bitkom

Position Paper

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The growing importance of standardisation for the digital economy: regulation, standards and opportunities for participation

Summary

Formal standardisation is becoming increasingly important for the digital industry, as its products are being increasingly regulated by the European Union's new regulations. The digital industry will therefore have to participate more in the creation of hENs at European level in the future.

Why standardisation is important

Technical standards must be distinguished from laws, even if they can have a legal effect. Standards are developed by the private sector by consensus, they describe a possible way to technically implement legal requirements and their application is voluntary.

Technical standardisation is a key element of economic and industrial policy. It forms the basis for interoperability and fair competition in global markets, and creates trust in and acceptance of new technologies. The success of digitalization and the Green Deal also depends crucially on norms and standards in the application of technologies such as artificial intelligence, cybersecurity and data usage. The same applies to Industry 4.0, where the potential can only be realized with widely recognised norms and standards. The achievement of digital sovereignty in the sense of self-determined

application, selection and provision of technologies is also decisively supported in this way. Overall, standardisation must be viewed from a global and European perspective, whereby it should be best practice either to use international standards or to think internationally from the outset when developing standards. National economic and value policy influences, including those of other countries, on international standardisation must be monitored in order to take sufficient account of Germany's and Europe's interests globally, remain internationally competitive and strengthen confidence in new technologies.

Standardisation: differences, significance and practice in the digital and telecommunications industry

In German, the words *norm* and *standard* refer to different things. This text was translated from German. Therefore, the following two paragraphs only apply to the German use of these words. Please note that we differentiate them by the process through which they are generated:

Norm: The standardisation procedure to obtain norms is the structured process of defining rules, guidelines or properties for products, services or processes. This is done in consensus with interested parties and with the involvement of the public in order to achieve broad acceptance (see DIN 820-3:2014-06, 3.1.3.1). This leads to the creation of norms that can be applied voluntarily, but often play an important role in market practice and regulation.

Standardisation: Standardisation is a broader term that describes the general process of standardisation – be it through norms, technical specifications or internal company standards. Standardisation can be carried out by official standardisation organisations as well as by companies or industry associations. It primarily serves to ensure compatibility, safety and efficiency.

Following, the process to obtain "norms" will be referred to as *formal standardisation*. As such, the process to obtain standards will simply be referred to as *standardisation*.

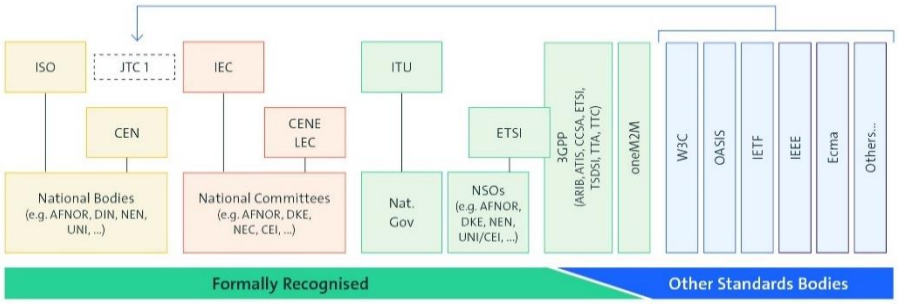

Figure 1 - Overview of the standardisation landscape (based on a diagram by Dr Jochen Friedrich, IBM); ETSI works at European and global level, where stakeholders can participate directly.

The digital economy was previously more strongly positioned in the area of standardisation than in formal standardisation. It still works intensively in global forums and consortia such as W3C, OASIS, IETF, IEEE, Ecma and others, which have core

competencies for standardisation in the IT sector. Some of these organisations have already been able to introduce their standards into international formal standardisation via the so-called Publicly Available Specification (PAS) procedure[1] and add them to the body of standards via ISO/IEC JTC 1 (Fig. 1).

Further, formally recognised structures were established for the telecommunications industry decades ago in view of the high regulatory requirements. With the founding of ETSI in 1988, a European standardisation organisation was established based on direct membership and cooperation and whose norms and standards are freely available. The need for standardisation in the context of mobile communications (GSM) and the requirements for global standards also played a role here. In particular, the global partnership project 3GPP, founded in 1998, marks the success of ETSI with the combination of a European standardisation organisation, the organisation for standardisation within the framework of CEPT and the global influence within the framework of 3GPP in creating a globally established mobile radio system for the first time.

Formal standardisation is becoming increasingly important for the digital industry due to the new EU regulations

Formal standardisation is currently gaining in importance, as the new regulations for the digital sector require technical interpretations that can only be made in the formally recognised standardisation organisations of the nation states and the EU. At European level, CEN, CENELEC and ETSI have so far been formalized via Annex I of the Standardisation Regulation (EU Regulation 1025/2012).

The Artificial Intelligence Act (AI Act), the Data Act and the Cyber Resilience Act (CRA) as well as regulations such as the Ecodesign Regulation (ESPR) and the resulting obligation for a Digital Product Passport (DPP) were enacted in the last European legislative period, which ended in June 2024. These legal acts all require harmonized European standards (hEN) as central elements of implementation. The EU Commission has already submitted 'Standardisation Requests' (often abbreviated: SReq) for the AI Act, the CRA, Data Act and the ESPR to the European standardisation organisations.

hENs are developed on the basis of an SReq. As soon as their references are listed in the Official Journal of the EU, they generate a 'Presumption of Conformity'[2] if applied correctly. The application of these standards remains voluntary (see 1025/2012 and DIN 820-1). However, products that comply with these standards are presumed to comply with the essential requirements of the legal act that apply to them. This legal effect is one of the key features of these standards and makes them an important instrument for companies to exercise the right to free movement of goods and services on the EU internal market.[3]

[1] List of PAS submitters to JTC 1
[2] Decision No 768/2008/EC Article R8 Presumption of Conformity
[3] The ECJ issued a landmark ruling on this on 5 March 2024 - Link to Bitkom's commentary

As the products of digital companies are increasingly regulated by the sectoral regulations of the 'New Legislative Framework' (NLF),[4] digital companies should ensure that the content developed in hENs can be implemented for them. To this end, the digital economy will have to play a greater role in the creation of hENs at European level.

In Germany, the path to European and international standardisation leads *via* the German Institute for Standardisation (DIN) and the German Commission for Electrical Engineering (DKE) and the mirror committees set up there, which reflect the standardisation work at international and European level. There are joint DIN and DKE committees for many of the fields that are important for the digital economy.[5] Company representatives can also participate together with other experts as part of the German delegation in the Joint Technical Committees (JTCs) or Technical Committees (TCs) of CEN and CENELEC or ISO and IEC. At ETSI, where many relevant ICT standards are being worked on, participation takes place directly in the Technical Bodies, without the diversions via DIN or DKE. A table of the currently most relevant European committees can be found below:

Abbreviation	Topic of the Technical Committee
CEN-CENELEC JTC 13, CENELEC TC47X, CENELEC TC65X, ETSI TC Cyber	Cybersecurity
CEN-CENELEC JTC 21	Artificial intelligence
CEN-CENELEC JTC 24	Digital product passport
CEN-CENELEC JTC 25, ETSI Smart M2M	Data management, Dataspaces, Cloud and Edge

How to participate in formal standardisation

Formal standards are drawn up by experts from various fields, such as manufacturers, inspectors, and consumer protection organisations. The processes are complex, but active participation is worthwhile. Formal standardisation is coordinated by the relevant formal standardisation organisations (in Germany by DIN and DKE, or in direct cooperation with ETSI). In order to participate in a formal standardisation process, you must first be a member of a relevant standardisation committee. This opens up the unique opportunity to participate in the national committee and contribute your own texts. In addition, ideas and proposals can also be submitted at European level to the European Standardisation Organisations (ESO) CEN, CENELEC and ETSI.

[4] A revision of the NLF is currently being discussed - link to Bitkom's position paper
[5] If you want to get involved in standardisation in Germany, the following website will help you get started: DIN and DKE

The EU Commission awards an SReq to one, two, or all three ESOs. This includes the obligation of the ESOs to create a standard within a certain period of time. The members of the ESOs have the opportunity to actively participate in the design of the SReq. In CEN and CENELEC, a Standardisation Requests – Ad-hoc Groups (SRAHG) is set up to which experts can be delegated.[6] In particular, the deadlines for publication and the content of the standard are prepared there. In ETSI there is the Standardisation Request deliverables Approval Process (SRdAP), for which the relevant Technical Group(s), the NSB Group, the NSO Group and the Annex III organisations are consulted on the SReq.[7]

Once the SReq has been accepted by the respective ESOs, the working group (CEN and CENELEC: working group – WG; ETSI: technical committee) begins its work. In this working group, the delegated experts from the national standardisation organisations develop the standard in a draft phase that takes place exclusively within the group. The proposals and drafts remain confidential in CEN and CENELEC; at ETSI they can also be viewed by external parties. In the best case, there is already preliminary work at ISO/IEC level that can be adopted. In this way, the connection to international trade can be ensured.

Direct involvement in standardisation work has proven its worth in practice, as experience has shown that most of the content contained in the final drafts is also included in the final version. The active participation of each individual is therefore of crucial importance. As soon as the working group has agreed on a draft, it is circulated for review and comment. The European mirror committees can submit their comments in a formal procedure. The working group must deal with all comments, i.e., either accept or reject them. The likelihood of a significant change to the content of the standard is low, as requests for changes (comments) must be well-founded and preferably represented in the working group on a long-term basis. Those who are not represented in the working group therefore have a poor chance. In addition, involvement in the drafting of standards offers the invaluable advantage of knowing their content before they are published and being able to orientate oneself accordingly.

[6] For further details see: Link
[7] For further details see: Link (Slides 8-9); NSB: National Standardisation Body; NSO: National Standardisation Organisation; Annex-III- Organisations refers to the organisations described in Annex III of EU Regulation 1025/2012.

Bitkom represents more than 2,200 companies from the digital economy. They generate an annual turnover of 200 billion euros in Germany and employ more than 2 million people. Among the members are 1,000 small and medium-sized businesses, over 500 start-ups and almost all global players. These companies provide services in software, IT, telecommunications or the internet, produce hardware and consumer electronics, work in digital media, create content, operate platforms or are in other ways affiliated with the digital economy. 82 percent of the members' headquarters are in Germany, 8 percent in the rest of the EU and 7 percent in the US. 3 percent are from other regions of the world. Bitkom promotes and drives the digital transformation of the German economy and advocates for citizens to participate in and benefit from digitalisation. At the heart of Bitkom's concerns are ensuring a strong European digital policy and a fully integrated digital single market, as well as making Germany a key driver of digital change in Europe and the world.

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AK Standardisierung