

The Impact of International Standardization

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Industry-wide standards play a vital role in our globalizing world. For example, in order to conform to foreign standards, 84% of German companies use European and International Standards as part of their export strategy.

The Umbrella Organization of German Industry ([BDI](#)) published a position paper (9 Theses on the Significance of Standards for German Industry in the 21st Century) in 2004 on the meaning of standards in the 21st century. This paper treats micro- and macroeconomic as well as legal and political aspects of the international standardization. The findings are very significant and affect our work in the Open Geospatial Consortium (OGC). For this reason, I present extracts of this position paper.

Standards make an important contribution to national and international competitiveness.

Standardization is a vital part of practical industrial policy. Standards provide the general public with information on important technical and organizational features. They describe a consensus on technical and organizational solutions for products and services as well as systems and processes. Standards help create interoperable products, define equal requirements for production processes, set comparable quality criteria or stipulate systems for the management. Thus standards promote understanding, interoperability and compatibility, contributing towards rationalization and a high level of quality for products and services.

Standards serve as proof of quality and support the flow of information and management along the value chain. They are the link between the national and especially the international division of labour. They are therefore of particular importance for the competitiveness of an industry that is very focused on exports. Standardization does not just facilitate the transfer of knowledge but also the opening up of markets.

Standards support the innovation capability of enterprises for products, services and management by creating objective and internationally recognized parameters, targets and yardsticks for business activity.

Standards promote innovation and competition. Their application is voluntary and therefore does not block or restrict technological progress. On the contrary, they create leeway for innovation. Experience clearly shows that new technical standards often give a foothold to new technologies. Standardization also helps make knowledge about technologies transparent and generally available.

As a result, standardization ultimately determines the positions in competition. Everyone has the means of participating and those who join in at an early stage are often better able to assert their interests and technologies.

Standards create business and political added value as they are drawn up in cooperation with corporate expertise and in consensus with all sectors of society.

In Germany, standards are drawn up by industry, government, scientists and NGOs in a social consensus, thus efficiently pooling the technological expertise our society has gathered. Standardization is therefore in the literal sense of the word a grass roots movement. It is supported in the main by industry, which alone in Germany sends over 26,000 honorary experts to standardization committees. All sectors of society should be able to effectively contribute to the standardization process.

This broad-based social consensus means that standardization enjoys a high level of acceptance among all stakeholders. This in turn creates a reliable basis for their application. The voluntary nature of the application of standards creates an attractive mixture of flexibility and legal certainty that also provides for standards to be regularly checked and updated, as is common practice.

Standards are important instruments to achieve technical, political and managerial objectives. They greatly contribute to deregulation and can complement legal and economic parameters in a targeted and flexible manner.

Standards are also a great help for the legislator and the administration. They provide assistance in the technical and practical implementation of legal requirements, which has been used for a long time by the “New Approach” in EU legislation, for example. In many cases, standards describe the state-of-the-art technology and clearly spell out statutory diligence requirements. With civil servants participating in the drawing up of standards in their respective areas of expertise, standards can improve the description and implementation of legal requirements.

The state also plays a central role in standardization and must create suitable framework conditions.

Fully functional standardization is a core part of the technical and scientific infrastructure. The state relies on standardization in many ways. The state is therefore responsible for securing suitable framework conditions for standardization which is supported by industry. A reversal of the original purpose of standardization towards an increase in state influence must be prevented. Even if the basic decisions or objectives are and should be determined by the legislator, standardization must not be loaded with political issues.

To safeguard the primacy of the market, standardization must not serve as a state-controlled means of implementing environmental and social policy objectives which failed to find majority approval elsewhere.

Nationally and internationally recognized standards strengthen the international competitiveness of products and enterprises in that they guarantee transparency, the necessary technical preconditions and provide yardsticks for business activity.

In the era of globalization, standards must be international. Only internationally recognized standards can promote free world trade. The relationship between the International Organization for Standardization (ISO), International Electrotechnical Commission (IEC), International Telecommunication Union (ITU) and the European CEN (European Standards Organization), European Committee for Electrotechnical Standardization (CENELEC) and European Telecommunications Standards Institute (ETSI) must be clarified, as well as their relationship to other standardizing organizations. Competing standards should be avoided, as different standards force companies to modify their products for different countries. This would obstruct the export opportunities of products and endanger their international recognition.

Standardization creates the precondition for economic success and innovation by standardizing the basic elements of technology and management. Real economic success and innovation arise from the creative combination of these elements. Standardization thus reaches its natural limits when it begins to curtail the freedom which fuels innovation. The original purpose and strength of standardization is still to create preconditions for the freedom which is the driving force of innovation.

OGC's "market share," that is, the percentage of available products that implement OGC standards, is rising rapidly. The OGC Board of Directors is committed to providing the necessary material and personnel resources to be sure this progress continues, guided by close attention to the needs of our markets and users. I am confident we will succeed.