Technical Standards in International Trade: the EU Perspective

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Abstract

Technical barriers to trade belong to the mostly used non-tariff measures for protection of a domestic market. On the contrary, harmonized standards facilitate international trade, support competition and innovations. It is a reason why the multilateral trading system obliges the WTO members not to use technical norms and standards as an unnecessary obstacle to trade. Harmonization, equivalence and mutual recognition is also an important part of bilateral free trade agreements or are concluded separately namely among developed countries. Standards have been identified as a very important aspect of the single market of the European Union, not only as a condition for the free movement of goods and services, but also for consumer protection. The EU developed a legal system for European standardization that is based on principles of openness, transparency and cooperation and embedded it into the EU Action Plan for 2010-2013. The paper presents the EU strategies in this field and analysis its relation to competitiveness of the EU industries.

Key words: technical norm, standard, harmonization, EU

Introduction

Technical regulations and standards play more and more significant role in international trade and international standards have growing economic and political importance in globalization. The number of technical norms and standards adopted by countries in quality management, food safety, labor conditions and ethical, ecological and social areas is growing significantly namely in recent years. Technical norms and standards developed autonomously and seem to reflect in each country the governmental policy in consumer protection and security and to respond consumers' demand for safe and high-quality products.

Technical norms, however, and namely a response how to deal with them, became to be important in the context of globalization. More and more enterprises do not limit themselves on their domestic market; on the contrary, they enter various foreign markets in order to reach economy of scale and effectiveness from their specialization. Each company that expands at foreign markets needs to prove that its products or services are in compliance with the technical norms and standards of the target market. To comply with technical norms means not only to receive a marketing approval, but also to communicate to the potential consumer safety and quality of the marketed product. At the same, however, the compliance with specific norms of each market increases cost of production and sale and makes companies and their production less effective thus less competitive. From this perspective, technical norms and standards became to be non-tariff trade barriers, which protective impact is very difficult to be assessed.

Governments in implementing technical norms into their legislation can pursue also other interests in the establishment of business environment and in industry protection or promotion. Technical norms and standards differ market to market, even if there are some attempts to impose international disciplines to them. It is why it is interesting to understand a technical norm system of individual country in the framework of international

agreements and initiatives in this field. This article brings such information about the European Union. It concentrates on technical regulation and standards and does not deal with sanitary and phytosanitary measures that are appropriate for food and agricultural products.

Dilemma of technical norms

A dilemma in using technical norms and standards is evident if we examine them from three – entrepreneurial, governmental and consumer – approaches.

Companies expand at foreign markets in order to achieve higher effectiveness through economy of scale (lowering costs per production unit as a result of higher sales). The effectiveness and the benefit from the expansion could be undermined or abolished due to the transaction costs among them also due to the necessity to implement various technical norms of the target markets and to fine tune the final products according to the different norms of individual markets. The increase of production costs related to technical norms lies in translation of foreign regulations, hiring of technical experts to explain foreign regulations and in adjustment of production facilities according to each market´s requirements, in proving evidence that the product is in compliance with the target market norms and standards (so called conformity assessment). If a company sells in multiple markets it challenges not only a diversity of norms, but also a diversity of testing procedures and methods. Companies are not only exporters – for the production, they relay often on importation of parts and other substitutions. Norms and testing procedures increase also price for imported products aimed for use in following production and increase of course price of the final product (for final consumers or for exportation).

Each government that cares about inhabitants and consumers of its country has to protect them and to protect also the environment in which they live. This could be done through various tools which the technical norms belong to. Norms could be, however, also used (or misused) with the goal to eliminate foreign competition and protect domestic (infant) industry, because it is less and less possible to use tariffs due to the international or bilateral trade commitments. In these cases, technical norms and eventual non-transparent and discriminatory conformity assessment procedures substitute traditional trade barriers.

Consumers find in technical norms a proof of certain level of safety and quality of the products. On the other hand, they pay for it higher prices - not only for the imported goods for final consumption, but also for domestic products that were outcome of supply chain production.

The problem and its impact on international trade has been recognized by international organizations as well, among them namely at the predecessor of the Word Trade Organization – the GATT Agreement that comprises specific provisions dealing with technical barriers to trade. The issue is also reflected in negotiations on trade facilitation within the Doha Development Agenda. Technical barriers became very important in negotiations of free trade agreements, specifically of their part devoted to non-tariff barriers. Several countries signed agreements on mutual recognition for different sectors of industries in order to facilitate and promote mutual exchange of products and to eliminate costs of certifications procedures for companies. It is also broadly discussed and solved within different integration blocks, for example in the European Union.

International technical norms and standards

Standards are outcome of governmental or non-governmental processes. It means that either governmental or non-governmental institutions or both in mutual cooperation develop and formulate specific characteristics of a product or a service and publish them for the use within companies (Charnovitz 2002). The descriptions concern for example size of a product, its shape, design, functions and performance, or the way how it is labeled or packaged before it is put on sale. In cases in that the process is significant for characteristics of a product, the product's process and production methods are subject to the technical regulation and standards. Standards differ from norms and regulation. Standards are understood to be non-mandatory and conformity with them is

voluntary; norms and regulation are compulsory and are a part of national legislation, in which they were implemented on a basis of a governmental autonomous decision or on a basis of an international commitment. If an imported product is not in compliance with a technical regulation of the target market, it cannot be put on sale. If a product does not comply with standards, it is allowed on the market, and it is up to consumers´ preferences if they trust the product that does not meet local standards.

The expression of international technical norms, standards and regulation is used for an international rule that is embedded into international agreements at multilateral or bilateral levels.

International framework for international standards and regulation is embedded into the set of the World Trade Organization agreements, as an outcome from the Tokyo round of negotiations on further trade liberalization (1973 - 1979). The WTO Agreement on Technical Barriers to Trade (TBT) has been revised in Uruguay round (1986 - 1994). It covers now also processing and production methods related to the characteristics of the product itself, the disciplines of conformity assessment are strengthened and notification provisions related to technical regulation and standards of both governmental and non-governmental institutions are more detailed. The annex of the Agreement provides a Code of Good Practice for the Preparation, Adoption and Application of Standards that is recommended to be adopted by standardizing public and private organizations.

The Agreement defines standards and technical regulation as follows: Standards: „Document approved by a recognized body, that provides, for common and repeated use, rules, guidelines or characteristics for products or related processes and production methods, with which compliance is not mandatory. It may also include or deal exclusively with terminology, symbols, packaging, marking or labeling requirements as they apply to a product, process or production method.“ (WTO, 1994) Technical regulation: „Document which lays down product characteristics or their related processes and production methods, including the applicable administrative provisions, with which compliance is mandatory. It may also include or deal exclusively with terminology, symbols, packaging, marking or labeling requirements as they apply to a product, process or production method.“

The goal of the TBT Agreement is to ensure that “regulation, standards, testing and certification procedures do not create unnecessary obstacles, while also providing members with the right to implement measures to achieve legitimate policy objectives, such as the protection of human health and safety, or the environment.“ (WTO 2013). Governments have, however, the right to protect for example the human, animal and plant health and life or the environment, to choose the appropriate level for it and to take necessary measures in order to achieve such a protection. As the technical regulation became a very actual trade challenge, the WTO members discuss regularly at their meetings a whole range of issues that are related to it: specific measures in technical regulations, standards or conformity assessment procedures maintained by other Members, good regulatory practices as for “producing” norms and their implementation, institutions involved, information sharing systems, transparency, etc. The aim of these discussions is to improve the practices, processes, institutions and infrastructures in individual countries. Results of meetings and recommendation for further work are published in the regularly revised document Decisions and Recommendations (WTO 2011a). Members have also an opportunity to review their trade concerns and to seek clarification in a bilateral or multilateral setting.

In order to avoid unnecessary obstacles to trade and to facilitate it, the WTO members are encouraged to use international standards and to prefer in regulation – where it is appropriated – performance and characteristics of the product.

Opportunities of the international technical harmonization

As mentioned, divergent regulations, even if it does not constitute an unnecessary obstacle to trade, increase costs for producers and exporters, namely for small and medium sized enterprises. They lose advantages of economy of scale as they have to invest into compliance with diverse technical regulation in different markets and production costs per unit do not decrease. They lose also comparative advantages from their specialization

and should add – to the production costs - also burdens of the necessity to certify conformity and costs related to the access to information on technical norms and their updates.

International harmonization of technical regulations decreases the mentioned costs, as it leads to compatibility of products and their parts that could be traded at different markets without changing the same product into various configurations. As supply chains are more and more developed internationally, harmonization of technical norms facilitates its management, makes it more effective and decrease transaction costs of quality management. Harmonization is beneficial also for consumers who have more extended choice of products at lower prices.

Harmonization of technical standards is on the agenda of some international institutions for already many years. The most important are International Standardization Organization (ISO), International Electro-technical Commission (IEC) and the International Telecommunication Union (ITU). Their activities in developing standards have high impact on liberalization of international trade. International standardizing bodies issued also international guidelines or recommendations for procedures of conformity assessment that are considered not to create an unnecessary obstacle to trade.

ISO is an author of about 19 thousands international standards covering almost all technical fields and each year, about 1000 new standards is published (ISO 2011). The ISO standard provides a guarantee that the product or a service fulfill requirement and achieve certain level of quality. Between 1987 and 1999, ISO issued 340 thousand certificates and more than half of them for European companies (Nadvi 2004). ISO introduces standards also in developing countries through its Committee on developing country matters (DEVCO). ITU is a specialized agency of the United Nations that established 14 groups on standards preparation (ITU 2012). IEC is an international organization that negotiations are open to other intergovernmental or non-governmental institutions.

The drawing of standards in international standardizing institutions is based on negotiations of participating states. Through the participation, a country specific interest could be reflected in the phase of preparation, what enables a smooth implementation into the national legislation.

Together with harmonization - in the terms of international technical standards development – countries have a possibility to accept that technical regulations different from their own are essentially equivalent, it means they fulfill the same policy objectives even if the used measures are different. As a consequence, producers and exporters are not obliged to satisfy the target market requirement, what eliminates costs of adjusting production facilities to fulfill foreign regulations and cost of testing and acquiring certification. This approach is based on the European Community's 1985 “new approach” to standardization.

The principle of equivalence is a basis for mutual recognition agreements (MRA) that comprise also mutual recognition of conformity assessment procedures and of competence of the conformity assessment bodies. This means that the product is tested only once and the testing results are accepted in the partner market, even if it implemented different methods or procedures. The mutual recognition agreements are usually related to specific sectors, and do not cover all technical standards of all industries. MRA are a prevailing practice between developed countries – examples could be the MRA between the EU and USA, the EU and Japan, the EU and Australia.

Harmonization of technical norms in the EU

The process of technical norms harmonization in the EU dates from 80ties of the 20th century. Various technical norms and standards in EU member states were identified as obstacles to the free movement of goods. It is a building stone of the EU single market together with free movement of services, capital and labor, which are accompanied by the common currency and project for a single taxation.

In 1985, the document "White book" has been adopted in the European Communities. It pointed out factionalism of the internal market and invisible barriers to trade. It suggested solutions and related legislative changes. Barriers should have been abolished until 1st January 1993 and this commitment has been embedded into the Single European Act from 1986 that amended the Treaty establishing the European Economic Community.

An important step towards the technical harmonization was the Council Resolution 85/C 136/01 of 7 May 1985 on a "New Approach to Technical Harmonization and Standards". Standardization has been considered as a way how to ensure free movement of goods, to increase competitiveness and to establish a same level in technical environment for all EU enterprises. The core goal of the new approach was to establish general rules applicable to sectors, products and hazards, in order to accomplish policy objectives in safety and health of consumers while disregarding how it would be achieved.

According to the new approach, the fundamental principles of the European standardization are following (EC 1985):

- "legislative harmonization is limited to essential safety requirements (or other requirements in the general interest) with which products put on the market must conform and can therefore enjoy free movement throughout the European Union;
- the task of drawing up technical production specifications is entrusted to organizations competent in industrial standardization, which take the current stage of technology into account when doing so;
- these technical specifications are not mandatory and maintain their status of voluntary standards;
- the authorities are obliged to recognize that products manufactured in conformity with harmonized standards are presumed to conform to the essential requirements established by the Directive. If the producer does not manufacture in conformity with these standards, he has an obligation to prove that his products conform to the essential requirements."

The system is operational on a basis of conditions that establish mutual trust between EU Members - standards guarantee the quality of the product and the public authorities are responsible for the protection of safety on their territory.

The Resolution sets down also supplementary principles of the European standardization, as for example: the states constantly check on the technical regulations which are applied and keep them updated; the states respect the mutual recognition principle related to the results of testing and establish harmonized rules on the operation of certification bodies; the states early consult national regulatory proposals or procedures if they might pose a threat to the smooth operation of the internal market; general reference to European (if necessary national) standards is extended and technical characteristics of products are formulated; the capacity to standardize is strengthened at European level; European standards are submitted to the European standardization bodies for approval (EC 1985).

The principles and condition of the new approach have been further and deeply reflected in the EC Directives 83/189/EEC, 98/34/EC and 98/48/EC. The latter amended the previous ones and established guidelines for procedures of providing information on norms and technical regulation and for rules for services of information society.

Harmonized technical standards are voluntary, the certification of the product, however, increases competitiveness and sales of the product. The main means of attestation are certificates and marks of conformity issued by a third party; the results of tests carried out by a third party; the declaration of conformity issued by the manufacturer, which may be coupled with a surveillance system. Other means of attestation could possibly be determined in the respective directive.

The conformity of a product with European technical standards is communicated through the CE marking (in force at the markets of European Economic Area (EEA) = the EU + Island, Norway and Lichtenstein). Only some types of products have to prove the conformity, as for example toys, electronic devices, medical and

sanitary instruments, lifts, machines and measurement devices. In substance, the CE marking is the manufacturer's declaration that the product meets the requirements of the applicable EU directives (on safety, health and environment protection) and that the conformity has been verified by a notified expert if the respective directive provides it for. It concerns the EEA´s and imported production. It is not a certification of quality of a given product or information about its origin.

The EU technical norms and standards regulate specifically listed products that could be dangerous for health or safety. Other products belong to the unregulated area. The European system is further composed of single technical norms that are embedded into the EU regulation and applicable in all EU Member States and national standards that are subject to obligatory mutual recognition. Applicability of national standards is resolved in the EC Regulation No. 764/2008 of the European Parliament and the Council (ECS 2009). The norms for services are regulated accordingly by the EC Directive No. 2006/123.

European standards and organizations

Standardization procedure is based on a development of technical specifications in cooperation of all stakeholders: small and medium sized companies, consumers, unions, nongovernmental organizations, governmental institutions. Standards are drawn by independent standardization organizations that are active at national, European and international levels. Process for development of technical norms and related regulations is provided in the EC Directive No. 98/34. All EU Member States have an obligation to inform other Members and the European Commission about new national standards and norms. The directive determines also standardization institutions (EC 1998).

Areas harmonized within the EU through regulations or directives are: chemicals, conformity assessment and management systems, construction, consumers and workers protection, energy efficiency, electric and electronic engineering, healthcare engineering, measuring technology, mechanical engineering and means of transport, postal services and packaging and packaging waste sustainability.

The European standardization process is financed by the European Commission according to the principles laying in grants for secretariats of three standardization institutions (see below) and in support of specific activities of these organizations. The sum devoted to the European standardization by the Commission is about 20 millions of euros per year.

The most important standardization organizations are the European Commission for Standardization (CEN), European Commission for Electro-technical Standardization (CENELEC) and European Telecommunications Standards Institute (ETSI). These three institutions are a core of European Standardization Organizations (ESOs) and are provided in accordance with the EC Directive No. 98/34 (under revision) with a mandate to develop appropriate European standards.

CEN has been established in 1975 and it is a non-profit organization. Its goal is to facilitate trade and to eliminate barriers for European industries and consumers. It proposes and approves European standards in all economic fields with exception of areas of activities of CENELEC and ETSI. CENELEC develops standards and harmonization documents for electro-technical industry (CENELEC 2012); it is as well a non-profit organization. ETSI is recognized to be an organization responsible for drawing technical standards. It is a non-profit organization with more than 700 members including also European states. ETSI standards are mostly applied in transportation, fixed networks, better living, public safety, etc. Other institutions that are active in technical regulation are for example Eurochambers, BusinessEurope, EuroCommerce and European Association of Craft, Small and Medium-Sized Enterprises (UEAPME).

European standardization organizations cooperate on a contractual basis with international institutions. The Vienna agreement on technical cooperation from 1991 has been signed between CEN and ISO; Dresden agreement from 1996 has been signed between CENELEC and IEC. Aim of both agreements was to avoid

duplication in standardization at international and European levels and to set out the rules governing co-operation. Vienna agreement recognizes the primacy of international standards and aims at standards to be recognized simultaneously at international and European level by means of improved exchange of information, mutual representation at meetings and simultaneous approval. Dresden agreement creates the necessary framework for an intensive consensus-finding process between European and international standards development activity in the electrical sector. A high share of identical (single) standards enables implementation of the WTO TBT Agreement.

The area of European standardization is continuing to be further developed under the 2010-2013 Action Plan for European Standardization and A strategic vision for European standards. "The Action Plan gives information about recently issued mandates and it reflects planned standardization initiatives in the European Commission for the coming years. It was elaborated by the European Commission's Standardization unit in close cooperation with relevant European Commission services. As a publicly available document, the Action Plan increases transparency of the mandating process and generally promotes standardization as a policy tool." (EC 2011b). The EU vision for 2020 is a system of standards that will - in response to needs of enterprises, society and public bodies - simplify and fasten all related procedures in order to deepen financial benefits from standardization (EC 2010).

In 2012, a new EU Regulation No. 1025/2012 on European standardization has been adopted. This Regulation aims at modernizing and improving the European standards setting to make it faster and at the same time more inclusive (EC 2012). It is a tool towards accomplishing the goals of the Action plan.

Conclusion

Technical regulation implemented by individual countries could create a very important trade barrier. International technical harmonization is considered as a tool for abolishing unnecessary obstacles to trade and for decreasing administrative burdens related to technical regulation. The EU applies a harmonized system of technical norms and standards that has enabled to fulfill requirements of the establishment of the single market, namely the free movement of products and services. The system serves also for achieving policy objectives in consumer, health and environmental protection. EU Member States have the responsibility to ensure on their territory safety of persons, domestic animals and goods. These areas are subject to legal technical norms and to obligatory attestations. The provisions ensuring such protection must be harmonized in order to ensure the free movement of goods, they should not, however, lower existing levels of protection in the Member States. Other products conform to the European standards on a voluntary approach.

The EU new approach that is based on a mutual recognition and on standardization of characteristics of products has been implemented in the WTO TBT Agreement. In the framework of this agreement, the EU standardization system is developed by European institutions that cooperate with international organization in order to simplify standardization procedures and squeeze number of standards that exist in the world. „The implementation of European Standards as identical national standards in the countries of the EU and EFTA has been fundamental in reducing costs to business, improving competitiveness, enhancing consumer choice and achieving the roll-out of public policies." (EC 2010).

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