Aspects of Harmonization of Requirements for Technical Regulation in the Russian Federation

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Abstract. In view of implementation of technical regulation reform in Russia, the authors have researched the level of requirements harmonization in part of development of Technical Regulations of the Customs Union (Eurasian Customs Union). Based on the case study of specific technical regulation of the Customs Union, we have conducted a research of recommended standards supporting the requirements and methods of control. This study makes it possible to focus attention on importance of deeper harmonization of requirements and methods of control within the frames of actualization of the current standards and development of new standards.

1. Introduction
Recent years witness the growing importance of international economic integration in the area of technical regulation. One of the most famous and reputable international organizations to establish the unified rules for conducting business is the World Trade Organization (WTO). WTO rules prohibit technical barriers to trade [8,12]. Agreement on technical barriers to trade ensures elimination of unnecessary hindrances created by regulations, standards and procedures, at the same time offering WTO members the right of taking measures to achieve the objectives of legal regulation, such as protection of health and safety of people or environment [5,14,17,20,21]. In August 2012, Russia joined WTO and was added to the official list of WTO members.

However, technical regulation reform in Russia is recently more connected with development of the Eurasian Economic Union. The work of Eurasian Economic Union (Customs Union), which agreement entered into legal force and effect starting from January 1, 2015, is based on the same principles as WTO. Active work in the area of technical regulation is performed by Eurasian Economic Commission, a currently effective regulation authority of Eurasian Economic Commission. Strategic objectives of technical regulation development involve integration of the Russian Federation to the international standardization system and harmonization of national and international requirements.

2. Timeliness, Relevance and Importance of Issue under Research
Raising the product competitiveness is ensured by its high quality and safety. Safety requirements are nowadays governed by the technical regulations, whereas the quality level is ensured by the manufacturer and is described in the standardization documents.

It is important to understand the level of harmonization of safety requirements with the international norms and quality requirements, as well as with the current level of scientific, technical and production development.

Hence follows the importance of studies showing the level of requirements harmonization and set the objectives for further development of technical regulation and standardization principles implementation.
In 2002, technical regulation reform was initiated in Russia, which involved harmonization of requirements with the international norms and technical support for wide implementation of new disruptive technologies. Harmonization of requirements is performed in two ways: harmonization with WTO requirements and establishment of common economic area in the Eurasian Economic Community (EAEC). These days Russia witnesses dynamic development of the national technical regulation system and intensive integration of the Russian Federation into the international standardization system.

Within the framework of technical regulation reform, the active lawmakers process in the area of technical regulation system is currently under way.

Within the frames of legislation enhancement in the area of standardization, the law “On Standardization in the Russian Federation” was adopted in 2015. The “Concept of Development of the National Standardization System in the Russian Federation up to 2020” is currently effective in Russia. One of the Concept objectives is strengthening the role of the Russian Federation and raising its authority in the area of international and regional standardization. One of strategic objectives for standardization system development in any country is enhancement of standardization system to meet the WTO Agreement provisions as regards the technical barriers to trade and reduction of unjustified technical barriers to trade [2,4,6,7,8,18,20].

In view of the above-said, harmonization of regional, national and international standards is actively implemented nowadays, whereas the technical regulations within the frames of Eurasian Economic Union are also strenuously developed and adopted [15,21].

3. Setting the Task
Objective of this research is analysis of harmonization level of requirements and methods of control based on the case study of specific technical regulation, systematization of currently effective technical regulations, analysis of EAEC members participation in development of technical regulations to have entered into legal force and effect, structure analysis of supporting standards based on the case study of specific technical regulation.

4. Theory Aspects
It is important not only to create the technical regulation system and establish communication of all national authority bodies in this area, but also to achieve its official international recognition. Therefore, technical legislation should be based on international norms and rules [2,8,10,5,13,16].

International standards meet the market demand and reflect the latest R&D achievements. Therefore, the chances of their practical application are higher [9]. The companies and states of today should have an opportunity of easy movement of the goods through the borders [3]. Hence, the world of today witnesses a trend of wide implementation of international standards to the national standardization systems [1,20].

Eurasian Economic Union is actively engaged in harmonization of legal support system for technical regulation in compliance with WTO norms. Statutory instruments of Eurasian Economic Commission establish the procedure for adoption, development and reversal of technical regulations of Eurasian Economic Union, which makes it possible for the member countries to efficiently carry out their activity in this area.

In the Russian Federation, technical regulations are adopted in compliance with the requirements of the Federal Law No. 184-FZ dated December 27, 2002 “On Technical Regulation”. However, after approval of respective EAEC Technical Regulation, the Russian technical regulation loses its legal force and effect, which means that attention should be focused on the currently effective EAEC technical regulations.

5. Experimental Research Results
The country is now performs tremendous work on enhancement of technical regulation, harmonization of regional and national standards with international standards and development of technical regulations.
The process of technical regulations development and adoption has been improving with time. Before 2011, technical regulations were adopted only by Decree of the Government of the Russian Federation or Decision of the State Duma. After establishment of the Customs Union in 2011, technical regulations were adopted by the decision of the Customs Union Commission. Later in 2012, as a result of EAEC creation, technical regulations were adopted by the Council of Eurasian Economic Commission.

Dynamics of Technical Regulations adoption is shown on the Table 1.

**Table 1. Technical Regulations Effective as of 2017.**

| The Authority Body to Have Approved the Technical Regulation | Quantity | Total Quantity | Year of Adoption |
|-------------------------------------------------------------|----------|----------------|-----------------|
| Government of the Russian Federation                        | 1        | 1              | 2005            |
| State Duma                                                  | 4        | 6              | 2008            |
| Government of the Russian Federation                        | 2        | 7              | 2009            |
| State Duma                                                  | 2        | 7              | 2009            |
| Government of the Russian Federation                        | 5        |                |                 |
| Government of the Russian Federation                        | 9        | 9              | 2010            |
| Customs Union Commission                                    | 24       | 24             | 2011            |
| Council of Eurasian Economic Commission                      | 7        | 7              | 2012            |
| Council of Eurasian Economic Commission                      | 3        | 3              | 2013            |
| Council of Eurasian Economic Commission                      | 4        | 4              | 2014            |
| Council of Eurasian Economic Commission                      | 1        | 1              | 2016            |

Analysis of technical regulations effective as of 2017 showed that the total number of 62 Technical Regulations were adopted and entered into legal force and effect by this time; Technical Regulations were most actively adopted in 2011 by the Customs Union Commission.

Within the framework of EAEC, all member countries take part in drafting of technical regulations. One country is responsible for drafting of technical regulation, the rest of the countries act as co-drafters.

Analysis of participation of Eurasian Union member countries in drafting of technical regulations as countries responsible for drafting within 2012-2017 (fig. 1).

![Figure 1. Analysis of participation of Eurasian Union member countries in drafting of technical regulations as countries responsible for drafting.](image-url)

Technical regulations in the process of their adoption do not enter into force right after adoption, but within the period set forth at the stage of their drafting. As of 2017, 8 technical regulations were...
adopted with a delayed period of entering into force: 3 technical regulations adopted in 2016 shall enter into force in 2018; for 1 technical regulation the period of entering into force is not specified; 4 technical regulations adopted in 2017 shall enter into force within 2018-2021.

The most active participant of the process of technical regulations development, as a country responsible for drafting, is the Russian Federation. Within the period under analysis, the total number of 48 technical regulations were adopted. Such an active work in this area promotes development of international relations and reduction of the technical barriers between the countries.

A Technical regulation includes the Lists of Standards for voluntary and mandatory observance of these technical regulation requirements. It is important that the level of standards harmonization for the List of Standards of technical regulation should be high enough.

Based on the case study of Technical Regulation 032-2013 “On Safety of Equipment Operating under Excessive Pressure”, we have carried out analysis of requirements harmonization.

The area of application of CU TR 032-2013 establishes safety requirements to equipment for development (design), production (manufacturing), as well as requirements to labeling of equipment for the purpose of protection of human life and health, property, prevention of actions, which are misleading for the consumers.

To this CU TR, a List of Standards is generated, which are approved by the Eurasian Economic Commission. In its turn, this List of Standards is divided into two lists. List of Standards, which application on a voluntary basis ensure observance of technical regulation requirements, and the List of Standards containing the rules and methods of research (testing) and measurements, including the rules of selecting samples necessary for application and implementation of technical regulation requirements.

In the course of data systematization under the first List, the principal standard categories and years of their adoption were identified. Results of analysis are shown on fig. 2.

Analysis under the first List showed that the average period of standard validity is 7.1 years. At the same time, the standards valid for over 20 years make up for 46.7%. There are three standards in the List, which were adopted in 2013.

Percentage ratio of standard categories is the following: GOST (regional (interstate) standard adopted in the USSR) – 48.1%, GOST R (national standard adopted in Russia) – 36.5%, GOST ISO (translation of respective international standard) – 1.9%, GOST R ISO (translation of respective international standard) – 13.5%. It is worth noting that the number of regional (interstate) standards adopted in 2005 is comparatively higher than in other years; dynamics of national standards is not stable: the largest number of national standards was adopted in 2011 and in 2009.

The second List contains the standards for the rules and methods of research (testing) and measurements, including the rules for selecting samples necessary to apply and implement the requirements to the Technical Regulation of the Customs Union “On Safety of Equipment Operating under Excessive Pressure” and carry out assessment (verification) of the products compliance. The information on the second List of Standards was systemized in the same way. The results of analysis are shown on fig. 3.
Whereas the Technical Regulation was adopted in 2013, the second list of standards contains only five regulatory documents adopted in 2013. The average period of standard validity is about four years. However, there are also standards in this list, which were approved in 1973, and the number of standards with the period of validity over 20 years equals to 49.7%.

Therefore, analysis showed prevalence of standards of GOST and GOST R series. The number of GOST R ISO series is minimal. Percentage ratio of these standard categories is the following: GOST – 62.2%, GOST R – 27.1%, STB EN (national standard of Belarus) – 7.3%, ST RK (national standard of Republic of Kazakhstan) – 1.3%, GOST R ISO – 0.7%, ST RK GOST R (national standard of Republic of Kazakhstan) – 0.7%, GOST ISO – 0.7%.

Jointly under the first and the second List of Standards adopted to ensure compliance with requirements of CU TR 032-2013 “On Safety of Equipment Operating under Excessive Pressure” 203 standards were adopted, among them:

- 58.6% regional (interstate) standards;
- 29.5% national standards of the Russian Federation;
- 5.4% national standards of the Republic of Belarus;
- 1% national standard of the Republic of Kazakhstan;
- 3.9% national standard identical to the international standard;
- 0.5% national standard of the Republic of Kazakhstan is identical to the national standard of the Russian Federation;
- 1% regional (interstate) standard is identical to international standard.

Analysis showed that altogether in the Lists to the specific technical regulation CU TR 032-2013 “On Safety of Equipment Operating under Excessive Pressure” has about 44.8% standards valid over 20 years. Such a result cannot be deemed successful, if we look at harmonization of requirements from the point of compliance with international requirements and scientific and technical progress. Therefore, when introducing the Technical Regulations, it is important to pay more attention to standardization in part of harmonization of specific requirements and methods of control.

6. Conclusions

In spite of dynamic development of technical regulation, improvement of legal framework and Russia gradually becoming the full-fledged participant of international relations in the area of technical regulation, there are still serious shortcomings as regards harmonization of requirements and their bringing to conformity with the latest achievements of science and technology.

Technical regulation reform should involve harmonization of requirements; however, adoption of Technical Regulations of the Customs Union, and later of the Eurasian Economic Community cannot guarantee harmonization of standards and their compliance with the state-of-the-art science and technology.
Obviously, this research is concentrated on analysis of one technical regulation only. However, results of this research reveal the absence of comprehensive development of technical regulation and standardization as a twofold objective to ensure quality and safety of products according to international standards. It is important to perform more intensive work in this area, as well as to strive to achieve maximum harmonization of standards and technical regulations with the international requirements so that to eliminate the technical barriers to trade.

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