

TECHNICAL REGULATION IN THE CONTEXT OF GLOBALIZATION AND DIGITALIZATION

¹Marysheva L.T.,

*¹Doctor of Technical Sciences Assoc. Tashkent University of Information
Technologies Muhammad al-Khwarizmi,*

²Latipova N.Kh.,

*²associate professor Tashkent University of Information Technologies Muhammad
al-Khwarizmi*

Annotation: The paper examines the issue of recent decades, when the world has faced rapid changes caused by globalization and digitalization. These processes have a significant impact on various spheres of life, including the economy, society and technology. In the context of global interconnectedness and digital transformation, there is a need for effective technical regulation, which should be flexible, adaptive and comprehensive. This article examines the key aspects of technical regulation in the context of globalization and digitalization, its challenges and opportunities.

Keywords: globalization, digitalization, technical regulations, consumer, quality and safety, confirmation of conformity, competitiveness.

INTRODUCTION

In modern conditions, the issues of product competitiveness do not lose their relevance. Two elements - consumer properties and price - are the main components of the competitiveness of a product (service). Managing competitiveness means ensuring the optimal ratio of the named components, directing the main efforts to

solving the following tasks: improving product quality, reducing production costs, increasing efficiency and service level.

Technical regulation includes a system of standards, norms and requirements aimed at ensuring the safety, quality and efficiency of products and services. It serves as a basis for protecting the interests of consumers and the environment, and also promotes the harmonization of technological processes.

With the development of the global economy and digital technologies, technical regulation has become more complex and multifaceted. It must take into account not only the domestic needs of countries, but also international standards related to cross-border trade and the use of technology.

Challenges of globalization for technical regulation/ Diversity of standards: In the context of globalization, countries have different approaches and standards to technical regulation. This diversity creates difficulties for companies operating in international markets and can lead to barriers to trade.

Risk Management: Globalization increases the interdependence of countries, making risk management more complex. Cyber threats, environmental issues, and other risks require coordination at the international level.

Difficulty in product tracking: Global supply chains are becoming increasingly complex. Products may pass through multiple countries, making it difficult to ensure that standards and requirements are met.

Digitalization and its impact on technical regulation/ Digitalization is transforming many aspects of life, including production, data processing, and services. One of the main tasks of technical regulation in the context of digitalization is to create a safe and transparent infrastructure that supports innovation without infringing on the interests of consumers.

Innovation and Startups: Digitalization is facilitating the emergence of new technologies and start-ups. This requires the implementation of a dynamic approach to technical regulation that takes into account the specific features of a rapidly developing sector.

Big Data and Analytics: Using big data in decision making opens up new horizons for technical regulation. Analytics can be used to predict potential problems and optimize processes.

Cybersecurity: In the context of ever-increasing cyber threats, technical regulation must ensure the protection of data and technologies from unauthorized access and attacks.

Opportunities for improving technical regulation

International cooperation: Countries must work together to develop compatible standards that will help reduce barriers to trade and provide greater security.

Flexible approaches to regulation: Technical regulation must be adaptive and flexible to respond quickly to changes in technology and the market environment.

Education and training of specialists: It is important to invest in the education and training of specialists who will develop and apply new approaches to technical regulation.

The main objectives of adopting technical regulations and technical standards are: ensuring safety, environmental protection, preventing actions that mislead consumers, energy efficiency and resource conservation. Therefore, the attention of specialists to the development and implementation of interstate standards and technical regulations is great.

At this stage, the interstate standard is a universal tool for removing barriers in the post-Soviet space. The problem of ensuring the quality and safety of goods can be presented in various aspects - political, technical, economic, legal. The current state of the domestic system of ensuring the quality and safety of goods is influenced by a number of circumstances. Most CIS member states have currently reformed their national legislation in the field of technical regulation and are actively developing and introducing national technical regulations. At the same time, standards related to safety and environmental protection are established in

mandatory technical regulations, and national standards are receiving the status of voluntary regulatory documents.

The Law "On Technical Regulation" of the Republic of Uzbekistan was adopted on 23.04.2009 under No. 3PY-213. After the adoption of this law, there were changes in the organizational and regulatory aspects of the standardization system and the technical regulation system.

In modern conditions, a significant role in the formation of the system of state quality assurance and product safety in the Republic of Uzbekistan is given to the implementation of the provisions of the Law "On Technical Regulation".

The President of the Republic of Uzbekistan signed the Law “On Technical Regulation” (LTU No. 819 dated 02/27/2023) [1].

According to the Law, technical regulation is the establishment, application and enforcement of requirements for the safety of products, processes and methods of their production, as well as verification of their compliance through conformity assessment and implementation of state control.

The Uzbek Agency for Technical Regulation is a specially authorized state body in the field of technical regulation [2].

The Cabinet of Ministers determines and coordinates the activities of authorized government bodies in this area.

In accordance with the Law, technical regulations are adopted for the purposes of:

- protection of life or health of citizens by establishing product safety requirements;
- protection of the environment, flora and fauna;
- prevention of actions that mislead buyers (consumers);
- ensuring energy efficiency and rational use of natural resources;
- preventing technical barriers to trade;
- increasing the competitiveness of products in domestic and foreign markets.

Mandatory confirmation of conformity established in technical regulations is carried out in the form of:

- declaration of conformity;
- mandatory certification.

According to the Law, a system of operational mutual notification between state control bodies regarding high-risk products will be created and will begin to function [3].

The Law "On Technical Regulation" provides for a radical reform of the entire system of mandatory requirements for products, production processes, operation, storage, transportation, sale, disposal, performance of work and provision of services, as well as assessment and confirmation of compliance. Thus, the law focuses on the reform of the national system of standardization and certification in various spheres and sectors of the economy. Mandatory requirements for the objects of technical regulation for application and execution are established in technical regulations. Technical regulations can be adopted by an international treaty of the Republic of Uzbekistan, ratified in the manner established by legislation, state law; presidential decree; resolution of the Government of the Republic of Uzbekistan.

In accordance with the Law, general and special technical regulations will be developed and implemented, the main characteristics of which are given in the table.

Table 1.

Characteristics of types of technical regulations

Comparative characteristics	General technical regulations	Special technical regulations
Areas of establishing requirements of technical regulations	Safe operation and disposal of machinery and equipment; safe operation of buildings, structures, facilities and safe use of adjacent territories; fire safety; biological safety; electromagnetic	Types of products, processes of production, operation, storage, transportation, sale and disposal, the safety of which is not ensured by the requirements of general technical regulations and the

	compatibility; environmental safety; nuclear and radiation safety	degree of risk of causing harm by which is higher than that taken into account by the general technical regulations
Mandatory application and compliance	Any type of product, production process, operation, storage, transportation, sale and disposal	Individual types of products, processes of production, operation, storage, transportation, sale and disposal
Taking into account the requirements of technical regulations and the features of the objects of application	Technological and other features of individual types of products, production processes, operation, storage, transportation, sales and disposal are taken into account.	The requirements are general in nature.

The article highlights that globalization and digitalization not only change traditional patterns of behavior and interaction, but also require countries to reconsider their approaches to technical regulation. One of the key aspects is the need to create harmonized standards that will ensure the safety and quality of products at the international level.

It also emphasizes that technologies are developing at an unprecedented pace, making traditional regulatory methods obsolete. Therefore, it is important to introduce new mechanisms, such as "smart" regulation, which takes into account the features of innovative technologies and allows for rapid adaptation to changes.

The article **discusses** challenges such as consumer protection in the context of digital platforms, ensuring cybersecurity and protecting personal data. All these aspects require an integrated approach and cooperation between government agencies, business and society.

In addition, the article considers opportunities to improve the effectiveness of technical regulation through the use of artificial intelligence and big data

technologies. These tools can help analyze large amounts of information to identify risks and develop more accurate regulatory solutions.

The article concludes by emphasizing the importance of international cooperation in the field of technical regulation. In a global economy, no country can solve problems alone; a joint effort is needed to create a safe and efficient environment for all market participants.

Technical regulation in the context of globalization and digitalization is a complex but important task that requires coordination and cooperation between countries and sectors. Correct regulation can contribute to the safe and sustainable development of technologies, improve the quality of life of people and maintain stability in global markets.

Achieving these goals requires active and targeted efforts from both governments and the private sector to not only address challenges but also to seize new opportunities for economic growth and innovation.

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