

Problems, achievements and prospects of the system of normative documents in the field of technical regulation of construction in Uzbekistan

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Abstract: This article highlights information about the system, types, history of the formation of documents in the field of technical regulation of the construction TRC of the Republic of Uzbekistan, information about the competent government bodies for their development and approval. as well as the current state of documents in the field of TRC, based on the experience of foreign and developed countries, the results of the analysis of the situation are highlighted. Conclusions are drawn on issues aimed at solving the identified current problems.

Keywords: World Trade Organization, system of technical regulation, building norms and rules, urban planning norms and rules, technical regulations, standards, method of establishing specific requirements, method of parametric rationing, rationing structure.

Introduction

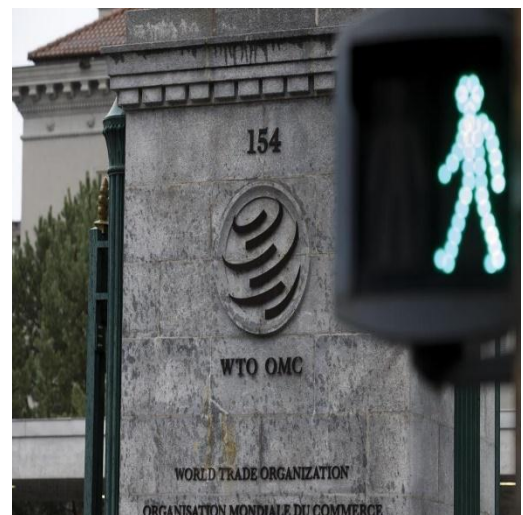
While studying the essence of the great reforms that are being carried out in our country today, we can understand that they are relevant and of particular importance in development of the country and the stabilization of our economy, as an example, one of the large-scale works related to the comprehensive reform of the construction sector, one can say the issues of improving the technical regulation system in construction (TRSC), and it is appropriate to look at it as one of the urgent and priority directions.

It is known that the World Trade Organization (WTO) is considered the only international organization that manages international trade rules.

One of the main tasks of the WTO is the elimination of technical barriers to trade, and one of the important documents mutually accepted within the framework of this organization focused on this issue is the "Agreement on Technical Barriers to Trade" document, which contains technical regulations, standards and conditions related to their development, use and adaptation to the international standardization system are given.

Today, the new Uzbekistan, which has determined the path of development, in its development strategy, aims to achieve economic and social development and stabilization in the country, to become one of the

leaders in the world community, to rise to the top positions in the rankings conducted by



international organizations by industry and promotes important issues such as creating an environment where national products can compete freely in the world market.

Therefore, the improvement and development of the system of normative documents in the field of technical regulation, which is considered as one of the important directions in the global world for achieving the goals in the above-mentioned issues, based on international requirements and experiences, is considered as one of the urgent issues in our country.

Historical stages of the system of regulatory documents in the field of construction in Uzbekistan

We will study the history of the emergence of the system of technical regulation and standardization in the structure of state management in the Republic of Uzbekistan, divided into 3 periodic stages:

The 1st stage is the period before the independence of the country until 1991.

The official stage of standardization in Central Asia, especially in Uzbekistan, began with the establishment of the "Weight and Balance Court Turkestan Center" in Tashkent in 1923. Branches of this center were established in the cities of Kokan, Samarkand, Ashgabat, and Alma-Ata.

In 1926, a standardization committee was established under the People's Commissariat of Worker-Peasant Inspection of Uzbekistan. At that time, the standard was approved in three types: testable, recommended, mandatory.

In 1932, for the first time in Uzbekistan, the UZREST50 Republican standard was accepted for the seed sort of sesame.

The modern stage of standardization in Uzbekistan begins in 1973 with the establishment of the State Standards Department of the Republic of Uzbekistan (Uzdavstandard).

The 2nd stage is the period between 1991 and 2017 after the country achieved independence.

After the independence of Uzbekistan, from the time of adoption of the decision of Cabinet of Ministers of the Republic of Uzbekistan (CMRU) No. 93 "On organization of standardization work in the Republic of Uzbekistan" in March 1992, a new era of standardization began.

In 1993-1998 and 2000-2003, a number of very important government decisions were made to accelerate standardization in Uzbekistan, certain measures were set. The main directions of the development of standardization combined with the international standardization process have been determined, the competent state institutions for the development and introduction of industry standards, regulatory documents, and the offices and organizations for control and monitoring have been determined.

In particular, according to the Law of the Republic of Uzbekistan "On Standardization" approved on January 28, 1994, in the field of construction, construction industry, including the State Architecture and Construction Committee of the Republic of Uzbekistan (now the Ministry of Construction of the Republic of Uzbekistan) was designated as the competent state management body in the direction of design and construction.

In 2003, the Republican Center for Standardization and Certification in Construction was established under the State Architecture and Construction Committee of the Republic of Uzbekistan.

The era of New Uzbekistan after 2017

In 2018, the Ministry of Construction of the Republic of Uzbekistan was established on the basis of the State Architecture and Construction Committee of the Republic of Uzbekistan. Also, in the same year, the Republican Center for Standardization and Certification in Construction was

reorganized into the Republican Center for Standardization in Construction. The following are the main tasks of this organization:

- ✓ improvement of the state system of standardization in the field of construction; organization, coordination and provision of standardization work;
- ✓ participation in the development of international (interstate, regional) standards;
- ✓ carrying out expertise of international (interstate, regional) and standards of other countries in the field of construction;
- ✓ development of legal documents on standardization objects in construction, as well as development of structural, organizational, technical and general technical sets of standards;
- ✓ Harmonization of requirements of construction industry standards of the Republic of Uzbekistan with international (interstate, regional) standards;
- ✓ carrying out scientific research works in the field of construction, construction materials, products and constructions, as well as standardization
- ✓ formation and management of construction industry standards, international (interstate, regional) and national standards fund of foreign countries;

Legal and structural changes in the field have been implemented in a systematic approach to the issues raised during the last 5 years of reforms in our country.

In 2021, the activities of the Uzstandart Agency were terminated and the activities of the Technical Regulatory Agency of Uzbekistan were established on its basis.

In 2022, the state institution " Research Institute for Technical Regulation and Standardization in Construction" (RISC) was established on the basis of the "Republican center for standardization in construction" (RISC) and the "Center for Technical regulation in construction" (CTRC), and the main tasks of this institution were determined as follows:

- Improving the system of regulatory documents, regulations, norms and rules and standards of urban planning in the field of construction and urban development;
- analysis and improvement of problems related to the development, revision, practical application of norms and rules and standards of urban planning, and harmonization with current reforms and international norms and standards;
- giving conclusions on the conformity of newly developed or improved projects of urban planning documents by ministries and agencies with the current regulatory documents in the field of technical regulation;
- development, implementation and improvement of the "National Classification of Construction Resources" and the "Electronic Catalog" based on it;
- introduction of digital technologies into the construction industry, including the project management system, monitoring of construction periods, digitized transparent systems for quality control of construction and assembly works;
- coordination of BIM technologies with the customer, monitoring of the state of implementation at the design and construction stages, as well as developing and improving BIM standards and uniform requirements based on international experience;
- expertise the energy-saving part of project documents developed on the basis of BIM technologies;
- improve the system of price formation in construction and the normative base on resource consumption;
- study the problems in the system of conducting scientific research and standardization and introducing new technologies in the field of construction;

- development of safety requirements for buildings, structures and their individual elements, as well as measures to increase the energy efficiency of buildings and structures;
- organization and management of scientific and technical library and electronic database of normative, including foreign documents;
- cooperation with foreign and international organizations, consultants and experts and involve them in improving the base of national regulatory documents.

In November 2022, a new version of the Law of the Republic of Uzbekistan "On Standardization" was approved, and according to it, three categories of standards are set to be state registered in the territory of the Republic of Uzbekistan, such as:

- ✓ Uzbekistan national standard (O'zMSt)
- ✓ international (regional) standards
- ✓ standards of foreign countries

A graphic representation of the history of the emergence of the technical regulation and standardization system in the state management structure

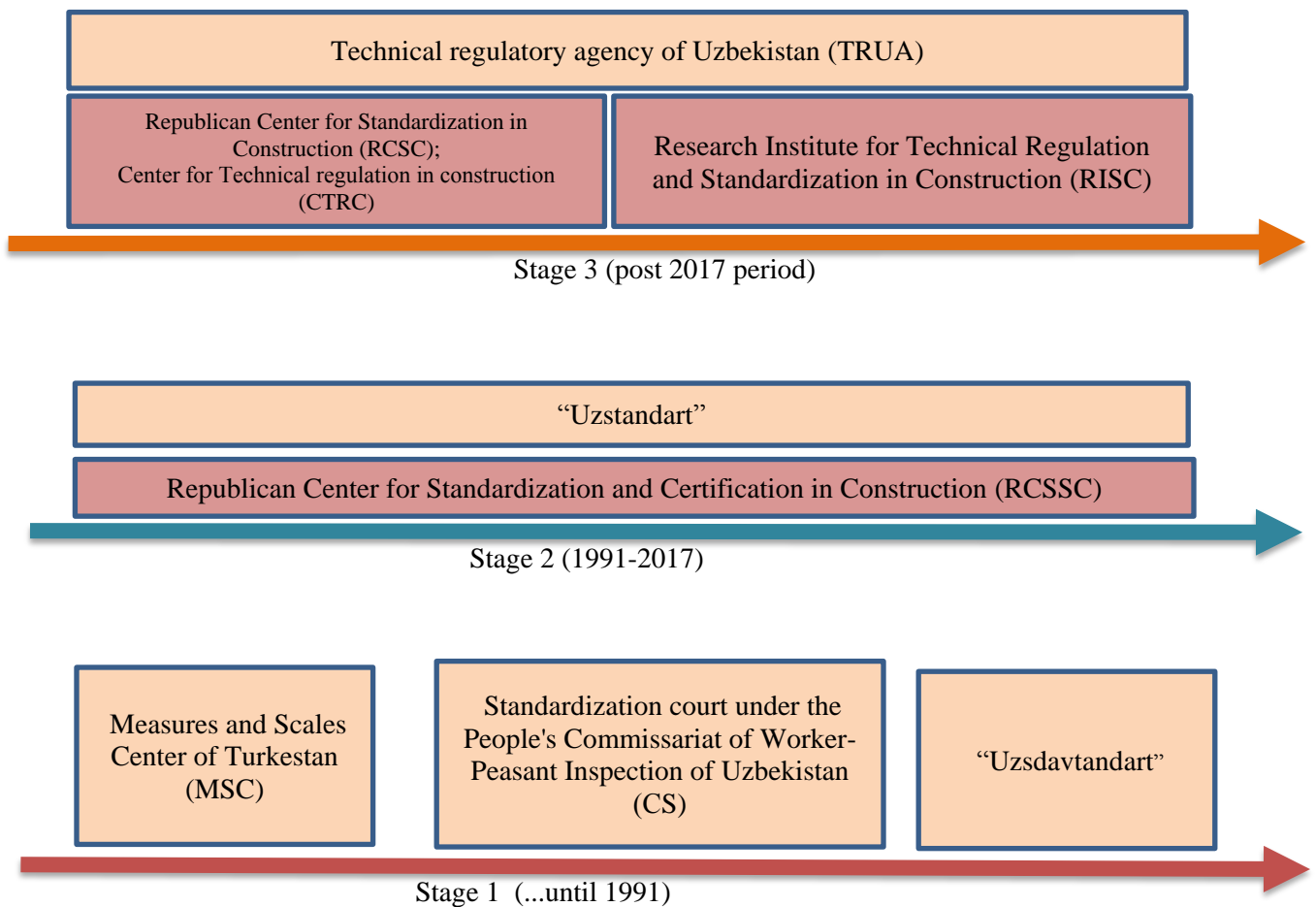


Figure 1: The history of the emergence of the technical regulation and standardization system in the state management structure

1 During the 1st stage, almost 99% of the technical regulatory documents in force in Uzbekistan consisted of standards obtained from the base of the interstate standard (GOST) approved by the Interstate Council for Standardization, Metrology and Certification (MGS).

During the 2nd stage, the indicator of the 1st stage organized the share of international standards 60-65% and national standards harmonized with these standards 25-30% and international (ISO) and national standards of foreign countries and national standards harmonized 10% with them.

In the 3rd stage, these indicators are as follows:

- State Standards (O'zDSt) -28%;
- International standards adopted in the original language (ISO, EN, IEC) -21%;
- Interstate standards (GOST) - 41%;
- National standards of foreign countries (DIN, GOST R) - 3%;
- Harmonized Interstate standards GOST ISO, GOST EN, GOST IEC - 28%;
- Harmonized state standards O'z DSt ISO, O'z DSt EN, O'z DSt IEC - 23%

Graphic representation of the degree of harmonization of the base of standardization in construction of Uzbekistan with the base of international standardization in historical stages

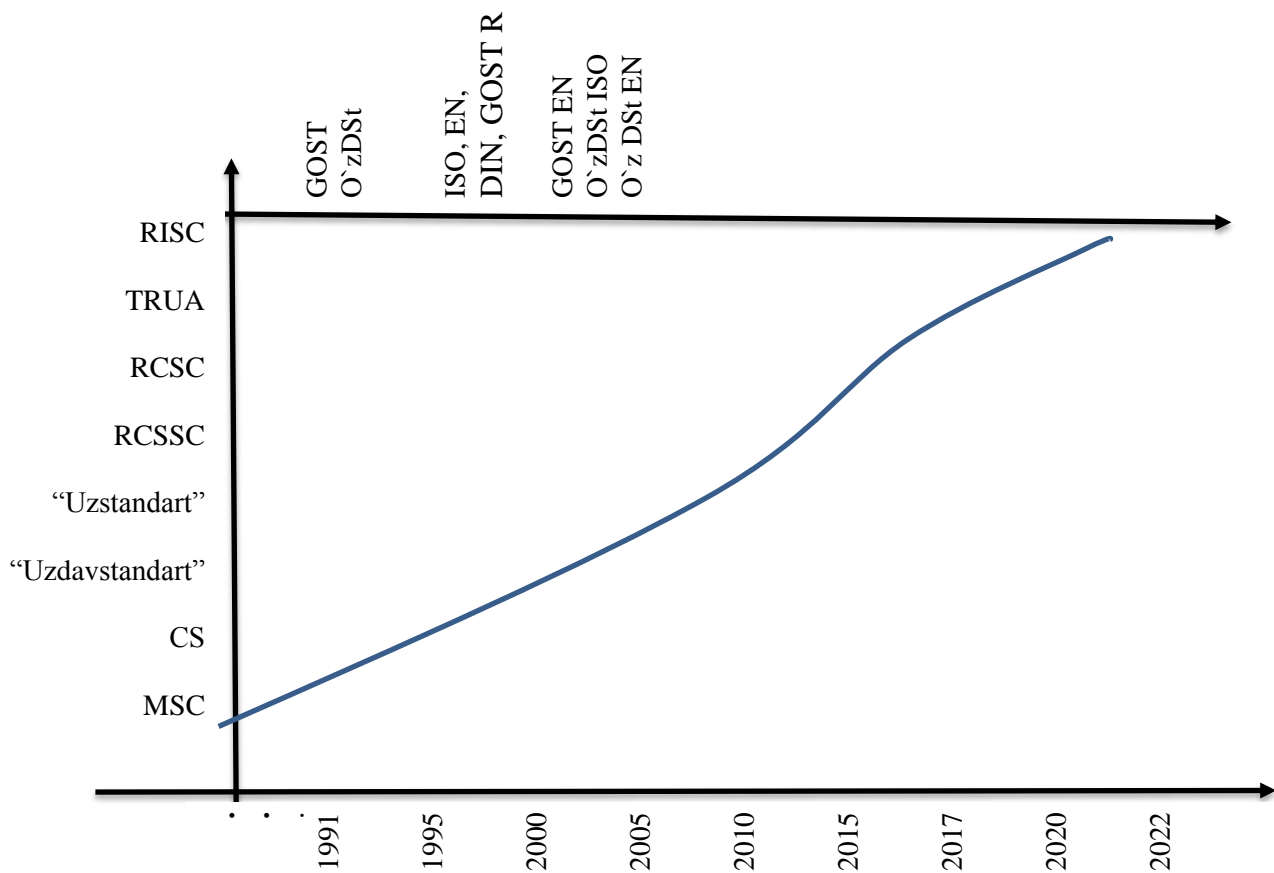


Figure 2: Graphic representation of the level of harmonization of the construction standardization base of Uzbekistan with the international standardization base in historical stages

Comparison of the current state of the structure of standardization in the technical regulation of the construction industry with the state of developed countries

According to the Law of the Republic of Uzbekistan "On Technical Regulation", normative-technical documents in the field of technical regulation - technical regulations, normative documents on standardization, sanitary, veterinary, veterinary-sanitary, phytosanitary rules and norms, city planning norms and rules, ecological norms and rules.

From these documents, we will briefly analyze the ones related to the construction industry on legal grounds.

Technical regulations (TR) - a regulatory document defining mandatory requirements for the

safety of products and services in the field of technical regulation, according to the Law of the Republic of Uzbekistan "On Technical Regulation".

Regulatory documents on standardization (International (ISO, EIC), Interstate (GOST, EN), National (UzDSt), Organization standard (Ts) - According to the Law of the Republic of Uzbekistan "On Standardization", compatibility of products in terms of product, environment, life, health and property safety of the population, technical and informational aspects and defines the requirements for ensuring their interchangeability, uniformity of control methods and uniformity of labeling.

Norms and rules of urban planning (Building Codes) - according to the urban planning code of the Republic of Uzbekistan, defines the mandatory requirements during the production and use of construction materials, products and constructions.

Analyzing these 3 types of regulatory documents in the field of technical regulation, we can see cases that repeat each other in the objects of regulation in them. That is, if the technical requirements for the products are determined simultaneously in technical regulations, norms and rules of urban planning, standards and other types of normative documents, if the products must be manufactured and/or used based on the requirements of the relevant regulatory documents, technically, in what proportion should normative documents in the field of regulation differ from each other, or according to what criteria should their normative objects be differentiated from each other? What are the differences in the content of the requirements defined in them, or what methods of standardization should be used in the formulation of the requirements in them? [7]

Based on the essence of the above questions, we will cover some analytical materials:

Information about the types of normative documents and their legal basis in the field of TRS related to construction, as well as information about the methods of standardization used in these normative documents are schematically represented in Figure 3;

Analytical data on the current situation of the structure of standardization of construction works and materials in TR in the Republic of Uzbekistan is covered according to Figure 4. Such as:

- Relative ranking of requirements applied to 1-, 2-, 3-, 4-level standardization objects;
- normalization satisfies are the highest level of parametric norm. These are general, socially significant requirements aimed at ensuring the safety of people and property.
- Functional requirements establish how the normalization object must satisfy the normalization villages
- Performance requirements establish performance criteria for building materials, assemblies, design factors and methods used in design and construction.
- The lowest level of compliance are the methods of scoring, which involve the provision of evidence of the regulatory compliance of the building solutions used.

Information about the competent state management bodies for approval of documents in the field of TR related to construction is presented in Figure 5



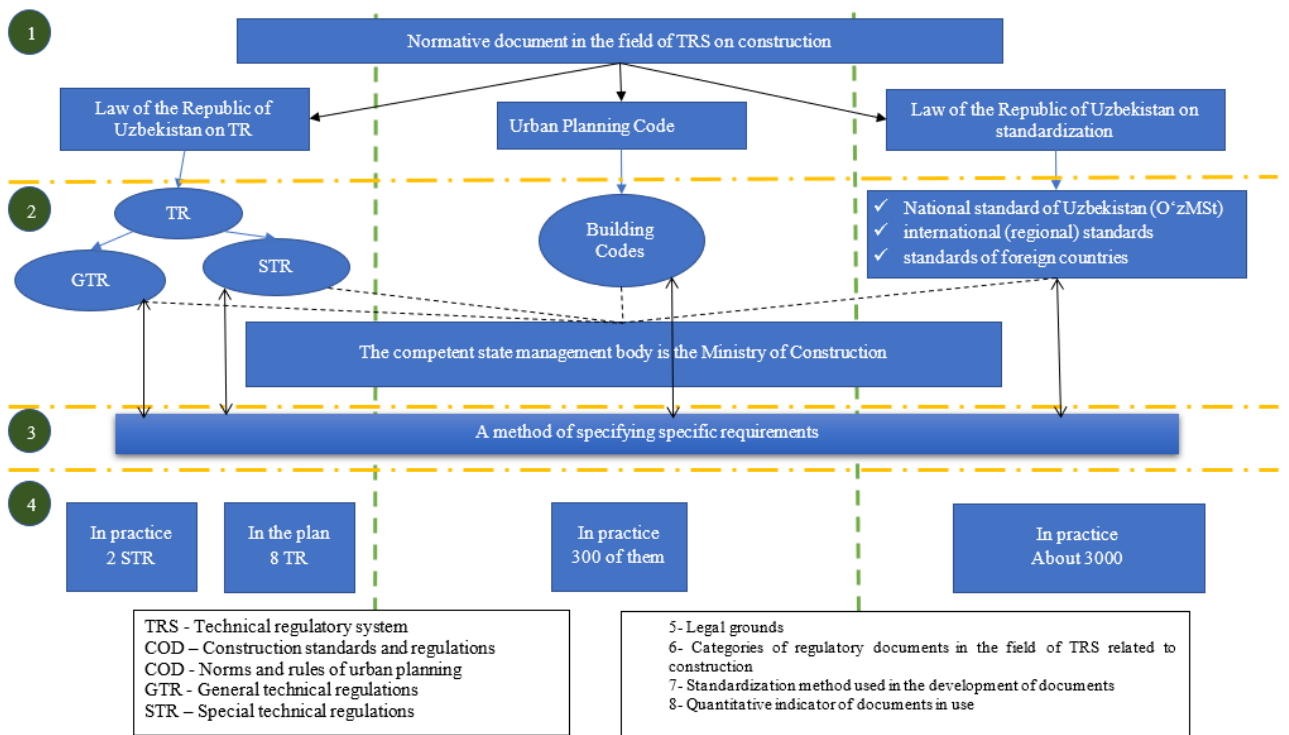


Figure 3: Legal basis, classification, standardization method of regulatory documents in the field of TRS related to construction and a schematic view of their actual quantitative indicators [1,2,3]

The structure of coordination of the technical regulation of the construction industry of Uzbekistan

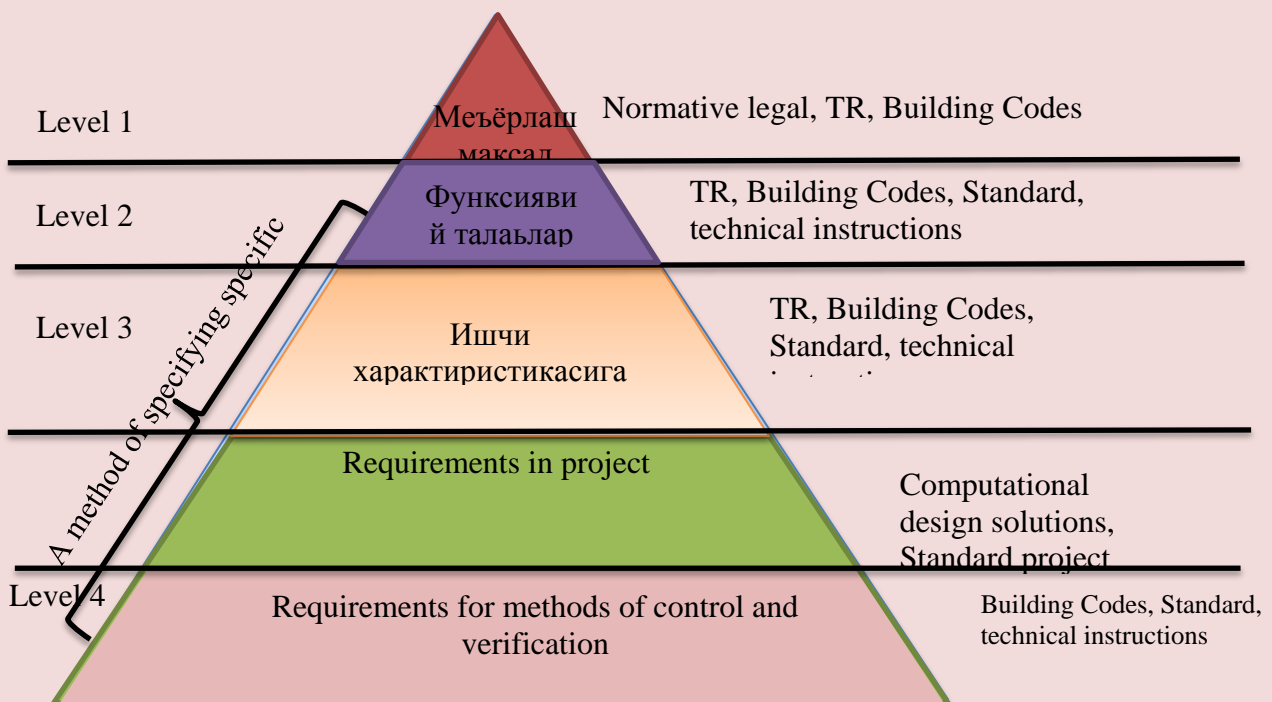


Figure 4. The structure of standardization in the technical regulation of the construction industry of Uzbekistan

TRS is a state management organization authorized to approve normative documents					
Validator organizations	GTR	STR	Building Codes	Standard	technical instructions
Cabinet of Ministers	✓				
TR agency					
Ministry of Construction		✓	✓	✓	✓
Standardization national office				✓	

It is approved based on the mutual agreement of the interested parties

Note: ✓ - According to the new version of the Law on Standardization (enters into force on 3.11.2022)

Figure 5: State Governing Bodies (SGB) authorized to approve TRS regulatory documents related to construction

Today's achievements and problems of Uzbekistan in the field

During a series of reforms aimed at urgent issues in this field, Uzbekistan is reflecting its achievements in the field of defense. The introduction of construction technologies from Germany, Korea, Turkey, China and India into Uzbekistan is the reason for the development of the construction industry in Uzbekistan, including, within the framework of the project "Modernization of building codes of Uzbekistan" carried out in cooperation with the Republic of South Korea, by the end of 2022, norms and rules of urban planning of Uzbekistan were studied and analyzed, also during this project it is envisaged to analyze the documents in the field of TRS related to the construction of the Republic of Uzbekistan and to re-develop them based on the principles of international standardization.

As a result of the reforms, along with the achievements, new aspects of the current problems in the field are revealed. We will mention some of them:

- Repetition of the requirements for standardization objects in the regulatory documents in the field of TR related to construction of Uzbekistan;
- The requirements of the normative documents in the field of construction technical standards of Uzbekistan are formed on the basis of the "Method of specifying specific requirements" and that this method does not correspond to the principles of international standardization;
- Due to the fact that the current state of the regulation structure of the TR system of the construction industry of Uzbekistan does not correspond to the principles of international regulation, it can be said that there are problematic issues such as the transition to the "Parametric regulation method".

Conclusion

The milestones that are set in determining the reforms to be implemented by our government show that, by organizing activities in accordance with international requirements, it is determined to take a place among the leaders in the international experience.

Therefore, the following conclusions can be drawn from the results of the analysis revealed in this article:

- In order to prevent repetition of the requirements imposed on the objects of regulation in the regulatory documents in the field of TR related to construction of Uzbekistan, it is necessary to study the regulatory legal documents;
- It is necessary to transfer the normative documents in the field of TR related to the construction of Uzbekistan from "Method of specifying specific requirements" to "Method of parametric standardization";
- It shows that the study of issues such as the need to revise the standardization structure of the TR system of Uzbekistan's construction industry based on the principles of international standardization and conducting research within them are very important current issues.

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