

# **INTERNATIONAL STANDARDS OF QUALITY IN THE REPUBLIC OF BELARUS**

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More and more enterprises of the Republic of Belarus realized the need to certify their activities in accordance with international standards. This is especially important for enterprises seeking to move beyond the national market, since it is these standards that are the globally recognized equivalent of quality that leaders rely on when deciding on

cooperation. The most popular standards used by Belarusian enterprises are STB ISO 9001, STB ISO 14001, STB 18001, STB 1470. Their joint application allows to form a functioning system at the enterprise that can be quickly adjusted to changes in external economic conditions, be it legislation or consumer preferences, and fully meet world requirements. This is due to the scientific and practical significance of the chosen research topic.

Objective: to conduct an analysis of the degree of implementation of international quality standards in the activities of enterprises of the Republic of Belarus.

Research methods: generalization of literary sources and statistical data.

Standard STB ISO 9001 establishes the criteria for a quality management system and is the only standard in the series for which certification is possible. According to the Resolution of the State Committee on Standardization of December 14, 2015, № 58, from March 3, 2016, the standards of the Republic of Belarus STB ISO 9001–2015 «Quality management systems. Requirements» and STB ISO 9000–2015 «Quality management systems. Fundamentals and vocabulary».

ISO 9001: 2015 is the improvement of the 2008 standard. ISO 9001:2015 reinforces requirements that were previously assumed, such as error checking, change management, risk management, and error tolerance in the event of non-fulfillment of planned activities. ISO 9001:2015 is perhaps more directive in these areas, and has less scope for interpretation. When following the path proposed by the new standard, the organization will come to a better understanding of the expectations of customers and protect their activities.

Objectives of the standard ISO 9001:2015:

- create a stable system of requirements for the next 10 years;
- despite the fairly general nature of being still relevant to all types and sizes of organizations regardless of the sector of the economy;
- maintain the current emphasis on the effective management of processes to achieve the desired results, to take into account the change in the practice of quality management, because the last major revision took place in 2000;
- reflect the change in the increasingly complex and dynamic environment in which the organization operates;
- apply the general structure in the definition text set out in the annex SL in the ISO directive to ensure compatibility with other management systems (example ISO 14001);
- use simple wording to ensure understanding and interpretation of requirements [1].

The new structure of ISO 9001:2015 was also reflected in the schematic presentation of the process approach. The scheme of the process approach reflects the interconnection of all sections of the standard (Figure 1).

According to The National System for Confirming the Compliance of the Republic of Belarus (NSCC) for the period from 2013 to 2016, the number of STB ISO 9001 certificates from 2570 increased to 3076 [2]. The largest number of certificates is in Minsk – 1110. Further down are: Minsk region – 509, Gomel region – 418, Brest region – 395, Mogilev region – 326, Grodno region – 322, Vitebsk region – 316 [3]. As of January 10, 2018, the largest number of certificates were issued Belarusian State Institute of Standardization and Certification (BelSISC) and was 344 certificates. Further descending followed by: Technical Institute for Certification and Testing (TICT) – 320 certificates; Belarusian State Institute of Metrology (BelSIM) – 307 certificates; RUE «Stroytechnorm» – 306 certificates; Bobruisk CSM – 276 certificates [3].

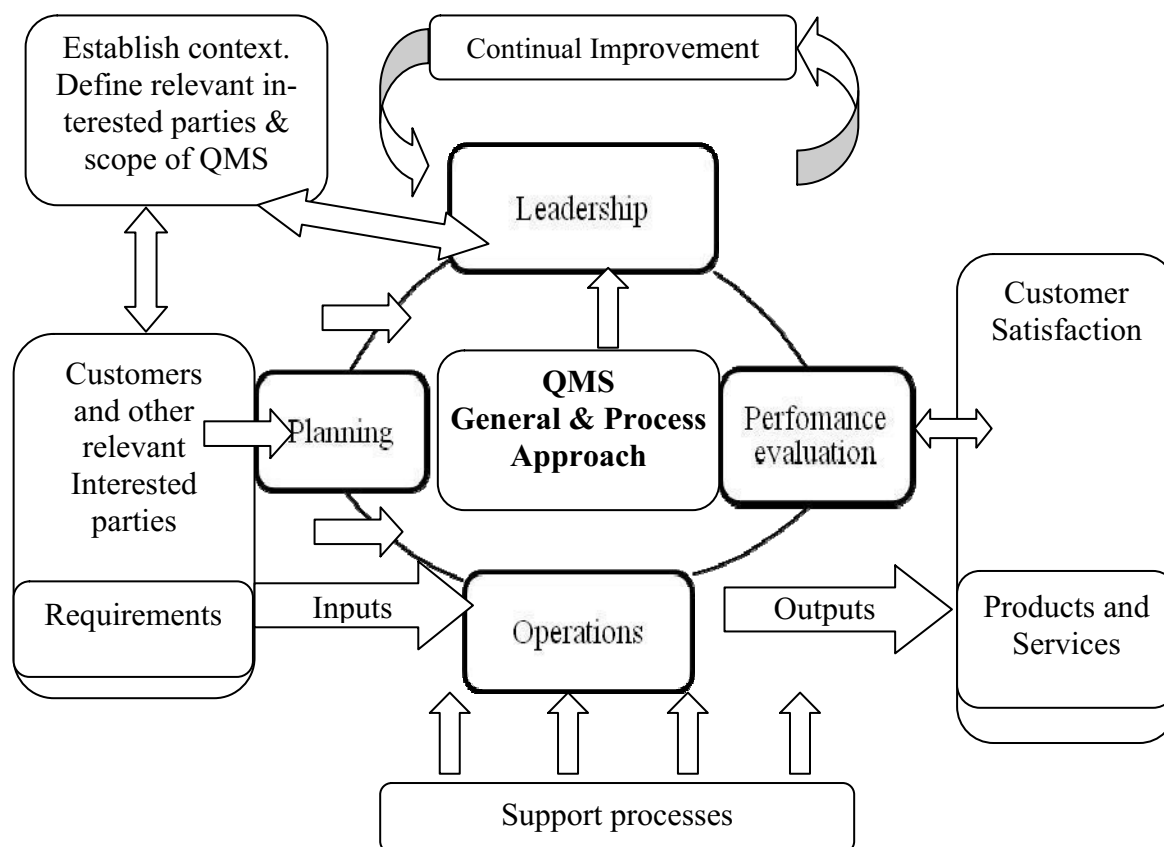


Fig. 1. Scheme of the process approach according to ISO 9001: 2015

Note – Developed by the author using [1]

STB ISO 14001 sets the system requirements of environmental management. The current version is STB ISO 14001–2017 «Environment management systems – Requirements with guidance for use», approved by the resolution of State Committee on Standardization of Belarus from 11.04.2017 г., № 29 and entered into force from 1 July 2017. According to the NSCC, in 2016 only 268 organizations of Belarus had this certificate, while in 2013 number was 294 [2]. That is, in contrast to other standards, here is observed gradual decline. Top 5 accredited certification bodies issued the highest number of certificates STB ISO 14001, at January 10, 2013 includes: EcologyInvest – 77 certificates, BelSIM – 68 certificates, BelSISC – 57 certificates, Belarusian Research and Development Center «Ecology» (BelRDC Ecology) – 33 certificate and BNTU – 23 certificate [2].

STB 18001 is another of the standards we consider. This standard specifies the requirements for occupational health and safety management system that are applicable to organizations of any type and size. The introduction of such a system allows organizations to formulate a policy in the field of labor protection, establish goals and processes to fulfill the obligations stipulated by the policy. STB 18001–2009 «Occupational health and safety management system. Requirements», approved by the resolution of State Committee on Standardization of Belarus from April 24, 2009, № 19 and entered into force from October 01, 2009. According to the NSCC, in 2016, 1068 organizations of the Republic of Belarus introduced this standard, while in 2013 their number was 873 [2]. The largest number of certificates STB 18001 as of 10.01.2018 was issued by Republican Center for Labor Protection of the Ministry of Labor and Social Protection of the Republic of Belarus

(RCLP) and amounted to 230 certificates. Further in descending order follow: Republican Institute of Higher School (RIHS) – 173 certificates, BelSIM – 119 certificates, BelSISC – 92 certificates, Bobruisk CSM – 51 certificate [2].

Standard STB 1470 establishes the basic requirements for a quality management system and food safety based on risk analysis and critical control points. It outlines the principles for the development of the HACCP system, the requirements for the implementation and operation of this system, and provides examples of working documentation. The current version of the standard is STB 1470–2012 «Management of food safety through the hazard analysis and critical control points. General requirements», introduced on January 1, 2013 in accordance with the Resolution of the State Committee on Standardization of the Republic of Belarus from January 18, 2012, № 4. According to the NSCC, in 2016 the number of enterprises certifying their activities under this standard was 381. In 2015, 2014 and 2013 years the value of this indicator was 353, 350 and 336 certificates, respectively [2]. Thus, there is an insignificant but steady increase in the number of enterprises that have successfully implemented this standard. The top 5 accredited certification bodies that issued the largest number of STB 1470 certificates at January 10, 2013 includes: BelSIM – 67 certificates, BelSISC – 48 certificates, Gomel CSM – 40 certificates, Brest CSM – 31 certificates, Grodno CSM – 29 certificates [2].

Thus, favorable conditions exist in the Republic of Belarus for certification and introduction of international level standards in the activities of enterprises of various industry affiliations. The basis for the regulation of relations arising in the development, establishment and application of technical requirements and standards is Law of the Republic of Belarus from October 24, 2016, № 436-3 «On the Introduction of Amendments and Additions to the Law of the Republic of Belarus «On Technical Norms and Standardization.» Also, this Law determines the legal and organizational basis of technical regulation and standardization, a unified state policy in this area.

#### Literature

1. СТБ ISO 9001–2015 (ISO 9001:2015, IDT). Системы менеджмента качества. Требования. – Введ. 01.03.2016. : Госстандарт. – Минск : БелГИСС, 2016.
2. Полякова, О. И. Сертификация деятельности предприятий Республики Беларусь по международным стандартам: актуальность и динамика / О. И. Полякова // Актуальні проблеми управління соціально-економічними системами : матеріали Міжнар. наук.-практ. інтернет-конф., Луцьк, 7 груд. 2017 р. Частина 2. – Луцьк : РВВ Луцького НТУ, 2017. – С. 262.
3. Полякова, О. И. Сертификация систем менеджмента в Республике Беларусь / О. И. Полякова // Модернизация хозяйственного механизма сквозь призму экономических, правовых, социальных и инженерных подходов : сб. материалов XI Междунар. науч.-практ. конф., Минск, 23 нояб. 2017 г. / М-во образования Респ. Беларусь, Белорус. нац. техн. ун-т ; ред. С. Ю. Солодовников [и др.]. – Минск : БНТУ, 2017. – Т. 2. – С. 196.