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methodology of the analytical providing of management through categories «finances», «financial resources», «financial activity». A key moment here are necessities of financial management [12; 14]. Thus, there is a necessity of all-round research of economic essence of category «financial activity» and the most complete concordance her from registration a theory and practice. To our opinion, further researches lie inplane process of capture of data for a management forming, distribution and use of financial resources of subject of menage : management money streams, generating of valueadded, her maintenance and conditioning for the use. Founding to such conclusion is and that in the developed countries distinguish two basic directions of financial activity : actually activity and management money streams.

It is therefore necessary to define the methodological aspects of collection of information for the necessities of management financial activity, that will be realized in the field of a record-keeping and to his methodology represented in registration standards and theoretical developments.

#### References:

1. Alborov R.A. Accounting in the system of economic methods of agricultural production management. R.A. Alborov. Agricultural economics. enterprises. 2001. № 10. S. 23–28.
2. Bazilinska O. Ya. Problems of financial management of enterprises in the conditions of formation of the financial system of the country. O. Ya. Bazilinska. Culture of the peoples of the Black Sea region. 2006. № 89. S. 19–21.
3. Belyalov T.E. Mechanism for managing the financial activities of corporate enterprises: Dis. for the degree of Candidate of Sciences. econ. Science: special. 08.06.01 «Economics, organization and management of the enterprise». T.E. Belyalov. K., 2006. 215 p.
4. Birman A. M. Finance of the national economy

of the USSR. in 2 h. M., 1953. 57 p.

5. Blancart S. Public finance in a democracy: an introduction to financial science: a textbook. S. Blancart: for science. ed. and before. V.M. Fedosov; lane. with him. S. I. Tereshchenko, O.O. Tereshchenko. K. : Lybid, 2000. 653 p.

6. Galazyuk N.M., Ivanochko S.S., Kipershain A.A. Methods of complex analysis of the results of financial and economic activities of natural monopolistic structures. N.M. Glazyuk, S.S. Ivanochko, AA Kipershain. URL: [www.nbu.gov.ua/portal/20./index.htm](http://www.nbu.gov.ua/portal/20./index.htm).

7. Commercial Code of Ukraine: The Verkhovna Rada of Ukraine dated 16.01.2003 № 436-IV (appeal date 03.04.2021).

8. Koval N.I. The economic essence of financial resources and their categorical apparatus. N.I. Koval. zb. Science. wash. *Bulletin of Sumy. state agrarian. University: Series: Finance and Credit*. Vip. № 2. Sumy, 2007. S. 384–385.

9. Lyshilenko O.V. Accounting: a textbook. 3rd ed., Revised. and ext. O.V. Lishilenko. K. : 2009. 230p.

10. Nalukova N. Financial activity of business entities: the essential-analytical aspect. N. Nalukova. Galician Economic Bulletin. 2011. №1 (30). P.166 – 174.

11. National Regulation (Standard) of Accounting 1 «General requirements for financial reporting»: IFI order of 07.02.2013. № 73 (appeal date 15.04.2021).

12. Accounting management of financial activities of agricultural enterprises. Monograph. Vinnytsia: Publishing House PE «Edelweiss and K», 2013. 302 p.

13. Tereshchenko O.O. Financial activity of business entities: teaching method. way. for self. studied dist. O.O. Tereshchenko. K., 2006. 312 p.

14. Finance of enterprises: a textbook. ker. aut. count and sciences. ed. prof. AM Podderiyogin 4th ed., Ext. and processing. K. ; KNEU, 2002. 571 p.

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## QUALITY OF AGRICULTURAL PRODUCTS IN THE SYSTEM OF EUROPEAN INTEGRATION PRIORITIES OF UKRAINE

### **Abstract.**

*The article analyzes the problem of harmonization of Ukrainian quality standards with European ones, considers the peculiarities of implementation of international quality standards in Ukraine, comparative analysis of the new fifth version of international quality standards ISO 9000 series, proves the feasibility and conditions of application of new requirements of international quality standards. The necessity and significance of HACCP implementation are substantiated and create and implement the latest quality management systems for agro-industrial products, as one of the key factors in increasing the export competitiveness of agricultural products on the world market.*

**Keywords:** *international quality standards, products of the agro-industrial complex, harmonization, quality management, free trade zone, integration.*

**Formulation of the problem.** Ukraine's integration into the European political and economic space has been repeatedly proclaimed as a priority vector for entering the world economy, which not only

corresponds to the natural geopolitical direction of Ukraine's integration strategy, but is a key practical means of forming an effective open economy.

For Ukraine, European integration is not only an opportunity to build democracy and civil society, it is a way to modernize the economy, attract foreign investment and new technologies, create new jobs, increase the competitiveness of domestic producers [5].

**Analysis of basic research and publications.** The works of well-known domestic scientists are devoted to the research of problems of system quality management of agrarian enterprises of Ukraine: L.I. Bozhenko, B.V. Burkinsky, O.Y. Gutta, V.P. Галушка, O.Д. Hudzinsky, JS Zavadsky, IG Venetsky, A.M. Length, A.M. Dolzhansky, P.Ya. Kality, VI Krivoshchokova, LE Kupinets, VO Мозолюка, O.I. Momota, S.K. Fomichev, II Chaika, M.I. Shapovalova and others.

**The purpose of the article** there is an analysis of ways to accelerate the harmonization of Ukrainian quality standards to European and prove the need for this phenomenon.

**Presenting main material.** Current trends in the development of domestic agriculture convincingly prove the existing objective preconditions, strong export potential and incentives for the development of foreign economic activity. The processes of formation and functioning of the agricultural market are impossible without adaptation to the European community, which opens new opportunities for farmers and provides significant opportunities for the development of the global economic space in terms of preferential trade, access to resources, expanding geographical and commodity structure. overcoming tariff and non-tariff barriers, etc.

However, despite obtaining a preferential regime in mutual trade, the practice points to a number of problems in accelerating the process of adaptation of domestic agricultural products to the requirements and norms of the European market. The inhibitory factors are low sectoral efficiency, inconsistency of the structure of Ukrainian exports of demand of the European Union (EU) for food, poor product quality, dominance in the structure of exports of raw materials and insignificant competitive advantages of certain products in the European market. More loyal and less flexible requirements of domestic legislation discriminate against the national agricultural producer, who is unable to meet the requirements of the European market, while importers enter the Ukrainian market without hindrance [1].

The deep and comprehensive free trade zone between Ukraine and the EU provides an opportunity to expand the access of agro-industrial products to the European market, which, in turn, requires increasing its competitiveness. The problem with the competitiveness of agricultural products in the European market is mostly inconsistent with its EU standards. The signing of an association agreement between the EU and Ukraine also means certain requirements for the quality standards of agricultural products [6].

According to international experience, an important prerequisite for improving quality (products, services or life) is the development of effective quality management systems.

It is known that the quality system is a set of organizational structure, relevant procedures, processes

and resources that ensure the overall quality management of products and services and maintain strong links between all management and operating enterprises at all levels of production and sales. The International Organization for Standardization (ISO) was established in 1946 in Geneva, Switzerland. ISO standards outline the requirements that a quality management system must meet. Its implementation and effective functioning is confirmed by a certificate. The basis of ISO quality system standards are four international standards. Regardless of the specifics of the products, these standards are applied both in the manufacturing sector and in the service sector.

ISO 22000 "Food Safety Management System" standards play an important role in improving product quality. The ISO 22000 standard is designed specifically to enable organizations of all types involved in the food supply chain to implement a safety management system for these products [4].

Harmonization of Ukrainian national standards with European ones is especially important in the process of Ukraine's European integration. In these conditions, the harmonization of Ukrainian standards with European ones can be considered as one of the main mechanisms to increase the competitiveness of products in the European market.

During the last period, Ukraine has been increasing the production and export of agricultural products. Despite the positive trends in agricultural exports to EU countries, there are still a number of problems related to its quality. Due to the low level of harmonization, Ukrainian goods are uncompetitive in the European market.

Currently, the vast majority of agricultural enterprises in Ukraine due to the lack of harmonization of national and European standards have been de facto excluded from trading in the markets of agricultural products in other countries. The largest share of domestic agricultural products, which do not always meet quality standards and safety requirements under the WTO and EU agreements, is produced by small households. Many Ukrainian companies do not have international quality certificates. According to the Ukrainian Agrarian Confederation, only 7% of Ukrainian producers have received international ISO and HACCP quality certificates [6].

The introduction of a food safety management system based on the HACCP concept (HACCP) allows the company to:

- guarantee the production of safe products through systematic control at all stages of production;
- properly manage all hazards that threaten food safety;
- prevent, eliminate or minimize them;
- ensure that food is safe at the time of consumption;
- to ensure proper hygienic conditions of production in accordance with international norms;
- demonstrate compliance with applicable legal and regulatory requirements for food safety;
- strengthen the confidence of consumers, customers and supervisors in the products produced and improve the image of the enterprise;

- expand the network of consumers of products and enter foreign markets;
- increase the responsibility of staff for the production of safe products and ensure that all employees of the enterprise understand the paramount importance of aspects of product safety.

The need to implement international standards is caused by the following factors of organizational and economic order: improvement of state systems of standardization and certification and bringing them into line with international requirements [3].

International standards are generally developed by ISO technical committees in accordance with the rules set out in the ISO / EU Directives, Part 3.

The Technical Committee ISO / TC-176 (Quality Management and Quality Assurance) in 1986-1987 developed and published the first five standards of the ISO 9000 series, which are based on the British standard BS 5750. The first region in the world to recognize the importance of these standards - Europe, implemented ISO standards and certification for compliance with them. Since 1987, each member state of the EU and the European Free Exchange Association has been using international quality management standards. In November 1987, the European Committee for Standardization introduced the European standards of the EN 29000 series, which are harmonized with ISO standards. In the following years, ISO 9000 series standards are systematically revised, developed and approved.

Currently in force is the fourth edition of international quality standards, adopted in 2005-2009, which contains three main standards

- ISO 9000: 2005 Quality management systems. Basic provisions and glossary of terms [8];
- ISO 9001: 2008 Quality management systems. Requirements [9];
- ISO 9004: 2009. Management to achieve sustainable success of the organization. Quality management approach [10].

The International Organization for Standardization (ISO) has released the 5th edition of the ISO 9000 series of standards, the preparation of which began in June 2012. The first standard of the new version (ISO 9000) was developed in 2014, it describes the principles of quality management, on which all ISO 9000 standards are based. The principles were developed and updated by international experts of the ISO / TC 176 committee, their number was reduced to seven. A detailed description of each principle and justification of its feasibility in the enterprise.

The principles of quality management according to ISO 9000 are not considered requirements in themselves, but they create a basis for the development of requirements in ISO 9001. In 2015, a draft of a new version of this standard DIS (Draft International Standard) was developed, the final version, which will result in the normal procedure of canceling the previous version of the standard (ISO 9001: 2008) and assigning a transition period. It will enable users of the standard to make changes to their management systems and obtain updated certificates of conformity.

The new version of the ISO 9001 standard has changed significantly compared to the 2008 version. The ISO 9001: 2015 version was developed in accordance with the Annex to the ISO Annex SL Directive (ISO / IEC Directives, Part 1 Consolidated ISO Supplements specific to ISO). The Directive defines the requirements for regulatory documents on the management system and establishes a new single standard for the structure of the management system.

The revision of ISO 9001 focuses on the efficiency of enterprises and its quantitative assessments. The word "business" is not common in ISO 9001: 2008, but ISO 9001: 2015 will define business processes. The requirements for the implementation of the process approach are defined in more detail and clearly. In the new version of the standard, precautionary measures are replaced by risk management.

In contrast to the current ISO 9001: 2008 standard, which had no significant changes compared to the previous version of 2000, the new version is characterized by significant changes in both the structure of the normative document and the content of sections. The ISO 9001: 2015 standard includes the following sections:

0. Introduction
1. Scope
2. Regulatory references
3. Terms and definitions
4. The context of the organization
5. Leadership
6. Planning
7. Provision
8. Processes
9. Evaluation
10. Improvement

Consider the main differences between the new version of ISO 9001: 2015 by section.

The introduction contains general information about the international organization for standardization, directly characterizes the standards of the ISO 9000 series, process approach, PDCA cycle, risk management, the relationship of the ISO 9001: 2015 standard with standards for other management systems. The scope of ISO 9001: 2015 compared to the 2008 version remained the same. Regulatory references contain references to interrelated standards.

The terms and definitions used in the standard have been expanded to introduce the concept of risk as the effect of uncertainty on the expected outcome. Uncertainty is a state or situation that is characterized by a lack of information, understanding or knowledge about a particular event, its consequences or probability. Risk is often expressed in the form of a combination of the consequences of an event (including changes in circumstances) and the associated probability of occurrence.

The international standard ISO 9001: 2015 under consideration, in contrast to the previous version, uses the terms "product" and "service" separately for the purpose of special selection of services that have characteristic features and differ from the category "products". Compliance with the requirements for

services must be carried out in cooperation with the consumer. Compliance with the requirements for the service can not be confirmed before its provision, it is determined by the satisfaction of the service user.

The new version of the ISO 9001: 2015 standard includes a section "Context of the organization", which provides for determining the internal and external working conditions of the organization (its environment), which affect the performance and quality management system. This can be the influence of both internal factors (infrastructure, available material and human resources) and external (government regulation, conditions of the world economic space, partners and customers). Organizations should identify stakeholders who can also influence the quality management system, analyze customer requirements, and monitor these requirements on a regular basis. By establishing a specific situation of "context", the organization forms goals, determines the external and internal parameters that should be taken into account in risk management,

The section "Organization context" sets out the requirements for defining the processes required for the quality management system and the procedures for managing these processes. An additional requirement of the standard for the organization is to determine the risks and opportunities of each process.

The section "Leadership" includes requirements for senior management of the organization, which must demonstrate its leadership position in the development of quality management system and commit to the implementation and management of this system. Similar to the requirements of ISO9001: 2008, senior management should develop, analyze and revise a quality policy that should be documented. A new requirement of this section is the obligation of the top management of the organization to determine the responsibilities and powers, as well as to distribute the necessary roles in the organization for the quality management system, the implementation of all processes and customer requirements.

The "Planning" section discusses actions to respond to the risks and opportunities of the organization. This is a fundamentally new block of ISO 9001: 2015 requirements. The organization must identify risks that may affect the quality management system and the results of the organization, create a plan to respond to the risks and opportunities of the organization. Management should set quality objectives for all levels of departments and processes, to achieve which plans should be developed and relevant events identified, as well as possible changes in the quality management system.

The "Provision" section covers common requirements for resource management: infrastructure, production environment, human resources for monitoring, as well as knowledge management requirements. The standard sets requirements for the competence and awareness of staff on quality policy and the requirements of the quality management system. This section of the standard requires the organization to identify internal and external

interactions that may affect the quality management system.

The ISO 9001: 2015 standard introduces new concepts that replace the terms "documented procedure" and "records" used in the 2008 version. The section contains common requirements for documentary information, requirements for its creation and updating, as well as requirements for the management of documentary information.

The main block describing the release of products in the quality management system and its operation is the section "Processes", which contains more detailed and clearly defined requirements for the implementation of the process approach. There is a systematic definition of processes, their identification and evaluation of interaction in order to achieve the planned result. Requirements for the following types of processes of quality management systems are set:

- processes of design, development of products and services, planning of initial data and possible changes to them;
- processes related to the management of external supply of products and services (similar to the requirements of section 7.4 of the ISO 9001: 2008 standard);
- processes of preservation of products and services, requirements for identification and traceability, delivery of finished products, as well as actions after delivery;
- management of inappropriate processes, products or services, the necessary actions of the organization in case of inconsistencies in processes, products or services.

The section "Evaluation" evaluates the effectiveness of the quality management system in the enterprise, includes general requirements for monitoring, measurement, evaluation analysis, as well as requirements for the analysis of the organization and quality management system. The requirements for planning, organizing and conducting internal audit are given.

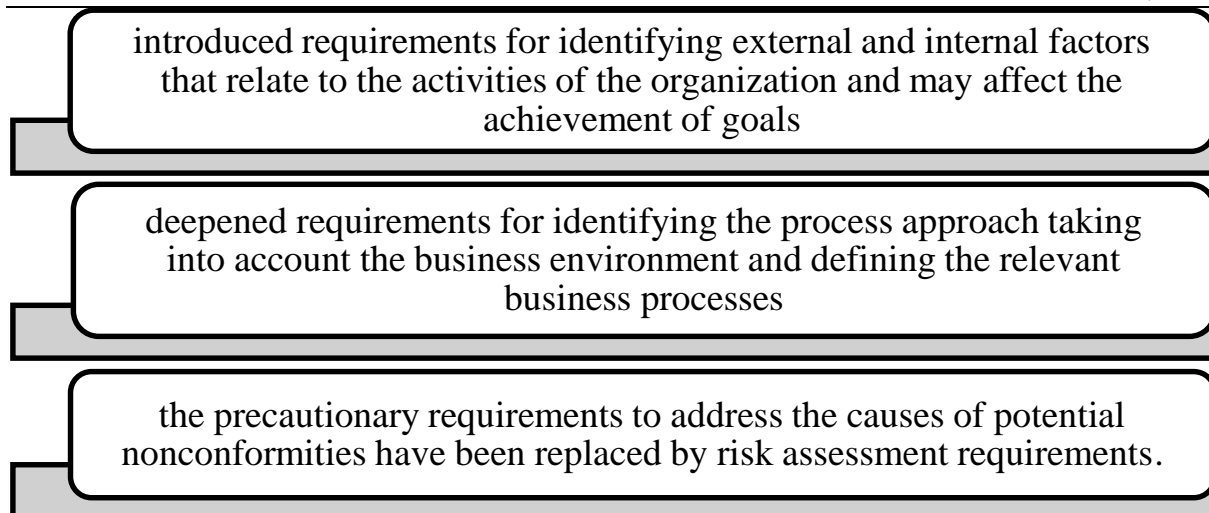
Additionally, the section contains requirements for senior management of the organization, which should plan and regularly analyze the management system of the organization.

The section "Improvement" defines the general requirements for continuous improvement in processes, products and services, as well as the effectiveness of the quality management system of the organization.

The requirements concerning the action of the organization in case of discrepancies are presented. This section identifies the need for corrective action. The requirements of this section oblige the organization to use its capabilities to continuously improve performance and the quality management system as a whole.

The analysis of the revealed differences of the new version of the international standard ISO / DIS 9001: 2015 indicates significant changes in the specified normative document, the main of which are (Fig. 1):





*Fig. 1 The main differences of the new version of the international standard ISO / DIS 9001: 2015*

An effective tool to solve the problem of quality improvement and competitiveness in the agro sector is the introduction of quality management systems in accordance with international standards ISO 9000. When developing management systems in agro-industrial enterprises should take into account new requirements for products and services and changes to quality management system according to international principles. First of all, the business environment in which a particular enterprise is located is studied, all stakeholders (customers, consumers, partners, suppliers of raw materials, etc.) are identified, the nature and processes of interaction with them are established, and consumer satisfaction is monitored. Risk assessment should be carried out in accordance with the requirements and recommendations of the international standard for risk management ISO 31000: 2009,

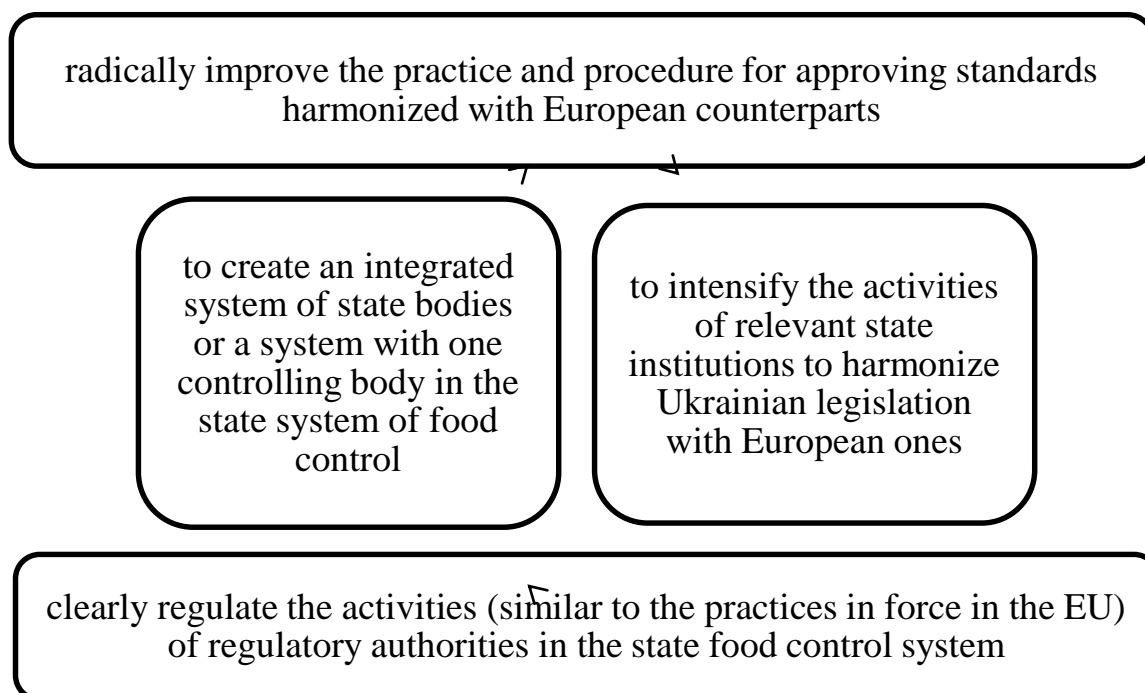
The enterprises of the agro-industrial complex cover various links of numerous chains of production and supply of agricultural products to the consumer, therefore new requirements of the international quality standards to these products should be applied together

with requirements of the standard for food safety management of the ISO22000: 2005 series based on HACCP principles.

New technical conditions ISO / TS 22002-3 have been developed to help agricultural enterprises implement international principles of risk and safety control in all chains of crop production, livestock breeding and processing of relevant products. "Programs of mandatory requirements for food safety. Crop Production ", which sets requirements and recommendations for the development, implementation and documentation of such programs for agriculture. The scope of this normative document includes all operations of agro-industrial production, including sorting, cleaning, packaging, feed production, transportation, etc.

[7].

To control the quality of products, it is advisable to create a self-regulatory organization of producers at the state level, which could coordinate activities in the field of standardization and quality of agricultural products. In the context of harmonization of Ukrainian legislation with European it is necessary (Fig. 2) [6]:



*Fig. 2 Recommendations for the harmonization of Ukrainian legislation with European*

Thus, in order to conquer international markets and ensure the appropriate competitiveness of agricultural products on world markets, it is necessary to constantly monitor the improvement of its quality. Improving product quality is one of the most important areas of intensive and innovative development of the national economy, a source of economic growth and efficiency of social production.

Globalization processes in the economy and increasing non-price competition stimulate agricultural enterprises to find innovative ways of development, which are primarily related to the problems of improving the quality of manufactured products, its adaptation to international requirements. Therefore, the improvement of the mechanism of formation of the quality management system in the agro-industrial complex, which acts as a guarantor of the ability of the organization to stably produce and supply products of a certain quality, becomes a priority. Development, implementation, certification and maintenance of the quality management system in a state of capacity is one of the strategic activities of economic entities, which significantly increases their efficiency, economic efficiency and competitiveness in the global market.

The introduction of quality management systems in agricultural enterprises has a direct impact on the agro-industrial sector, as the competitiveness of organizations involved in agriculture increases, the number of investments in agricultural production increases, available resources are used more efficiently and attention is paid to the environmental component of enterprises.

At the macro level, increasing the number of certified agricultural enterprises in accordance with international standards facilitates trade on the world market, improves the image of the state, increases living standards and strengthens food security [2].

EU countries are the largest importers of agricultural products to Ukraine, whose share in the regional structure of agricultural imports in 2019-20 was almost 45%.

Despite the established volumes of quotas for grain exports to EU countries, it is necessary to note a number of features of EU market regulation that should be taken into account. As an example, the EU has a so-called "floating duty": if the value of corn on the Chicago Board of Trade is more than \$ 4. US per bushel, corn exports to EU countries are duty free if less than or equal to \$ 4. US per bushel - import duty on corn supplies above the quota is 94 euros per ton [14].

The association agreement allows domestic companies engaged in the production, processing and sale of livestock products to enter the EU market. Thus, Ukraine can annually supply the market of EU countries: 12 thousand tons of beef, 20 thousand tons of pork, 16 thousand tons (with an increase of 5 years to 20 tons) of poultry meat, 1.5 thousand tons increase for 5 years to 3 thousand tons) of eggs, 8 thousand tons (with an increase for 5 years to 10 thousand tons) of milk, cream, condensed milk and yogurt, 1.5 thousand tons (with an increase for 5 years to 5 thousand tons) of milk powder, 1.5 thousand tons (with an increase of 5 years to 3 thousand tons) of butter, 250 thousand tons of processed butter products, 5 thousand tons (with an increase of 5 years to 6 thousand tons) of honey. At the same time, no quotas have been set for cheeses, which allows you to import an unlimited number of this type of product from Ukraine to the EU. At the same time, the volumes of exports of the vast majority of livestock products from Ukraine to the EU are insignificant, in 2017-18 they were (in kg): cattle - 0, pigs - 0, sheep, goats - 0, live chickens - 0; beef (fresh) - 366.9, beef (ice cream) - 1187.14, pork - 3170.7, lamb or goat - 128.7, meat and edible poultry offal - 447563.3, fresh

fish - 162.6, milk and cream, not condensed and without added sugar or other sweetening substances - 10949.2, milk and cream, condensed and with added sugar or other sweetening substances - 25483.4, butter - 320.8, cheeses of all kinds and sour milk cheeses - 1279.3. the volume of exports of the vast majority of livestock products from Ukraine to the EU is negligible, in 2017-18 they were (in kg): cattle - 0, pigs - 0, sheep, goats - 0, live chickens - 0; beef (fresh) - 366.9, beef (ice cream) - 1187.14, pork - 3170.7, lamb or goat - 128.7, meat and edible poultry offal - 447563.3, fresh fish - 162.6, milk and cream, not condensed and without added sugar or other sweetening substances - 10949.2, milk and cream, condensed and with added sugar or other sweetening substances - 25483.4, butter - 320.8, cheeses of all kinds and sour milk cheeses - 1279.3. the volume of exports of the vast majority of livestock products from Ukraine to the EU is negligible, in 2017-18 they were (in kg): cattle - 0, pigs - 0, sheep, goats - 0, live chickens - 0; beef (fresh) - 366.9, beef (ice cream) - 1187.14, pork - 3170.7, lamb or goat - 128.7, meat and edible poultry offal - 447563.3, fresh fish - 162.6, milk and cream, not condensed and without added sugar or other sweetening substances - 10949.2, milk and cream, condensed and with added sugar or other sweetening substances - 25483.4, butter - 320.8, cheeses of all kinds and sour milk cheeses - 1279.3.

It should be noted that Ukraine's exports of livestock products to the EU can be increased through the use of tariff quotas only if domestic exporters can meet EU requirements for safety and product quality standards and certify products accordingly. In the near future to fill the established quotas for livestock products will be problematic, as the vast majority of animals are kept by households (as of 31.12.2019, the population kept 61.6% of the total number of cattle, including cows - 77.7%; pigs - 53.1%, sheep and goats - 87.0%), which do not have the ability to use modern production technologies, which leads to its low quality and non-compliance with European sanitary norms and standards.

For the vast majority of domestic small and medium-sized agricultural enterprises there are also problems to ensure compliance with European standards, as the processes of harmonization and adaptation of legislation in the field of technical regulation and sanitary and phytosanitary measures require not only long time but also significant material resources. For example, the total cost of adapting to the EU standards of the Polish meat industry alone was about 2 billion euros [6]. The process of implementation of European and international food safety and quality standards (HACCP, ISO, EN, Codex Alimentarius) in the field of agro-industrial production in Ukraine is extremely slow. At the same time, in accordance with Chapter 17 of the Association Agreement between Ukraine and the EU, cooperation between the parties will cover, inter alia.

To this end, the requirements of EU directives and regulations concerning agriculture and the food industry, as well as at least 80% of current European standards must be implemented in Ukrainian legislation.

In Ukraine, much attention is paid to the implementation of international standards, as this is one of the conditions for accession to the European Union. Consider the level of harmonization of standards for agricultural products, and, accordingly, control methods, safety requirements, environmental requirements, etc. (Table 1).

Analysis of the table data shows that of the total number of DSTU and PCT of the Ukrainian SSR in force in Ukraine - 617 - 456, or 75.8%, have been harmonized. The level of harmonization can be considered satisfactory, but it is not the same for different classes of agricultural products.

The highest level of harmonization (100%) of national standards for tobacco and tobacco products, which harmonizes standards for methods of determining the quality and safety of products. 75.2% harmonized standards for fishery and fishery products, as well as standards for control methods and materials [17, 19].

Table 1  
**Standards for agricultural products and the level of their harmonization with international and European ones**

product name	Number of applicable standards			Of these, harmonized				The level of harmonization on average,%
	DSTU	PCT of the USSR	GOST	DSTU, PCT USSR		GOST		
				number	%	number	%	
Livestock and animal breeding	24	3	45	2	7.4	-	-	2.8
Agricultural buildings and livestock farms	7	3	7	4	40	-	-	23.5
Agricultural machinery, trailers, equipment, inventory	337	4	93	263	77.1	9	9.7	62.7
Fertilizers and agrochemicals	43	5	67	33	68.7	4	6.0	32.2
Animal feed	83	3	132	36	41.9	3	2.3	17.9
Apiculture	20	-	2	-	-	-	-	-
Hunting	1	-	3	-	-	-	-	-
Fishing and fish farming	10	3	-	9	69.2	-	-	69.2
Tobacco, tobacco products, equipment	20	-	18	20	100	4	22.2	63.1
Total	545	21	367	367	64.8	20	4.3	41.5

However, according to the Ministry of Economic Development, Trade and Agriculture of Ukraine, of the 297 standards of the Codex Alimentarius system, 30 standards have been harmonized and are being approved. In addition, the following are harmonized with international and European norms: - in class 65 "Agriculture" [18] - 261 ISO standards [19] (52% of the 499 standards that make up the total number of current ISO standards in this class); - in class 67 "Technology of food production" - 381 ISO standards (59% of 645 standards that make up the total number of current ISO standards in this class); - in class 65 "Agriculture" - 58 EN standards [20] (64% of 90 standards that make up the total number of current EN standards in this class); - in class 67 "Technology of food production" - 63 standards EN (40% of 157 standards,

Today in Ukraine the following national standards have been adopted from this series: DSTU ISO 22000: 2007 "Food safety management systems. Requirements for any food chain organizations "; DSTU-P ISO / TS 22003: 2009 "Food safety management systems.

Requirements for bodies auditing and certifying food safety management systems "; DSTU-P ISO / TS 22004: 2009 "Food safety management systems. Guidelines for the application of ISO 22000: 2005 "; DSTU ISO 22005: 2009 "Traceability in feed and food chains. General principles and basic requirements for the development and implementation of the system "; DSTU ISO 15161: 2004 Guidelines for the application of DSTU ISO 9001: 2001 in the production of food and beverages "[11]. Unfortunately, the situation in Ukraine is not yet at the best level, not only with the adaptation to world standards relating to food management, but also those that set requirements for certain groups of food products. The first step of Ukraine in the direction of harmonization of domestic standards with European ones was the introduction of the State Standard of Ukraine DSTU 3662-97 "Whole cow's milk. Procurement Requirements ", which applies to raw cow's milk when purchasing from dairy farms of enterprises, regardless of ownership and type of activity. This standard brings us closer to the regulations of the European Union and sets quite strict requirements for the producer, which provides a new approach to milk quality, similar to highly developed EU countries. However, from the same group of dairy products, do not meet international quality requirements for drinking cow's milk when buying it, cheese products, kefir, sour cream, canned milk, etc. The presented data do not include harmonized standards on shelf life, technical conditions of dairy procurement, including for baby food, methods for determining fat, water purity, microbiological analysis, etc. In the vast majority of cases, the quality of dairy products is determined by the old GOST, most of which have not been revised in the last ten years, and regulated by them, but in the Ukrainian version (ie State Standards of Ukraine, the vast majority of cases the quality of dairy products is determined by old revised over the last ten years, and governed by them, but in the Ukrainian edition (ie by the State standards of Ukraine on the basis of GOST 13264-70 and GOST 13264-88). The requirements of these standards for the quality of

milk and dairy products are much lower than European [17].

Non-compliance of Ukrainian products with European standards is a significant threat to the development of the domestic agri-food sector, as it hinders the supply of products to EU markets for the period of introduction of all necessary technical regulations and certificates of conformity, reduces profitability of domestic small and medium agricultural enterprises. domestic market of certain types of Ukrainian products compared to European, which is already duly certified. First of all, we can predict an increase in imports to Ukraine of certain types of meat and food by-products, milk and dairy products, some types of vegetables and fruits.

Also, the need to introduce EU standards for keeping and treating animals will lead to the exit of domestic households from the domestic market and reorientation of their production exclusively for their own consumption, which in the dominance of such producers in the livestock market may pose a threat to food security [20 ].

Thus, the management of the quality of agricultural products should be considered as a direction of performing the function of general management of the process of providing society with quality safe products. In turn, the quality management system is a management system that directs and controls the activities of the organization in terms of quality [12, 13].

It is important, relevant and promising to create and implement the latest quality management systems for agro-industrial products, as one of the key factors in increasing the export competitiveness of agricultural products on the world market. This is due to the following factors:

- constant growth of prices for agricultural products due to the aggravation of the global food crisis;
- according to statistics, high-quality products bring about 40% more profit than low-quality products;
- growth in world demand for organic products (its price is higher by 20-50%);
- the presence of a certified quality management system becomes a prerequisite for concluding agreements between world-renowned companies and their partners.

In the field of production of high-quality and safe agricultural products, standards most effectively promote the active introduction of innovative technologies, economical use of raw materials, extension of shelf life of products and preservation of nutrients in it. The object may be competitiveness, innovation level or any other indicator, characteristic or the whole set of product properties or any part of them, group, individual property [11, 14].

Thus, in order to conquer international markets and ensure the appropriate competitiveness of agricultural products on world markets, it is necessary to constantly monitor the improvement of its quality. Improving product quality is one of the most important areas of intensive and innovative development of the

national economy, a source of economic growth and efficiency of social production.

Globalization processes in the economy and increasing non-price competition stimulate agricultural enterprises to find innovative ways of development, which are primarily related to the problems of improving the quality of manufactured products, its adaptation to international requirements. Therefore, the improvement of the mechanism of formation of the quality management system in the agro-industrial complex, which acts as a guarantor of the ability of the organization to stably produce and supply products of a certain quality, becomes a priority. Development,

implementation, certification and maintenance of quality management system in a state of capacity is one of the strategic activities of economic entities, which significantly increases their efficiency, economic efficiency and competitiveness in the world market [20].

The growth in the agricultural sector of the economy, which occurs due to the processes of land concentration, intensification of agricultural production and increasing its export potential are interpreted as undoubtedly positive trends, which helps to highlight benefits from the introduction of quality management systems for agricultural products (see table 2)

Table 2

#### Advantages of implementing quality management systems for agricultural products

Macro-level	Meso-level	Micro-level
State:	Branch:	Enterprise:
-improving the living standards of the population; -strengthening food security; -easy of international trade; -positive image in the world market.	-growth of product competitiveness; -rational use of resources; -attraction of investments; -compliance with international standards.	-increasing the number of consumers; -increase in sales of quality products.

The introduction of quality management systems in agricultural enterprises has a direct impact on the agricultural sector, as increasing the competitiveness of organizations involved in agriculture, increasing the amount of investment in agricultural production, more efficient use of available resources and attention to the environmental component of life [15; 16].

At the macro level, increasing the number of certified agricultural enterprises in accordance with international standards facilitates trade on the world market, improves the country's image, increases living standards and strengthens food security.

**Conclusions.** Thus, the introduction of quality management systems according to international standards provides competitive advantages to companies in domestic markets and allows them to enter foreign markets. The topic of implementing quality management systems according to international standards is relevant and specific to individual industries, so it requires more research.

The practical application of ISO 9000: 2000 series standards can be of great help for the adaptation of the Ukrainian economy to the world economic system to increase the competitiveness of enterprises. These standards can be an effective means of solving many problems in enterprise management. ISO 9000: 2000 series standards are designed for market conditions. Their main advantage is consumer orientation. The main difference between the 9000: 2000 standards and the previous ones is that they are not aimed at product quality management, but at managing the processes of its creation (process approach) and optimizing these processes.

In order to minimize risks and use opportunities for the agricultural sector of Ukraine as a result of the opening of European markets, it is necessary to implement a number of state agricultural policy measures that do not contradict the principles of state support and regulation of the agricultural market. agricultural products, in particular:

- consolidation of the process of implementation of European and international standards of food safety and quality (ISO, EN, Codex Alimentarius) in the field of agro-industrial production;

- development of a system for monitoring foreign trade operations with EU countries as a mechanism for rapid response to market changes in the agricultural market;

- promoting the development of small-scale agricultural production, including legal regulation of personal farms and developing a mechanism for their transformation into farms, which will ensure the integration of private farms into market mechanisms of the agricultural sector.

Thus, the economic aspect of the problem of agricultural product quality is to increase the efficiency of the national economy, increase corporate profits, increase the competitiveness of products in both domestic and foreign markets, rational use of material and energy resources. It should be noted that all issues in the field of quality, such as improving its level and its management, are associated with economic costs, which as a result should give a reasonable economic effect.

The modern innovative aspect of the problem is based on the relationship between the process of improving product quality and the pace of implementation of innovative technologies. As a result of scientific and technological progress, information systems, transport communications, technological processes are improved, thereby ensuring a higher level of product quality, which in turn leads to a new round in science and technology.

#### References

1. Zinchuk TO Problems of adaptation of the agricultural sector of the economy to the terms of the Free Trade Agreement Ukraine - EU AIC Economy 2015. E5 P. 79-87
2. Kovalchuk S. Ya. European landmarks of the agrarian sphere of Ukraine: prospects and



opportunities. Mukachevo State University. Economy and society. 2016. №2 pp. 54–60

3. Lapin OV Fridrif VP Implementation of international standards ISO series 9000 and 14000, HACCP (HACCP) and the formation of quality management systems in agricultural enterprises of Ukraine. Agrosvit 2014. №23 P. 43-47

4. Martsenyuk MM Gvozdetskaya IV International quality standards. Bulletin of Khmelnytsky National University 2014. №3, (2) P. 154-156

5. Matsola SM Free trade zone Ukraine - EU: advantages for the economy of Ukraine. Bulletin of the Precarpathian University. Economy. 2014. №10. Pp. 58-61

6. Pazizina S. Pazizina K. Harmonization of Ukrainian quality standards with European ones as a mechanism to increase the competitiveness of agro-industrial products. Ukrainian science: past, present, future. 2014. №19, (1) pp. 108-114

7. Rudenko VP Requirements and differences of the new version of international quality standards. Mechanization and automation of production processes. 2015. №11 (27) pp. 97-102

8. Quality management systems. Basic provisions and glossary of terms. (ISO 9000: 2005, IDT): DSTU ISO 9000: 2007. [Effective from 2008-01-01]. K. : Derzhspozhyvstandart Ukrainy, 2008. S. 26-27 (National standard of Ukraine)

9. Quality management systems. Requirements (ISO 9001: 2008, IDT): DSTU ISO 9001: 2009. [Effective from 2009-09-01]. K.: Держспоживстандарт України, 2009. С. 28-29 (Національний стандарт України)

10. Management to achieve sustainable success of the organization. Quality management approach (ISO 9004: 2009, IDT): DSTU ISO 9004: 2012. [Effective from 2012-11-28] Kyiv: Derzhspozhyvstandart Ukrainy, 2012. P. 29-30 (National Standard of Ukraine)

11. EU legislation. URL: <http://organic-food.com.ua/organicheskoezaknodatelstvo-es/>

12. Lykhopiy VI The mechanism of ensuring competitive production of agricultural products: theoretical and methodological aspect - VI Lykhopiy // Bulletin of Zaporizhia National University.- 2010.-№1 (5) -P.137-140.

13. International law. URL: <http://organic-food.com.ua/zaknodatelstvo-es/>

14. Ministry of Environmental Protection of Ukraine URL: <http://minagro.gov.ua/page/?5795>

15. Possibilities and reservations on the consequences of the implementation of the provisions of the Association Agreement between the EU and Ukraine: Science. ext. / for ed. acad. NAS of Ukraine VM Heitz, Corresponding Member NAANU TO Ostashko, Dr. Econ. Science VO Tochilina; NAS of Ukraine, State Institution "Institute of Economics and Forecasting" K., 2013. 98 p.

16. Assessment of prospects and opportunities for the agro-industrial complex of Ukraine as a result of the signing of the Association Agreement between Ukraine and the European Union ". Analytical note URL: <http://www.niss.gov.ua/articles/1633/>

17. Sliva Yu. V. Shvets TG The current state of development of international and national regulatory frameworks for food safety management system URL: [http://nbuv.gov.ua/j-pdf/Nd\\_2013\\_6\\_11.pdf](http://nbuv.gov.ua/j-pdf/Nd_2013_6_11.pdf)

18. Association Agreement between Ukraine, of the one part, and the European Union, the European Atomic Energy Community and their Member States, of the other part URL. [http://www.kmu.gov.ua/kmu/docs/EA/00\\_UkraineEU\\_Association\\_Agreement\\_%28body%29.pdf](http://www.kmu.gov.ua/kmu/docs/EA/00_UkraineEU_Association_Agreement_%28body%29.pdf)

19. Shpylovy VA Some aspects of environmental safety of food production. 3b. Science. Proceedings of Cherkasy State Technological University. 2013. №8. Pp. 91-94.

20. Shubravska OV Prokopenko KO Ukraine's integration prospects: advantages and risks for the agricultural sector. Ukraine economy. 2014. № 1. pp. 63–73