

8. Шевчук В. Макроекономічні ефекти відхилень реального обмінного курсу від рівноважного рівня в Україні [Електронний ресурс] / В. Шевчук // Міжнародна економічна політика. – 2011. – № 12–13. – Режим доступу: <http://www.ir.kneu.edu.ua:8080/bitstream/2010/1040/1/Shevchuk.pdf>

9. Central, Eastern, and Southeastern Europe [Електронний ресурс] / International Monetary Fund (IMF), Regional Economic Issues Update. – October, 2014. – Режим доступу: <http://www.imf.org/external/pubs/ft/reo/2014/eur/eng/pdf/erei1014.pdf>

10. Post crisis development of economy: modernization strategy fundamentals / [Zhalilo Y., Pokryshka D., Belinska Y. and others]. – К. : NISS, 2012. – 144 p.

11. Баженова О. В. Зовнішні шоки економічного зростання в Україні: теоретичні основи та емпірична перевірка / О. В. Баженова // Вісник Київського національного університету імені Тараса Шевченка. – 2009. – Серія: Економіка 10 (4). – С. 349–360.

12. Kalinkova I. The Monetary Shock's Wave-Like Diffusion Cross-Analysis through Developed Countries: proceedings at the 1st International science conference [Europe Applied Science: modern approaches in scientific research], November–December, 2012. – Stuttgart, 2012. – Vol. 1 (2). – P. 120–128.



UDC 006.3.8

O. O. Pavlenko, Doctor of Pedagogics, Head of Foreign Languages and Professional Language Training Department, University of Customs and Finance

O. O. Triakina, Ph. D. of Pedagogics, Senior Instructor of Foreign Languages and Professional Language Training Department, University of Customs and Finance

S. I. Kouzmine, Ph. D. of Economics, manager of the UNECE education on standardization project

STANDARDS FOR GOODS AND SERVICES AND EDUCATION STANDARDS: PROMOTION OF STANDARDS

The paper is devoted to the issue of goods and services standards influence on facilitating international commerce as well as companies' ability to compete at international markets. The authors stress on standards' competencies required by the labour market and make an overview of aspects/knowledge of standards issues being important at different levels in a company.

The paper also considers the programmes on teaching standards for both technical and non-technical specializations within different educational establishments. The authors analyze the UNECE activities on promoting and teaching standards.

The international requirements to customs officers' competencies on standardization matters defined by the WCO Professional Standards on standardization have been identified.

Key words: standards for goods and services; education standards; promoting and teaching standards; competencies; international trade; UNECE.

© O. O. Pavlenko, O. O. Triakina, S. I. Kouzmine, 2015

Статтю присвячено проблемі впливу стандартів у сфері торгівлі товарами та послугами на сприяння міжнародній торгівлі, а також на здатність компаній конкурувати на міжнародних ринках. Автори акцентують увагу на компетенціях у сфері стандартів, що необхідні на ринку праці, та аналізують різні аспекти/знання стандартів, важливих на різних рівнях компанії.

Розглянуто програми навчання стандартам серед технічних і нетехнічних спеціальностей у рамках різних навчальних закладів. Проаналізовано діяльність ЄЕК ООН щодо впровадження і навчання стандартам.

Окреслено міжнародні вимоги до компетенцій посадових осіб митних органів з питань стандартизації, що визначаються професійними стандартами Всесвітньої митної організації.

Ключові слова: стандарти на товари і послуги; стандарти освіти; впровадження і навчання стандартам; компетенції; міжнародна торгівля; ЄЕК ООН.

Problem formulation. Globalization processes demonstrate the ever-growing importance of standards as a new competition tool. Standards are one of the principal corner stones of trade and economic integration and of all dimensions of sustainable development, at the same they can become a protective device by establishing stricter requirements for foreign products or limiting their deliveries based on the unwarranted risks. Hence, the importance for policy makers and for business is to understand both trade-facilitating and trade-distorting aspects of standards and to ensure that such “technical barriers to trade” (TBT) do not unnecessarily hamper international trade.

Analysis of recent researches and publications. Various types of research have been done to analyze the role of regulatory measures in trade. It was shown that the same standard can be both a trade barrier and a measure facilitating international commerce. The WTO Trade Report 2012 noted with concern the increased application of technical barriers to trade as a major challenge for international trade and concluded that regulatory standards can have even more a significant impact on trade than tariffs. This regulatory complexity can be illustrated by a recent (2014) study on the barriers to commercialization of innovative goods and services in 28 countries of the European Union [1]. A similar research was made in the US and Swiss companies, where the complexity of meeting regulations and standards was noted.

These studies clearly showed the need for business to be fully aware of the complexity of mandatory and voluntary regulatory measures as well as importance in keeping companies aware of the role of standards and promoting relevant standardization knowledge and skills among specialists entering the labour market.

Purpose of the article. Taking into account the increasing understanding of a need in standards related competencies and skills that is clearly reflected in relevant requirements from business, it is reasonable to study different standards’ competencies required by the labour market and various activities and programs directed at standards promotion and activities.

Main material. Our research has found out that globalization of trade in goods and services require much wider and deeper knowledge in standardization. Thus, the International Federation of Standards Users (IFAN), which unites major industrial companies, prepared in 2014 a guide to show what aspects/knowledge of standards issues are required at different levels (departments) in a company (see table 1 below).

As it is clear from table 1 [2], almost every employee in a company from top management to marketing or sales agents shall have at least a certain understanding of standards for trade and services. In particular, the CEO and top management are expected to have: (a) “substantial knowledge” of: need to comply with standards and regulations; strategies for standardization work; role of business associations in developing standards; standards and company management systems; (b) “good knowledge” of: how standards can help sustainable development (in the con-

text of company’s strategy at world market place); (c) “some understanding” of: how to influence the content of standards from the company’s strategic perspective; how to identify standards and regulations that products have to comply with.

Table 1

A guide of IFAN

Knowledge Functions	Standardization role	Standards identification process	Integration of the content for relevant standards	Take into account sustainable development	Integration of management systems	Product compliance		Standardization lobbying		Business intelligence in standardization
						Issues	Methods	Issues	Methods	
CEO & senior management	•••			••	•••	•••		•••	•	
Human resources	•		•••							
Marketing	•••	•	•		•••	••		••	••	••
Sales	•••									
R&D and Innovation		•	••	••	••	•••		••	••	•
Laboratories			••		••	•••	•••	••	••	•
Purchasing		••		••	••					•
Production										
Quality, Environment, Safety Social responsibility			••	••	••	•••				•
Standardization	•••	•••	••	••	••	••	••	••	••	••

- Substantial knowledge
- Good knowledge
- Some understanding

As it is clear from table 1 [2], almost every employee in a company from top management to marketing or sales agents shall have at least a certain understanding of standards for trade and services. In particular, the CEO and top management are expected to have: (a) “substantial

knowledge” of: need to comply with standards and regulations; strategies for standardization work; role of business associations in developing standards; standards and company management systems; (b) “good knowledge” of: how standards can help sustainable development (in the context of company’s strategy at world market place); (c) “some understanding” of: how to influence the content of standards from the company’s strategic perspective; how to identify standards and regulations that products have to comply with.

A study of relevance of standards qualifications for getting recruited was done in Germany in 2010–2012 through an analysis of around one thousand job offers from recruiting companies looking for professionals with the words “standards” and “engineers” in the job title [3]. The analysis showed that responsibilities varied according to a company’s profile. However, all companies were looking for an engineer or an equivalent bachelor degree specialist with additional experience in standards (sometimes in a specific standard). In general, standards can be an educational asset and are often relevant for getting recruited.

It shall be noted that business requirements for high level of standards-related competencies and skills resulted in numerous activities aimed at standards education and promotion. Thus, a significant interest in education on standards was noted in Asia as the result of the discussions on this issue at APEC (it included also preparations of training materials on this subject). In Asia, the most significant developments took place in Korea, Japan, Indonesia and China which from the mid 2000-s started a number of projects and programmes on university education on standards [4].

In Europe, according to the survey made by the Helmut Schmidt University, the situation in 2008 in high education establishments was the following: very limited academic infrastructure in the field of standardization; no common curriculum with defined core content; no recognized textbooks. The emphasis of courses varied considerably from university to university and was ranging from standardization governance, strategic aspects of standardization to development of IT standards and e-business applications. In 2008, the estimated number of students in Western Europe was approximately 500. The follow-up survey done in 2013 (based on a limited number replies from European countries) confirmed the above-mentioned tendencies with certain positive exceptions. In particular, in Bulgaria 9 courses were taught with 285 students. The School of Economics (Erasmus University, Rotterdam) offered 6 courses attended by 134 students. For today the total number of students trained in specialized standardization programmes in Europe could be estimated at around 1000 per a year.

In North America only few educational institutions are starting to teach standards (in our opinion, it is connected with a low importance of standards at the US regulatory system).

The great efforts in promoting the importance of understanding standards as technical and political tools has been made by the United Nations Economic Commission for Europe (further – UNECE). Firstly, its permanent group of experts called the UNECE Working Party on Regulatory Cooperation and Standardization Policies has been dealing with policies relating to standardization, conformity assessment, technical regulations, market surveillance, metrology since 1970. Its experts noted the importance of teaching standardization in high school and this proposal was reflected in a recommendation “I” to governments (voluntary recommendations are one of the forms of elaborating best practice at the UNECE) [5]. They also stressed on a need for horizontal general awareness training/education among students of non-technical specialization to demonstrate them the multi-disciplinary character of standards in a modern world. To discuss this issue in detail an international workshop was organized by the UNECE in Geneva in 2012.

In 2011–2012, the UNECE secretariat studied how standardization issues are being taught in various countries in bachelor and master programmes at non-technical faculties. The collected information showed that the situation with teaching standards differs substantially through the

countries: an active interest in standards was noticed in Asia; in Europe there were very few universities where students could learn standards. In addition, only a few universities offered specialized master programmes (like in Switzerland – Geneva University or in Portugal – School of Management and Technology of Porto Polytechnic Institute). A number of institutions in Netherlands, Germany, Bulgaria, Japan provided selected training courses on various aspects of standards. Some distance training was also offered by national standards bodies (German Standardization body etc.).

Furthermore, taking into account the great difference in the contents and duration of educational programs on standardization, the UNECE secretariat in consultations with academia, prepared a proposal for a “model program on education on standardization” which covers the minimum set of issues that a graduate shall master to have a general understanding of the topic from business or governmental perspective (it includes major standardization, regulatory and related issues relevant to the activities of business and of regulatory and administrative authorities). Our study cleared out that this programme is intended for general university level academic programmes rather than to provide specialized in-depth training on standardization.

In the UNECE experts’ opinion [6], one of the practical results of such awareness and capacity building efforts was an introduction in the European region of new courses on standards and wider attention to these issues within existing programs. For example, in Portugal the School of Management and Technology of Porto Polytechnic Institute offers a two-year program “master in integrated quality, environmental and occupational health and safety management systems” based on the UNECE model program. In Matej Bel University, Banska Bystrica, Slovakia, a course on “standardization and international standards” is offered within the master degree program “finance, banking and investment”.

Our research has showed that the most effective steps in training and promotion standards made by the UNECE include: launching a website [7], which contains a library of programs (from various universities) on teaching standards as well as links to the training materials on standardization of other organizations; developing three teaching modules (on benefits of standardization, standards in the WTO context and quality management systems). In our opinion, these modules will facilitate the inclusion of introductory and awareness building courses on standards in institutions which may currently lack qualified expertise on this subject.

In general, the major stakeholders in the area of education on standards include: companies, employees, ministries of education, universities, students, regulatory authorities/policy makers, standards-setting bodies (national, regional, international). Interest is also expressed in the development of similar teaching programs on standards issues in the Customs area. In particular, a pilot project on standards training, which is based both on national requirements for education of Customs officials and the Professional Standards of the World Customs Organization is under implementation in the University of Customs and Finance, Ukraine [8–10]. These programs train Customs staff to follow international performance standards and use modern technologies of goods inspection (on the basis of risk assessment, through transferring control procedures to the places of departure and destination, Customs audit, e-declaration etc.) to achieve the required fiscal tasks without creating administrative barriers to trade.

Conclusions and further researches directions. The issue of standards both as a trade facilitation and as a trade distortion factor is growing at international arena and causes permanent concerns for business. As the result, today standards and related regulatory tools began to play a critical role in influencing the competitive positioning of companies and countries.

The knowledge of standards is an important part of the portfolio of competencies and skills that have been (and to continue to be) required for job seekers in engineering professions. Recent studies show that large companies are starting to understand that standards awareness can be also an asset for other employees (non-engineers) dealing with the placement of products on the market (marketing, legal, etc. departments).

In this context UNECE recommendation on introducing standards-related issues in educational curricula is timely and market based and shall be further promoted. In general terms it can be noted that the awareness of the importance of standards will be of benefit to the society as a whole and not only to graduates seeking jobs. Hence, the education on standards would be useful not only for high educational institutions (which is the focus of UNECE activities) but also for secondary and primary schools (adequately tailored to specific needs of each group).

The current situation (in particular in Europe) with education on standards (number of offered courses, scope and students attending them) is not satisfactory and is below the market demand.

There are various reasons for the weak response of educational institutions to introducing standardization into curricula which include: often ambiguous requirements from business (standardization needs are not clearly articulated); lack of nationally (regionally, internationally) agreed content for programmes; lack of trained professors and of agreed textbooks; specific national conditions relating to educational systems (approaches).

The approach to teaching standardization shall also be changed. Traditionally standardization was considered to be part of curricula of engineering professions (or as a part of vocational training) and was usually highly specialized and linked to a specific professional profile. An appearance of new standards that go beyond technical matters (ecology, social, etc.) shows the necessity to see and to understand the multidisciplinary character of standards and to teach them accordingly. The new approach to standards has also resulted in developing standards for Customs profession and creating relevant training programs to meet all the challenges Customs administrations face at present.

The future work in this area can include: awareness building and promotion of education on standardization among all major stakeholders; elaboration of an agreed content of harmonized educational programmes; building up an expertise on teaching standards at educational institutions; preparation of training materials and textbooks; continuation of professional and vocational training on standards, elaboration of courses and training materials on standards specifically oriented at certain groups of users (i. e. logistics employees, Customs officials, etc.).

References:

1. The role of public support to in the commercialization of innovations, European Commission, 2014.
2. IFAN guide “education and training about standardization: different needs for different roles”, 2014.
3. Workshop on standardization management, 20–21 March 2012, Valencia, Spain.
4. Discussion paper on standardization in higher education, Helmut Schmidt University, 2014.
5. UNECE document ECE/TRADE/C/WP.6/2012/7.
6. Information from UNECE secretariat.
7. UNECE [Електронний ресурс]. – Режим доступу : <http://www.unece.org/trade/wp6/educationonstandardization.html>
8. Павленко О. О. Концептуальні основи розробки та упровадження міжнародних стандартів, механізмів та інструментів (на прикладі професійних стандартів Всесвітньої митної організації) [Електронний ресурс] / Павленко О. О. – Режим доступу : <http://www.pravoznavec.com.ua/period/article/2858/%CE>
9. Павленко О. О. Формування комунікативної компетенції фахівців митної служби в системі неперервної освіти : дис. ... докт. пед. наук : 13.00.04 “Теорія і методика професійної освіти” / О. О. Павленко. – Дніпропетровськ, 2010. – 539 с.
10. Трякіна О. О. Підготовка магістрів в галузі митної справи на засадах міжнародних професійних стандартів митників : дис. ... канд. пед. наук : 13.00.04 “Теорія і методика професійної освіти” / О. О. Трякіна. – Запоріжжя, 2015. – 358 с.