

Małgorzata Koszewska

Technical University of Łódź
Chair of World Economy and Textile Marketing
ul. Zeromskiego 116, 90-543 Łódź, Poland

Rules Governing Marketability of Goods in the Single European Market - the Protective Clothing Market

Abstract

The single European market, with its free movement of goods, puts product safety and quality at the top of the agenda. Many of the requirements laid down in international standards, directives and other laws must be met by the Polish economy so it can join the market's mechanisms. Of especial importance are the regulations governing standardisation, quality assurance systems, attestation and certification. This article discusses the rules determining the marketability of goods in the single European market, with special attention paid to the protective clothing market and the process of adjusting the Polish certification and standardisation system to that operating in the EU.

Key words: *Single European market, protective clothing market, certification, standardisation.*

verning manufacturing processes and the marketability of goods.

Norms and standards as a significant technical barrier to trade

Norms and standards can be deemed a somewhat controversial instrument used to protect domestic production from imports, as they may become a significant technical barrier to trade, even though they should not. When applied in order to protect the domestic market, they may constitute an unjustifiable obstacle to the development of foreign interchange. The very fact of differing technical regulations and standards among different countries represents a hindrance to trade and reduces its benefits. It is also justifiable to ask whether, with the progressing elimination of tariff and non-tariff barriers, such diversified national standards and regulations will not become another barrier to trade, and whether national governments will take advantage of laws and testing & certification procedures to provide domestic companies with some covert advantages.

Every country has the right to establish standards and technical requirements for products admitted to the internal market. However, these should serve to protect public order, to ensure consumer safety and health, to guarantee the safety of products, to reduce air pollutants, to rationalise manufacturing, etc. It becomes dangerous when standards and technical requirements are abused to protect the domestic market, thus becoming a serious technical hurdle impeding international trade.

The European Union faced the problem of the diverse norms and technical stan-

dards operated in particular member states in the course of building a single internal market. It turned out that the prerequisite to continued integration of the Community was the abolition of technical barriers to the free movement of goods.

In 1985 over 100,000 technical requirements in the European Community were determined at country level. In extreme cases this situation disabled the export of some products to a member state that followed stricter or special technical or safety standards. Consequently, producers were frequently forced to make products tailored to the requirements of a given market, which saddled enterprises with additional cost [18, p. 40].

The European Union implemented various methods for harmonising or ensuring full consistency of norms and standards. All of them aimed to abolish barriers impeding the development of trading activities by converging national technical legislations.

Attempts at full harmonisation provoked many conflicts of interest. The so-called **old approach to technical harmonisation**¹ proved to be rather ineffective; similarly, the **principle of mutual recognition** of products based on the judicial decisions of the European Court of Justice failed to lift all barriers to the free movement of goods. It would not have been possible to establish the single market of goods by the end of 1992 if the regulatory technique applying to technical requirements had not been changed. Only the introduction of uniform rules effective across the European Union concerning the manufacturing of and trade in

Free Movement of Goods in the EU's Internal Market

One of the basic values underpinning the single European market is the principle of free movement of goods. This means unrestricted trading activities between the member states resulting from the elimination of various forms of border controls as well as the establishment of uniform rules in trade with third countries, together with the abolition of other barriers existing in the EU markets [26]. On 1 January 1993 the single market of goods became a fact. For that market to function properly, a wide range of barriers had to be abolished. Most obstacles resulted from **technical barriers**, that is, member state-specific standards and technical regulations, requirements go-

goods could have overcome the existing barriers effectively. Hence the idea of introducing accreditation and certification standards as the basic methods for assessing product conformity with the EU standards required a uniform legal act.

New approach to technical harmonisation

The new approach to technical harmonisation and standards was introduced by **the EU Council Resolution of 7 May 1985**. Since that date, standardisation laws have not specified technical requirements, but have provided only general standards relative to human health, environment and safety. At the same time they are not recommendations as before, but are binding for all member states.

All directives developed according to the New Approach are therefore mandatory laws in the EU, that provide only basic requirements concerning the safety of technical products. They regulate harmonisation of laws that protect consumers against products that might be hazardous to life, health and the natural environment. Details of the requirements addressing such products can be found in the EU standards known as standards harmonised with the New Approach Directives that have been developed by the CEN and the CENELEC by virtue of a mandate issued by the European Commission, and then introduced in an unchanged form to the national standards of the EU and EFTA countries. Despite a strong relationship between the EU harmonisation standards and directives (the latter being binding laws, as we have mentioned), the standards have retained the status of **voluntarily applied documents** [8]. Producers do not have to observe them, but if they do, the conformity of a given product with the basic requirements laid down in a directive is assumed.

To ensure efficient implementation of the New Approach, product certification methods applied by a given member state are expected to be automatically recognised by other EU members. Consequently, in 1989 the New Approach was completed with the so-called **Global Approach to Testing and Certification** [30] that sets rules for the assessment of product conformity with the laws and standards operated in the European Union. Within the Global Approach, eight basic modules were distinguished which can be

used to develop procedures for conformity assessment provided in particular directives; criteria for the selection of the modules were established, as well as rules allowing the CE marking to be applied. It is also worth mentioning that beside the New Approach directives that provide for the CE marking, there are also directives based on the New Approach or Global Approach rules that omit the marking [8].

To products left outside the detailed safety rules set in the Old and New Approach directives, or if the latter do not cover all safety aspects or all risk categories, requirements concerning general product safety are applicable. This system presumes the honesty of the producer, who bears the responsibility for defective products (together with the suppliers of raw materials and components); this responsibility also rests on importers who place a product originating in a non-member state on the European market [26, p.130].

A significant role in the functioning of the New Approach system is played by **market surveillance** [8, pp.47-59]. In the meaning of the New Approach directives, this term denotes the controlling/monitoring of products after they have been placed on the market in respect of their conformity with the basic and obligatory safety, health and environmental protection requirements laid down in the directives. The market surveillance system operated in the EU, which is parallel to the conformity assessment system that covers products before they are launched, is also used as an instrument to protect businesses from unfair competition in the Single Market [26, p.131]. It aims to remove products that do not comply with the mandatory requirements from the market.

The New Approach to technical harmonisation has solved the question of new barriers emerging in trade between the member states. The problem which remains to be solved is the obstacles in business contacts with third countries. In order to overcome this hurdle, the European Union enters into **Mutual Recognition Agreements (MRAs)**. These documents provide for mutual recognition of testing results and conformity certificates produced and issued in countries which are parties to the agreements without the need to adjust the national laws. The

EU has signed such agreements with the USA, Japan, Canada and other countries. With the candidate countries, the European Union signs a special type of mutual recognition agreements known as the **Protocol to the Europe Agreement establishing an Association (...) on Conformity Assessment and Acceptance of Industrial Goods (PECA)**. By signing up to the PECA, a candidate country commits itself to align its national laws with solutions operating in the European Union. In fact, implementation of the protocols means that the Single Market has expanded to the territory of the candidate country which signs such a protocol for industrial goods regulated by the New Approach directives and covered by the Protocol *before the country's actual accession to the European Union*. The Single Market expansion means that both parties to the Protocol will abide by all the basic rules that the document lays down. The protocol is only valid in the bilateral relations between the EU and a PECA signatory (in other words, it does not govern relations in the given field between other countries, i.e. parties to protocols or mutual recognition agreements) [13].

Protective Clothing and Requirements of the Single European Market

Protective clothing is one group within the category of so-called **personal protective equipment (PPE)**. The basic requirements that personal protective equipment articles must meet in order to protect the health and safety of their users, and the conditions for their introduction to the single EU market, are laid down in **Directive 89/686/EEC**. The directive was one of the first directives formulated under the New Approach. It determines safety requirements for personal protective equipment and the relevant procedures to confirm that such requirements have been met (so-called conformity assessment procedures). Personal protective equipment (including protective clothing) can be placed on the EU market provided that they have met all the directive's requirements.

According to the New Approach rules, the directive aims to ensure the safety of PPE articles and their free movement within the Single European market. Exclusively qualitative aspects are excluded

from the regulation, and producers are free to choose any actions they deem relevant, which quite frequently, however, are acknowledged by various certificates. Regarding products subject to the jurisdiction of the directive, its requirements are the only safety-related rules that are applicable to such products. The member states are not allowed to introduce any new regulations that might be contrary to the directive, or to burden producers with additional requirements [11].

Regarding personal protective equipment that also includes protective clothing, directive 89/686/EEC co-exists with directive 89/656/EEC that sets minimum industrial safety rules regarding workers' use of PPE in the workplace. The first directive imposes obligations on the PPE producers, and the second on employers who are responsible for providing their workforce with protective articles. The directives are complementary and show some areas of crossover. In article 4, directive 89/656/EEC requires employers to provide their workers with personal protective equipment complying with pertinent European safety and health rules that decide how such articles should be designed and produced. It enumerates employers' responsibilities, such as obligatory risk analysis preceding the selection of adequate PPE. Personal protective equipment subject to directive 89/686/EEC has to meet basic safety and health protection requirements. The simplest way to accomplish this is to apply harmonisation standards connected with the directive. The standards **presume** conformity with the basic requirements, yet their application is voluntary. When a producer decides to disregard a standard, or when one is unavailable, then he is responsible for proving that his product conforms with the basic requirements [23].

Compliance with safety requirements and conformity assessment procedures as laid down in the directive is a prerequisite to marketing goods in the Single European market. Directive 89/686/EEC divides personal protective equipment (PPE) into three categories, depending on the degree of hazard the PPE is supposed to protect against. Qualification in one of the categories determines the conformity assessment procedure to be applied, according to modules A through H, which are arranged in the order of their growing complexity. The degree of the procedures' precision depends on the level of risk

connected with product use. The ultimate result of applying the conformity assessment procedures is the **CE marking** given to a product [25, pp.54-56]². The CE marking has to be affixed to every article of personal protective equipment placed on the market. The marking confirms that a given product conforms not only with all requirements set in directive 89/686/EEC, but also with requirements laid down in other directives, if applicable.

All Polish manufacturers planning export transactions with the member states have to apply for the CE mark. Presently, they are also obliged to comply with the Polish system of standards. There is no doubt that this duality of systems is an encumbrance for businesses. As Poland's ties with the EU market become stronger and stronger, in recent years efforts have been initiated to adjust the national system of standards and product conformity assessment to the Community standards (this need also arises from the obligations accepted by Poland under the Europe Agreement) [14].

The Process of Adjusting the Polish Certification and Standardisation System to the EU System

Current Polish regulations governing PPE (including protective clothing) and its marketability are transitional and will remain effective until the EU system is fully introduced. According to the Europe Agreement, Poland should introduce the European standardisation and certification system into its legislation. The goals were provided in the **PECA** that was initialled - after long consultations - in March 1997 and signed on 30 July 1998. The Protocol reflects the philosophy of transitional solutions agreed between the government of Poland and the European Community in respect of the harmonisation of the Polish conformity assessment system with the Community's requirements. The Protocol is the primary document that identifies adjustment-related tasks in the field of conformity assessment. It provides for the establishment of a conformity assessment system in Poland, fully aligned with the EU requirements. In the transitional period, the Community solutions will be gradually introduced, including recognition of producer declarations and the third-party certificates issued in the EU. In addition, the Protocol provides a

schedule for the implementation of the *acquis communautaire* in respect of technical harmonisation [3]. This Protocol has served as the framework agreement in which Poland declared her will to negotiate the **PECA**³.

By signing the PECA, Poland has committed herself to meeting several conditions that aim to ensure proper functioning of the conformity assessment system in the field regulated by the Protocol-related directives, including **Directive 89/686/EEC**.

The Polish system of certifying units is gradually approaching the EU solutions. Poland has introduced basic changes to the system of standardisation and certification, implementing solutions similar to those applied in the member states. The legislative work on adjusting the Polish testing and certification system to the EU requirements accelerated considerably in the second half of 1999 and in the first half of 2000. Several laws were enacted which made the goal much more achievable. On 22 July 1999 the law amending the testing and certification act of 3 April 1993 was enacted, as the old law contradicted the rules and the philosophy of the EU system. The new law was put in force on 5 August 1999. It defined the producer's conformity declaration, and obligated the Council of Ministers to compile a list of products subject to mandatory certification and requiring producer declarations to be issued on the person's sole responsibility. It obligated the Minister responsible for economic issues to determine the mode of product certification, the accreditation of units certifying quality systems, etc. As a result, the Council of Ministers issued an ordinance on 9 November 1999 (effective as of early December) providing a list of products manufactured in Poland, as well as of those imported to the country for the first time, which might be either hazardous to or protective of human life, health or environment, and which were subject to mandatory certification for the safety mark and required such marking, as well as products that the producers had to issue conformity declarations for. The ordinance curtailed the list of products subject to mandatory certification for safety mark B [3].

The next stage was the act on the conformity assessment system, accreditation and amendments to some acts passed in 2000.

Until recently, the structure of the conformity assessment system in Poland was regulated by two parallel laws, that is [1]:

- **the amended testing and certification law of 3 April, 1993,**
- **the act on the conformity assessment system, accreditation and amendments to some laws of 28 April 2000.**

Initially it was assumed that the first act would expire on 1 January 2003, with the other act already being effective since 1 January 2001. This situation contributed to a transitional period requiring those persons involved in conformity assessment to make highly flexible decisions on a current basis, and to build the new solutions in their plans for the years to come.

The act of 28 April 2000⁴ provided a legal framework enabling EU directives to be introduced into Polish law, as well as the transposition of the EU conformity assessment procedures (the so-called modules), together with a whole infrastructure of notified bodies. This act provided basic terms and mechanisms, with the implementation of specific directives being left to the Council of Ministers' ordinances or to other acts. Regarding protective clothing, the ordinance by the Council of Ministers dated 9 January, 2002 was particularly significant, as it laid down basic requirements for personal protective equipment. This ordinance established the following:

- basic personal protective equipment requirements,
- conditions and procedure for conformity assessment of personal protective equipment,
- the manner of marking the personal protective equipment,
- the design of the CE mark.

Originally, the ordinance was to be made effective on 1 January 2003. However, this did not happen due to a **new conformity assessment act**⁵ that was published on 7 October 2002 and replaced the previous act (dated 28 April 2000) on 1 January 2003. The new act has enabled full implementation of the EU conformity assessment system with all its elements. The changes it provides are quite numerous, so the decision was made to draw up a completely new act rather amending the old one. The changes are orderly and complementary. However, the interim and final solutions are very important, especially those stating that laws obli-

gating producers to effect product conformity assessments against the basic requirements are effective from the day Poland becomes a member state. Until that date the existing laws will remain effective, based on the testing and certification act of 3 April 1993 that provides for the safety mark B for some products. In addition, the articles of the act compelled amendments to all ordinances introducing the New Approach directives that were to become mandatory on 1 January 2003. And so, the ordinance of January 2002 concerning basic PPE requirements has been replaced with a new ordinance⁶. Its regulations will be put in force on the date Poland becomes a EU member [12].

The certification of protective clothing that belongs to products protecting or saving life and health is therefore still regulated by the provisions of the amended testing and certification act of 3 April 1993. Protective clothing (with several exemptions)⁷ is subject to mandatory certification for the safety mark B reserved by the Polish Centre for Testing and Certification. To be granted the mark, a product has to fulfil the requirements set by the Polish Standards and/or applicable laws. The safety mark has to be placed on the 'sproduct packaging by the supplier, producer or importer.

The country of the product's origin determines the specific procedure that a PPE article on the list of 9 November 1999 must undergo before it becomes marketable:

- PPE items manufactured in Poland are subject to certification for the 'B' mark;
- personal protective equipment originating in a country with which Poland has signed an agreement on the recognition of conformity certificates or producer declarations⁸ is subject to a verification procedure for a respective certificate or a declaration issued in the country of origin. This procedure is conducted by a Polish certifying body, may not take longer than 21 days, and its cost may not exceed 10% of the fee payable for a certification of the same product for 'B' marking;
- PPE articles imported from countries that have not signed such an agreement with Poland are always subject to certification for 'B' marking.

It is noteworthy that the present approach to personal protective equipment

(including protective clothing) in Polish legislation concentrates on worker protection in the workplace. Thus a number of user-protecting articles are left outside the system of regulation and certification, for the simple reason that they are used elsewhere (a case in point is protective sportswear).

For Polish producers of protective clothing, the replacement of the existing testing and certification system with the conformity assessment system as laid down in the act of 30 August 2002 will mean the introduction of the aforementioned PECA⁹. Poland predicts that the PECA will become effective on 1 July 2003, although this will depend on the course of the ratification process in both Poland and the EU¹⁰. Making the PECA effective before Poland becomes a member state will allow producers to adjust themselves to the new system before the accession date, but it will also enable the administration to check how all the system elements function, and to take corrective actions, if necessary.

The full adjustment of Polish law to EU solutions operated in the area covered by the so-called New Approach directives that provide for 'CE' marking on industrial goods requires a transposition of the harmonised European standards to the set of Polish standards.

Harmonisation of Polish protective clothing standards with the European standards

Regarding standardisation, a huge step forward has been evidenced by the **standardisation act** made effective on 1 January 2003¹¹. The act introduces a **completely voluntary compliance with the standards**. Since 1 January 1994, standards in Poland have been essentially voluntary, yet particular ministers were authorised to issue ordinances introducing mandatory standards. This approach is not used in the member states. The new act has deprived ministers of these prerogatives. In addition, the act requires standardisation to be guided by rules such as transparency and public access to the standards; voluntary participation in standard development and application; contribution of all interested parties to a standard designing process (by completing surveys); grounds for the content of standards based on consensus; independence from public administration; com-

Table 1. Progress in transposing harmonised European protective clothing standards into the set of Polish standards. Source: developed by the author on the basis of the on-line Catalogue of Polish Standards, <http://www.pkn.pl/PNAdm1/index.htm>, and the CEN On-line catalogue, <http://www.cenorm.be/catweb/13.340.10.htm>.

ICS subgroup	Subgroup	Year	Polish standards PN-EN	European standards EN and ENV ¹²	Implementation, %
13.340.10	Protective clothing	2001	39	67	58 ¹³
		2002/3	75	89	84

pliance with European and international standardisation rules.

Given the fast development of the world economy, foreign countries use standardisation documents other than standards, for instance, technical specifications or prestandards (which apply to innovative solutions). The previous standardisation act of 1993 referred to only one such document: the Polish Standard. Under the new act, the Polish Standardisation Committee (PSC) has also been allowed to develop standardisation documents other than standards. In addition, according to the act of 1 January 2003 the existing Standardisation Problem Commissions have been converted into **Technical Committees (TCs)** responsible for the content of Polish Standards. Consequently, protective clothing issues are handled by **TC 21 for Personal Worker Protecting Equipment** (in the part concerning textile protective clothing and gloves). On the CEN side, this subject is dealt with by the **Technical Committee CEN/TC 162** (protective clothing, hand and arm protection and lifejackets).

The act also states that a Polish standard may introduce an international or European standard in its original language version. The broad application of the recognition-based approach was necessitated by the implementation of condition no. 7 out of the nine that must be met by the Polish Standardisation Committee for it to become a member of the European standardisation organisations, the CEN and the CENELEC. According to this condition, a prospective member of the CEN and the CENELEC has to transpose 80% of the standards operated by the organisations to its national standards in order to be eligible for membership [24]. Unusual progress was made in the last period of the PSC's operations. In 2002 as many as 6548 Polish Standards were established, of which 2427 are European

and international standards translated into Polish, as well as genuine national standards, and 4121 are European standards accepted as Polish standards [37]. Table 1 shows the progress in transposing harmonised European protective clothing standards into the set of Polish standards.

The basis for the above comparison was the standards officially included in the Catalogue of Polish Standards¹⁴ and the European standards in subgroup 13.340.10 of the International Classification of Standards (ICS 13.340.10 protective clothing)¹⁵.

The 84% implementation rate shows the progress which has been made as of March 2003. It is worth emphasising that the set of Polish standards already includes all the European protective clothing standards that had been published before 2001.

Possible Effects of Adjustments to Requirements of the Single European Market on the Polish Protective Clothing Market

The Polish market of protective clothing defined as clothing subject to mandatory certification for safety marking 'B' constitutes a fraction of the overall market of working clothing. This situation is largely due to the differences between the Polish system for admitting personal protective equipment to the market and the European system based on directive 89/686/EEC. In the first place, in the Polish system the extent of personal protective equipment which is subject to requirements is defined by enumeration of its concrete types (categories). As a consequence, articles that do not fit into any of them escape requirements and certification procedures, even though their users may be exposed to some hazards. As a result of the protection being focused on workers only,

many privately-used protective articles are left outside the system of requirements and certification. In addition, conformity assessment procedures have not been sufficiently defined in current law so far. The existing regulations merely itemise elements that should be included in an application for certification and the safety mark 'B'. It is also important that Polish producers of protective clothing are compelled to use the services of domestic certifying bodies¹⁶. This situation will basically change after Poland has joined the European Union, and it should be expected that the new solutions will considerably affect the Polish protective clothing market.

For instance, safety requirements will equally affect protective clothing used by workers both in the workplace and outside. Also we will see the disappearance of the dual certification system, which today obliges Polish entrepreneurs exporting to the EU to apply for the CE marking to an organisation notified in one of the member states, and certify their products for the 'B' marking at home. It can thus be expected that after the EU certification and standardisation system has been implemented in Poland, the domestic producers will be provided with better access to the EU market. At the same time, however, suppliers in the member states will be able to introduce a broader range of products into the Polish market without having to affix the B marking to some types of protective clothing. Consequently, the choice of products will improve, accompanied by considerably increasing pressure from the European competitors.

Also, the ongoing adjustment of general Polish industrial safety regulations to the EU legal framework, and the related gradual modification in the way Polish enterprises approach worker safety and health protection issues, are important for the protective clothing market in Poland. This modification is strongly influenced by economic factors, for instance those included in the new accidents and occupational diseases insurance act, together with the introduction of the insurance premiums which vary in relation to the sources of occupational hazards, as well as their effects [16].

Conclusions

- In recent years the process of adjusting Polish regulations to EU requirements has largely accelerated. It is correct to say that today the Polish certification and standardisation system is by and large ready to introduce EU regulations. The new standardisation act which has been in force since the beginning of 2003 and the new conformity assessment system act allow full implementation of the EU conformity assessment system with all its elements. In addition, the European protective clothing standards have been predominantly transposed into the set of the Polish standards.
- The introduction of the Single Market rules to Poland will be the most beneficial for consumers - buyers of the protective clothing - who will enjoy a better choice of products and lower prices. It should be remembered, however, that in the case of protective clothing the buyers are employers and the final users are workers. European law is very effective in making employers comply with their obligation to provide the workers with personal protection articles meeting relevant safety and health regulations. The employers may perceive the changes as bringing higher costs of securing adequate protection for their employees in the workplace. It seems, however, that setting them against the costs of possible accidents caused by deficient protection of workers, and the fact that human life and health cannot be overvalued, the balance always appears positive.
- Regarding the manufacturers of protective clothing, it is hard to predict today the net balance of emerging opportunities offered by easier access to the EU market and stronger competition from EU producers. It is, however, highly probable that Polish producers who fail to adjust to the EU requirements on time will be squeezed out by their EU competitors. The opportunity of becoming known in the European market will not be wasted by those who begin to make preparations for the operational environment of the Single European Market even before the Polish market becomes a part of that market.

References

1. Bogucki M., *Notyfikacja i certyfikacja specjalistycznego wyposażenia chroniącego zdrowie i życie ludzkie (Notification And Certification of Specialist Equipment Protecting Human Life And Health)*, 'Techniczne Wyroby Włókiennicze' 2001.
2. Cisko M.: *Harmonizacja polskich norm z zakresu odzieży ochronnej z normami europejskimi (Harmonisation Of Polish Protecting Clothing Standards With The EU Standards)*, 'Odzież' 2/2002.
3. Chorzelewska K., *Skutki włączenia Polski do rynku wewnętrznego Unii Europejskiej (Effects of Poland's Joining the EU Internal Market)*, article derived from the Europa service <http://www.europa.edu.pl>.
4. Davies B., *Trends in the Western European market for protective clothing*, 'Technical Textiles International' 1998.
5. Duda J., *Biała Księga Polska- Unia Europejska, Jakość wyrobów (Poland-EU White Book - Quality of Products)*, Warsaw 1995.
6. *Dyrektywa 89/686/EEC dotycząca środków ochrony indywidualnej (Directive 89/686/EEC concerning personal protective equipment)*, CIOP, Warsaw 1996.
7. Gayczak J., *Harmonizacja polskich norm z zakresu włókiennictwa z normami europejskimi (Harmonisation of Polish Textile Standards with European Standards)*, conference proceedings, Łódź 2001.
8. *Guide on the implementation of directives based on the New Approach and the Global Approach*, Office for Official Publications of European Communities, Luxembourg 2000.
9. Hildebrant R., *Znakowanie CE i handel w ramach Unii Europejskiej (CE Marking And Trade Within the EU)*, [in:] *Jutro Normalizacja Dziś*, Biuro PKN, Warsaw 1997.
10. Hutyra A., *Oznaczenie CE warunkiem eksportu wyrobów przemysłowych do Unii Europejskiej (CE Marking As A Condition For Export Of Industrial Goods to the EU)*, Biblioteka Przedsiębiorcy.
11. Hutyra A., *Środki Ochrony Indywidualnej. Regulacje dotyczące bezpieczeństwa wprowadzania na rynek w Polsce i w Unii Europejskiej (PPE. Regulations Concerning The Safety Of Their Introduction To The Polish And EU Markets)*, Przewodnik dla Producentów, Gdańsk 2001.
12. Hutyra A., *Od kiedy znak CE będzie obowiązkowy w Polsce? (When Will The CE Marking Be Mandatory In Poland?)*, <http://www.euoinfo.org.pl>
13. Kaczurba J., *Znak 'CE' - Zasady dopuszczania towarów do obrotu na Jednolitym Rynku (The CE Marking. Rules For Product Marketability In The Single Market)*, <http://www.mpips.gov.pl/>.
14. Karpuk M., Gajewski Z., *Normy i Certyfikaty w Polsce i w Unii Europejskiej (Standards And Certificates in Poland And the EU)*, 1999.
15. Kawecka-Wyrzykowska E., *Skutki członkostwa w Unii Europejskiej dla handlu wyrobami przemysłowymi (Effects of EU Membership On Trade In Industrial Goods)*, article derived from the Europa service <http://www.europa.edu.pl>.
16. Koradecka D., *Rola badań naukowych w skutecznym wdrażaniu w Polsce dyrektyw Wspólnot Europejskich w zakresie bezpieczeństwa i ochrony zdrowia pracowników (Role of Research In Effective Implementation of EC Safety and Worker Protection Directives in Poland)*, Międzynarodowa Konferencja 'Bezpieczeństwo i higiena pracy w przededniu członkostwa Polski w Unii Europejskiej', Krakow, 24-26 June 2002.
17. Koszewska M., *Market of protective clothing in Poland - the process of transposing Directive 89/686/EEC (Personal Protective Equipment - PPE) to the Polish legislation*, 2nd European Conference on Protective Clothing, Challenges for Protective Clothing, 21-24 May 2003 Montreux Switzerland.
18. Kundera J., *Nowe podejście do harmonizacji technicznej (New Approach To Technical Harmonisation)*, 'Wspólnoty Europejskie' 1999/6.
19. *Liability for defective products. Green Paper, COM (1999) 396 final*, Brussels, 28.07.1999.
20. Marciniak A., *Wprowadzanie norm europejskich do Polskich Norm. Normy zharmonizowane z dyrektywami nowego podejścia (Transposition of European Standards to Polish Standards. Standards Harmonised with the New Approach Directives)*, 'Normalizacja' 11/2001.
21. *Market, environment and objectives of CEN/TC 162 -Protective clothing including hand and arm protection and lifejackets*, CEN, BTC 46/1999.
22. Michoński A., *Pozaprawne aspekty dostosowania Polski do wymogów rynku wewnętrznego UE – normalizacja (Extra-legal Aspects of Poland's Adjustment to the Requirements of EU Internal Market – Standardisation)*, 'Wspólnoty Europejskie' 1999/6.
23. Nicolas F., Repussard J., *Common standards for Enterprises*, Brussels, 1994.
24. Plich B., *Dostosowania normalizacyjne w Narodowym Programie Przygotowania do Członkostwa w Unii Europejskiej (Standardisation Adjustments In the National Plan of Preparations To EU Membership)*, 'Normalizacja' 2/2001.
25. *Product Certification and Marketing Protective Apparel in Europe*, Nonwovens Industry, 1992 No 12.
26. Synowiec E., *Swoboda przepływu towarów (Free Movement of Goods)*, [in:] *Unia Europejska. Przygotowania Polski do członkostwa (European Union. Poland's Preparations For Membership)*,

E. Kawecka-Wyrzykowska, E. Synowiec (eds), IKCiHZ Warsaw 2001.

27. *The European Directive on personal protective equipment. Part two: how to get products certified, 'Technical Textiles International' 1992 no 3., pp. 20-22.*
28. *Useful Facts in Relation to The Personal Protective Equipment (PPE) Directive 89/686/EEC, European Commission: 1999.*
29. *Council Directive 85/374/EEC of 25 July 1985 on the approximation of the laws, regulations and administrative provisions of the member states concerning liability for defective products, Official Journal L 210, 07/08/1985 P. 0029-0033.*
30. *Council Resolution of 21 December 1989 on a Global Approach to Conformity Assessment (OJ C10 Z 16.01.90).*
31. *The conformity assessment act of 30 August 2002 (Dz.U. z 2002 r. no. 166 item. 1360).*
32. *The act on conformity assessment, accreditation and amendments to some acts of 28 April 2000 (Dz.U. 2000, no. 43, item 489 with following amendments).*
33. *The conformity assessment act of 30 August 2002 (Dz.U. 2002, no. 166 item 1360)*
34. *Standardisation act of 12 September 2002 (Dz. U. no. 169, item 1386).*
35. *The Council of Ministers' ordinance regarding the basic requirements for PPE of 9 January 2002 (Dz. U. no. 4, item 37).*
36. *The Council of Ministers' ordinance amending the ordinance concerning basic PPE requirements of 20 December 2002 (Dz. U. no. 231, item 1947).*
37. www.pkn.pl
38. www.cennorm.be
39. www.newapproach.org

Footnotes:

1. *The Old Approach used sectoral directives specifying technical requirements of products - progress in converging technical requirements based on this method was very slow.*
2. *Product Certification and Marketing Protective Apparel in Europe, Non-wovens Industry, 1992 no. 12 pp.54-56.*
3. *Accelerated implementation of the Protocol is aimed at ensuring producers a smoother transition from the old system of testing and certification to the new conformity assessment system (preparation of all conditions necessary for a proper system functioning, informational campaign using training and publications). In addition, the early implementation will allow verification of the performance of all system elements before the European Union is entered, and the making of relevant amendments, if necessary [13].*
4. *Act providing for conformity assessment system, accreditation and amendments to some acts of 28 April 2000 (Dz.U. 2000*

no 43, item 489 with following amendments).

5. *The conformity assessment system act of 30 August 2002 (Dz.U. of 2002, no. 166 item 1360).*
6. *Ordinance by the Council of Ministers of 20 December 2002, amending the ordinance concerning basic PPE requirements (Dz. U. no. 231, item 1947).*
7. *A detailed register of exempted products covered by the Council of Ministers' ordinance concerning the list of products manufactured in Poland, as well as imported to Poland for the first time, that might be either hazardous to or serving to protect or to save human life or environment, can be found in Dz. U. no. 5, item 53, published 28 January 2000.*
8. *Poland has entered into such an agreement with the EU, that is all member states. This is the said PECA signed in 1998 [11].*
9. *To date the Protocol has covered 4 directives (i.e.: 'low-voltage', 'machinery', 'electro-magnetic compatibility' directives and a 'PPE' directive relating to protective clothing). The next step after the PECA becomes effective will be the extension of its jurisdiction (to other directives), or accession to the European Union and starting up a system for all 'new approach' directives. [13].*
10. *The PECA should come into force not later than 6 months before Poland becomes a member state; otherwise, the benefits of early application of the PECA will not offset the costs spent and efforts made to negotiate it.*
11. *European standardisation documents may include: European standards – these have to be ratified by publishing the full content of a relevant convention; harmonisation documents – in special circumstances, these allow countries to depart from standards due to specific legal and technical problems; European prestandards – presenting temporary proposals (maximum 5 years) of future standards; they are issued for fields characterised by fast technological progress, and their introduction does not impose the obligation to withdraw national standards that disagree with them [23].*
12. *Cisło M.: Harmonizacja polskich norm z zakresu odzieży ochronnej z normami europejskimi, (Harmonisation of Polish Protective Clothing Standards With European Standards) 'Odzież' 2/2002.*
13. *On-line Catalogue of Polish Standards, February 2003, <http://www.pkn.pl/PNAadm1/index.htm>*
14. *CEN On-line catalogue, <http://www.cennorm.be/catweb/13.340.10.htm>*
15. *Regarding PPE, only one unit with a broad scope of accreditation is operative. In the EU, a producer may choose the services of one of many notified units in any member state.*

Received 06.09.2003 Reviewed 27.10.2003



Aachen Textile Conference 2004 'From Material to Function'

The 31st Aachen Textile Conference, organised by the German Wool Research Institute (DWI) in co-operation with the Aachen Textile Centre Inc., will take place at the Aachen Congress Centre EUROGRESS on November 24 - 25, 2004.

The first day of the Conference is dedicated to plenary lectures and technical papers from development and industrial practice. On the second day, two symposia will take place:

- Textiles in medicine, biomaterials and hygiene,
- Economical production of textiles via new propulsion, process control, and quality management systems.

The call for poster, especially for the symposia, is open till
August 2, 2004.

Further information is available from:

contact@dw.rwth-aachen.de
www.dw.rwth-aachen.de