

POLISH COMMITTEE FOR STANDARDIZATION



ANNUAL REPORT 2012

OPERATIONAL REPORT OF THE POLISH COMMITTEE FOR STANDARDIZATION FOR THE YEAR 2012

2012

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Dear Ladies and Gentlemen!

For the Polish Committee for Standardization (PKN) the year 2012 was a period of important events linked to the delivery of PKN's objectives set for 2009-2013.

As regards the highlights in terms of international relations, PKN established contacts with some of the former CIS countries: it signed a Cooperation Agreement on standardization with the Ministry of Economy and Antimonopoly Policy of the Kyrgyz Republic, negotiated a draft Memorandum of Understanding with the Committee for Technical Regulation and Metrology of the Ministry of Industry and New Technology of the Republic of Kazakhstan and a draft cooperation agreement with the Ministry of Economic Development and Trade of Ukraine. The Polish Committee

for Standardization hosted a meeting for representatives of the standardization bodies of the Customs Union countries (Belarus, Kazakhstan, the Russian Federation) and Kyrgyz Republic and Poland. The meeting was followed up by a seminar entitled "Access of Polish goods to the market of the Customs Union and the Common Economic Area of Russia, Belarus and Kazakhstan." The activity of PKN in this respect has a specific goal: to make it easier for Polish businesses to access markets of the countries Poland cooperates with. The success of the task is not only up to PKN – we deliver actions relevant for business environment institutions but we have no influence on political decisions.

With a view to publicising standardization among the general public and streamlining the management of PKN, we took important decisions to integrate our Quality Management System and our Information Security Management System into a single Integrated Management System. Furthermore, we appointed a Plenipotentiary of the President of PKN for Education about Standardization and initiated standardization-related education at all school levels. Given PKN's potential as a publicly-financed body, we initiated a promotional campaign to publicise the PN Mark (Polska Norma – Polish Standard) as a consumer label. PKN also participated in a number of events (conferences, fairs, etc.) where standardization was promoted as a modern business management tool. We kept refining our management control.

The greatest achievement in terms of cooperation with Technical Committees was the launch of the Polish Standardization Resource (Polski Zasób Normalizacyjny), which is a new tool supporting standardization work. We decided to implement it in a manner that did not prove favourable for its suppliers in publicity terms but allowed us to detect errors fast and maintain the desired level of security.

The introduction of a new type of technical body – the Task Committee – was a great success. There are already five such committees and their activity shows that the new form of organisation was much needed. We regret that it is PKN that initiates such activities. 20 years after voluntary standardization was introduced in Poland, PKN is still being perceived as a decision-making body rather than a partner supporting communities in delivering their standardization-related objectives. We make every effort to change the perception of our role, but the effects are still unsatisfactory.

Tomasz Schweitzer, Ph.D. Eng.

President of the Polish Committee for Standardization
Warsaw 2012



Dear Ladies and Gentlemen!

The Standardization Council (SC), which I have the honour to chair, is a very important body of standardization activity. The SC is responsible, among other things, for supporting PKN in delivering its objectives and indicating areas relevant for standardization, and thus also for the general public. The Standardization Council is composed of representatives of the government, business organisations, employer's organisations, professional organisations and research and technical bodies, as well as persons re-

presenting tertiary education and community of researchers. Consequently the Council represents a full range of sectors, being delegated to provide opinions on the status of standardization and issues related to the organisation of standardization work.

In 2012, SC focused mainly on supporting PKN in its standardization-related educational efforts. PKN's activities towards introducing standardization to school curricula is crucial, as it will make present-day students, i.e. future manufacturers, engineers, designers and consumers, aware of standardization and its importance for the quality of goods and human lives. For this reason, PKN appointed a Plenipotentiary for Education, which is responsible for coordinating cooperation with schools and universities. The Standardization Council keeps emphasizing the relevance of PKN actions in this respect and supports its decisions.

Thanks to a recommendation of the previous Standardization Council, PKN is allowed to appoint Technical Bodies other than Technical Committees: Working Groups, Sector Councils and Task Committees. The above initiative, strongly supported by SC, is highly popular among sectoral communities and enhances their involvement in standardization work.

In 2012, PKN introduced crucial changes to the standardization system, intensifying its actions to create a modern IT system: the Polish Standardization Resource (Polski Zasób Normalizacyjny), which is a corporate portal replacing the existing ZSI Norma and e-KT systems. The changes would not have been possible, had it not been for the involvement of PKN management and staff, as well as the Members of the 3rd Standardization Council, to whom I would like to express my sincere gratitude.

Professor Stanisław Tkaczyk, Ph.D. Eng.

Chairman of the PKN Standardization Council

Warsaw 2012



GOAL, VISION, MISSION AND ACTIVITIES OF PKN

GOAL, VISSION, MISSION AND ACTIVITIES OF PKN

PKN's goal for 2009-2013 is to become a reputable organisation, both domestically and abroad, which:

- is renowned and esteemed, independent of any influence, autonomous and unbiased;
- coordinates standardization efficiently, is actively involved in international and European standardization work;
- provides high-quality services and products to Polish businesses, citizens and public administration.

The above objective will be achieved at three levels: public, corporate and technical.

Public level - refers to a broad general public (including consumers) and the public administration.

Corporate level – refers both to the internal organisation of PKN work and to PKN's involvement in corporate activity of international and European standardization bodies.

Technical level – means the activity of technical expert at national, European and international levels.

THE VISION

PKN being a modern organisation with a legal personality, well-known and reputable in Poland and worldwide, independent and open to the needs of the market and of the public administration, satisfying users' needs and providing high-quality and timely services.

THE MISSION

To organise standardization activity efficiently, based on European and international solutions developed with active involvement of domestic experts, in support of Poland's technology policy to facilitate trade, ensure competitiveness to Polish manufacturers; pro-

vide all stakeholders with top-quality standardization products, within agreed deadlines and in response to market needs.

The main objective of PKN management is to create favourable conditions for effective and autonomous operation of its Technical Bodies. This objective is to be delivered by actions at different levels.

Since 2006, PKN has insisted that the legislator should complete the transformation of the Polish standardization system by revising the Standardization Act and transforming PKN into an association. Once again, these efforts failed. This mainly affects communities interested in standardization, as there is no change in people's awareness as regards the role of standardization bodies. As a consequence, the course of standardization work and funding are affected.

Therefore, PKN continued to remodel its activity (subject to applicable laws) so that it reflects the conditions that will prevail once PKN is transformed into an association. This is to be achieved by recent and ongoing changes to the structure of the standardization division, which is currently ready to respond fast to the needs of stakeholders. Changes introduced to procedures concerning the work and management of Technical Bodies are to serve a similar objective. Last year was the first year when Sector Councils and Task Committees were in place. The introduction of a new type of Technical Body (TB), namely the Task Committee, was a great success. There are already five such committees and their activity shows that the new form of organisation was much needed.

Also, a procedure was introduced allowing members to appeal against decisions taken by a TB.

The main objective of all the above changes is to streamline and facilitate standardization work so that it can respond to market needs. PKN emphasizes the objectivity and autonomy of Technical Bodies, therefore it aims to avoid controlling the work of Technical Committees (KTs) and the funding of standardization work.

Moreover, PKN has consistently followed the principles of social justice. The costs of standardization may not be borne by all taxpayers if standardization benefits only some. In areas where standardization concerns the broad security of the public, work should be initiated and costs borne by the respective ministries. We keep reminding relevant ministries that they are responsible for funding such work, as a voluntary standardization system means that standardization is funded in a decentralised manner.

The organisational changes go hand in hand with computerisation. PKN launched a new computer tool for supporting standardization – the Polish Standardization Resource (Polski Zasób Normalizacyjny – PZN), which is a corporate portal replacing the systems used previously: ZSI Norma and e-KT. The tool offers flexibility and accessibility – it can be logged into from anywhere in the world. Technical Bodies have obtained state-of-the-art tools to work with, and a wide group of users have been provided with convenient access to Polish Standards.

PKN carries out consistent awareness-raising actions to popularise standardization among the public. A major stress is placed on educational policy making, which consists in promoting standardization at universities. The aim is to "educate" a future generation of aware engineers, manufacturers and consumers.

Management Control

The Team for Management Control Monitoring and Evaluation positively assessed the functioning of the management control at the Polish Committee for Standardization in 2012. Notably, in performing their respective day-to-day tasks, all of its staff comply with management control standards. The actual putting in place of an employee's postulate, submitted as a result of self-evaluation during the management control conducted in 2011, proves that PKN staff have an opportunity of contributing to the development and streamlining of PKN's internal work organisation. In 2012, PKN introduced mechanisms to improve management control, while results of self-evaluation, audits of the Integrated Management System, financial

controls, monitoring of goal and task delivery, corrective and preventive actions taken are a source of information on the status of management control as provided by the President of PKN and the degree to which all standards specified by the Minister of Finance are implemented in an efficient and effective manner.

Integrated Management System

Over a period of 6 months (March-September 2012) PKN itself delivered a project to integrate PKN's Quality Management System and Information Security Management System. The Integrated Management System has been in place since 14 September 2012.

Work on the integration of the Quality Management System and Information Security Management System operated by PKN was undertaken to:

- harmonise rules;
- control documents and records;
- carry out internal audits;
- initiate and deliver corrective actions;
- review the system in terms of quality and information security;
- optimise and establish logical and clear solutions for a process-based approach, as well as for risk analysis, creation and testing of operational continuity plans and other issues covered by the requirements of PN-ISO/IEC 27001;
- creation of a single Intranet website for the Integrated Management System.

The integration of the systems will provide the following benefits:

- limitation of the number of system documents and locations where documents of both systems are collected, made available and stored;
- new design and new functionalities of the system's intranet webpages thanks to the new tool used for their publication;
- easier management of documents by the Plenipotentiary;
- interactive form to be completed and signed on-line by electronic signature in designated sections of the form.

External audit of the Integrated Management System

On 28-29 November 2012, auditors from the Polish Centre for Testing and Certification carried out a joint external audit of supervision of the the conformity with Integrated Quality and Information Security Management System to PN-ISO/IEC 27001:2007 and PN-EN ISO 9001:2009.

The objective of the audit was to assess the adequacy and performance of the Information Security Management System and the Quality Management System and identify possible areas for improvement.

The audit showed that the Quality Management System and the Information Security Management System used by the Polish Committee for Standardization conformed with PN-EN ISO 9001:2009 and PN-ISO/IEC 27001:2007 respectively. The systems are maintained and subject to an improvement process.

In their comments on the processes inspected, auditors showed how the implemented securities can be potentially refined and emphasized the importance of the QMS and ISMS integration. As a result of the audit, the auditors recommended that the validity of the Quality Management System certificate issued for compliance with PN-EN ISO 9001:2009 and of the Information Security Management System certificate issued for conformity with PN-ISO/IEC 27001:2007 should be maintained.



STANDARDIZATION BY SECTORS

STANDARDIZATION BY SECTORS

Overview

In 2012, standardization activities were carried out in 17 Standardization Sectors reporting to the Standardization Work Department. The Sectors were established in 2011 as a result of the subdivision of standardization areas.

The key organisational changes in terms of standar-dization work in 2012 include the introduction of a new electronic system entitled the Polish Standardization Resource (Polski Zasób Normalizacyjny ¬– PZN), which replaced the previous ZSI Norma and e-KT systems.

Polski Zasób Normalizacyjny – a web-based application (available on-line), a database of Polish Standards, standardization deliverables and standardization organisations for comprehensive management of standardization work at PKN and providing Technical Bodies with functionalities for managing their respective standardization work, featuring a voting function protected by an internet password received by a text message.

In 2012, 367 standards and deliverables were published as a result of the work, including:

300 Polish Standards implementing European Stan-

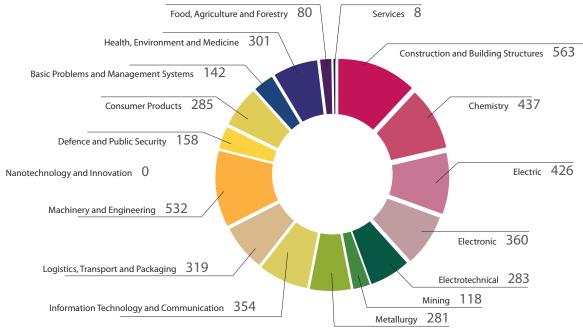
- dards, 149 of which were standards harmonised under New Approach Directives;
- 40 Polish Standards implementing International Standards;
- 21 Polish Standards homegrown developments;
- 6 Polish Standardization Deliverables (including 2 implementations of European deliverables).

PKN participated in the development of European Standards in accordance with CEN and CENELEC work programmes. Upon completion, new European Standards are added to the collection of Polish Standards through endorsement (in the original language). Additionally, PKN endorsed 97 European Standards in the development of which PKN did not participate. As a result of the above activities, a total of 1,299 European Standards were endorsed.

As at the end of 2012, the Standardization Work Programme comprised 4,647 work items at different stages of development. In 2012, work on 1,666 projects ended with the publication of Polish Standards, supplementary components to Polish Standards and Polish Standardization Deliverables.

Polish Standards are being notified to European standardization bodies. Overall, in 2012 1,681 homegrown

NUMBER OF ALL STANDARDIZATION WORK ITEMS IN THE STANDARDIZATION WORK PROGRAMME BY SECTOR



Polish standards and standards implementing European and International Standards were notified – all items submitted for notification. Of all the 1,619 Polish Standards implementing European Standards 1,085 were notified to CEN, 428 to CENELEC and 106 to ETSI.

In order to enable all stakeholders to participate in the creation of standardization deliverables and comply with the statutory duty to provide opinion on draft Polish Standards, public enquiries were carried out within the framework of the development of work items.

Entities participating in the work of Technical Bodies through their representatives have a significant influence on the actual content of the standards and documents. As a result of new challenges facing European and international standardization, by decision of the President of PKN new types of Technical Bodies (other than Technical Committees) were introduced in November 2011:

- Sector Councils (RSs), composed of Chairpersons of Technical Committees and Task Committees from respective Standardization Sectors of the Standardization Work Department (WPN), which coordinate activities in the scope of the respective Sector;
- Task Committees (KZs) collegiate bodies appointed to perform a specific standardization work, e.g. draw up several draft standards.

Sector Councils are established within Sectors of the Standardization Work Department (WPN).

In 2012, 244 heads of KTs/KZs worked at 16 Sector Councils. No Sector Council for the Nanotechnology and Innovation Sector was set up due to the small number of KTs/KZs in the Sector.

In 2012, the interest in the participation in the work of KTs was similar to previous year. The President of PKN appointed 128 entities as members of Technical Committees (181 KT memberships), which means that 128 entities started working at 181 KTs, and dismissed 62 entities (100 KT memberships). 41 entities (62 KT memberships) declared complete withdrawal from the work of KTs.

88 entities (117 memberships) that had not participated in KTs at the end of 2011 came forward to participate in the work of KTs.

At the end of 2012, 1,049 entities participated in the work of 249 Technical Committees through 2,850 representatives, with a total membership in KTs of 2,603.

Organisations, economic operators and commercial companies represent the largest group of Technical Committee members (69.3% of members), but they only hold 45.8% of KT memberships due to the fact that 67.4% of them are small and medium-sized enterprises (SMEs), with only one or two KT memberships.

The membership of SMEs in KTs represents 46.7% and is as follows (situation as at the end of 2012):

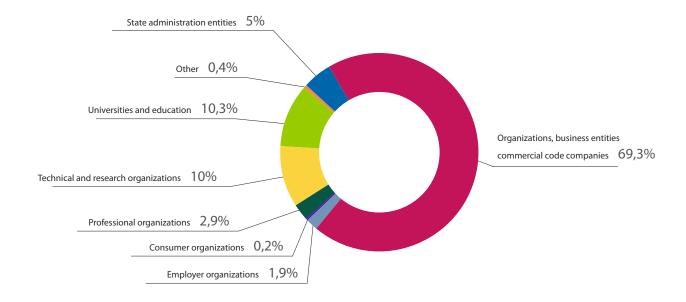
- microenterprises 139 entities;
- small enterprises 137 entities;
- medium-sized enterprises 214 entities.

Number of entities in KT by type, pursuant to Standardization Act

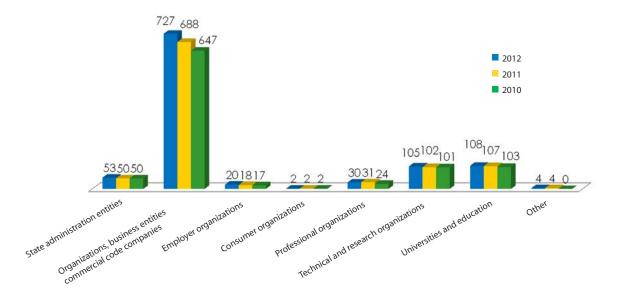
Item No.	Type of entity	Num	ber of e	ntities	Number of memberships			Number of representatives		
NO.		2010	2011	2012	2010	2011	2012	2010	2011	2012
1	State administration entities	50	50	53	197	194	194	217	215	213
2	Organizations, business entities commercial code companies	647	688	727	1 046	1 124	1 192	1 080	1 153	1 214
3	Employer organizations	17	18	20	30	33	35	33	35	38
4	Consumer organizations	2	2	2	14	13	13	11	10	10
5	Professional organizations	24	31	30	36	44	41	45	52	51
6	Technical and research organizations	101	102	105	459	470	467	536	532	534
7	Universities and education	103	107	108	618	640	657	758	776	798
8	Other	-	4	4	-	4	4	-	6	6
Total		944	1 002	1 049	2 400	2 522	2 603	2 680	2 779	2 864*

^{*}A larger number of representatives in relation to individuals is explained by the fact that the same people represent several different organizations.

Participation of types of entities in KTs (2012)



Comparison of the number of types of entities in the years 2010 - 2012



Following the expiry of terms of office or dismissals, Chairperson and Deputy Chairperson elections were organised in KTs. Chairpersons and Deputy Chairpersons were appointed by the President of PKN for a four-year term of office. The Chairperson appointed were also members of Sector Councils.

29 Chairpersons and 14 Deputy Chairpersons were appointed to perform functions at KTs. Among the new appointments – 12 Chairpersons and 10 Deputy Chairpersons had not performed their functions in the respective KTs.

Pursuant to the Standardization Act, KT secretariats are run by PKN. By way of agreement, PKN may outsource secretariat services. As at the end of 2012,

of all the 249 KT secretariats 158 (63.5%) were based in PKN, while 91 (36.5%) were run by 54 entities located outside PKN. The reduction in the number of outsourced secretariats compared to the previous year (from 98 to 91) is attributable, among other things, to the launch of the Integrated Quality Management and Information Security Management System and Decision of the President of PKN introducing new principles on secretariat outsourcing. Some entities decided not to run the secretariat under the new principles (11 resignations). In 2012, 5 Task Committees were created upon requests from interested parties:

- No. 500 Indoor Sun Exposure Services
- No. 501 Services for Fire Safety and Security Systems

Total number of Technical/Task Committees

Total as of		Changes in the KT/k	es in the KT/KZ number per year		
31.12	2011	dissolutioned	established	31.12. 2012	
KT	249	-	-	249	
KZ	-	-	5	5	

- No. 502 Aesthetic Surgery Services
- No. 503 Facility Management
- No. 504 Real Estate Market Commitee.

As at the end of 2012, 49 representatives of 37 entities participated in the work of 5 Task Committees (KZs), having 40 memberships.

Task Committees are composed for most part of entities from groups of organisations, business operators and commercial companies. They represent 64.9% of members, having 62.5% of all memberships.

All KZ secretariats are run by PKN.

By the decision of the President of PKN, since 2011 every existing KT and newly established KT and KZ has been obliged to develop and update on an ongoing basis an Action Plan. KTs/KZs Action Plans are equivalent to business plans used by European technical committees (TCs).

The Action Plan of a Technical Committee (PD KT)/ Task Committee (PD KZ) is a concise overview of the current status of standardization work and of the working plan within the context of important business, technology, environmental and social forecasts in the working field of the KT/KZ concerned. The Action Plan of a Technical Committee (PD KT)/Task Committee (PD KZ) is drawn up, among other things, to promote the achievements and plans of the KT/KZ that require fund raising necessary for the work plans to be delivered among communities of stakeholders. Following their approval, KT and KZ plans are made available to stakeholders via PKN website.

Number of entities in KZ by type, pursuant to Standardization Act

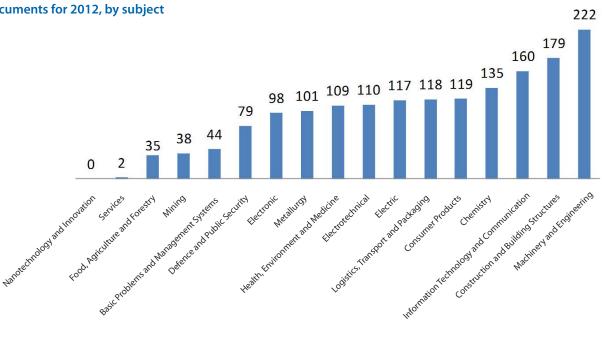
Type of entity	Number of entities	Number of memberships	Number of representatives
State administration entities	1	1	2
Organizations, business entities commercial code companies	24	25	30
Employer organizations	-	-	-
Consumer organizations	-	-	-
Professional organizations	5	6	7
Technical and research organizations	3	3	5
Universities and education	4	5	5
Total	37	40	49

Number of approved/published Polish Standards, additional elements, and Polish standardization documents, by subject, for 2012*

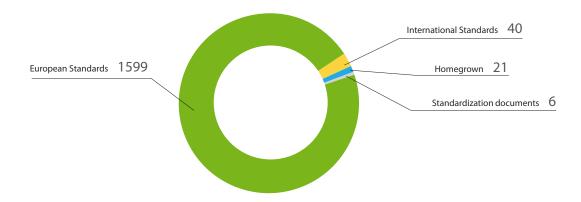
Subject	Number of approvals	Number of published documents
Construction and Building Structures	196	179
Chemistry	147	135
Electric	122	117
Electronic	99	98
Electrotechnical	113	110
Mining	41	38
Metallurgy	104	101
Information Technology and Communication	173	160
Logistics, Transport and Packaging	129	118
Machinery and Engineering	230	222
Nanotechnology and Innovation	0	0
Defence and Public Security	81	79
Consumer Products	121	119
Services	2	2
Basic Problems and Management Systems	43	44
Health, Environment and Medicine	113	109
Food, Agriculture and Forestry	35	35
Total	1 749	1 666

^{*} Number of approvals provides an image of the work done by the KT and the Sector its cooperating with in 2012; the number of publications shows how many standards and other standardization documents provided to the users in 2012 (contains parts on standards/documents approved in 2011 and the standards and documents published in 2012 and approved in 2012).





Number of published Polish Standards, additional elements, and Polish standardization documents for 2012, by type



Work relevant for the implementation of European Standards and European standardization deliverables represented 96.1% of all publications in 2012.

Some of the work (33.5%) relating to the development of Polish Standards and Polish standardization deliverables in Polish was financed within the framework of work requested by stakeholder communities.

Withdrawal of Standards

1,438 Polish Standards that were obsolete or non-compliant with European Standards were withdrawn from the collection of Polish Standards without replacement, including 1,134 Polish Standards out of 1,140 Polish Standards scheduled for withdrawal as a result of a periodic review of homegrown standards and standards implementing International Standards (in seven instances, KTs changed their decisions in respect of the need to withdraw a standard upon the completion of the review).

Cooperation with European and international standardization organisations

In 2012, PKN continued its activities in connection with its membership in international (ISO and IEC) and European (CEN and CENELEC) organisations and its status as an ETSI national standardization organization.

PKN cooperates with 173 technical committees (TCs)/subcommittees (SCs) of IEC, being a participating member ("P") in 64 of them and an observer ("O") in 109; it does not cooperate with 2 TCs/SCs. 77 experts from Poland, representing economic operators and being KT members, are active in 124 working groups.

In 2012, the forms of participation were changed or new forms added with respect to the work of:

- 5 IEC TC/SC.

PKN cooperates with 644 ISO technical committees (TCs)/subcommittees (SCs), being a participating member ("P") in 235 and an observer ("O") in 409; it does not cooperate with 93 TCs/SCs. The activity of 127 working groups is carried out with the participation of 84 Polish experts.

In 2012, the forms of participation were changed or new forms added with respect to the work of:

- 23 ISO TC/SC.

Membership in IEC

Membership	Committees (TC)	Subcommitte- es (SC)	Total (TC and SC)
	IE	C	
Participating member ("P")	34	30	64 (37%)
Observer ("O")	61	48	109 (62%)

Membership in ISO

Membership	Committees (TC)	Subcommitte- es (SC)	Total (TC and SC)
	ISC)	
Participating member ("P")	60	175	235 (27%)
Observer ("O")	140	269	409 (64%)

At CEN, 197 Polish experts are active in 247 working groups (WGs). In 2012, PKN carried out verification of experts to be delegated to working groups.

At CENELEC, 21 Polish experts participate in the work of 27 working groups.

In 2012 delegates participated in 62 meetings of working bodies of European and international standar-dization organisations, including: 6 IEC meetings, 14 ISO meetings, 23 CEN meetings and 5 CENELEC meetings.

Within the framework of PKN's cooperation with European and international standardization organizations, opinions were issued on all documents requiring an obligatory position of membership organisations.

2,018 IEC working documents were registered, 716 of which concerned the TCs/SCs in which PKN has a member status. PKN issued opinions on 1,037 documents, submitting 123 technical comments, editorial comments or proposals for modifications.

4,859 ISO working documents submitted for opinion or vote in 2012 were registered, including 2,336 working documents concerning TCs/SCs where PKN has a "P" status. Responses to 2,658 documents were issued, with 154 technical comments, editorial comments or proposed modifications.

PKN registered 2,519 working documents issued by CEN (with ASD-STAN and ECISS), with respect to which opinions were given or which were voted, including 1,698 draft European Standards – prEN and FprEN. Technical or editorial comments were submitted with respect to 189 draft European Standards.

PKN also registered 844 CENELEC working documents, with respected to which opinions were given or which were voted, including 837 draft European Standards – prEN and FprEN. Technical or editorial comments were submitted with respect to 39 drafts.

Since the beginning of 2012, 70 positions on draft European Standards were provided (prETSI EN), including 3 with comments.

During the 45th CEN/BT TCMG meeting a new project committee was established: CEN/TC 419 Forensic science services. The committee was created upon request from PKN; the project originated in cooperation with the Central Forensic Laboratory of the Police (CLKP) in Warsaw. As a consequence, the CEN Technical Board

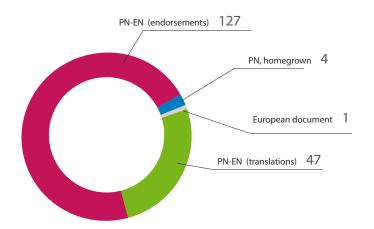
allocated the secretariat of the TC to the Polish Committee for Standardization. On 3 August 2012, PKN signed an agreement under which the secretariat was entrusted to CLKP. The first CEN/TC 419 meeting was held on 23 October 2012 in the seat of the Polish Committee for Standardization in Warsaw. It was attended by nearly 30 delegates representing Belgium, France, Germany, Finland, the United Kingdom, Sweden, Spain, the Netherlands and Poland. The sessions were chaired by the Secretary of the Committee, Ms. Agnieszka Łukomska (Central Forensic Laboratory of the Police) and by Committee Chairman, Junior Inspector Paweł Rybicki, head of CLKP, who was appointed to the function by decision of the TC members.

Construction and Building Structures Sector (SBD)

As regards standardization work carried out by the Construction and Building Structures Sector completed in 2012, implementations of European Standards and European documents represent 97.8% of the Polish Standards published in the Sector.

Number of all standards and additional components to PNs published in 2012

Standardization documents	2012
PN-EN (translations)	47
PN-EN (endorsements)	127
PN, homegrown	4
European document	1
Total (all documents)	179



Directions of Changes in the Sector in 2012

In 2012 the standardization work in SBD focused mainly on two very important working areas in the construction industry:

- start of the revision of European Standards, also referred to as Eurocodes, at EU level by revisions and amendments;
- revision of European Standards in such a manner as to reflect the replacement of New Approach Directive 89/106/EEC on construction products (CPD) by Regulation of the European Parliament and of the Council (EC) No. 305/2011 of 9 March 2011.

Eurocodes are a collection of harmonised technical rules on the structural design which would initially constitute an alternative for national provisions on structural design applicable in EU Member States and would ultimately replace the provisions. Issues linked to the introduction of Eurocodes to the Polish standardization system have been crucial for SBD activity.

Very often, Sector staff are also actively involved in activities related to the promotion of solutions applied in Eurocodes. For example, they attended a meeting on 18 December 2012 at the Faculty of Civil Engineering of

the Warsaw University of Technology, where a discussion panel was held on the safety of reinforced-concrete structures and application of Eurocodes.

Regulation No. 305/2011 lays down harmonised conditions for the marketing of construction products and repeals Council Directive 89/106/EEC. National provisions transposing Directive 89/106/EEC are to be completely repealed on 1 July 2013. The regulation introduces, among other things, new provisions on the declaration by manufacturers of construction products of the performance of such products, based on harmonised standards. Currently, the set of construction-related harmonised standards published in the EU's Official Journal comprises 412 standards. The provisions of all these documents referring to Directive 89/106/EEC will have to be amended so as to incorporate the provisions of the new regulation.

Bearing in mind the changes of European construction rules and the interest of the Polish construction sector, last year, the activity of the Construction and Building Structures Sector involved the translation into Polish, jointly with KTs, of approximately 50 European standards endorsed as Polish Standards.

Of these, the series of standards coded PN-EN 1090 Design of steel and aluminium structures needs to be emphasized as they are crucial to suppliers of steel structures.

In 2012, the Sector organised meetings of Committee ISO/TC 98 Bases for design of structures, which has been based in Poland for 40 years, and of its three subcommittees, including SC2 Reliability of structures, run by PKN.

In 2012, increased interest could be observed in the activity of Polish experts at working groups (WGs) of CEN technical committees. 11 new experts were delegated to WGs in 2012. Currently, 140 experts take part in the work of 89 working groups in the Sector. One of the groups, WG 5 Design and calculation methods for smoke

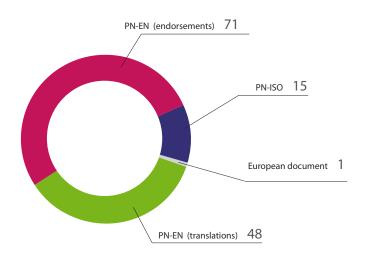
and heat exhaust ventilation systems, which operates under TC 191/SC1, is led (the Convenor) by a representative/expert from KT 180 Fire safety of buildings. The group deals with the design and calculations for smoke and heat exhaust ventilation systems, i.e. problems having a crucial importance for the safety of users of buildings and structures.

Chemistry Sector (SCH)

As regards standardization work carried out by the Chemistry Sector completed in 2012, implementations of European Standards and European deliverables represent 88.9% of all the Polish Standards and Polish Standardization Documents published in the Sector.

Number of all standards and additional components to PNs published in 2012

Standardization documents	2012
PN-EN (translations)	48
PN-EN (endorsements)	71
PN-ISO	15
European document	1
Total (all documents)	135



Directions of Changes in the Sector in 2012

The Chemistry Sector covers the following subject areas: chemical analysis, chemical safety, explosives, coal derivatives, liquid fuels, lubricating oils, asphalts, technical gases, plastics, plastic pipes and fittings, rubber, adhesives, technical ceramics, mineral fertilisers, paints, varnishes, dyestuffs, pigments, extenders, cosmetics and household chemicals, protection of wood.

SCH cooperates with 17 technical committees whose areas of activities reflect the structure of the European Committee for Standardization (CEN).

In 2012, cooperation with CEN/TC 411 in the area of Bio-based products was established. The SCH Sector Council is interested in some work items which are being developed by the committee.

In 2012, the sector published Polish-language versions of systemic standards for the transmission of gaseous fuels. The standards are crucial for industry and the economy. The individual components of PN-EN 1555 Plastic piping systems for the transmission of gaseous fuels specify the requirements to be fulfilled by a piping system and its components made of polyethylene (PE) and intended for the transmission of gaseous fuels. It also provides recommendations on conformity assessment and the recommended installation practice. The provisions of PN-EN 1555 apply to PE pipes, fittings, and valves, their joints and to joints with components of other materials intended to be used under specific pressure and temperature conditions.

Technical Committees (KT 12 and KT 269) developed standards and draft standards relating to a new thematic area. They are standards linked to chemical safety and safety of pyrotechnics.

PN-EN 16020:2012 Explosion diverters describes the importance of explosion diverters for diverting explosions propagating through ducts, thus preventing flame jet ignition and pressure piling in connected protected enclosures. This reduces the risk of flame propagation.

The series of standards EN 16256 Pyrotechnics – Theatrical pyrotechnics define the procedures for the subdivision of such products into generic types, subtypes or individual items of theatrical pyrotechnic products. The products were assigned to categories T2 and T1 for outdoor use and to T1 for indoor use (with a comprehensive description). The requirements concerning the design, operation and packaging units of the different types of theatrical pyrotechnic products were set forth.

In 2012, the interest of entities in the funding of work on request was similar to the previous year. The entities cooperating with KT 222 Petroleum and related products and KT 140 Plastic pipes, fittings and valves have been particularly active within that area. Most of the PN-EN standards drawn up by KT 222 and published deal with asphalts and asphalt binders. PN-EN standards were also developed in the field of liquid petroleum products, motor vehicle fuels, and PN-ISO standards providing test methods for petroleum products and lubricants. A PKN-ISO/TS standardization deliverable concerning the requirements for motor vehicle fuels was published. In total, 32 work items were developed. Within the framework of KT 140, 9 standards projects in the area of water and gas pipes were developed..

SCH experts took part in events dedicated to standardization in the Sector. At training organised in the Polish Centre for Testing and Certification entitled EU system for assessing fertiliser conformity in the light of changes proposed by the European Commission (Unijny system oceny zgodności nawozów w świetle proponowanych zmian Komisji Europejskiej), an SCH consultant presented a paper on the standardization of fertilisers. The conclusions of a seminar organised in Gliwice entitled Terminology issues – an attempt to standardise vocabulary in the area of trenchless technologies in the light of standardization (Zagadnienia terminologiczne – próba ujednolicania nazewnictwa w dziedzinie technik bezwykopowych w aspekcie prac normalizacyjnych) were taken into account in standardization. The terminology proposed and adopted at the seminar was incorporated into the following Polish Standards: PN-EN ISO 11296-1,3,4 and PN-EN ISO 11298-1.

Electronic Sector (SEK)

As regards standardization work carried out by the Electronic Sector completed in 2012, implementations of European Standards and European deliverables represent 100% of all the Polish Standards published in the Sector.

Number of all standards and additional components to PNs published in 2012.

Standardization documents	2012
PN-EN (endorsements)	98
Total (all documents)	98

Directions of Changes in the Sector in 2012

KT 60 Semiconductor Power Converters

In 2012, some of the thematic scope dealt with by KT 60 Semiconductor Power Converters, which cooperates with IEC/TC 113 Nanotechnology standardization for electrical and electronic products and systems, was transferred to the Nanotechnologies and Innovation Sector (SNI).

The journal *Wiadomości PKN*. *Normalizacja* published an article written by a WPN-SEK consultant on standar-dization in semiconductor electronics in the context of the activity of KT 60 Semiconductor Power Converters, which is at risk of being disbanded.

KT 105 Electroacoustics, Audio And Video Information Storage Systems

In 2012, work was under way to translate into Polish European Standard EN 60118-13:2011, which covers a full range of phenomena linked to electromagnetic compatibility with reference to hearing aids. The Polish Standard was published in 2013.

KT 105 experts were actively involved in the work of international technical bodies. For example, a KT 105 expert participated in an IEC/TC 29 meeting and in the meetings of the following working groups and teams:

MT 4, WG 17 and MT 19. The meetings were held in the seat of the Danish standardization body, i.e. Danish

Standards (DS) in Charlottenlund near Copenhagen between 17 and 21 September 2012.

KT 282 Fibre Optics

The work of the KT focused on the implementation of European Standards. Throughout 2012, KT 282 took part in the implementation of fibre-optics standards to PN 40. KT 282 actively participated in the work of mirror IEC international committees. Between 6 and 15 November 2012, a KT 282 expert participated in a plenary meeting of IEC/TC 86, IEC/SC 86A, IEC/SC 86B, IEC/SC 86C and meetings of IEC/SC 86B, WG 4, WG 6, WG 7, WG 1 and IEC/SC 86C. The meeting was held in Mexico.

Three new members joined KT 282, which proves that its work is highly popular in 2012:

- The Corning Cable Systems Polska company delegated two representatives and
- FIBERON TECHNOLOGIES INC. Poland delegated one representative.
- The Office of Electronic Communications replaced its representative.

KT 69 Measuring, Control and Laboratory Equipment

KT 69 cooperates mainly with IEC/TC 66 and CLC/TC 66. It deals with the safety of electronic devices and measuring systems as well as laboratory equipment according to PN-EN 61010 (multi-part standard). In 2012, work on the successive parts of the standard was under way, as new laboratory apparatus appeared, e.g. medical devices for in vitro diagnostics (IVD) (prPN-prEN 61010-2-101) or laboratory atomic spectrometers with thermal atomisation and ionisation (prPN-prEN 61010-2-61). Furthermore, laboratory equipment standardized earlier is being upgraded and modernised, which requires revision of existing standards. The above standard has a wide application in all laboratories and measuring

stations. In 2012, a new standard was endorsed and published in this area: PN-EN 61010-2-033:2012.

KT 69 is responsible for standard PN-EN 50436, which deals with alcohol interlocks. Alcohol interlocks, which respond to breath alcohol, are designed to prevent drink-driving. In 2012, Part 1, which specifies the technical performance requirements for alcohol interlocks and Part 2, which concerns test methods and technical performance requirements for alcohol interlocks, started to be revised. Furthermore, Part 4, which deals with the methods for connecting alcohol interlocks with car accessories and other vehicles, started to be developed. The multi-part CENELEC/BTTF 116-2 European Standard was implemented into the Polish Standard.

KT 241 Electromechanical Components and Mechanical Structures for Electronic Equipment

The thematic scope of KT 241 comprises connectors, circuit breakers, switches, casings, panels, stands, cabi-

nets and other accessories that are necessary for the operation of any consumer or professional electronic equipment.

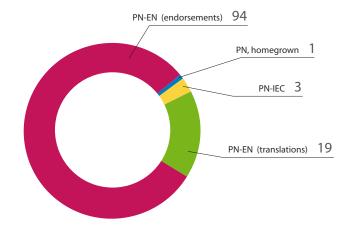
The standardization work of this KT in 2012 focused on the endorsement of European Standards into the collection of Polish Standards. 13 Polish Standards were approved and published. For most part, the standards approved in 2012 concern "connectors for electronic equipment" (PN-EN 60512, PN-EN 61076) and "mechanical structures for electronic equipment" (PN-EN 61587 and PN-EN 61969).

Electrical Sector (SEL)

As regards standardization work carried out by the Electrical Sector completed in 2012, implementations of European Standards represent 96.6% of all the Polish Standards published in the Sector.

Number of all standards and additional components to PNs published in 2012

Standardization documents	2012
PN-EN (translations)	19
PN-EN (endorsements)	94
PN-IEC	3
PN, homegrown	1
Total (all documents)	117



Directions of Changes in the Sector in 2012

Aspects focused on the revision of standard PN- EN 50341-1 Overhead electrical lines exceeding AC 1 kV, involving, among other things, the development of the National Annex specifying the national conditions for the design of such lines in Poland. It is a crucial issue for the Polish power sector, as it will provide the community of designers and investors dealing with Overhead electrical lines exceeding AC 1 kV with access to the revised standard PN-EN 50341-1 Overhead electrical lines exceeding AC 1 kV - Part 1: General requirements - Common specifications. Without the National Annex designing overhead electrical lines exceeding AC 1 kV would be highly hindered.

The specification of national conditions through an annex is also linked to the active participation of KT 80 representatives in CENELEC/ TC 11/WG 9. Most of the comments prepared by the KT and proposed to be included in prEN 50341-1:2012 were adopted by CENELEC/ TC 11.

KT 62 Electrical Accessories revised homegrown standard PN-E-93151:2012 Switches for household and similar fixed electrical installations - Surface-type switches up to 16 A, 250 V - Principal dimensions. It was the first standard to be developed by PKN according to the Vilamoura Procedure, as work on request.

KT 4 Lighting Technology expanded the scope of its work with the scope of the newly-established ISO/ TC 274 Light and lighting.

KT 4 Lighting Technology developed standards having a practical application for a wide range of users, linked to safety and responding to new trends: digital light control system (smart lighting), energy performance of lamp accessories or emergency lighting in road tunnels. The KT developed a standard that had been much-awaited by various communities and bodies supervising work places: PN-EN 12464-1:2012 Light and lighting - Lighting of work places - Part 1: Indoor work places.

KT 78 Industrial Electroheating takes active part in the work carried out by IEC/TC 27, because Poland runs the Secretariat of the IEC committee. In April and October 2012, PKN held, at its seat, meetings of Working

Group IEC/TC 27/MT 18, which deals with the revision of standard IEC 60519-1 Safety in electroheating installations - Part 1: General requirements. It is a key standard for **KT 78 Industrial Electroheating**. The work carried out by MT 18 takes into consideration recommendations from CENELEC/SR 27 and from CENELEC experts dealing with the Machinery Directive (2006/42/EC).

In 2012, **KT 54 Cells and Batteries** published standards relating to fuel cells and photoelectric systems converting sunlight into electrical energy (photovoltaics). They are important for industry and the economy.

PN-EN 62282-3-200:2012 Fuel cell technologies – Part 3-200: Stationary fuel cell power systems. Performance test methods

PN-EN 62282-3-100:2012 Fuel cell technologies – Part 3-100: Stationary fuel cell power systems – Safety

PN-EN 62282-2:2012 Fuel cell technologies – Part 2: Fuel cell modules

PN-EN 61701:2012 Salt mist corrosion testing of photovoltaic (PV) modules

At present, any actions to improve energy efficiency, as well as to promote and use renewable energy sources (RES) play a key role in standardization, treated as a bridge between research, innovation and market.

This is linked to the delivery of the EU "Horizon 2020" strategy, which is supported by CEN and CENELEC through the launch of new RES-related themes.

Experts of **KT 54 Cells and Batteries** are active in the eMobility Coordination Group (eM-CG). In response to the mandate of the European Commission, CEN and CENELEC appointed the eMobility Coordination Group (eM-CG). This ensures consistent and coordinated management of work in the area of e-mobility and cooperation with CEN-CENELEC-ETSI Smart Grids Coordination Group and CEN-CENELEC-ETSI Smart Meters Co-ordination Group.

Through one of its experts, a member of the Task Force for the Validity of Standards IEC /TC 9/MT 310 Railway applications – Traction transformers and inductors on

board rolling stock, **KT 61 Electrical Equipment** and Systems for Railways participates in the development of draft International Standard IEC 60310 Ed. 4 Railway applications – Traction transformers and inductors on board rolling stock (9/1730/CD IEC 60310 Ed. 4).

KT 61 also actively participated in the preparation of opinions on CENELEC Technical Board documents. Comments were submitted on the draft mandate on the harmonisation under Directive 2006/95/EC concerning electrical equipment designed for use within certain voltage limits (LVD) and on the draft standardization work programme and draft mandate M/486 on Urban Rail.

In 2012, **KT 63 Household and Similar Electrical Appliances** developed Polish Standard PN-EN 60335-1:2012 Household and similar electrical appliances - Safety - Part 1: General requirements. It is a basic standard to which specific standards concerning all types of equipment falling within the thematic scope of KT 63 refer. It is a harmonised standard relating to the LVD (2006/95/EC) and safety of machinery directive or MD (2006/42/EC).

Furthermore, a Polish-language version for the much popular PN-EN 62115 Electric toys - Safety was developed. The standard is also a harmonised standard and relates to Directive 2009/48/EC on the safety of toys.

Sector staff attended meetings on the proposed legal solutions for systems of plugs and sockets for household and similar use in Poland. The issues are not addressed by LVD, which causes problems for Polish manufacturers and ultimately for consumers.

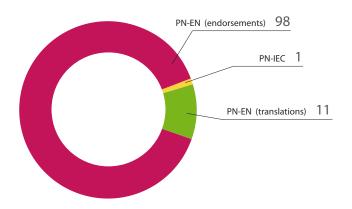
Following a recommendation from the Standardization Council, upon the initiative of the Association of Polish Electrical Engineers SEP and PKN, on 16 October 2012 PKN held a meeting attended, among others, by representatives of the Ministry of the Economy, the Ministry of Transport, Construction and Maritime Economy, the Office for Competition and Consumer Protection and organisers of the meeting. It was proposed that the Association of Polish Electrical Engineers SEP should request the Government Legislation Centre to develop a legal act regulating the market for plugs and sockets in Poland. It was suggested that the example of other EU countries in this respect should be followed.

Electrotechnical Sector (SET)

As regards standardization work carried out by the Electrotechnical Sector completed in 2012, implementations of European Standards and European deliverables represent 99.1% of all the Polish Standards published in the Sector.

Number of all standards and additional components to PNs published in 2012

Standardization documents	2012
PN-EN (translations)	11
PN-EN (endorsements)	98
PN-IEC	1
Total (all documents)	110



Directions of Changes in the Sector in 2012

In the sector, KT 304 expanded international cooperation with the newly-established IEC/TC 120 Electrical Energy Storage (EES) Systems and entered into cooperation with ISO/TC 203 Technical energy systems.

A large portion of standardization work in the sector focused on endorsements of European Standards. The multi-part PN-EN 60811 standard (38 parts) under the common title "Electric and optical fibre cables – Test methods for non-metallic materials" was among the most important tasks. Another important task was to develop energy efficiency standards, including standard:

- PN-EN 16231:2012 Energy efficiency benchmarking methodology
- PN-EN 16212:2012 Top down and bottom up methods of calculation of energy consumption, energy efficiencies and energy savings
- PN-EN 16247-1:2012 Energy audits Part 1: General requirements

Fifteen standards translated into Polish were developed and approved in the Sector, 12 of which were published in 2012. The work by KT 304 included one much-desired standard, namely PN-EN ISO 50001:2012 Energy management systems – Requirements with guidance for use. KT 304 also delivered Polish translations of an energy efficiency standard defining the minimum

requirements for an energy efficiency service and a standard specifying CENELEC standard voltages for AC transmission, distribution and utilisation systems.

KT 77 developed three standards linked to low-voltage electricity distribution and control apparatus, while KT 55 developed three standards relating to safety aspects in low-voltage installations. SET also prepared revisions of international electrical vocabulary to define several electromagnetic terms in a more specific manner and developed a standard addressing the protection of electronic equipment against static electricity and specifying the properties and requirements linked to the classification of packaging designated for apparatus vulnerable to electrostatic discharge.

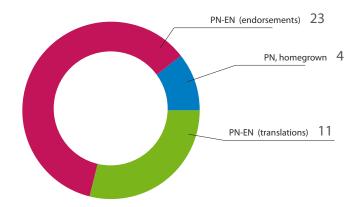
SET participated in the preparation of a special issue of Wiadomości PKN. Normalizacja entitled Energy Efficiency. Furthermore, *Wiadomości PKN. Normalizacja* published an article on the benefits of the implementation of PN-EN ISO 50001:2011 written by a SET employee. The Sector also entered into cooperation with the editors of the *Smart Grid Polska* journal.

Mining Sector (SGR)

As regards standardization work carried out by the Mining Sector completed in 2012, implementations of European Standards represent 89.5% of all the Polish Standards published in the Sector.

Number of all standards and additional components to PNs published in 2012

Standardization documents	2012
PN-EN (translations)	11
PN-EN (endorsements)	23
PN, homegrown	4
Total (all documents)	38



Directions of Changes in the Sector in 2012

In SGR, cooperation was entered into with ISO/TC 263 Coalbed methane (CBM), which started work on new standards for coalbed methane mining, its industrial use and development of the necessary infrastructure.

kt 31 Petroleum and Natural Gas Mining continued work on translation of EN ISO standards and approved, among others, PN-EN ISO 15663-1:2012 Petroleum and natural gas industries – Life cycle costing – Part 1: The methodology, which provides guidelines for the implementation of life-cycle costing for the development and operation of facilities for drilling, production and pipeline transportation within the petroleum and natural gas industries. The methodology, as presented in the standard, is very useful when decisions are made on new investments. It is used to identify the main cost-generation factors and the limit values for those costs, which facilitates their effective control and optimisation throughout a project's life cycle. It may also be applied for shale gas projects.

KT 64 Electrical Apparatus for Potentially Explosive Atmospheres published an important standard: EN 60079-0:2012 Explosive atmospheres – Part 0: Equipment – General requirements, which specifies general requirements for electrical equipment and components for use in an explosive atmosphere.

KT 64 also finished translating EN 50495:2010 Safety devices required for the safe functioning of equipment with respect to explosion risks, which describes the requirements to be fulfilled by electrical safety devices for preventing potential ignition sources in equipment for use in an explosive atmosphere. The standard also applies to equipment operating outside environments with explosive atmospheres, guaranteeing safe operation in explosion risk situations.

KT 144 Coke and Other Solid Formed Fuels, which is responsible for solid fuels, continued the process of endorsement of European Standards for solid biofuels and solid recovered fuels, important for achieving a high efficiency of co-firing with coal and for reducing CO2 emissions in the energy sector. Currently, the set comprises 55 standards relating to Directive 2001/77/ EC of the European Parliament and of the Council of 27 September 2001 on the promotion of electricity produced from renewable energy sources.

A very important standard was introduced in 2012, namely PN-EN 15359:2012 Solid recovered fuels – Specifications and classes. Its goal is to establish clear and transparent rules for the classification and specification of the parameters of solid recovered fuels. The standard is a tool facilitating trade in solid recovered fuels, promoting acceptance of such products on the market

for fuels and enhancing public confidence. It will also ensure mutual understanding between suppliers and consumers and facilitate trade, cross-border trade, use and surveillance, as well as good communication with equipment manufacturers. It will support authorisation procedures and reporting in connection with the use of fuels from renewable energy sources and in other situations relevant for environmental protection.

The crucial European Standards dealing with biofuels and solid recovered fuels will be translated in 2013-2014.

KT 227 Surface Mining started work on the review of four homegrown standards, one of which in particular, namely PN-G-02100 Opencast mining – Threat strip and protective strip of round open pits – Application and width, is important not only for surface mining. As the standard defines the method for specifying the location of permanent structures in the vicinity of open pits, it can be applied in combination with zoning plans.

An SGR consultant took part in the work of the group of bodies notified pursuant to Directive 94/9/EC on the general requirements for equipment and protective systems intended for use in potentially explosive atmospheres (ATEX) and in the work on related deliverables and information. The meetings are helpful in establishing the national position presented by representatives of the Ministry of Economy during meetings of ATEX Directive Experts Working Group.

Furthermore, in May 2012 SGR staff participated in the European Economic Congress, sitting on the mining panel. The Congress is an annual event held in Katowice with the participation of representatives of the government, ministries, local government, industry and bodies supporting industry.

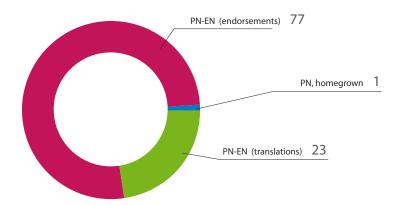
The operation of the Sector depends to a large extent on cooperation between the KOMAG Institute of Mining Technology in Gliwice and the Central Mining Institute in Katowice. The joint work of these organisations results in on-going revisions of homegrown standards for underground mining machinery and equipment, mining maps, mining excavation supports and coal quality testing.

Metallurgy Sector (SHT)

As regards standardization work carried out by the Metallurgy Sector completed in 2012, implementations of European Standards represent 99% of all Polish Standards published in the Sector.

Number of all standards and additional components to PNs published in 2012

Standardization documents	2012
PN-EN (translations)	23
PN-EN (endorsements)	77
PN, homegrown	1
Total (all documents)	101



Directions of Changes in the Sector in 2012

In 2012, **KT 145 Alloy and Special Steels** entered into cooperation with CEN/TC 407 Cylindrical helical springs made from round wire and bar – Calculation and design – Structure. The Committee plans to revise the standards related to helical springs, which are commonly applied in many branches of industry.

In 2012, the Technical Committees operating within the framework of the Metallurgy Sector and dealing with steels and non-ferrous metals were mainly preoccupied with providing opinions on draft European Standards and their endorsement into Polish Standards. The translation of harmonised EN standards (Machinery Directive) concerning safety of machinery and equipment for production of metals was continued. This concerned, among others, PN-EN 14681 Safety of machinery - Safety requirements for machinery and equipment for production of steel by electric arc furnaces. Furthermore, standards relevant for safety in welding was implemented, namely PN-EN ISO 10882-1:2012 Health and safety in welding and allied processes – Sampling of airborne particles and gases in the operator's breathing zone -Part 1: Sampling of airborne particles and for testing of welds, i.e. PN-EN ISO 22825:2012 Non-destructive testing of welds - Ultrasonic testing - Testing of welds in austenitic steels and nickel-based alloys.

KT 106, which deals with corrosion of metals, endorsed, a series of standards on the specification of corrosivity (PN-EN ISO 9223, PN-EN ISO 9224, PN-EN ISO 9225 and PN-EN ISO 9226). The standards define the categories of the corrosivity of atmospheres and lays down methods for measuring the parameters required for the corrosivity of atmospheres to be estimated. They serve as a basis for choosing suitable steel grades for metal parts of various structures or machinery and equipment and for choosing sets and protective varnish coatings. They may be also useful for assessing corrosive damage of steel structures, e.g. of urban infrastructure (bridge structures, street lighting supports, etc.).

By participating in working groups and ad hoc groups, manufacturers of concrete reinforcing steel from Centre for Promotion of Steel Quality, which as an industry organisation cooperating with the Sector within the framework of KT 127, were actively involved in the European work on the preparation of the proposed revision of EN 10080 in this area, which falls within the remit of the European Commission. The purpose of those meetings was to develop a single European approach to this controversial subject. To date, as a result of the above meetings, the participants in the work decided to reject the division of the standard into three parts (which Poland voted for), not to specify individual steel grades in the standard and not to create

a separate European Standard for steel products uncoiled by the processor.

Employees of the Metallurgy Sector (SHT) took part in conferences/seminars and other events related to the subject area falling within the competence of the Sector. Together with the Polish Union of Steel Distributors, the sector co-organised training entitled "Standards for steel products" for traders, purchasing division staff, supply division staff and other personnel of steel manufacturers and suppliers. The trainers were recruited from among the Sector representatives. The trainees were most interested in the certification and control of steel products based on existing PN-EN standards.

In 2012, SHT staff also participated in a seminar entitled "Prospects for the development of the copper industry in Poland," dedicated to the discussion of the economic and environmental goals of the industry consistent with national economy interests. Furthermore, SHT staff participated in the European Economic Congress, taking part in the metallurgy panel. The Congress is held annually in Katowice and is attended by representatives of the government, ministries, local government, industry and organisations supporting industry, both from Poland and abroad.

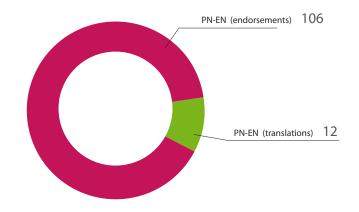
The Sector Cooperated with scientific and technology journals: *Hutnik – Wiadomości Hutnicze* and *Rudy i Metale Nieżelazne*, promoting standardization and encouraging communities of researchers and industry to take active part in the creation of standards. Both journals publish updated information on new standards and draft standards related steel and non-ferrous metals metallurgy under development.

Logistics, Transport and Packaging Sector (SLT)

As regards standardization work carried out by the Logistics, Transport and Packaging Sector completed in 2012, implementations of European Standards represent 100% of all the Polish Standards published in the Sector.

Number of all standards and additional components to PNs published in 2012

Standardization documents	2012
PN-EN (translations)	12
PN-EN (endorsements)	106
Total (all documents)	118



Directions of Changes in the Sector in 2012

In 2012, the thematic scope of SLT was expanded. The scope of CEN/TC 418 Exchange format in marine and transport insurance and ISO/TC 269 Railway applications was added.

In 2012, stakeholders expressed increased interest in the standardization of railways. This is evidenced by a growing number of KT members and representatives of existing members. In the second half of the year, KT 138 received a proposal to develop homegrown Polish Standard entitled Track sleepers and bearers - Requirements and test methods for manufacturing components and concrete. CEN published further draft standards of the EN 16272 series concerning noise barriers preventing airborne sound propagation. Another new development is the preparation, among others, of the requirements for ERTMS Trackside Boards (prEN 16494) and for ground based service (prEN 16507).

Jointly with ISO/TC 149, CEN/TC 333 developed a draft multi-part standard specifying the safety requirements for bicycle safety. Intensive work in the area of intelligent transport systems were carried out both at European and international level. The work resulted in the development by CEN/TC 278 of a multi-part standard for after theft systems for the recovery of stolen vehicles.

Intensive standardization work was also under way with respect to cranes. ISO/TC 96 published, among others, draft standards for the operation of cranes, mobile cranes, tower cranes, rail cranes and bridge cranes.

Standards in the following fields were introduced into the Polish Standards collection through translation:

- KT 19 Aircraft and Space Vehicle Engineering developed successive parts of standards laying down general and specific requirements for aircraft ground support equipment.
- KT 101 Cranes and their Component Parts developed standards relating to the safety of cranes and chains, as well as general principles of the design of cranes and means of access to cranes.
- KT 163 Ropes and Ropes Transport developed further parts of standards for the safety of steel rope end terminations and textile lifting slings.

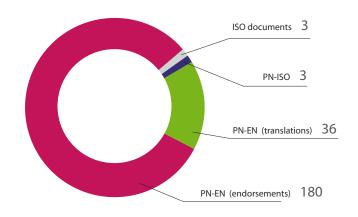
- KT 162 Logistics, Bar Codes and Warehouse Management developed standards for the safety of stacker cranes, mobile storage racks and packaging machinery.
- to permanently installed fuel systems, field of vision from the helm position, assessment of sound emission and another part for a series of standards on inflatable boats.

Machinery and Engineering Sector (SMC)

As regards standardization work carried out by the Machinery and Engineering Sector completed in 2012, implementations of European Standards represent 97.3% of all Polish Standards and Polish Standardization Documents published in the Sector.

Number of all standards and additional components to PNs published in 2012

Standardization documents	2012
PN-EN (translations)	36
PN-EN (endorsements)	180
PN-ISO	3
ISO documents	3
Total (all documents)	222



Directions of Changes in the Sector in 2012

The thematic scope of SMC comprises national, international and European cooperation towards the standardization of the design, manufacturing and operation of machinery and equipment. SMC also covers topics linked to radiation safety and issues associated with the gas industry.

SMC cooperates with 24 Technical Committees.

In 2012, the Sector introduced certain changes within the scope of its cooperation with European and international technical committees. KT 137 joined CEN/CLC/TC 2 Power Engineering, CEN/TC 399 Gas turbines applications – Safety, ISO/TC 208 Thermal turbines for industrial applications (steam turbines, gas expansion turbines) and IEC/TC 117 Solar thermal electric plants. KT 130 entered into cooperation with CEN/TC 286 Liquefied petroleum gas equipment and accessories. A highlight in terms of European cooperation was the transformation of CEN/TC 413 Testing methodologies and requirements for insulated means of transportation from a project committee into a technical committee. The amount of work in the TC was growing so dynamically, that its scope had to be redefined. Consequently,

the Committee took over, from CEN/TC 113 Heat pumps and air conditioning units, work on Draft Standard prEN 16440-1 Testing methodologies of cooling equipment for insulated means of transportation - Part 1: Mechanical refrigeration systems with forced air circulation evaporator or convection and optional heating devices. Work is also to start on the planned parts 3, 4, 5 and 6 of the standard.

In 2012, entities cooperating with **KT 277 Gas Engineering** expressed increased interest in funding standards projects developed within the framework of work on request. Their activity resulted in the publication of 13 Polish Standards (10 PN-EN and 3 PN-ISO) and 3 standardization deliverables (2 PKN-ISO/TR and 1 PKN-ISO/TS) with respect to appliances burning gaseous fuels, analysis of natural gas and pipes, fittings and their connections used for the construction of pipelines.

KT 16 undertook and completed work on the translation of the harmonised PN-EN standards concerning the safety of agricultural machinery, mainly the series PN-EN ISO 4254 Agricultural Machinery - Safety.

The PN-EN ISO 4254 series of standards specifies the safety requirements and the means of their verification for the design and construction of the machinery they relate to. The standards describe methods for eliminating and reducing risks inherent in their use and information on occupational safety rules to be provided by manufacturers.

All of the standards developed are widely used in the agricultural machinery sector by manufacturers, as well as certification and research bodies. The preparation of Polish language versions of those standards improves user safety.

KT 16 also invited new members to participate in its work, mainly machinery manufacturers, who had not participated in standardization work before. As a result, KT 16 was joined by two new members: companies SIPMA SA from Lublin and EU CERTO OFFICE Sp. J.

KT 48 developed the much-awaited Polish language versions of standards on geometrical product specifications (GPS), which are crucially important and used in many industries. The standards lay down additional and specific provisions concerning tolerances of form, as laid down in EN ISO 1101:2005 (PN-EN ISO 1101:2006), which is a basic standard for GPS.

PN-EN ISO 12180-1:2012 Geometrical product specifications (GPS) – Cylindricity – Part 1: Vocabulary and Parameters of Cylindrical Form

PN-EN ISO 12181-1:2012 Geometrical product specifications (GPS) – Roundness – Part 1: Vocabulary and Parameters of Roundness

PN-EN ISO 12780-1:2012 Geometrical product specifications (GPS) – Straightness – Part 1: Vocabulary and Parameters of Straightness

PN-EN ISO 12781-1:2013 Geometrical product specifications (GPS) – Flatness – Part 1: Vocabulary and Parameters of Flatness

Each of the standards developed consists of two parts; the first concerns the vocabulary and parameters of the tolerance concerned, the other lays down the specification operators relevant for the verification process.

The first of the standards deals with the most important tolerances of form, describing the permissible deviations from cylindricity. The tolerances are the oldest historically parameters of geometrical regularity of a product, often critical for its operation.

The parameters and tolerances described in the second of the standards for roundness are specified in the deliverable jointly with the tolerances of cylindricity, as they are relatively easy to be verified in the manufactured product.

Both of the above standards are widely used by such industries as manufacturing of cars, combustion engines, rolling-element bearings, compressors, piston pumps, mechanised home appliances, pneumatic and hydraulic automation products and various precision products (e.g. for the armaments industry).

The last two standards mentioned above concern a relatively new subject area for GPS, but are crucial for industries manufacturing complex mechanisms containing assembled body components – as in the automotive and machine tool industries.

In 2012, another standard in the GPS area was developed and published:

PN-EN ISO 8015:2012 Geometrical product specifications (GPS) – Fundamentals – Concepts, principles and rules

The standard is a very important document as it sets forth the principles for interpreting GPS-related requirements provided in technical documentation. It should be used by any mechanical engineer dealing with structural design, technology or metrology (quality control), irrespective of the industry.

In 2012, similarly to previous years, SMC staff participated in the activity of working groups of the National Consultation Forums for machinery and pressure equipment, within the framework of the Technical Security

Centre (Centrum Bezpieczeństwa Technicznego – CBT). CBT was initiated and organised by the Office of Technical Inspection, Warsaw University of Technology and the Polish Engineering Organisation under the auspices of the Ministry of Economy. Its meetings are attended by representatives of various communities, including designers, manufacturers and users from all over Poland. The main objective of CBT is to support Polish institutions and economic operators in their actions pursued under the applicable requirements of European law.

PKN consultants take part in issuing opinions on materials prepared for meetings and provide information on standardization work in this respect at a national and European level.

Nanotechnology and Innovation Sector (SNI)

Directions of Changes in the Sector in 2012

Since December 2011, Technical Committee 314 Nanotechnology has operated in the sector. It is formed by a forum of specialists from the dynamically developing area of nanotechnology. Its scope covers the scope of TC 352 of the European Committee for Standardization (CEN/TC 352) Nanotechnology and TC 229 of the International Organization for Standardization (ISO/TC 229) Nanotechnologies.

A Polish representative is actively involved in the work of ISO/TC 229, whereas no such interest is shown in CEN/TC 352. This is surprising as nanotechnology is a fast developing area of technology and there are examples of Polish entities participating in EU-funded programmes, which does not translate, however, into participation in the development of nanotechnology-related European Standards. There is also no interest in the funding of the development of Polish-language versions of standards and standardization deliverables in this respect, although the number of existing deliverables in this respect is already high. ISO/TC 229 developed 33 standards and standardization deliverables, and 22 are under development. For the needs of the European market, CEN/TC 352 added to the set of European standards 3 International Standards and 2 international standardization deliverables, with one deliverable being developed.

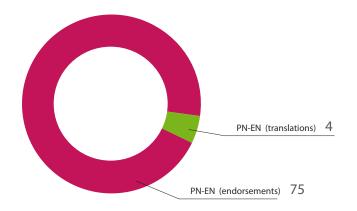
The dynamic development in the area required the sector to incorporate the thematic scope of IEC/TC 113 Nanotechnology standardization for electrical and electronic products and systems and that of ISO/TC 266 Biomimetics, established in 2012. Having operated for such a short time, ISO/TC 266 has not managed to publish any deliverable yet.

Defence and Public Security Sector (SOB)

As regards standardization work carried out by the Defence and Public Security Sector completed in 2012, implementations of European Standards and European deliverables represent 100% of all Polish Standards and Polish Standardization Documents published in the Sector.

Number of all standards and additional components to PNs published in 2012

Standardization documents	2012
PN-EN (endorsements)	75
PN-EN (translations)	4
Total (all documents)	79



Directions of Changes in the Sector in 2012

In 2012, KT 306 Public and Citizen Security entered into cooperation with CEN/TC 417 Maritime and port security services and with CEN/TC 419 Forensic Science Services. By the decision of the CEN Technical Board of 24 May 2012, the organisation of the latter's secretariat was entrusted to PKN – CEN/TC 419 is the first CEN committee led by PKN. The secretariat duties are performed by the Central Forensic Laboratory of the Police, which is a KT 306 member.

In response to the needs of the Polish market, the first Task Committee (KZ 501) Services for fire safety and security systems was established. The establishment of the committee was a result of Poland's active involvement in the work on a standard being developed by joint project committee CEN/CENELEC/TC 4 Services for fire safety and security systems. The standard will have a major effect on business operation in this field on the European market for goods and services.

In 2012, a much-awaited standard was introduced, namely PN-EN 50132-1 Alarm systems - CCTV surveillance systems for use in security applications - Part 1: System requirements, which applies to CCTV surveillance systems for use in private and public areas. Also the work on PN-EN 50131-2-6 was completed. The standard

concerns opening contacts (magnetic) for application in intrusion and hold-up alarm systems installed in buildings. A Polish representative participates in the work of CLC/TC 79, CEN/TC 72 (chairing the working group for Routing devices), CEN/CLC/TC 4 dealing with fire safety and security systems.

The Sector continues cooperation with the Standardization Service of the Minister of National Defence, to which the representative of the Sector presented, in 2012, a paper entitled "New opportunities of cooperation within the framework of the Polish standardization system" at a meeting of representatives of the Ministry of Defence, industry and national standardization bodies of five countries: the USA, Germany, the United Kingdom, France and Poland. The participants exchanged experience in operational standardization and standardization of materials and technologies to define the scope of NATO and EU cooperation. The principles of the cooperation determine the rules of domestic cooperation between the national standardization body and the standardization service of the Ministry of Defence. Within the framework of the cooperation, which is based on provisions applicable for more than ten years, Technical Committee 176 Military Technology and Supplies develops generally applicable national standards in line with the rules of European and international work and Defence Standards intended specifically for the needs of the Ministry of Defence according to the rules adopted by the Ministry. Sector staff assign numbers and maintain databases of Defence Standards. Last year, numbers were assigned to 6 Defence Standards and 6 Defence Standardization Manuals.

In 2012, the staff of the Sector were actively involved in numerous promotional and training activities aimed at presenting the directions for and status of standardization in the field of public security, crisis management, protection of population and property, as implemented within the framework of standardization activities pursued by international and European organisations, with a special emphasis on the latest standards

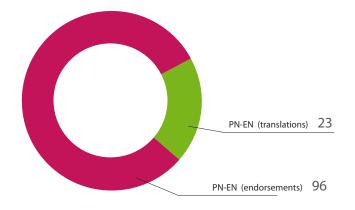
and standardization deliverables in the above area, as well as deliverables under development. Representatives of the Sector presented papers at: the 1st European Standardization Forum – "Benefits of standardization in the area of security", the 2nd Conference on the management of building and information security and the Conference entitled "Preparations for defence in government administration activities", which was held at the National Defence University of Warsaw.

Consumer Products Sector (SPU)

As regards standardization work carried out by the Consumer Products Sector completed in 2012, implementations of European Standards represent 100% of all Polish Standards published in the Sector.

Number of all standards and additional components to PNs published in 2012

Standardization documents	2012
PN-EN (endorsements)	96
PN-EN (translations)	23
Total (all documents)	119



Directions of Changes in the Sector in 2012

In 2012, the Sector entered into cooperation with CEN/TC 410 and ISO/TC 174. The committees work on developing a jewellery standard: ISO/DIS 18323 Jewellery – Consumer confidence in the diamond industry. The scopes of these committees were reassigned to KT 239 Jewellery.

KT 26 Textiles and Textile Products published PN-EN ISO 3758:2012 Textiles – Care labelling code using symbols, which is an important standard for the textile industry. It establishes a system of graphic symbols to be applied on textile product labels with the aim of providing key information preventing irreversible damage to the product during care treatments. The application

of these symbols within the labelling system was defined. The following treatment methods were taken into account: laundering, bleaching, ironing, dry-cleaning, wet-cleaning and drying. The standard applies to all textile products as supplied to the user.

KT 20 Leather and Footwear published a standard crucially important for the safety of firefighters: PN-EN 15090:2012 Footwear for firefighters.

It specifies minimum requirements and test methods for the performance of three types of footwear for use by firefighters for fire suppression, general-purpose rescue, fire rescue and hazardous materials emergencies.

KT 237 Articles for Babies and Young Children and Safety of Toys established two standards relevant for the safety of the youngest consumers. The first of them, PN-EN 1888:2012 Child care articles. Wheeled child conveyances. Safety requirements and test methods, provides the safety requirements and test methods for prams and pushchairs for one or more children. The standard was adopted as a result of the revision of PN-EN 1888:2004 and differs significantly from the latter. PN-EN 1888:2012 is highly popular both among manufacturers and certification bodies. The second standard concerns safety of toys. PN-EN 71-8:2012 Safety of toys - Part 8: Activity toys for domestic use describes the requirements and test methods for activity toys often attached to or incorporating a crossbeam, and similar toys on or in which children play. The toys are intended for children under 14 years and are intended to bear the mass of one or more children. The document also specifies requirements for separately sold accessories for, and components of activity toys; construction packages for activity toys including components used to build activity toys according to a scheduled building instruction. The standard is linked to Directive 2009/48/EC on the safety of toys.

The staff of the Sector contributed actively to the promotion of standardization at conferences and training activities. A paper entitled "Review of the key toy safety standards" was presented at the European Toy Safety Information Seminar. Staff of the Sector attended industry-oriented conferences organised by the National Centre for Supporting Vocational and Continuing Education (KOWEZiU), which promoted the results of the project: "Improvement of framework curricula as a key to the modernisation of vocational education". Eight papers were presented: 4 on "Standardization in vocational education" and 4 on standardization in general.

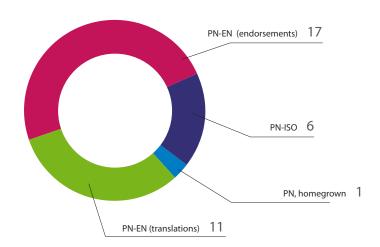
The Sector also worked jointly with the Technical University of Łódź and Łódź University, giving 5 lectures to the students of those educational institutions.

Food, Agriculture and Forestry Sector (SRŻ)

As regards standardization work carried out by the Food, Agriculture and Forestry Sector completed in 2012, implementations of European Standards represent 80% of all Polish Standards published in the Sector.

Number of all standards and additional components to PNs published in 2012

Standardization documents	2012
PN-EN (translations)	11
PN-EN (endorsements)	17
PN-ISO	6
PN, homegrown	1
Total (all documents)	35



Directions of Changes in the Sector in 2012

In 2012, the opening meeting of the SRZ Sector Council was held, with the participation of the Chairperson of the KTs cooperating with the Sector. The Chairperson of **KT 38 Fruit and Vegetable Products**, who represents the Institute of Agricultural and Food Biotechnology Industry, was elected as Chairperson of the SRZ Sector Council.

The scope of regional cooperation pursued by SRZ was expanded by cooperation with CEN/TC 415 Project Committee – Sustainable and Traceable Cocoa. As a result, standards projects related to cocoa beans and cocoa powder were added to the thematic scope of KT 229, which was renamed as **KT 229 Coffee, Tea and Cocoa**.

2012 saw an increase in the number of standardization work items developed on request, in particular by KT 35 Milk and Milk Products, KT 40 Animal Feeding Stuffs and KT 36 Cereal and Cereal Products.

KT 35 Milk and Milk Products approved and published 4 Polish Standards implementing ISO standards on test methods for characteristic microflora and test methods for omega-3 and omega-6 fatty acids in milk

products. The topics are extremely important for the milk industry in connection with the fact that microflora has a positive effect on human alimentary tract while omega-3 and omega-6 acids increase the level of "good cholesterol" (HDL) while reducing the level of "bad cholesterol" (LDH) and blood triglicerides in blood. The standards developed will facilitate the control of the quality of milk products available on the market, as they complement the scope of standardized methods for testing characteristic microflora by the enumeration method for Lactobacillus acidophilus and the enumeration method for bifidobacteria and specify the characteristics of starter cultures, mainly for lactic acid bacteria (LAB). The characteristic also covers the bifidobacteria and propionibacteria used in the production of milk products, such as yoghurt, soured cream (cream), soured-cream butter and cheese.

KT 40 Animal Feeding Stuffs also approved and published Polish Standards implementing European Standards on test methods for the determination of mycotoxin levels in feeding stuffs.

PN-EN 15791:2012 Animal feeding stuffs – Determination of Deoxynivalenol in animal feed - High performance liquid chromatographic method with UV detection and immunoaffinity column clean-up

PN-EN 16007:2012 Animal feeding stuffs – Determination of Ochratoxin A in animal feed by immunoaffinity column clean-up and High Performance Liquid Chromatography with fluorescence detection

Owing to the adverse effects of mycotoxins on animal health and quality and safety of animal foodstuffs the European Commission considered the standards to be important for evaluating feedingstuffs safety and quality, and adopted them as mandated standards. The publication of the standards in Polish facilitates feedingstuffs quality and safety controls, as the standards are a perfect tool for ensuring compliance with Regulation (EC) No 882/2004 of European Parliament and of the Council of 29 April 2004 on official controls performed to ensure the verification of compliance with feed and food law, animal health and animal welfare rules.

In 2012, **KT 36 Cereal and Cereal Products** finished revising the Polish Standard on the preliminary control of quality and organoleptic tests for cereals. The revised standard PN-R-74013:2012 Cereals grain – preliminary control of quality and organoleptic tests is used for assessing the grains of the key cereals grown in Poland. The assessment concerns organoleptic characteristics (including odour, colour, and presence of pests) and is carried out at delivery points and warehouses. The methods specified in the standard make it possible for the condition of grain accepted for storage or stored in warehouses to be determined fast and easily.

KT 181 Forestry proposed revision of the Polish Standard applying to the qualitative and dimensional classification of medium-size coniferous and non-coniferous timber wood such as logs, round timber and billets for industrial processing. The theme is at the stage of notification to CEN.

KT 39 Tobacco and Tobacco Products is actively involved in the work of ISO/TC 126 Tobacco and tobacco products. KT 39 representatives attended the plenary

meeting of ISO/TC 126 Tobacco and tobacco products in Dresden. In parallel, meetings of two subcommittees were held: ISO/TC 126/SC 1 Physical and dimensional tests and ISO/TC 126/SC 2 Leaf tobacco. The meetings were attended by representatives of Imperial Tobacco Limited and Group Companies and British American Tobacco Polska SA, which are KT 39 members.

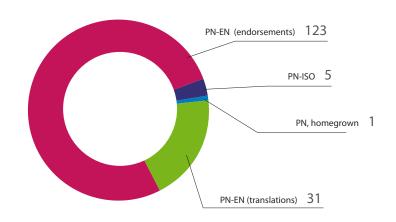
The employees of the sector took part in the popularisation of standardization actions by attending KOWEZIU conferences promoting the project "Improvement of framework curricula as a key to the modernisation of vocational education," where a presentation was given on "Standardization in vocational education". SRŻ staff also promoted standardization at the 21st "Mleko-Expo 2012" Diary Fair and at a conference entitled "Quality of milk products – prospects for development and future of the industry".

Information Technology and Communication Sector (STI)

As regards standardization work carried out by the Information Technology and Communication Sector completed in 2012, implementations of European Standards represent 96.3% of all Polish Standards published in the Sector.

Number of all standards and additional components to PNs published in 2012

Standardization documents	2012
PN-EN (endorsements)	123
PN-EN (translations)	31
PN-ISO	5
PN, homegrown	1
Total (all documents)	160



Directions of Changes in the Sector in 2012

The Sector dealt with areas falling within the scope of European and international cooperation. In 2012, joint EU and international work was developing very intensively and involved the participation of KT members representing PKN in a number of debates and symposia. As concerns European cooperation, representatives of KT members participated in meetings concerning, among other things, mathematical modelling for new generation cables, data transmission for 40 Gbit Ethernet and data centres – CENELEC (KT 173), in a regular meeting of the European Electronic Signature Forum dedicated this time to "Trust electronic services in the international digital market", organised under the auspices of CEN (KT 172), and in the work of WG 3 -CLC/TC 209 Cable networks for television signals, sound signals and interactive services (KT11). The thematic scope ofKT 103 Audio, Video and Similar Systems and Equipment took up new thematic areas developed by IEC/TC 100:

- IEC/TC 100/TA13 Environment for AV and multimedia equipment
- IEC/TC 100/TA14 Interfaces and methods of measurement for personal computing equipment.

The subject area Cable networks for television signals, sound signals and interactive services was dealt with by KT 11 WG 3 - 25.

In terms of international cooperation, PKN became a participating member (P) of ISO/IEC/JTC 1/SC 38 – cooperation of KT 182.

A major area addressed by international technical committees is cloud computing, its architecture, references and securities. The work in this field is carried out by ISO/JTC 1/SC 38, with major contribution from KT 182 experts (ISO/IEC 17788, ISO/IEC 1779 series projects). Another important area covers IT security tools for business operation, data storage and assessment of IT services falling within the scope of ISO/JTC 1/SC 32 (concerns ISO/IEC 19770 series), where KT 171 experts are represented.

In October 2012, a meeting of ISO/IEC JTC 1/SC 32 was held in Kraków. It agenda covered metadata management, including data standardization for electronic commercial transactions and data interoperability for data computing, taking into account metamodels for data registered in medical records, exchange of business data and new-generation analytic data for cloud servi-

ces, healthcare and the social services sector. On the part of PKN, the meeting was co-organised by KT 171.

PKN was represented by KT 271 at an International Bank of Russia Seminar on the modernisation of the Russian payment system, where Polish experience in the field of standardization and normalization of payment systems was presented, with a discussion the role of the KT and the PN-F-01102 standard; the staff of the KT also participated in a meeting of the European Commission – COGEPS group. The meeting was organised for national SEPA coordinators to discuss the methods for numbering bank accounts in Poland and combining IBAN and BIC codes (PN-F-01102 and PN ISO 9362).

Notably, a key vocabulary standard in the field of information security was implemented into the set of Polish Standards, namely PN-ISO/IEC 27000:2012 Information technology – Security techniques – Information security management systems – Overview and vocabulary (KT 182).

The PN-EN ISO 12967:2012 series of standards was implemented, becoming a part of the Polish Standard collection. It specifies methods for describing health information systems by means of language, notation

and paradigms suitable for facilitating system planning, design and comparison and specifies the key aspects of the architecture allowing health information systems to obtain openness, integration and compatibility (KT 302).

KT 172 revised PN-ISO/IEC 9834-3:2012, which is crucial in the field of object registration – objects, or strictly speaking, their names, may be registered. Following the registration, unique identifiers are assigned to them, which makes it possible for any user to identify and interpret an object being sent to him.

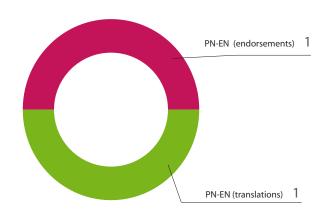
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Services Sector (SUS)

As regards standardization work carried out by the Services Sector completed in 2012, implementations of European Standards represent 100% of all the Polish Standards published in the Sector.

Number of all standards and additional components to PNs published in 2012

Standardization documents	2012
PN-EN (endorsements)	1
PN-EN (translations)	1
Total (all documents)	2



Directions of Changes in the Sector in 2012

Three new Task Committees were established in SUS: KZ 500 Solar Services (Mirror committee for CEN/TC 412 Indoor sun exposure services), KZ 503 Facility Management (Mirror committee for CEN/TC 348 Facility management and ISO/TC 267 Facilities management) and KZ 504 Real Estate Market (Mirror committee for CEN/TC 373 Services of real estate agents). The establishment of the third Technical Body in the Services Sector allowed for the Sector Council of the Services Sector to be appointed. As a result, SUS areas that had not been assigned previously could be allocated among the Technical Bodies. The scope assigned to the SUS Sector Council is highly diversified and comprises the following: engineering consultancy services (CEN/TC 395), expertise services (CEN/TC 405), services of osteopaths (CEN/TC 414), services of chiropractors (CEN/TC 394), beauty salon services (CEN/TC 409), service excellence systems (CEN/TC 420), cinematographic works (CEN/TC 372, ISO/TC 36) and outsourcing (ISO/TC 259).

Standardization in services is a relatively new field but enjoys a growing interest. It expands dynamically, comprising an increasing number of services. In 2012, intensive work was carried out by ISO ISO/TC 259, as a result of which the committee developed ISO/CD 37500

Guidance on outsourcing. The activity of CEN/TC 405 focused on specifying the scope of a standard laying down the requirements for the expertise services. CEN/TC 409 established the provisions of the standard for beauty salon services. CEN/TC 414 published a draft standard concerning the requirements applicable to training for personnel providing professional sun tanning services with the use of appliances emitting UV radiation.

The SUS scope encompasses: CEN/TC 420 Service Excellence Systems, ISO/TC 231 Brand valuation and ISO/TC 237 Exhibition terminology.

PN-EN 15221-1:2012 Facility Management – Part 1: Terms and definitions was translated into Polish and adopted.

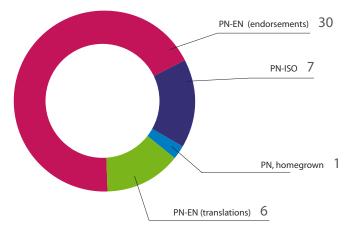
A SUS employee took part in two conferences discussing, among other things, work on a standard on pest control services, which was under development, and participated in the first of a series of seminars planned for 2013 to discuss the promotion of the PN-EN 15221 series of standards on facility management.

Basic Problems and Management Systems Sector (SZP)

As regards standardization work carried out by the Basic Problems and Management Systems Sector completed in 2012, implementations of European Standards represent 81.8% of all the Polish Standards and Polish Standardization Deliverables published in the Sector.

Number of all standards and additional components to PNs published in 2012

Standardization documents	2012
PN-EN (endorsements)	30
PN-EN (translations)	6
PN-ISO	7
PN, homegrown	1
Total (all documents)	44



Directions of Changes in the Sector in 2012

KT 305 Social Responsibility completed work on the Polish-language version of ISO 26000 Guidance on social responsibility. Since 5 November 2012, PN-ISO 26000:2012 Guidance on social responsibility has been available. The standard concerns the responsibility of organisations for the impact of their decisions and actions on the public and the environment.

The Sector staff promoted standardization at a conference on PN-ISO 26000 held at seat of the Ministry of Economy, the Jubilee Polish Forum ISO 14000 Conference ("Standardization of environmental management – history, present and future") and the 1st Conference "Standardization and its social implications" ("Standardization and its role in business").

KT 6 Management Systems developed the Polish-language version of PN-EN ISO 19011 Guidelines for auditing management systems. The standard provides guidance on auditing management systems, including the principles of auditing, managing an audit programme and conducting management system audits, as well as guidance on the evaluation of competence of individuals involved in the audit process, including the person managing the audit programme, auditors and audit teams. The Secretary of KT 6 discussed the new standard at the "Improvement of the auditing process" seminar organised by the Polish Forum ISO 9000 Club, and prepared an article for *Wiadomości PKN*. *Normalizacja*.

Furthermore, two basic documents on risk management were published in the Polish language:

PKN-ISO Guide 73:2012 Risk management – Terminology

PKN-ISO Guide 31000:2012 Risk management – Principles and Guidelines

The Guide lays down definitions of general terms related to risk management. The standard specifies general principles and guidelines on risk management in a systematic, clear and reliable manner, regardless of the scope and context of risk management. The standard may be applied to any type of risk, irrespective of its nature and any positive or negative consequences.

KT 158 Safety of Machinery and Technical Equipment and Ergonomics – General Problems developed the Polish versions of two much-awaited standards introducing harmonised EN standards linked to the Machinery Directive, namely

PN-EN ISO 12100 Safety of machinery – General principles for design – Risk assessment and risk reduction

PN-EN ISO 13580 Safety of machinery – Emergency stop equipment – Principles for design

From 24 to 29 June 2012, ISO/TC 37 Terminology and other language and content resources, and its subcommittees, held an annual plenary meeting in Madrid. The 2012 meeting was hosted by the Spanish standards body AENOR and AEN/CTN 191 (Spanish counterpart of ISO/TC 37).

Poland was represented by the Chairman of KT 256 Terminology, other language resources and content management and Deputy Chairman of the KT. Meetings of five TC 37 subcommittees continued for a week and were very fruitful (approx. 100 resolutions were adopted); with the following results:

- A Working Group for the review of ISO 704 Terminology work – Principles and methods was established
- Review of ISO 1087 Terminology work was scheduled
- Work on ISO/CD 17100 Translation services Requirements for translation services was continued.

For years, KT 256 has pursued active cooperation with the TC and all its subcommittees.

The following were published as a result of the work of **KT 311 Conservation of Cultural Property**

PN-EN 15886:2012 Conservation of cultural property – Test methods - Colour measurement of surfaces

PN-EN 15758:2012 Conservation of cultural property

– Procedures and instruments for measuring temperatures of the air and of the surfaces of objects

PN-EN 15757:2012 Conservation of cultural property

– Specifications for temperature and relative humidity
to limit climate-induced mechanical damage in organic
hygroscopic materials

The above standards are the first effects of the work of Polish experts at CEN/TC 346 Conservation of cultural property and cooperation between KT 311 and the National Institute of Museology and Collections Protection. CEN/ TC 346 has 11 working groups.

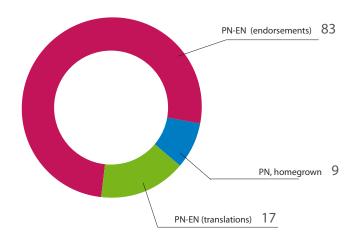
The work of CEN/ TC 346/WG 7 Specifying and measuring indoor/outdoor climate is carried out with the participation of Polish experts representing the Polish Academy of Sciences and the National Museum in Kraków.

Health, Environment and Medicine Sector (SZŚ)

As regards standardization work carried out by the Health, Environment and Medicine Sector completed in 2012, implementations of European Standards represent 91.7% of all Polish Standards published in the Sector.

Number of all standards and additional components to PNs published in 2012

Standardization documents	2012
PN-EN (endorsements)	83
PN-EN (translations)	17
PN, homegrown	9
Total (all documents)	109



Directions of Changes in the Sector in 2012

A new Task Committee was established in the sector: KZ 502 Plastic Surgery Services, whose objective is to participate in developing a European Standard laying down requirements and recommendations concerning plastic surgery services provided to patients, including general framework and principles to be applied by all healthcare institutions – before, during and after the procedure. For most part the standard is to address patient safety.

The work of **KT 1 Disabled Persons** resulted in the publication of the Polish version of the harmonised stan-

dard PN-EN ISO 10535 Hoists for the transfer of disabled persons – Requirements and test methods. The standard applies to various stationary hoists and body-support units intended for the transfer of disabled persons. The provisions of the standard are formulated with regard to the needs of both the disabled persons being hoisted and the attendant using the hoist.

In response to significant interest in standards relating to noise in working environment, **KT 157 Physical Hazards in Working Environment** developed the Polish versions of two standards in the PN-EN ISO 11200 series:

PN-EN ISO 11201:2012 Acoustics – Noise emitted by machinery and equipment – Determination of emission sound pressure levels at a work station and at other specified positions in an essentially free field over a reflecting plane with negligible environmental corrections

PN-EN ISO 11202:2012 Acoustics – Noise emitted by machinery and equipment – Determination of emission sound pressure levels at a work station and at other specified positions applying approximate environmental corrections (ISO 11202:2010)

Polish Standard PN-EN ISO 4871 Acoustics – Declaration and verification of noise emission values of machinery and equipment was approved, too.

The above standards are harmonised standards relating to the Machinery Directive (2006/42/EC).

Eight Polish Standards falling within the scope of

KT 159 Chemical and Aerosol Hazards in Working **Environment** concerning test methods for aerosol hazards in working environment were approved. They are standards formulated under the multi-annual research work programme entitled "Improvement of working safety and conditions", which is implemented by the Ministry of Labour and Social Policy. Within the framework of the programme, KT 159 was requested to develop a Polish Standard. The development of Polish Standards based on the results of experimental studies on the methods for determination of chemical agents at work stations ensures reliable and comparable measurement of exposure to those agents across Poland. The development of the work method is closely related to the operation of the Interdepartmental Commission for Maximum Admissible Concentrations and Intensities for Agents Harmful to Health in the Working Environment, which approves the documentation of admissible values of harmful agents. The meetings of the Commission in 2012 were attended by an employee of the Sector acting as a PKN representative.

KT 295 Sterilisation finished work on the translation of a group of standards related to medical directives. The Committee accepted Polish version of six parts of PN-EN ISO 13408 under the common title Aseptic processing of health care products and 3 other standards on

sterilisation and washer-disinfectors. In a related field, PN-EN 14563:2012 Chemical disinfectants and antiseptics – Quantitative carrier test for the evaluation of mycobactericidal or tuberculocidal activity of chemical disinfectants used for instruments in the medical area – Test method and requirements (phase 2, stage 2) the Polish version of standard was published. The standard was developed by **KT 296 Disinfection and Antiseptics**.

As regards the subject matter dealt with by KT 284 Mechanical Medical Equipment, Tools and Devices, intensive work was under way to revise EN 13718-2 Medical vehicles and their equipment – Air ambulances – Part 2: Operational and technical requirements of air ambulances. The work of CEN/TC 239/WG 5 was carried out with the participation of Polish experts, who attended several meetings and organised one of them in Warsaw. The standard comprises requirements concerning air ambulances to be used for patient transportation and medical treatment of sick and injured persons. They include Helicopter Emergency Medical Service (HEMS), Helicopter Intensive Care Medical Service (HICAMS) fixed-wing air ambulances (FWAA). Polish experts representing the Polish Air Rescue Service (Lotnicze Pogotowie Ratunkowe) submitted proposals for creating proper conditions for airborne lifesaving.

Between 26 and 29 June 2012, meetings and workshops of CEN/TC 292 Characterisation of waste, CEN/TC 308 Characterisation of sludges and CEN/TC 345 Characterisation of soils were held in Stockholm. Poland was represented by the Chairman of **KT 216** Waste, who works at the Institute of Environmental Engineering of the Polish Academy of Sciences in Zabrze (Instytut Podstaw Inżynierii Środowiska PAN) The attendants discussed inter alia ongoing work, future work of those committees and their mutual cooperation, the operation of CEN/TC 400 Project Committee - Horizontal standards in the fields of sludge, biowaste and soil, and a proposal that more attention should be paid to environmental aspects during work on new standards and closer cooperation established with CEN/TC 352 Nanotechnologies.



Education about Standardization

EDUCATION ABOUT STANDARDIZATION

In February 2012, PKN appointed a Plenipotentiary of the President of PKN for Educational Policy (PPE). The most important tasks of PPE include the popularisation of standardization, in particular at schools and universities. The Plenipotentiary's activity reflects the recommendations of the European Commission in this respect. To deliver the tasks, cooperation was started with major educational institutions, including: The Ministry of National Education (MEN), The Mazowieckie Region Educational Authority (MKO), The Podkarpacie Region Educational Authority (PKO), The National Centre for Supporting Vocational and Continuing Education (KO-WEZiU), The Mazowieckie Local/Self-Government Teacher Training Centre (MSCDN), The Computer Assisted Education and Information Technology Centre in Warsaw (OEIiZK), The Office for Education of the Capital City of Warsaw (Biuro Edukacji), mayors of the following city districts: Praga-Południe, Wola, Wawer, self-government of Wołomin, Centre for Practical Education in Warsaw, District Education Finance Offices for Praga Południe and Mokotów and with numerous secondary education schools within the area of Warsaw, the Mazowieckie, Podkarpackie and Małopolskie regions.

As regards tertiary education, PKN cooperates with 11 universities from all over Poland, ten of which lecture standardization to students. In one of them, Warsaw University of Technology, work is under way to introduce standardization to the curriculum of the Management Faculty.

Cooperation was also initiated with The Office of the Inspector General for the Protection of Personal Data. It involves the implementation of a joint project for developing and releasing a publication for the promotion of standardization education.

Highlights

- 1. The activities in the field of education comprised approx. thirty meetings with representatives of the above institutions responsible for basic, secondary and tertiary education. The following seminars discussing a range of standardization-related topics were organised:
- for headmasters of secondary schools (attended by representatives of educational supervisory bodies, including the Mazowieckie Region Educational Authority and representatives of bodies in charge of schools in the Capital City of Warsaw);
- heads of schools and educational establishments in the area of the Wawer District, Warsaw (in cooperation with the District mayor);
- for staff of the Ministry of National Education (in cooperation with the Ministry);
- for research and teaching staff of the Bogdan Jański Academy;
- for students and teachers of J. Jasiński School of Secondary Education No. 72 in Warsaw;
- standardization was discussed during the annual Polish Standardization Day; the organisation of the event was supported by PPE.
- **2.** The "Standardization at School" Conference for headmasters and teachers from Mazowsze was inaugurated. The Conference was supported by: BE, MKO, MSCDN, OEIiZK, Secondary School No. 72 in Warsaw, KOWEZiU, Mayor of Praga-Południe.
- **3.** Close cooperation was established with The National Centre for Supporting Vocational and Continuing Education (KOWEZiU), thanks to which PKN representatives were able to attend KOWEZiU conferences for secondary vocational schools from all over Poland (Warsaw, Łódź, Katowice, Toruń, Poznań and Wrocław).
- **4.** Furthermore PKN outlined standardization problems at a conference organised by the Mazowieckie Region Educational Authority.

- **5.** MEN invited PKN staff to join the coalition of supporters of the "Friendly and Safe School" project.
- **6.** The rules of the "Standardization and Me" (Normalizacja i ja) competition were drawn up and the competition was announced.
- **7.** A competition for BA and MA students for the best thesis is delivered in cooperation with the Bogdan Jański Academy.
- **8.** The "Education Zone" was created on the PKN website. Already two months after its launch, it was viewed by 20% of all Internet users visiting the PKN website. The webpage features a number of tabs updated on an ongoing basis: http://pkn.pl/polityka-edukacyjna

9. Preferences were agreed for schools and educational establishments acquiring standards for educational purposes.

To sum up: in 2012 over 20 meetings were held to initiate joint work in the field of education about standardization; papers were presented at 28 conferences and seminars organised both by PKN and other bodies (overall our activities involved 2000 teachers, students and research and teaching staff of tertiary schools).



External Relations

EXTERNAL RELATIONS

International Relations

As regards its international cooperation, the Polish Committee for Standardization cooperates with international and European standardization organisations and coordinates cooperation in the field of negotiating, signing and performing contracts and bilateral agreements with standardization institutions from other countries.

In carrying out its tasks arising from the membership in the following standardization organisations: IEC (International Electrotechnical Commission), ISO (International Organisation for Standardization), CEN (European Committee for Standardization), CENELEC (European Committee for Electrotechnical Standardization) and from its status of a national standardization organisation for ETSI (European Telecommunications Standards Institute), PKN always makes it possible for Polish stakeholders to actively participate in standardization work at the European and international level.

PKN staff represent Polish stakeholders in international and European management bodies. In 2012, they attended the following meetings: 76th IEC General Meeting, 60th ETSI General Assembly, 40th ETSI/ NSO Meeting, 8th CEN-CENELEC Annual Meeting, CEN Extraordinary General Meeting. In 2012, Poland's position on issues addressed by the ISO General Assembly was exceptionally presented at the General Assembly through AENOR, which is the Spanish national standardization body. PKN was represented at the CEN Administrative Board (CA) and the Certification Board (CCB), as well as the Technical Boards (BT) of CEN and CENELEC. PKN representatives were active in the work of advisory committees and groups supporting the work of higher-level bodies. These were, among others, the advisory bodies for the policy of CEN and CENELEC Administrative Boards and the working group of BT Efficiency (CENELEC). PKN representatives were also involved in the work of 2 new working groups appointed for specific tasks: preparation of the European Standardization Strategy 2020 and reform of the CEN Governance.

Furthermore, PKN representatives participated in the work of joint groups established by European Standardization Organisations: CEN-CLC/CA WG Membership, CEN-CLC-ETSI/JWG EaS Education about Standardization.

Being actively involved in the work of standar-dization organisations, PKN manages and supervises the management of secretariats of ISO, IEC and CEN technical committees (ISO/TC 98, ISO/TC 98/SC 2, ISO/TC 107/SC 7, IEC/TC 27, CEN/TC 419), as well as CENELEC reporting secretariats (CLC/SR 27 and CLC/SR 90).

Activities connected with Poland's membership in the European Union

Cooperation with the Committee on Standards and Technical Regulations continued for the part relating to standardization. Activities were coordinated which were aimed at preparing the position of Poland on the documents discussed during the meetings and consulted by correspondence. A PKN representative participated in a session of the Committee.

PKN was actively involved in the work on the draft regulation on standardization. The PKN position on the draft was promoted, and regular cooperation was maintained with the Polish representative in the Council Working Party on Technical Harmonisation.

Bilateral Cooperation

Kyrgyz Republic

At the beginning of March 2012, PKN signed an agreement on cooperation and exchange of information with the Ministry of Economy and Antimonopoly Policy of the Kyrgyz Republic. Within the framework of the Development Cooperation Plan for 2013 prepared by the Polish Ministry of Foreign Affairs, the Polish Committee for Standardization proposed an aid project for Kyrgyz Republic concerning the internationalisation of the operation of Kyrgyz businesses by the implementation of

European Standards in cooperation with the Ministry of Economy and Antimonopoly Policy of the Kyrgyz Republic. The project envisages a series of lectures and training sessions in Kyrgyz Republic and outside the Kyrgyz business environment, and is also addressed to the Kyrgyz administration and Kyrgyz standardization bodies. The project is to be completed in 2013.

DIN - DKE

From 23 to 24 January 2012, within the framework of cooperation between PKN and DIN, experts from Mongolian ministries and administrations responsible for roads, transport, construction and urban infrastructure development came to Warsaw on an official two-day visit. The delegation was invited by DIN on a longer visit to Europe to become acquainted with European standardization solutions applied e.g. in construction. Warsaw was one of the stops. The External Relations Department of PKN organised two meetings for the Mongolian delegates - at the Construction Technology Institute and at the Department of Spatial Development and Construction of the Ministry of Transport, Construction and Maritime Management. Furthermore, PKN introduced the Mongolian guests to the Polish standardization system, with a special emphasis on standardization in the construction sector.

PKN management attended the Annual Meeting of DKE (Deutsche Kommission Elektrotechnik Elektronik Informationstechnik im DIN und VDE), which was held in Offenbach on 9 May 2012.

In December 2012, a joint meeting between PKN and DIN representatives took place in Berlin to discuss issues related to Polish users' introduction of the DIN database and developing a method for entering Polish vocabulary into the DIN database.

Belarus

Working arrangements were agreed between the Polish Committee for Standardization and the Belorussian National Standardization and Certification Institute (BelGISS) on the need to exchange information on technical standards and regulations applicable in both countries. As a result of the arrangements, since 12 September 2012, the PKN website has featured a "Customs Union" tab.



Signing of an agreement with Kyrgyz Republic

On 16 October 2012, PKN delegates celebrated the 20th anniversary of the State Committee for Standardization of the Republic of Belarus (Gosstandart) in Minsk.

Multilateral Cooperation

Meeting with the standardization bodies of the Customs Union

Between 28 February and 2 March 2012, the Polish Committee for Standardization hosted a meeting of the standardization bodies of the Customs Union (Belarus, Kazakhstan, the Russian Federation) and Kyrgyz Republic and Poland. The purpose of the meeting was to exchange views and discuss the forms of possible future cooperation between PKN and the standardization bodies of the Customs Union and CIS countries and EASC in the context of increasing economic integration (Customs Union and Eurasian Economic Community), as well as in connection with new EU standardization-related legislation.

The Baltic Standards Forum

The 2012 meeting of the Baltic Standards Forum was hosted by the Estonian standardization body – EVS, with the sessions held from 30 to 31 August 2012. During the plenary session, heads of individual delegations presented the changes that have taken place in their standardization bodies since the last meeting, while working groups discussed problems common to all participating parties.

Seminar on the Customs Union

On 7 December 2012, a seminar was held on the "Access of Polish goods and services to the market of the Customs Union and the Common Economic Area of Russia, Belarus and Kazakhstan." The seminar was co--organised by the Polish Committee for Standardization, the Ministry of the Economy of the Republic of Poland and the Polish Agency for Enterprise Development. The seminar was intended for businesses interested in entering the markets of Poland's eastern neighbours or already present on the markets. The central theme of the seminar covered issues related to the technical regulations and standards applicable on the territory of the Customs Union countries, as well as customs, veterinary and phytosanitary provisions, including problems related to the certification and protection of industrial property likely to be faced within the area of the Customs Union by businesses from outside the area.

During the seminar, the Warsaw seat of PKN hosted a meeting between Minister Valery Koreshkov, Member of the Board (Minister) for technical regulation of the Eurasian Economic Commission and Francisco Verdera, Chairman of the External Relations Committee (ERC) of the European Standardization Organisations CEN, CENELEC, and ETSI. The meeting was dedicated to the prospects for cooperation between the Eurasian Economic Commission and European Standardization Organizations.

EASC

The management of PKN once again took part in the annual session of the Interstate Council for Standardization, Metrology and Certification (EASC) of the Commonwealth of Independent States (CIS), which was held in Almaty (Kazakhstan) between 22 and 24 May 2012.

EFSD

In 2012, the meeting of the European Forum for Standards Distribution (EFSD) was held for the 42nd time. The meeting was hosted by the Croatian standardization body (HZD). The Forum was dedicated, among others, to interactive sales and marketing workshops and factors improving the attractiveness of online shops.

Meeting of five countries dedicated to exchanging experience in operational standardization and standardization of materials and technology with the aim of defining cooperation within NATO and the EU

The meeting was held in Koblenz in Germany between 23 and 24 May 2012. It was attended by representatives of national standardization bodies in the area of defence of Germany, USA, France, United Kingdom and Poland, representatives of German, French and Polish national standardization bodies and actors from the European defence industry. The attendees discussed a number of issues, including questions of compatibi-



Meeting with representatives of Customs Union, Kyrgyz Republic and Poland in PKN

lity between civil and military standards and solutions adopted in this respect in different countries.

Public administration

WRZ (External Relations Department) cooperates on a regular basis, among others, with the Ministry of the Economy, the Ministry of Foreign Affairs, the Central Office of Measures, the Prime Minister's Office and other public administration bodies to exchange information on the international activity of PKN. In 2012, information provided to public administration bodies concerned, among others, PKN actions in the area of standardization, participation in aid schemes and bilateral and multilateral cooperation.

Activities in Poland

In order to promote standardization and education on standardization, the Polish Committee for Standardization organised a meeting to celebrate the Polish Standardization Day (20th May), which was attended, among others, by representatives of educational bodies and Warsaw districts. The meeting was a starting point for drawing attention to education about standardization in schools and the educational policy carried out by PKN over the years to come.

Representatives of the Polish Committee for Standardization took part in a number of events organised by external bodies, also as standardization experts. They included the following conferences:

- "New Food Hygiene and Safety Standards in the EU"
- "2nd Conference on the Security Management of Buildings and Information"
- "International Fair Trade of Analytical, Measurement and Control Technology 2012"
- "Central European Electronic Card Warsaw 2012"
- "Access of Polish goods and services to the market of the Customs Union and the Common Economic Area of Russia, Belarus and Kazakhstan"
- a series of "Facility Management" seminars

PKN's domestic activity in 2012 also comprised the participation of its staff in events organised by external actors, which were held under PKN patronage.

In order to promote the PN Mark, advertising materials for such journals as "Quality News", "Mamo, to ja", "Cztery Kąty", "Dziecko", "Przemysł Spożywczy", "Dom z pomysłem", "Dobre wnętrze", "Ładny Dom", "W podróży", "Kaleidoscope" were designed graphically and publicity materials were prepared jointly with the Certification Department.

As regards the promotion of the sale of standards, standardization publications and training, 23 ads appeared in the Wiadomości PKN. Normalizacja. Additionally, 15 banners promoting events, standards and training were designed and published on the www. pkn.pl website.

In response to the expectations of Polish businesses pursuing trade cooperation with the Customs Union (Belarus, the Russian Federation, Kazakhstan) or planning to expand its operations in the area, the Polish Committee for Standardization jointly with the State Committee for Standardization of the Republic of Belarus (Gosstandart) and the Belorussian National Standardization and Certification Institute (BelGISS) prepared a website tab dedicated to the "Customs Union." The tab contains links to Polish-language webpages of Gosstandart, where users may find information on standards, technical regulations and certificates applicable within the Customs Union.



Polish Standardization Day meeting



The conference organized on the occasion of the publication of the PN-ISO 26000 standard

Promotion of the PN-ISO 26000 standard

In 2012, actions were carried out to promote PN-ISO 26000:2012 Guidance on social responsibility.

They involved the following:

- participation of PKN personnel in a press conference and a conference organised by the Ministry of the Economy in connection with the publication of the PN-ISO 26000 standard and in a series of conferences on "Responsible business development" organised under the auspices of the Ministry of Finance in various Polish cities: Lublin, Kraków, Gdańsk, Olsztyn, Katowice, Wrocław and Warszawa;;
- inclusion of the "Social Responsibility" tab on the www.pkn.pl website dedicated to events and issues linked to good practice in the area of social responsibility;
- release of a special issue of Wiadomości PKN. Normalizacja fully dedicated to social responsibility in the context of the PN-ISO 26000 standard. The issue discussed topics linked e.g. to occupational health and safety, the role of consumers and social responsibility of non-governmental organisations;
- preparation of the Polish version of ISO promotional materials: posters and information folder;
- placement of a banner on PKN website and preparation of promotional leaflets.

Small and medium-sized enterprises

In order to get SMEs acquainted with standard issues, the PKN website contains an "SME Zone" webpage,

which is updated on an ongoing basis and contains, among other things, addresses useful for SMEs (with links e.g. to information on funding opportunities available to European SMEs, to CEN-CENELEC websites dedicated to SMEs) and downloadable files (e.g. Polish translation of CEN-CENELEC Guide 17 "Guidance for writing standards taking into account micro, small and medium-sized enterprises (SMEs) needs".

The Wiadomości PKN. Normalizacja monthly

The monthly journal of the Polish Committee for Standardization is downloadable from the PKN website in an electronic format.

In 2012, a new section was added to the monthly: SEK-TORY PKN (PKN SECTORS), which contains information on e.g.: new Technical Committees and Task Committees, meetings of domestic and international technical committees, events attended by PKN personnel (conferences, seminars), information on newly published standards.

Furthermore, articles dedicated to the activities of PKN and standardization work in Poland, the EU and worldwide were published in the monthly.

Each issue contained articles concerning the standardization of important issues in different economic areas.

In 2012, for the first time, two special thematic issues were publicate – on energy efficiency and social responsibility, in addition to the 12 regular issues of the *Wiadomości PKN*. *Normalizacja* monthly.



The first one to be published was the issue on energy efficiency in the context of standardization activities. The publication consisted of articles on standards and standardization deliverables needed for establishing a uniform measuring and testing methodology for assessing energy consumption and its reduction by means of new technologies and processes. The articles were written by specialists in the respective fields actively involved in the standardization work of KT 304 System Aspects of Electrical Energy Supply.

The special issue on social responsibility was published as part of the promotion campaign on PN-ISO 26000:2012, which lays down social responsibility rules and guidance on their implementation. The special number was fully dedicated to the theme of social responsibility across its key aspects: human rights and employment-related practices, consumer issues, environmental responsibility, local community development, etc. The articles were written by specialists active in KT 305 Social Responsibility.





INFORMATION TECHNOLOGY

INFORMATION TECHNOLOGY

Part II of the Portal e-Norma at the Polish Committee for Standardization, the delivery of which was scheduled for 2010-2013, consists of subprojects and system integration. It is implemented under the Operational Programme Innovative Economy, Priority Axis VII Information Society – Establishment of Electronic Administration. PKN is on the reserve list of beneficiaries. The project objectives reflect the National Development Strategy 2007-2015: Priority 1: Improvement of competitiveness and innovativeness of the economy – Activity: Development of information society.

In 2012, the implementation of the subproject Polish Standardization Resource Portal was continued. It involved the design and implementation of a secure corporate portal to provide a platform for standardization work using electronic means of communication.

The implementation of the subproject was divided into 4 stages.

- Stage 1 Engineering completed in November 2010;
- Stage 2 Delivery of hardware and software completed in February 2011;
- Stage 3 System development and deployment completed in November 2011;
- Stage 4 Maintenance initiated in 2012 and to be continued in 2013;

In 2012, the implementation of the subproject Digital Selling System for Products and Services was initiated. The objective of the subproject is to establish a platform that will meet the market expectations and facilitate the sale of PKN products and services.

The subproject was divided into 3 stages:

- Stage 1 Engineering completed in April 2012;
- Stage 2 System development and deployment completed in December 2012;
- Stage 3 Maintenance scheduled for 2013-2014.

In 2012, PKN initiated a subproject, within the framework of the e-Norma Portal, entitled Standardization Knowledge Management and e-Learning. The subproject is aligned with a strategic objective of PKN which is to reorganise the training system for standardization and related fields by creating the technical infrastructure to develop and share training courses using modern media technologies, both for commercial targets and to promote standardization.

The completion of the subproject is scheduled for 2013. The subproject is divided into 2 stages:

- Stage 1 Engineering completed in October 2012;
- Stage 2 Development and implementation 2013.

The Integration subproject, involving the integration of the PKN computer systems implemented under the systems Portal e-Norma Parts I and II is scheduled for 2013.

To make the achievement of PKN strategic objectives for 2009-2013 possible, all systems and solutions planned under the Portal e-Norma project at the Polish Committee for Standardization Project Part II need to be implemented. The project is a continuation of the Portal e-Norma project at the Polish Committee for Standardization, Part I, completed in 2009.

All project activities support the organisation and promotion of standardization work, in line with European and international solutions, with an active participation of national experts. Moreover, they ensure a consistent improvement of the quality of the services and products provided by PKN, by introducing the technical resources necessary to develop standardization deliverables and tools improving the competitiveness of PKN products and services by developing and extending the distribution channels.

It should be emphasised that the subprojects are closely interrelated. Virtualised resources (subproject Resource Virtualisation) will be used both in the process

of creating standardization deliverables (Polish Standardization Resource Portal, Standardization Knowledge Management), and in the commercial operations of PKN (Digital Selling System, e-learning).

Furthermore, the ICT infrastructure was developed and upgraded within the framework of IT projects (aside from the Portal).

In 2012, the IT Department prepared the necessary documentation and used it to implement new security standards and IT infrastructure for the needs

of integrating the Information Security Management System, which conforms to PN-ISO/IEC 27001, with the Quality Management System, which is consistent with PN-EN ISO 9001.

The level of resource availability and continuity in 2012 met the expectations at 95.74% (according to good IT practices, it should be at least 95%).



PRODUCTS AND SERVICES

Products and Services

Sales of standards, other deliverables and licences

The promotion of sales of standards and standardization products included:

- 3 banners (Standard Management System / SZN/, non-destructive testing lex-norma, Social Responsibility);
- 6 leaflets (non-destructive testing lex-norma, EN 16001:2009, Social Responsibility, Standardizsation, List of lex-norma standards in construction, List of legal acts relevant for construction lex-norma);
- publication of an advertisement in each issue of Wiadomości PKN. Normalizacja (12 issues);
- Informacje o przebiegu i wynikach prac normalizacyjnych monthly was published (12 issues);

- new lex-norma plus (A and AW) and premium (A and AW) websites were prepared;
- international BUDMA 2012 Fair was organised and attended;
- a meeting with universities was held (March seminar);
- promotional actions were carried out (leaflets sent by mail) concerning publications related to the Information Security Management System in practice, the construction lex-normaand non-destructive testing lex-norma Internet products, as well as subscriptions of Polish Standards;
- mailing actions promoting the products were carried out.

Sales of Polish Standardization Deliverables (PN and PKN) in 2012 y sectors:

Sector	PN-EN	PN-ISO	Others	Homegrown	Total
SBD	13 796	215	151	1 554	15 716
SCH	7 486	873	48	944	9 351
SEK	1 105	0	8	8	1 121
SEL	3 761	0	115	230	4 106
SET	2 631	10	1 330	142	4 113
SGR	2 022	172	12	1 027	3 233
SHT	11 192	95	13	604	11 904
SLT	4 253	291	9	933	5 486
SMC	6 536	490	47	812	7 885
SNI	3	0	0	0	3
SOB	1 588	95	117	174	1 974
SPU	3 734	69	10	392	4 205
SRZ	1 492	634	174	1 796	4 096
STI	1 726	969	251	104	3 050
SUS	64	0	0	10	74
SZP	7 526	1 422	342	1 341	10 631
SZŚ	5 780	792	25	1 041	7 638
Total	74 695	6 127	2 652	11 112	94 586

e-Access

A new service for online access to the collection of Polish standards selected by a client is updated on an ongoing basis. It may be any collection or a collection related to one or more ICS (International Classification for Standards). The content of relevant standards is published on the PKN website.

lex-norma (lex standard)

A new service for online access to construction-related legislative acts and standards referred to in those acts, which are updated on an on-going basis. The texts of the standards and regulations are also presented in a consolidated version. Navigation is facilitated by hyperlinks between regulations and standards. The collection is located on a PKN server.

PKN's SZN application (Standard Management System)

The application enables users to organise (search the collection of standards by specific criteria) and manage (under a licence obtained for a specific number of users) the collection of Polish Standards and update it. The application along with the collection of standards is located on a client-server.

Sales of services: standardization training, conformity marking for Polish Standards and specialist information

Training delivered to external clients in 2012

In 2012, 12 standardization training courses were organised, with a total of 205 participants.

Training was delivered in the following fields:

- Standards for steel products
- Practical use of standards
- Internal audit of the Information Security Management System
- New legal requirements for construction products
- Training for the Central Forensic Laboratory
- Polish Standards in the legal system
- Standardization and certification as a curriculum subject
- References to standards in legal provisions
- Training for students of the Warsaw University of Life Sciences
- Standardization and its social implications.

PN and Keymark Certification

The Polish Committee for Standardization owns the Intellectual Property Rights of Polish Standards. Consequently, it is the only Polish organisation authorised to certify and award rights to the PN Conformity Mark with respect to all Polish Standards. Other certification bodies authorised by the President of PKN can only issue PN Mark certificates with respect to the standards to which they are accredited.

The figures as of 31 December 2012 are as follows:

- bodies certifying products (JCW) bodies authorised by the President of PKN to certify PN conformity and award PN Mark rights: 4 (1 new JCW was established compared to 2011);
- valid PN certificates: 5 (1 renewed certificate + 3 new certificates compared to 2011);
- number of certification procedures carried out by PKN in 2012;
- valid Keymark certificates for SDG-5 Thermal insulation products in construction: 8 (an entity accredited to SDG-5 /COBRPIB Katowice/ carried out control

audits and extended three existing Keymark conformity certificates and issued 5 new certificates);

To build the position of the PN Mark as a consumer mark, promotion actions were conducted among each of the three distinguished groups of PKN customers: manufacturers, cooperating JCWs and consumers.

PN Mark promotion measures:

- advertising campaign in the media (Internet/press) involving 10 advertisements, the promotion of the PN Mark and PKN by means of advertising gadgets, roll-ups, multimedia information at the PKN reading room, etc.;
- promotion of the PN Mark in Wiadomości PKN. Normalizacja and in Quality News – 3 articles and 1 interview;
- participation of the Certification Division in training, seminars and meetings with potential parties interested in the PN Mark: 2 external training courses entitled "Application of standards in practice" delivered by PKN; training at the Public Procurement Office; training at Zakłady Azotowe PUŁAWY - participation in a seminar dedicated to Facility Management services;
- implementation of a discount policy for holders of PN certificates, JCW and other PKN partners.

However, the most significant achievement in terms of PN Mark certification was the execution by PKN and delivery by its Certification Division of three procedures that ended with the award of PN certificates. This allowed the changes introduced in 2011 to be verified and optimised.

The goal of further PKN measures is to build the position of the Mark and convince stakeholders that the PN Mark is important in any product conformity assessment system, as it provides a greater certainty as to the quality of the product bearing the Mark and guarantees that both the product and its manufacturing process are regularly tested and supervised by an independent third party.

System Certification – PKN as a Certification Body

In 2012, the Polish Committee for Standardization carried out 9 supervisory audits with respect to Information Security Management Systems of universities that had obtained Information Safety Certificates in 2011. The objective of the audit was to assess the adequacy and performance of the Information Security Management System and verify the delivery of the recommendations of previous audits (or identify potential areas for improvement). All the universities managed to prove that they conform to the requirements of PN-ISO/IEC 27001:2007, as a result their Information Security Management System Certificates remain valid.

Publishing activity 2012

Non-Serial Publications of PKN

Publishing work involving non-serial publications of PKN is aimed at preparing the documents and standardization documents in the electronic format (a PDF template and an additional xml file), to be able to disseminate them in any format:

- paper edition instant printing on request;
- PDF file to be downloaded directly by customers from the online shop;
- a PDF file on a CDR a ready-made set concerning a specific theme or a customer-specified set of standards.

Polish Standards and Standardization Deliverables

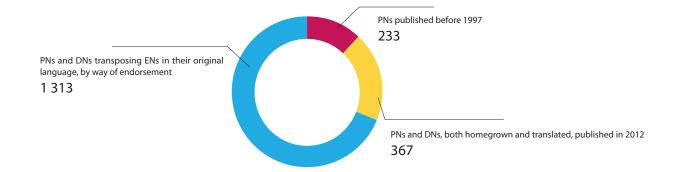
Overall, the electronic collection of PNs and DNs was expanded to include PDF versions of 1,913 PNs/DNs – for sale and for the goals of standardization work, of which::

 233 archive PNs from before 1997 were scanned and converted into PDF;

- 367 homegrown and translated PNs/DNs were typeset, proofread, published and converted to PDF files (of which 1 was approved in 2011, 366 were approved in 2012). 84 PNs approved in October, November and December 2012 were left to be published in 2012;
- the following quality indicator was achieved: average publication time of homegrown and translated PNs/ DNs in days from approval date to publication date
 14 calendar days;
- PDF files were prepared containing 1,313 PNs/DNs endorsing ENs in the original language, of which 1,299 were approved in 2012 and 14 archive standards were approved in 2002-2008;
- the following quality indicator was achieved: average time to make available PNs endorsing ENs in days from approval date to PDF availability date 3 calendar days.

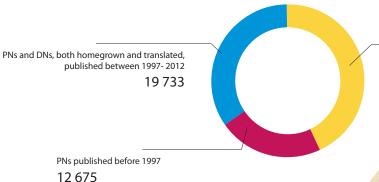
Growth of the repository of PNs and DNs in PDF format in 2012

	Type of document	Number of PNs/DNs in PDF format
1	PNs published before 1997	233
2	PNs and DNs, both homegrown and translated, published in 2012	367
3	PNs and DNs transposing ENs in their original language, by way of endorsement	1 313
Total		1 913



Repository of PNs and DNs in PDF format (as of 31.12.2012 r.)

	Type of document	Number of PNs/DNs in PDF format
1	PNs published before 1997	12 675
2	PNs and DNs, both homegrown and translated, published between 1997-2012	19 733
3	PNs and DNs transposing ENs in their original language, by way of endorsement	24 845
Total		57 253



Other Non-Serial Publications of PKN

In 2012, two publications to be distributed in paper and electronic form were released:

• Energy-management systems

Working translation of EN 16001:2009, withdrawn in 2011, published in consultation with KT 304 System aspects of electrical energy supply as a result of stakeholders' interest in the Polish-language version of the standard.

The publication does not have a Polish Standard status.

• Standardization – Issue II

The edition was expanded with new issues related to social responsibility and management-related standardization: energy management, risk management, quality management system in aviation. The publication updated and supplemented the chapters concerning domestic standardization activity, the funding of standardization activities and the Information Security Management System.

Virtualisation of PKN Resources

In 2012, nearly 25,000 PDF files with PN and DN contents were converted into the xml format. As of 31 December 2012, the collection of xml PNs and DNs included nearly 33,500 deliverables and covered nearly all valid documents.

PNs and DNs transposing ENs in their original language, by way of endorsement 24 845 Systemy zarząd energia Systemy zarządzania energiq OMITETU NORMALIZACYJNEGO. NORMALIZACJA



Human Resources

Human Resources

Staff

In 2012, the Polish Committee for Standardization employed 267 full-time employees and 3 full-time members of management, i.e. altogether 270 employees.

In 2012, the average level of full-time employment was 256, including 3 management positions.

Between 1 January 2012 and 31 December 2012, 21 staff members left PKN and 19 persons were employed.

Employees are recruited by way of an open recruitment process, carried out on the basis of an advertisement published in the Public Information Bulletin and on PKN website. In 2012, 15 competitions were organised, as a result of which 12 persons were recruited.

According to data as of 31 December 2012, out of the 267 staff, 144 were employed in the standardization division, performing tasks directly linked to the organisation of standardization work.

In terms of educational attainment, the structure has largely remained the same for several years. As of 31 December 2012, 71% of the personnel had higher education, including 8 persons with a doctoral degree; 26% with secondary education and 3% with basic and primary education.

Training activities

PKN organises training for its staff to further develop their skills. Training was delivered in the following forms:

- **1. Specialist training** (courses, conferences, fora) organised by external providers 63 employees were referred to 34 training courses.
- 2. Training organised by PKN.

5 courses were provided in 2012:

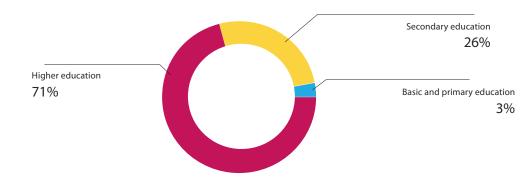
- ISM & ISA Refreshing
- Invoicing in the SAP system
- Training to ISO/ IEC 20000:2011 lead auditors
- Occupational Health and Safety
- Professional Customer Service

A total of 103 members of PKN staff attended the courses organised by PKN.

Foreign languages

PKN staff have an opportunity of improving their language skills at foreign-language courses.

The educational structure of employees



 English classes – in 2012, PKN employees continued to learn English. In Warsaw, the classes were provided by the POLANGLO language school; 58 people attended the course.

In Łódź, 5 people continued individual language classes.

 Russian classes – in 2012, PKN employees continued to learn Russian. The classes were provided by an external language school; there were 6 attendees. Since 2012, Russian language classes were provided by another language school and attended by 9 PKN employees.

Subsidizing university education

3 members of PKN staff benefited from the available funding for education.



FINANCE

FINANCE

Execution of the financial plan

The legal basis for the financial management and accounting at PKN is provided by:

- **1.** Act of 29 September 1994 on accounting (Journal of Laws of 2009 No. 152, Item 1223 as amended);
- **2.** Act of 27 August 2009 on public finance (Journal of Laws No. 157, Item 1240 as amended) and relevant implementing provisions.
- 3. The Regulation of the Minister of Finance of 5 July 2010 on special accounting policies and charts of accounts for state budgets, budgets of local governments, state budget-funded units, self-governmental state budget-funded units, state special-goal funds and state budget-funded units established outside the territory of the Republic of Poland (Journal of Laws No 128, item 861, as amended);

- **4.** The Regulation of the Minister of Finance of 2 March 2010 on detailed classification of revenues, expenses, income, spendings and receipts from foreign sources (Journal of Laws No 38, item 207, as amended);
- **5.** Order of the President of PKN No 33 of 26 September 2012 adopting the Financial Manual for the Polish Committee for Standardization;
- **6.** Order of the President of PKN No 25 of 2 July 2012 adopting the accounting rules (policy) for the Polish Committee for Standardization;

In 2012, financial management was based on an annual Plan approved by the President of PKN. This plan includes budget expenses and revenues.

Budget Revenues

PKN revenue is non-taxable and falls under subsection 75002 – the Polish Committee for Standardization PKN obtains revenue from the following sources:

Item no.	Specification	Implementation of the year 2011	Plan for 2012	Implementation of the year 2012
1.	Receipts from the sale of Polish Standards and homegrown publications and from PKN's information activity	9 267	11 605	8 180
2.	Receipts from concession and licence fees	0	360	220
3.	Receipts from training	108	105	47
4.	Sale of assets	6	0	5
5.	Rental and lease receipts	9	10	4
6.	Receipts from miscellaneous revenues	177	15	182
Total:		9 567	12 095	8 638

Amounts in thousands of PLN

In 2012, PKN generated revenue of PLN 8,638,000, which was 71.42 % of the planned figure.

The revenue was planned and generated within a single section: 750 – Public administration and single subsection: 75002 PKN.

The top item in the 2012 revenue structure was the sales of Polish standards, homegrown publications and information activities with a value of PLN 8,180,000. This figure included interest of PLN 12,000. Revenue from standards on request represented PLN 80,000. Revenue from training for external customers amounted to PLN 47,000.

Receipts from concessions and licences amounted to PLN 220,000.

In 2012, revenue was lower than planned by PLN 3,457,000 and was lower than implementation in 2011 by PLN 929,000. The amount of revenue implemented under this item depends mainly on the interest in Polish Standards among buyers, both domestic and foreign. Therefore, precise revenue planning for the financial year is impossible. The decline in the sales of standardization products in 2012 was due to the poor financial condition of PKN customers.

Miscellaneous revenue in 2012 was higher than planned by PLN 167,000 and exceeded the 2011 figure by PLN 5,000. This value included, inter alia: fees paid by foreign standardization institutions for foreign standards sold to Polish customers and revenue from previous years

Budget Expenses

PKN is financed by:

- section 750 Public administration, subsection 75002 - the Polish Committee for Standardization
- section 752 State defence, subsection 75212 –
 Other defence expenses.

Implementation of the expense plan in 2012

Planned amount of expenses	Expenditures	Unused
33 820	31 422	2 398
100%	93%	7%

Amounts in thousands of PLN

The planned budget expenses according to the Budget Act 2012 amounted to PLN 33,820,000.

Investment expenses made in 2012 were lower by PLN 128,000 than the planned figure.

Current expenses made in 2012 were lower by PLN 2,270,000 than the planned figure.

The reason for which the current expenses were lower than planned is the continuation of the cost-cutting measures taken by the President of PKN. The pricing policy for standards adopted in 2009 was followed, promoting the sale of electronic versions of products. The costs of paper, operation and maintenance of printing equipment were lowered. Energy consumption was reduced. A system was used that registered every printing and copying operation. The cost of fixed-line and mobile telephones was analyzed on an ongoing basis. The number of magazine and trade literature subscriptions was again reduced. The amount of domestic travel was cut down by using teleconferencing equipment.

The President of PKN reallocated the planned expenses within his mandate pursuant to Article 171 (1) the Act of 27 August 2009 on public finance (Journal of Laws No 157, item 1240).

PKN does not grant any subsidies, is not involved in any multi-annual programmes and does not establish incentive funds.



LIST OF TECHNICAL COMMITTEES AND TASK COMMITTEES

LIST OF TECHNICAL COMMITTEES AND TASK COMMITTEES

KT dealing with the Construction and Building Structures Sector

KT number	Name
102	Bases for design of structure
108	Aggregates and stone for building
128	Design and execution of steel structures
169	Windows, doors, shutters and building hardware
179	Thermal protection of building
180	Fire safety of buildings
193	Prefabricated components of aerated concrete and nonreinforced components of light-weight aggregate concrete
194	Gypsum and gypsum based products
195	Precast concrete products
196	Cement and buildings limes
197	Ceramic tiles and ceramic sanitary appliances
198	Glass
199	Melioration system and hydrotechnics
211	Thermal insulating products for buildings
212	Road execution and maintenance
213	Design and execution of concrete structures and composite structures
214	Bitumen and synthetic products for waterproofing in building
215	Design and execution of timber and wood-based structures
232	Construction documentation
233	Masonry
234	Accessories for roofing
251	Bridges
252	Design of masonry
253	Buildings Acoustic
254	Geotechnics
274	Concrete
278	Water supply and waste water engineering
279	Heating systems and ventilation
307	Sustainability of building construction
308	Assessment of release of dangerous substances-construction products
312	Earthworks

KT dealing with the Chemistry Sector

KT number	Name
12	Explosives and pyrotechnical articles
141	Plastics

KT dealing with the Chemistry Sector

KT number	Name
155	Dyestuffs, dye intermediates, pigments and extenders
156	Fertilizers
168	Plastic products
175	Paints and varnishes
184	Adhesives
185	Protection of wood and wood-based products
186	Rubber and rubber products
201	Cosmetics and household chemicals
222	Petroleum and related products
223	Technical gases
249	Chemical analysis
269	Chemical safety
289	Technical ceramics

KT dealing with the Electronic Sector

KT number	Name
60	Semiconductor power converters
67	Electrical equipment in medical practice
69	Measuring Equipment and protection equipment
71	Measurement equipment for electrical and electromagnetic quantities
105	Electroacoustics, audio and video information storage systems
241	Electromechanical components
266	Nuclear instrumentation
282	Fibre optic technology
290	Special techniques used in electrotechnology
291	Laser equipment and optical radiation safety
293	$Capacitors\ and\ resistors\ for\ electronic\ equipment,\ printed\ boards\ and\ electronics\ assembly\ technology$
294	Piezoelectric devices, magnetic components and ferrite materials

KT dealing with the Electrical Sector

KT number	Name
4	Lighting technology
54	Cells and batteries
56	Electrical machine (rotating) and hand-held motor- operated and portable electric tools
61	Electrical equipment and system for railways
62	Electrical accessories
63	Household and similar electrical appliances
70	Electrical relays and protection equipment
72	Live working

KT dealing with the Electrical Sector

KT number	Name
73	Low-voltage surge protective devices and system engineering and erection of electrical power installations in system with nominal voltages above 1 kV A.C. and 1.5 kV D.C.
74	High-voltage switchgear and control gear assemblies
75	Fuses
76	Insulators
78	Industrial electroheating
79	Power transformers
80	Overhead lines – general aspects
81	Instruments transformers, small power transformers
267	Electrically-operated farm appliances and electrical commercial catering equipment
281	Safety of machinery – electrotechnical aspects

KT dealing with the Electrotechnical Sector

KT number	Name
8	Terminology, symbols of quantities, units, documentation and graphical symbols use in electrotechnical technology
53	Cables and wires
55	Electrical installations in Building and lighting protection of buildings arresters for building structures
65	Insulting materials and environmental conditions, classification and methods of test
68	High-voltage testing techniques
77	Low-voltage switchgear and control gear assemblies
143	Electrostatics
303	Electrical insulating materials
304	System aspects of electrical energy supply

KT dealing with the Mining Sector

KT number	Name
30	Geology, geophysics and small dimensions drilling
31	Petroleum and natural gas mining
64	Electrical apparatus for potentially explosive atmospheres
124	Transport in mines
125	First working and exploitation of mines
144	Coke and other solid formed fuels
164	Safety in mining
220	Solid mineral fuels
221	Mining, mineral processing and ore analyses
226	Coal mechanical preparation
227	Surface mining
275	Natural hazards in mining
285	Underground mining machines and equipment

KT dealing with the Metallurgy Sector

KT number	Name
28	Refractories
29	Chemical analyses of ores, concentrates and metals
33	Powder metallurgy
106	Corrosion and protection of metallic materials against corrosion
123	Mechanical testing of products
126	Steel tubes
127	Metallurgical stock and steel
145	Alloy and special steels
146	Steel sections
153	Thin steel sheets
165	Welding and allied processes
219	Hard non-ferrous metals
225	Light non-ferrous metals
262	Heat treatment of metals
301	Founding

KT dealing with the Logistics, Transport and Packaging Sector

KT number	Name
17	Road vehicles and road transport
18	Ships and marine technology
19	Aircraft and space vehicle engineering
101	Cranes and their component parts
131	Lifts, escalators and passenger conveyors
133	Packaging
135	Packaging of metal and closure systems
138	Railway applications
162	Logistics, bar codes and warehouse management
163	Ropes and ropes transport
187	Tyres, rims and valves
230	Small craft
245	Continuous handling equipment General purpose constant transportation devices
248	Industrial trucks
265	Urban Communication

KT dealing with the Machinery and Engineering Sector

KT number	Name
5	Refrigeration, heat pumps, air conditioners and compressors
13	Earth-moving machinery, road construction machinery and mobile cranes
14	Machinery and equipment for building construction, building materials industry and rock mining
15	Machines and devices for the food processing industry, trade and catering business

KT dealing with the Machinery and Engineering Sector

KT number	Name
16	Tractors and machinery for forestry
47	Pumps and hydraulic turbines
48	Machine design fundamentals
50	Automatic and manipulating industrial robots
112	Gear
130	Chemical apparatus, vessels and gas cylinders
132	Internal Combustion engines
137	Mechanical and thermal equipment in power plants
160	Hydraulic fluid power
206	Metal cutting machine tools and tools and workpieces tooling and tools tooling
207	Material removal and accretion machining processes and surface layer characteristics
208	Pneumatic fluid power
210	Industrial valves and industrial pipelines
236	Fasteners and assembly tools
240	Plastic- and rubber- working machines
246	Radiological protection
263	Equipment for collection and removal of waste municipal
268	Equipment for collection and removal of waste municipal
277	Gas engineering
299	Technology and machine tools for plastic working of metals

KT dealing with the Nanotechnology and Innovation Sector

KT number	Name
314	Nanotechnologies

Technical and Task Committees dealing with the Defence and Public Security Sector

KT number	Name
52	Alarm system
176	Military technology and supplies
177	Design and manufacturing of armament and material
244	Equipment for fire protection, rescue and fire fighting
264	Fire alarm systems
273	Mechanical security systems
306	Societal and citizen security
KZ number	Task Committee concerning
501	Services for fire safety and security systems

KT dealing with the Consumer Products Sector

KT number	Name
2	Sports and recreation
20	Leather and Footwear
22	Clothing
23	Textile and Related Machinery
24	Textile Raw Materials
25	Pulps, Paper, Board and Their Products
26	Textiles and Textile Products
27	Floor Coverings and Burning Behaviour of Textile Products
100	Products of timber and wood-based materials
107	Technical Textiles
142	Geosynthetics
237	Articles for Babies and Young Children and Safety of Toys
239	Jewellery

KT dealing with the Food, Agriculture and Forestry Sector

KT number	Name
3	Food microbiology
35	Milk and milk products
36	Cereal and cereal products
37	Fishes and fish products
38	Fruit and vegetable products
39	Tobacco and tobacco products
40	Animal feeding stuffs
82	Spirit products
87	Animal husbandry and breeding
88	Deep-frozen food
90	Cultivation of soil and horticulture
92	Oilseeds, vegetable and animal fats and their by-products
93	Meat and meat products
110	Herbal materials and products
181	Forestry
200	Dry food mixes, starch and dietetic products
229	Coffee and tea
235	Food analysis
287	Biotechnology
310	Management systems for food safety

KT dealing with the Information Technology and Communication Sector

KT number	Name
11	Telecommunication
103	Audio, video and similar systems and equipment
104	Electromagnetic compatibility
170	Information technology vocabulary, coding information and office equipment
171	Networks and software
172	Personal identification, electronic signature, electronic signature and cards and their related systems and operations
173	Interfaces and building electronic systems
182	Information technology – security techniques
183	Safety of information and communication technology and business equipment
271	Banking and related financial services
288	Multimedia
297	Geographic information
302	Using of informatics in the health protection
309	Biometrics

Technical and Task Committees dealing with the Services Sector

KT number	Name
259	Post
313	Pest control services
KZ number	Task Committee concerning
500	Indoor Sun Exposure Services
503	Facility Management
504	Real Estate Market Commitee

KT dealing with the Basic Problems and Management Systems Sector

KT number	Name
6	Management systems
7	Non-destructive testing
9	Dependability
10	Applications of statistical methods
49	Optics and optical instruments
51	Industrial measurements of non-electrical quantities
158	Safety of machinery and technical equipment and agronomics – general problems
204	Technical drawings and technical documentation
242	Information and documentation
243	Symbols and graphical signs
256	Principles and methods of terminology work
257	General metrology
270	Environmental management

KT dealing with the Basic Problems and Management Systems Sector

KT number	Name
276	Occupational safety and hygiene management
298	Geodesy
305	Social responsibility
311	Conservation of cultural property

Technical and Task Committees dealing with the Health, Environment and Medicine Sector

KT number	Name
1	Disabled persons
21	Personal Protective Equipment
115	Environmental noise
119	Water quality – general problems
120	Water quality – biological microbiological and test
121	Water quality – chemical tests – inorganic substances
122	Water quality – chemical test – organic substances
157	Physical hazards in working environment
159	Chemical and aerosol hazards in working environment
161	Indoor air quality
190	Soil biology
191	Soil chemistry
192	General physics and general problems
216	Wastes
247	Medical materials and biomaterials
280	Air quality
283	Stomatological materials
284	Mechanical medical equipment, tools and devices
295	Sterilization
296	Disinfection and antiseptics
300	Medical laboratory tests in vitro
KZ number	Task Committee concerning
502	Aesthetic Surgery Services

