



Improving safety of machinery in Slovakia from point of view of standardization, testing and certification

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Transformation of standardization, testing and certification in Slovak republic

Political changes in Slovakia in 1989 brought also a new orientation in the area of safety and health at work. European and international standardization started more to reflect in Czechoslovak Standards. The completion of the Association Agreement of Slovak republic and European Union meant particular advantages in the European market for our country in that time. As a condition was accelerated harmonization of legislation and standards concerning products and consequently also procedures of conformity assessment, testing and certification.

The formation of independent Slovak republic in 1993 was the next milestone. There was necessary to establish our own Slovak framework of technical standardization in new state structure as well as to create new authorities for standardization, testing and certification. The transformation of Czechoslovak standards into the new Slovak standard system was the first step. Technical standards had historically status of obligatory force. It influenced also character of Technical Standards. Standards determined duties for users, they obliged binding requirements for operators, their qualification, as well as requirements for operation and their parameters.

Slovak Technical Standards (STN)

Activities regarding the pre-accessing process of Slovak republic into European Union got started fully in the middle of 90's. They meant substantial revolution not only in legislation of safety and health at work, but also in the area of standardization, testing and certification. The main task of the pre-accessing process was a harmonization of the national legislation with Acquis communautaire above all, but also practical procedures regarding with standardization, testing and certification. In 1999 the Slovak Technical Standards became on voluntary status according adopted Act (No 246/1999 Coll.).

From my personal point of view (as a long-time expert of labour inspection and user of Standards) this transformation for voluntary standards had to be supported by such a step, that from standards should be extracted those provisions into legal regulations, which should be obligatory for that users they are related to. Unfortunately this was not done and many requirements listed in standards are fulfilled from habit (for example annual inspection of presses, qualification of industrial track drivers, etc.). The philosophy of voluntary status has not been fully understood by public. Some people are perceiving henceforward technical and safety standard as an legal duty and others are thinking voluntary standards as not valid. Therefore is necessary to make an education campaigns in this area for future.

Slovak Institute of Technical Standardization (SUTN)

Slovak Institute of Technical Standardization is responsible for making, approval and publishing of Slovak Technical Standard (further STN) and it has an exclusive settlement. The problem is a low availability of the STNs. The price of standards is excessively high, mainly for small and medium size undertakers and sole traders. The law bans using copies of STNs under the stiff fine. Executing of order of STN takes often a long time. There is a lack of electronic versions of STNs. Appropriate browsers for orientation in standards are missing.

On the other hand, the positive feature is that the Slovak standardization takes over European and International standards, and that covers full harmonization of conditions in Slovak republic. On the present, European standards are taking over with marking STN EN (ISO). Harmonized standards are took over in preference by the translation into Slovak language. The Slovak Institute of Technical Standardization has reached a full membership in the European standard organizations (CEN, CELENEC) and other international institutions. The SUTN creates National technical committees for development and implementation of standards, involving various governmental and expert bodies and sectors companies. The participation in international committees is ensured as well.

Slovak Office for Standards, Metrology and Testing

Slovak Office for Standards, Metrology and Testing (UNMS) is the central governmental body responsible for the state policy in the field of technical standardization, metrology and testing in Slovak republic. One of the task of this body is providing services in the determined areas, in order to make more favourable business environment for Slovak enterprises.

The Office (UNMS) has appointed also other institutions – for example in the area of Metrology – the Slovak Institute for metrology (SMU), which guarantees development and storage of national measurement etalons, as well as it provides services regarding calibrations, measurement certifications, etc. In 2002 institute obtained Quality Certificate according ISO 9001:2000 presented by the certification body - LGA InterCert, Germany.

The testing

Significant changes have occurred in the area of testing in Slovakia during the last 15 years. The network of state testing laboratories has been transformed into the private accredited, authorised or notified subjects, associated in the Testing Service Slovakia.

The pre-accessing period was characterized by certain problems, because the law required using of the Slovak declaration of conformity, which was not accepted in other countries. It became a duplicity in the EU conformity assessment procedures in some cases. It was partly reduced by the PECA protocol. Building up of the national structure

of the conformity assessment on the base of European and International Standards was one of the key condition of the EU membership. Slovak republic established the national accrediting body – Slovak National Accrediting Service, which successfully passed through the process of international evaluation and it is also a signatory of agreements about the mutual recognition of accreditations (such as EA, MRA, ILAC, IAF, etc.).

Enlightenment in the area of standardization, testing and certification

In spite of positive development of transformation in the area of standardization, testing and certification in Slovak republic, from my personal point of view, the level of awareness of all relevant procedures of certifications, using of standards and testing is not satisfactory, mainly in small and medium sized enterprises and sole traders. It is abused sometimes by commercial organisations to whom enterprises have to pay a lot of money for the advice, consulting and certifications. It is a deal also in certifications of the safety management systems. Even though that one of the main reason why ISO 18000 was not developed had been an apprehension of the commercial abusing, it seems that the implementation and certification of safety management systems have become a good business.

It is necessary for future to support enlightenment, better awareness, better approach to information, clear and understandable rules how to fulfill legal requirements in the area of standardization, testing and certification. It will be needed to give an opportunity for enterprises and professionals to participate in process of standardization in a wider extent. One of the way how to reach these objectives could be the involvement into the EUROSHET. However the Slovak authorities and institutions in the field of standardization, testing and certification are the members of the crucial European bodies, the EUROSHET could give an opportunity for other professionals to participate in the activities of European standardization, testing and certification.

Participation of Slovak republic in the EUROSHET

Slovak republic was registered in this net in April 2005. Technical University of Košice took part as a contact point of EUROSHET. There is a specialized Department of safety and Quality of production at this University, which provides except of education activities also the research and service in the area of safety management systems, prevention of major hazards, advise form companies in the area of technical and operative safety. The Technical committee of Slovak National Accreditation Service for risk management has been established in the Technical University of Košice and starts its activities.

In last days we have began an information campaign which have to disseminate an awareness about the EUROSHET activities for other institutes and offer them a participation in the net. Technical University of Košice and mainly its Department of Safety and Quality of production has an interest to be active in EUROSHET, particularly in the area of safety management systems and technical safety of machinery.

The Directive No. 98/37/EC on technical requirements for machinery and on conformity

assessment was harmonized in Slovak republic only last year. Harmonized Governmental regulation (No. 310/2004) implements the EC conformity declaration and the machinery marking wholly by using CE sign in Slovakia. In the year 2004 the European Standard EN ISO 12100 -1,2 on Safety of Machines was also implemented into Slovak system, which replaced EN ISO 292 - 1,2, and it is vital for the conformity assessment. These steps open new possibilities for Slovak designers and producers in asserting at the European market. On the other hand, they are setting strict criteria for the compliance of standardized safety and they are obliging to higher responsibility. Standardization, testing and certification in the area of machinery safety is important, because it plays an important role for the ensuring of free movement of products in European market.

The content of this regulations and standards as well as principles for the safety design of machinery and their placing on the market is a subject of education process at our Department of Safety and Quality of production, which is a part of Machinery Faculty of Technical University of Košice. The consistent observation of design principles and the ability to assess risks already in constructional project and ability to reduce residual risks are the significant conditions for reputation of Slovak products in the European Market.

My contribution describes some principles of the safety machine building and machine placing on the market from point of view of standardization, testing and certification in Slovak republic. Connecting to the legal requirements, which prescribe "what" must be done, there is a need of standardized procedures and rules, which are providing solutions "how" the legal requirements can be fulfilled. Improvement in this area requires an international cooperation and the relevant information assurance. We believe that the participation in EUROSHEET can fulfill these requirements.