

STANDARDISED METHODS – TOOLS FOR MUTUAL UNDERSTANDING AND INTEGRATION INTO GLOBAL SOCIETY

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The paper presents basic concepts, terms, and their definitions in the field of standardisation – standard, international standard, national standard, testing standard, test report, and proficiency testing according to the ISO/IEC Guide 2:1996. The paper also explains the role of voluntary standards in the process of technical harmonisation. National adoption and implementation of international testing standards facilitates testing, comparison of test reports, and any proficiency testing, and can promote their global recognition. This can be recognised as a step toward creation of the global society. The Croatian »approach« to these activities is given attention in the light of globalisation and efforts made in establishment of Croatian standardisation infrastructure.

Key words:
international standard, national standards body, new Croatian standards, regional and international integration, standard, technical harmonisation, technical infrastructure, testing standard

The standard is defined as »a document, established by consensus and approved by a recognised body, that provides, for common and repeated use, rules, guidelines or characteristics for activities or their results, aimed at the achievement of the optimum degree of order in a given context« (1).

The international standards, established by consensus on the highest level of involvement in standardisation, adopted without any changes as national standards and used throughout the world can contribute to the process of globalisation by eliminating technical barriers to trade (2, 3).

A testing standard is concerned with a test method. Standardisation of test methods has a specific aim to make technical procedures applied in tests fit their purpose. The resulting normative document, acknowledged by a majority of representative experts and reflecting the state of the art, is presumed to be an acknowledged rule of technology at the time of its approval and at the appropriate level. Consensus of all parties concerned, reached at the international level (international testing standard), promotes understanding and prevents barriers between countries.

STANDARD, STANDARDISATION, AIMS OF STANDARDISATION

Standards should be based on consolidated results of science, technology, and experience, and aimed at the promotion of optimum community benefits on various levels (1). According to their definition, standards should be »established by consensus« of all interested parties. Standards can also be observed as the »state of the art« in particular fields (1). A collection of actual standards at each level (national, regional, and international) can be considered a reflection of existing technical capability at that level in general.

There are many aims of standardisation; general aims are given in the definition of the term. Specific aims are to make a product, a process, or a service fit their purpose under specific conditions. Such aims can be, but are not restricted to, a variety of control procedures through selection of the optimum number of sizes or types, assurance of compatibility and interchangeability of products, protection of health, safety, protection of environment, protection of consumers, removal of trade barriers, facilitation of technology, and so on. (1). The aims can overlap. The list of aims makes it clear that the greatest benefits can be achieved by using international standards established by consensus on the broadest scale.

What has been said for standards in general also goes for testing standards and their role in performing and facilitating testing, comparison of test reports, and their recognition by co-operating bodies. The international testing standards have a very special task in supporting everyday practices in laboratories; to accord results of science, technology, and experience, which ensures »the optimum degree of order« in the field of testing world-wide.

National adoption and implementation of international testing standards facilitates testing, comparison of test reports, and any proficiency testing worldwide, and can promote their global recognition. This can be seen as a step toward creation of the global society.

For the last ten or twenty years, differing national standards have been considered as one of obstacles in technical co-operation between countries at various stages of technological development and as barriers to international trade. If this fact is accepted, it is easy to understand that harmonisation of standards will be an important part of technical harmonisation for every country that wishes to gain access to any regional or global integration. Technical harmonisation means harmonisation of rules considering safety of persons and of products, and consists of harmonisation of technical regulations, harmonisation of standards, and harmonisation of conformity assessment procedures – testing, certification, and accreditation.

STANDARDISATION AS A PART OF TECHNICAL HARMONISATION IN CROATIA

The Republic of Croatia is preparing for the membership in the World Trade Organization (WTO). Beside activities aiming at technical harmonisation, the standardisation activities in Croatia have to meet WTO requirements, which means in particular:

- adoption of international standards as national standards whenever possible; and
- active contribution to the establishment of new international standards in order to remove possible trade barriers between Croatia and other WTO members (3).

On the other hand, the Republic of Croatia is also preparing for the future integration into the European market. The requirements of the European market and European organisations for standardisation should also be considered and met, especially regarding voluntary status of standards, adoption of European Standards in all sectors, and active contribution to the preparation of new European Standards, especially in the fields of interest of Croatian economy (4–7).

How does the State Office for Standardisation and Metrology, as the Croatian national standards body, cope with the above requirements? To understand the issue, one should consider the following four problems: inherited situation, membership in international and European organisations, establishment of technical infrastructure, and achievements in preparation of new Croatian Standards.

Inherited situation

Seventy percent of inherited standards were mandatory in use and were considered as technical regulations (this is not in line with the term »standard« as a document based on consensus). More than a half of the inherited standards were adopted over 20 years ago and they partially corresponded to international standards at the time of adoption. It should be emphasised that the inherited standards have ceased to reflect the state of the art in many sectors in Croatia.

Membership in international organisations

The State Office for Standardisation and Metrology was accepted as a Croatian member body by the International Organization for Standardization (ISO) and International Electrotechnical Commission (IEC) in 1993. As an affiliate member in the European Committee for Standardization (CEN) and in the European Committee for Electrotechnical Standardization (CENELEC), the State Office was granted the use of the results of European standardisation in 1995. These memberships secured full access to information about the activities of these organisations, their documents have become available in Croatia and they granted the right to adopt international and European standards as Croatian national standards.

Establishment of technical infrastructure

The necessary technical infrastructure is being gradually established through technical committees in various sectors. These bodies gather all interested parties to achieve national consensus on technical matters according to their needs and possibilities.

Such gathering is believed to ensure wide voluntary use of all established standards. The preparation of Croatian standards has followed certain guidelines to meet actual general requirements and to achieve compliance with the international and European standards as soon as possible:

- adoption of basic international standards by translation
- adoption of international and European standards – vocabularies by translation
- adoption of basic international standards in particular sectors by endorsement (translation upon request)
- adoption of harmonised European standards by endorsement (translation upon request)
- adoption of international standards referenced in harmonised European standards (translation upon request).

New Croatian standards (October 14, 1998)

Out of 83 standards published by October 14, 1998, 81 were adopted by translation (51 international and 30 European). There were only two Croatian national standards. Of 591 standards adopted by national cover-page or endorsement, 316 were international, 220 European, and 55 German standards (DIN). The total number of new Croatian standards amounts to 674. Currently, 107 Croatian standards are in a draft form and approximately another 1,000 are under way.

The relation to the international and European Standards illustrates the practical implementation of all the above-mentioned principles of technical harmonisation of standards in the process of regional and international integration. Most Croatian standards are adopted international standards, then European Standards, and so on. The number of purely national standards is low. The consensus merely on the national level establishes technical barriers to other trading partners and is not contributing to any integration.

The designation of new Croatian standards (such as HRN EN ISO 3696:1997, HRN ISO 6107–1:1998, HRN EN 45001:1996) clearly indicates the relationship between international, European, and Croatian national standards and illustrates that our technical practices are getting closer to internationally/regionally established technical practices, which will facilitate understanding between Croatia and its neighbours and support its integration into the global society.

New Croatian testing standards (in the area of water and air quality, surface active agents, fertilisers, paints and varnishes, acoustics, electromagnetic compatibility, and petroleum products) have already been adopted or are in the process of adoption. They serve the similar purpose: to enhance performance of tests, reflect the actual state of the art, and promote understanding and worldwide recognition of test results, which is another aspect of technical harmonisation.

CONCLUSION

Standardisation activities aim at establishing »provisions for common and repeated use« in order to achieve optimum degree of order in a given context. Established

documents – standards – are defined as general agreements between interested parties and they are widely and voluntarily used. International standards promote understanding and they contribute to the process of globalisation by eliminating technical barriers to trade.

National adoption and implementation of international testing standards facilitates comparison of test reports and results and can support their mutual and global recognition.

Standardisation has an important place in the process of technical harmonisation. The State Office for Standardisation and Metrology, as a Croatian standards body, has made first steps towards adoption of international and European standards, including testing standards. The standardisation process makes part in Croatia's preparation for the international and regional integration.

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Sažetak

NORMIRANE METODE ISPITIVANJA – POMOĆ UZAJAMNOM RAZUMIJEVANJU I INTEGRACIJI U GLOBALNO DRUŠTVO

Norma je definirana kao »isprava za opću i višekratnu uporabu, donesena konsenzusom i odobrena od priznate ustanove, koja sadržava pravila, upute ili obilježja djelatnosti ili njihovih rezultata i koja jamči najbolji stupanj uređenosti u određenim okolnostima«.

Norme se moraju temeljiti na provjerenim znanstvenim, tehničkim i iskustvenim rezultatima, a cilj im je jamstvo najboljeg stupnja uređenosti radi postizanja boljitka zajednice na različitim razinama. Međunarodne norme donesene konsenzusom na najvišoj razini normizacije, prihvaćene bez preinaka kao nacionalne norme i primijenjene diljem svijeta mogu pridonijeti procesu globalizacije uklanjanjem tehničkih zapreka među državama.

Norme za ispitivanje utvrđuju metode ispitivanja. Normiranje metoda ispitivanja ima poseban cilj: osigurava da tehnički postupci za obavljanje ispitivanja služe svojoj namjeni. Za završni normativni dokument, koji znači stanje tehnike pretpostavlja se da označava stupanj razvoja tehnike u vrijeme donošenja i na razini na kojoj se donosi. Konsenzus svih zainteresiranih strana postignut na međunarodnoj razini (međunarodna norma za ispitivanje) pridonosi njihovu međusobnom razumijevanju i suradnji.

Nacionalno prihvaćanje i primjena međunarodnih normi za ispitivanje olakšava ispitivanja, usporedbu različitih izvještaja o ispitivanju i ispitivanja osposobljenosti i može pridonijeti njihovu prihvaćanju i priznavanju u širim razmjerima. To se smatra korakom naprijed prema stvaranju globalnog društva.

Prikazan je hrvatski »pristup« djelatnosti normizacije u procesu globalizacije i dosadašnji napori u uspostavi normizacijske infrastrukture u Republici Hrvatskoj.

Ključne riječi:

međunarodna norma, norme za ispitivanje, nove hrvatske norme, tehnička infrastruktura, tehničko usklađivanje

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