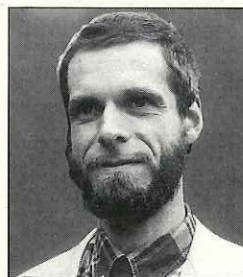


Certification and Accreditation Performed by National Standards Organizations

*Does It Reinforce or Damage the Traditional Work of NSOs?**



by Henk de Vries

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This contribution reflects his personal opinion.

Many national standards organizations (NSOs) have become involved in metrology, product testing, certification and/or accreditation in addition to their core activities of standards development, selling standards, providing information on standards and standardization, and maintaining membership in ISO and IEC.

NSOs, for example, in Denmark, Finland, France, Kenya, Sri Lanka, South Africa, and the United Kingdom are involved in product testing and certification. They have their own product labels that demonstrate a product's conformity to standards. Most of these NSOs also carry out quality and environmental management certification activities. Accreditation bodies are generally outside a given country's NSO, although the latter often plays a leading role in setting up such a body. In the Czech Republic, Jamaica, Jordan, Kazakhstan, Mexico, Russia, Saudi Arabia, Slovenia, and Thailand, however, the NSO performs accreditation.

While business theory, especially with regard to the service sector, looks favorably on diversification given certain conditions, the combination of certification and accreditation activities with standardization services represents a conflict of interest.

From theories on diversification strategies we learn that such portfolio extensions can be of benefit for customers, as we expect them to prefer one-stop shopping, provided that the services have an acceptable price/performance rate and are not conflicting. NSO activities in certification or accreditation can have synergy with core standardization services. Good internal communication within the NSO bureau is a prerequisite for this.

However, outside of general business theory, there are several concerns regarding this expansion of services within NSOs.

Testing and Certification

In short, for the sake of assuring their independence in standards development, NSOs should not be involved in testing and certification. Testing and certification, in general, are based on standards, so the target groups for standardization and testing/certification overlap. Moreover, NSO officers involved in these activities experience the applicability of

the standards concerned and can use this experience when revising the standards or preparing related ones. Furthermore, standardization as well as testing and certification are part of a country's institutional business infrastructure. However, there is a danger of conflicting interests.

Charles de Secondat, Baron de la Brède et de Montesquieu (1689–1755), developed the famous trias politica: he stated there should be a strict separation of powers among the legislative, the executive, and the judicial branches. There should also be a separation of powers among standards development, standards implementation, and testing/certification. NSOs develop standards, companies and other organizations implement them, and test houses and certification bodies judge whether or not companies meet the requirements laid down in the standards. The intertwining of standards development on the one hand and testing/certification on the other may cause problems:

- NSOs might be accused of influencing standards in order to stimulate their business in testing/certification by making standards complex, giving preference to their own test methods, or promoting development of additional standards.
 - If their information services help companies implement standards, NSOs are no longer independent in judging whether or not these companies implemented them well. Dependency might be avoided by having a strict separation of responsibilities within the NSOs, but then there are no advantages to combining them in one organization, except for sharing office facilities.
 - Information services may lose impartiality by promoting third party testing and certification over self-declarations of conformity.
 - The NSO's testing and certification department may decide to test and certify only on the basis of formal standards, thus influencing the choice of standards developing organizations in favor of formal standardization organizations.
- Additional complications are:*
- Many NSOs have their own mark of conformity that can be placed on products indicating their compliance to standards.

Sometimes the standard tag and the conformity label are even identical, such as the NF (Norme Française) mark and label. This leads to further confusion. Moreover, it is not clear who has declared that the products meet the requirements: the producer, a testing house, or the NSO's testing department.

- NSOs have a common interest in improving the world-wide ISO/IEC standardization system on which they all increasingly depend. Their cooperation in this area may be hindered by the competition between them in the field of certification.

Accreditation

Standardization has less synergy with accreditation than with testing/certification. The direct target group of accreditation is small, namely, testing and certification bodies and laboratories, and only a few standards are concerned. Furthermore, there can again be some synergy, as accreditation is also part of the national business infrastructure and office facilities can be shared.

The arguments against NSO involvement in testing and certification, however, are also partly applicable on accreditation:

- In their information services, NSOs are no longer independent; they might stress the importance of third party testing and certification, and focus less on self-declarations of conformity.
- The NSO's accreditation department may decide to base accreditation only on formal standards. This would influence certification bodies, companies, and other actors in favor of formal standards and, thus, of formal standardization organizations instead of other standards developing organizations.
- There is a lot of criticism on the functioning of certification bodies, especially in the area of ISO 9000 registration. A Dutch research project showed that the accreditation process functions insufficiently, which is partly related to the standards used: ISO/IEC Guides and, based on these, the European EN 45000 series of standards. At the moment, the stakeholders have no interest in chang-

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ing this situation, though a change would benefit most of them. NSO activities in accreditation, certification, and/or testing may withhold NSOs from taking initiatives for standards improvement.

From this, it can be concluded that NSOs should terminate their involvement in accreditation. A combination of accreditation and testing/certification should always be avoided, of course; this would be totally unreliable.

Conclusion

Testing, certification, and accreditation directly affect the NSO's reputation at the point of impartiality. Therefore, the inclusion of testing, certification, and accreditation into the NSO portfolio should be avoided in maturing economies. Separation reflects the differences in character and responsibilities among these functions. **SN**

¹ This article is excerpted from one published in the Proceedings of the Second Interdisciplinary Workshop on Standardization Research, University of the Federal Armed Forces Hamburg, Germany. It is based on the study *Standardization—A Business Approach to the Role of National Standardization Organizations*, to be published by Kluwer Academic Publishers, Boston/Dordrecht/London, November 1999 (De Vries, 1999). Data in this paper were taken from NSO Web sites and from Toth, Robert B. (1997) *Profiles of National Standards-Related Activities*, NIST Special Publication 912, National Institute of Standards and Technology, Gaithersburg, Md., 157 p.

SHOP TALK—CONT. FROM PAGE 25)

In another proactive measure, ASTM has made educational resources such as “A Guide to the Use of Standards in the ICC International Codes” and the “Code Development Process for the International Codes” readily available to ASTM staff and technical committees. (Also see the ICC web site at www.intlcode.org for additional information.) Managers are working closely with the affected committees, informing them about the requirement for incorporating mandatory language. Also available is BOCA's guideline of mandatory versus nonmandatory terms (see sidebar, page 25).

Finally, staff reviews the code change proposals and hearings each year. They track ASTM standards currently cited in the codes, as well as any additional ASTM standards proposed for a new citation, or possible deletion, during the annual code cycle. Working with the technical committee staff will facilitate the process for replacing permissive language when the need is identified. ASTM works closely with the relevant technical committee to review, and if necessary and appropriate, correct any standards noted as “non-compliant” by code staff. The staff manager can update the committee on the status of various standards under the committee's jurisdiction in the building codes, and can advise committees on the best way to eliminate permissive language, either through editorial changes or balloted technical changes.

The effort to ensure inclusion of mandatory language in standards intended for citation in the codes has required a commitment of ASTM resources. However, it has been successful, as the majority of ASTM standards cited in the codes are compliant. Most of the remainder are either on ballot or being editorially revised to remove permissive language, while a few others are being worked out at the subcommittee level.

Your staff manager can advise you on many issues involving your committee's standards in the building codes, including the incorporation of mandatory language. **SN**