MSS+

Management systems need more than just management system standards

by **Henk de Vries** and **Knut Blind**

Organizations benefit most when standards other than "just" management system standards (MSS) also receive close attention by top management and are integrated with strategy and operations.

For many managers, ISO is principally known for its management system standards (MSS) such as ISO 9001 (quality management) and ISO 14001 (environmental management). However, the International Organization for Standardization has so far published more than 18 000 "other" standards and adds about 100 new or revised standards to its portfolio every month.

Goals can be achieved better if quality management is combined with other standards

In this article, we relate these other standards to quality management systems (QMS) based on ISO 9001:

- Firstly, we explain how standards support the functioning of the system
- Then, we broaden the perspective: the goals to be achieved with ISO 9001 – a better position in the market and improved organizational operations – can be achieved even better if quality management is combined with the use of other relevant standards
- Finally, we address the question of how the management of standards can be embedded in the organization by linking standards management to quality management.

Standards for better functioning of the QMS

Articulating requirements

A core element of ISO 9001 is its customer focus. The organization provides products (according to ISO's concept, products include services) which are delivered to the customer and should lead to customer satisfaction.

This satisfaction should stem from conformity with the customers' requirements. The organization has to communicate with the customer about his or her needs which then have to be translated into requirements.

These requirements form input for the product realization process. The organization may strive even to exceed the expectations of the customers and in this way realize a competitive advantage over its competitors in follow-up transactions.

Standards other than ISO 9001 may further support objectives

Formulating requirements may be a bilateral exercise between organizations, but in many cases there is no need to do this from scratch – they can refer to standards.

Typically, these are standards that:

- Give requirements for products
- Provide concepts and terminology to help formulate exactly what the parties agree on
- Define test methods that can be used to check conformity with requirements. The latter can be also related to the "measurement, analysis and improvement" part of ISO 9001.

"Self-evident" requirements

Customer requirements can be made explicit and addressed in the communication between organization and customer, but sometimes the requirements are so obvious that these are not part of the negotiation, yet nevertheless necessary for the specified or intended use of the product.

Of course, this may be an area for possible confusion and even for dispute. Therefore, it is important to be able to build on international or national standards because these can be assumed to reflect what is seen as "normal" in society, thanks to their consensus-based development process in which all interested parties can be represented.

Legal requirements

In the ISO 9001 approach, meeting legal requirements is one of the objectives of the quality management system. In some cases, standards

About the authors

***Henk de Vries** is Associate Professor of Standardization, Rotterdam School of Management, Erasmus University, The Netherlands.*

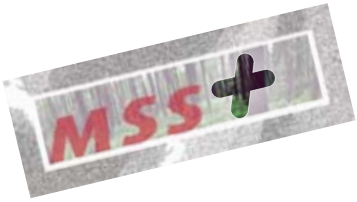
E-mail HVries@rsm.nl

Web www.rsm.nl/hdevries

***Knut Blind** is Professor of Standardization, Rotterdam School of Management, Erasmus University. He also holds the Chair of Innovation Economics at the Technical University in Berlin, Germany, within the Faculty of Economics and Management, and is head of the Competence Centre "Regulation and Innovation" of the Fraunhofer Institute ISI.*

E-mail KBlind@rsm.nl

Web www.isi.tu-berlin.de/menue/ueber_uns/team/prof_knut_blind/parameter/en/



may be used to meet these requirements.

In, for instance, the European "New Approach", legal requirements for product safety in particularly are laid down in European Directives which have to be implemented in the national legal systems of the member states of the European Union and the European Free Trade Association.

These "essential requirements" are formulated in a general way. European standards provide detailed requirements for specific products, or test methods. Then, meeting the standards provides a presumption of conformity with the essential requirements in the Directives.

Process management

ISO 9001 requires a process approach. It is up to the organization how its processes are shaped. However, these processes are not necessarily in all aspects unique to the organization – there may be similarities with processes in other organizations. When that is the case, common standards might be relevant, not only for the quality, reliability and safety of the processes, but also for cooperation and interaction with other companies in the supply chain.

Resource management

Resource management includes management of human resources and management of other resources such as information technology (IT) systems. Human resource management may benefit from standards for the qualification of employees. Effective use of other resources may profit from standards for ensuring interoperability, quality and occupational health and safety.

Standards for measurement, analysis and improvement

Continual improvement of the quality management system is an essential part of ISO 9001. Measuring how inputs are transformed into outputs and measuring customer satisfaction followed by analysis of the data is the basis for such improvements. Standards may provide methods for some of these measurement methodologies.

Standards for business results

The above shows how standards can support in a number of ways the good functioning of an ISO 9001-based quality management system. However, a QMS is not an end in itself – it serves business objectives and standards other than ISO 9001 may further support the same objectives.

In general, these objectives can be grouped into two major categories:

- Achieving an advantage in the market in comparison with competitors
- Improving the functioning of the organization – which, of course, is also beneficial to the first objective.

Success in the market

Standards may contribute to market success by facilitating:

- Market entry of products because they meet requirements, laid down in standards,

that are important for customers and can be verified using test methods also laid down in standards

- Regulatory acceptance because conformity with standards may be a means of demonstrating conformity with legal requirements
- Expanding to new markets where the same – international – standards are implemented
- Interoperability of products with other products, or within systems, which are used by customers
- Decreased time to market of new products through coordination efficiencies
- Reduction of risk of accidents – improved product safety and stronger liability position if conformity with recognized standards can be demonstrated
- Improved environmental performance and demonstration of this performance.

Improving the organization

Internally, management standards can be complemented by other standards for:

- Not re-inventing the wheel, but using existing and already successful solutions laid down in standards
- Reducing design costs by making component evaluation and coordination more efficient
- Bringing procedures in line with what is commonly practised elsewhere, so that cooperation is simpler
- Efficient working, by repeatedly using the same solution (smoothening the learning curve)
- Facilitating outsourcing due to common or compatible management processes
- Cheaper purchasing, due to economies of scale, and more transparency in the market – which results in intensified price competition
- Less cost of stock because of standardized spare parts
- More efficient logistics by relating the physical flow to the information flow by using standardized identification systems, such as barcodes and RFID, and by using standardized packaging, handling, storage and transport, including standardized freight containers and pallets
- Using recognized requirements – for example, related to quality – and test methods for sub-assemblies and raw materials
- Fewer problems in the field of occupational health, safety and the environment
- When standards are correctly implemented, the vulnerability of the organization caused by the absence of key personnel (illness, vacation, job rotation, etc.) can be avoided, or at least diminished.

Integrating standards management and quality management

Given the potential of standards for helping businesses to reap benefits, the use of standards by companies deserves sound management – which can be based on their governance structure.

Standards contribute to **market success**

Large enterprises may have a standards officer or a standardization department. For many medium-sized enterprises and for almost all small enterprises this is not feasible, but nevertheless they may benefit from standards – the question is how to organize this in a systematic way.

An option is to integrate standards management with quality management in the sense that the quality manager is also responsible for several tasks related to standards. An option is to make three organizational units responsible:

1. Board

- Strategy
- Setting priorities
- Management review

2. Product development/engineering

- Tracing standards
- Analysing – connecting organizational needs to available standards
- Selecting standards
- Developing additional technical company standards
- Implementing standards
- Participation in external standardization

3. Quality management

- Developing procedural organization standards (procedures, instructions)
- Informing about procedural company standards
- Maintenance of the standards collection
- Auditing the implementation of standards.

Standards: a management issue

ISO 9001 emphasizes the role of top management. It should formulate and employ policy in the field of quality and should review whether objectives have been met. This article seeks to demonstrate that standards other than management system standards also deserve such attention by top management.

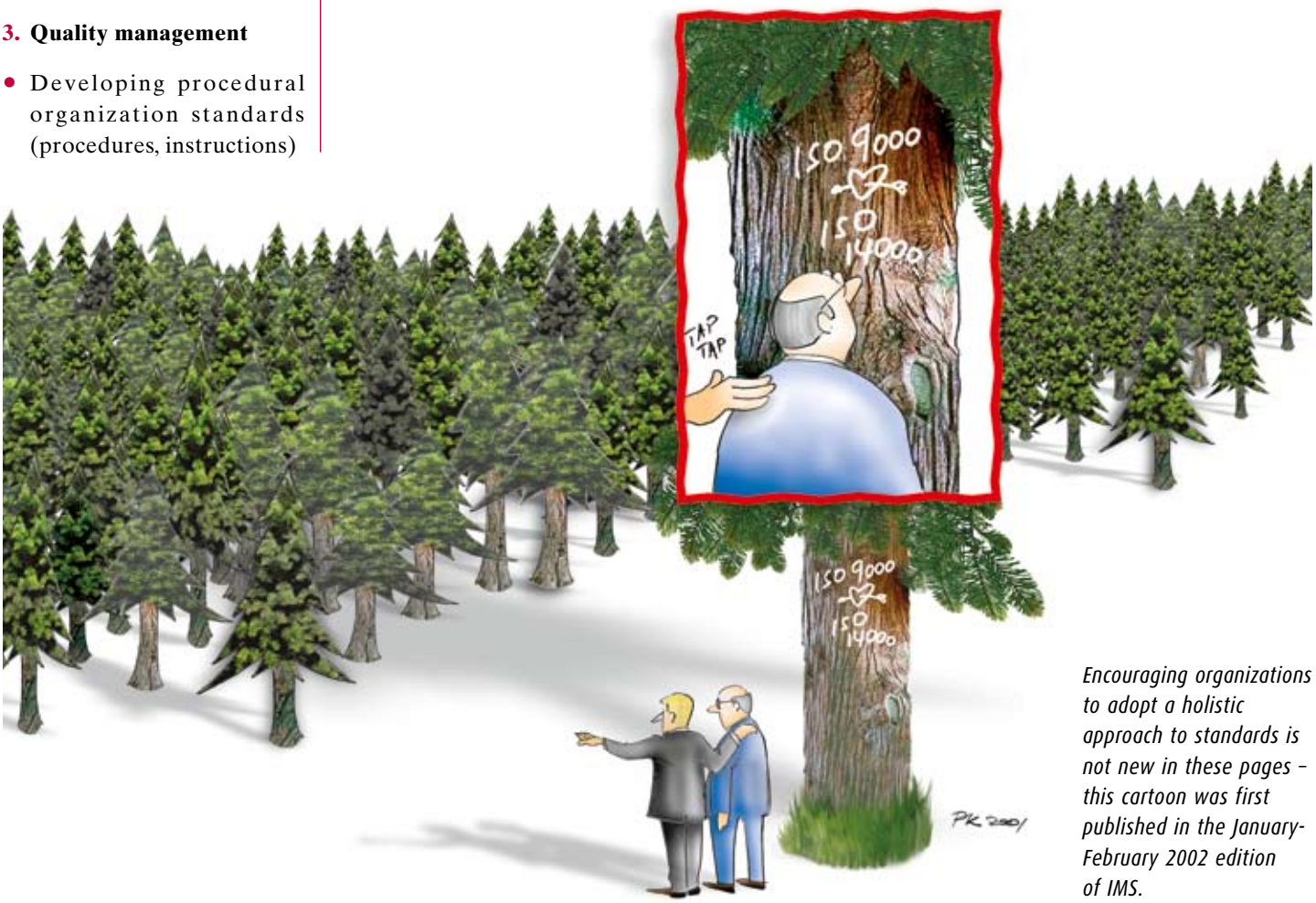
This attention should be more than a once-only occasion in the Board meeting. A governance structure is needed in which responsibilities, authorities and tasks are determined so that the right people do the right thing, including taking management decisions related to standards.

An option is to **integrate** standards management with quality management

One of the issues is if the organization should leave the setting of standards to others. Standards are the rules for the game of business – it is not self-evident to leave the setting of these rules to competitors.

Pro-active organizations may want to do more, such as participating in the development of standards. In an article in a future issue *ISO Focus+*, we therefore intend to focus on participation in external standardization. •

Standards are the rules for the game of business



Encouraging organizations to adopt a holistic approach to standards is not new in these pages – this cartoon was first published in the January-February 2002 edition of IMS.