Marks of conformity assessment

A brief report on current practices in the use of marks of conformity assessment, including marks of conformity and logos

First edition

International Organization for Standardization

ISO in brief

ISO is the International Organization for Standardization. It is made up of national standards institutes from countries large and small, industrialized and developing, in all regions of the world. ISO develops voluntary technical standards which add value to all types of business operations. They contribute to making the development, manufacturing and supply of products and services more efficient, safer and cleaner. They make trade between countries easier and fairer. ISO standards also serve to safeguard consumers, and users in general, of products and services – as well as to make their lives simpler.

ISO develops only those standards for which there is a market requirement. This work is carried out by experts on loan from the industrial, technical and business sectors which have asked for the standards, and which subsequently put them to use. These experts may be joined by others with relevant knowledge, such as representatives of government agencies, consumer organizations, academia and testing laboratories.

Published under the designation of International Standards, ISO standards represent an international consensus on the state of the art in the technology concerned.

CASCO

CASCO is ISO's policy development committee on conformity assessment.

CASCO's terms of reference are as follows:

- to study means of assessing the conformity of products, processes, services and management systems to appropriate standards or other technical specifications;
- to prepare international guides and International Standards relating to the practice of testing, inspection and certification of products, processes and services, and to the assessment of management systems, testing laboratories, inspection bodies, certification bodies, accreditation bodies and their operation and acceptance;
- to promote mutual recognition and acceptance of national and regional conformity assessment systems, and the appropriate use of International Standards for testing, inspection, certification, assessment and related purposes.

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Foreword

This report was prepared by a special working group set up by ISO/CASCO to examine the use of marks of conformity assessment. The working group is undertaking a number of activities aimed at reducing common misunderstandings about marks and at educating both consumers and conformity assessment bodies on the true significance of marks.

This working group's main task is to develop an International Standard for conformity assessment bodies on the use of marks of conformity assessment. It will cover several aspects which may include the following:

- the use of marks for specific purposes;
- the use of a single mark for multiple conformity assessment purposes;
- whether and how marks with separate purposes can be used jointly; and
- the avoidance of misuse of marks.

The group is also developing concepts for simplifying the application of marks of conformity assessment in order to further reduce their proliferation and confusion about what they mean.

The purpose of this report is to document the current practices around the world in the use of marks of conformity assessment and, in so doing, to provide the working group with information that would be useful in determining the scope and subject matter of the forthcoming International Standard.

Some of the practices covered in this report do not conform to existing International Standards and Guides, but have been included to provide a full record of the way that marks of conformity assessment are now used. No attempt has been made to identify nonconforming practices in the report. However, the working group will take note of any nonconforming practices and determine how best to deal with them in the International Standard being prepared by the group*.

The information in this report was deemed worthy of a wider distribution than to the members of CASCO alone. Readers should take care, however, not to use this document as an authoritative reference on good practice in the use of marks of conformity assessment, but to use it solely as an inventory of current practices – sanctioned and unsanctioned. This material is intended for use by all of those, including the members of CASCO working groups, who wish to improve their understanding of marks and their proper application.

* During the period that the CASCO working group is completing its task, information is welcome on nonconforming practices. Readers are invited to send any information on this and related topics to the CASCO Chairman, c/o ISO Central Secretariat, Case postale 56, 1211 Genève 20, Switzerland. Fax + 41 22 733 34 30, E-mail central@iso.ch

1 Introduction

How aware are consumers of marks of conformity assessment (hereafter referred to as "marks") and should they be at all concerned about their use?

Marks can convey powerful messages about a product or service, but do all users understand the messages? Does a mark attest to the safety of a particular product, or its impact on the environment, or its durability and performance? Does a mark represent a claim that the product or service supplier operates under a management system complying with particular standards or codes of practice? Who owns the mark appearing on a product or accompanying a service? Does it belong to the supplier or an independent conformity assessment body?

Why do some products have many different marks? Will the marks provide access for a product or service to a particular market, or will it result in acceptance of the product or service by a regulatory body? Where can a consumer find out more about the significance of a particular mark? Who is liable if a marked product fails?

This report describes features of marks currently in use and their significance. It also identifies areas where future guidance on use of marks may lead to greater understanding of the meaning of different marks and their relevance to end users of products and services.

2 Marks and other labelling

Marks on products or on information documents about products, processes or services take many forms. It is important to distinguish between, on the one hand, those which identify or describe products, processes or services and their characteristics and, on the other hand, those which indicate compliance with a specification, code of practice, management system or product or service standard. The latter group is normally based on conformity assessment by an independent certification, accreditation or inspection body, or placed on the product by the supplier through self-declaration of compliance.

Some examples not based on conformity assessment include the trade marks or brand names of the supplier, nutritional labelling, safety or handling warnings, claims of the absence of particular ingredients (often related to some eco-labelling programmes, or alerts to diet-sensitive consumers), or details on the method of production. While it is possible for some of these labelling claims to be verified by conformity assessment, such labelling is usually done without a formal, structured conformity assessment process.

The significance of individual marks is directly related to the type and purpose of the conformity assessment undertaken. The formal definitions of conformity assessment are given in ISO/IEC Guide 2:1996[1)] as follows:

1) ISO/IEC Guide 2:1996 – *Standardization and related activities – General vocabulary*

- ***conformity***

  fulfilment by a product, process or service of specified *requirements.*

- ***conformity evaluation***

  systematic examination of the extent to which a product, process or service fulfils specified *requirements.*

- ***conformity assessment***

  any activity concerned with determining directly or indirectly that relevant *requirements* are fulfilled.

  NOTE:

  Typical examples of conformity assessment activities are sampling, *testing* and *inspection*; evaluation, verification and *assurance of conformity (supplier's declaration, certification); registration, accreditation* and *approval*, as well as their combination.

- ***mark of conformity (for certification)***

  protected mark, applied or issued under the rules of a *certification* system, indicating that confidence is provided that the relevant product, process or service is in *conformity* with a specific *standard* or other *normative document.*

  [Separate definitions are given in ISO/IEC Guide 2 for each of the words shown above in italics in the definitions]

3 Main Conformity Assessment activities

The main assessment activities that may result in a mark accompanying a product or service are:

(i) inspection

(ii) testing

(iii) management systems certification (quality, environmental, occupational health and safety)

(iv) product certification (or related forms of product assessment).

As described in Section 4 of this report, another layer of conformity assessment is *accreditation* of the providers of the above conformity assessment services. Some other forms of conformity assessment, such as personnel certification, have little or no relevance to marks.

It should also be noted that there are essentially three categories of organizations that undertake conformity assessments of products, processes and services. They are commonly described as *first, second* or *third party* bodies.

First party conformity assessment involves declarations or attestation by the manufacturer or supplier of a product, process or service (including management systems), that the product, process or service complies with specified requirements. These are sometimes described as *suppliers' declarations* or *manufacturers' declarations* and procedures for such are laid down in ISO/IEC Guide 22.

Second party conformity assessment involves evaluation of a product, process or service (including management systems) by the purchaser or end user. Major user organizations are commonly involved in second party conformity assessments.

Third party conformity assessment involves evaluation of a product, process or service (including management systems)

by an organization that is independent of the supplier and the end user.

It is *third party* conformity assessment that is of major relevance to the use of marks, although both first party and second party conformity assessments do sometimes result in attribution of marks to products, processes or services.

> Note: References to products, processes or services should be read as inclusive of quality management systems.

The main conformity assessment activities listed above result in marks that have quite different meanings.

Inspection, in simple terms, involves assessment of a product, commodity, assembly, or service by competent personnel judging conformance with a set of defined requirements. Various forms of inspection include visual assessment, on-site gauging, measurement or testing, design review, etc., and often involve the application of engineering or other professional knowledge by staff of the inspection body. Marks associated with inspection bodies include stamps or marks of the inspection body, either placed on the articles inspected, or on inspection reports or certificates attesting to the conformance or otherwise of the inspected items. Such reports or certificates often also include the Marks of bodies that have accredited the competence of the inspection body.

Testing is perhaps the most commonly used form of conformity assessment. It means that where characteristics of products, processes or services are tested to determine conformance with a specification or standard. Testing is usually regarded as a laboratory function, but there is not always a clear line of demarcation between testing and inspection. Typically, marks associated with testing are found on a test report or test certificate and are often the basis for product certification. A laboratory which has been recognized by an accreditation body as competent to perform the tests included in an accreditation scope may refer to its accreditation and its conformance with accreditation criteria (such as ISO/IEC Guide 25) on test certificates and test reports.

Management systems certification (such as quality systems certification to the ISO 9000 series of standards and environmental management systems certification to ISO 14001) involves recognition that a certified organization's management system complies with a defined management systems standard or code of practice. This form of certification does not recognize conformance with a specific product or service standard, and marks for systems standards, when placed on products, have resulted in major confusion amongst many consumers who have interpreted them to mean that the products are certified rather than the supplier's management system. Systems certification marks typically appear on letterheads, promotional literature, packaging and product information documents of certified suppliers. Often, they may also be accompanied by the mark of an accreditation body that has recognized the competence of the certification body to undertake management systems certification. More information is available in the ISO brochure, "Publicizing your ISO 9000 or ISO 14000 certification".

Product certification involves the issue of a certificate or mark (or both) to attest that a specific product meets a defined set of requirements for that product, usually specified in a standard. The mark is normally found on the product or its packaging and may also appear on a certificate issued by the product certification body. Most marks for products are accompanied by a reference to the number or name of the relevant product standard, but in some cases the certification of the product may relate only to parts of the standard (such as the safety aspects only). There are various evaluation techniques used by product certification bodies (most of them dependent on testing), but the actual technique

used for specific products is not usually evident to consumers.

Note : Declarations of conformity by the manufacturer or supplier of a product, process or service may be the result of the supplier's own evaluation of their product, process, or service, etc., or may be based on the result of one of the main conformity assessment activities listed above that has been conducted by a second or third party.

4 Significance of marks

The significance of different types of marks should, ideally, be understood by the purchaser and user of a product or service. However, there are many factors that can lead to confusion and misunderstanding about what different types of marks actually mean. It is hoped that the International Standard on marks being developed by CASCO will reduce such confusion and misunderstanding and provide a basis for better control of the use of marks by conformity assessment bodies.

Ideally, marks should demonstrate to consumers that the product or service meets and continues to meet the generally accepted standard for that product or service.

For other parties, such as regulators and accreditors, the marks may also need to demonstrate that the body which has performed the conformity assessment is competent to do so.

For consumers in general, it is clear that there is great confusion about the meaning of different types of marks. The major areas of misunderstanding and confusion are the following:

1. The difference between the use of marks for voluntary or mandatory purposes.
2. The characteristics of a product or service that are and are not endorsed by a specific mark.
3. The difference between marks endorsing conformance of management systems and those endorsing specific product or service conformance.
4. The significance of multiple marks or a family of marks accompanying a single product or service.
5. The difference between the logos or marks of accreditation bodies (endorsing the competence of other conformity assessment bodies) and those of an accredited conformity assessment body.
6. The ownership of marks and the transparency of the processes by which they are applied by conformity assessment bodies.
7. The application of a single mark by multiple pathways.

Before examining in more detail each of the above sources of misunderstanding, it is worth noting that there is a special form of mark which is intended to satisfy the need to demonstrate that conformity assessment bodies are themselves competent to apply marks for specific purposes. This is the role of one group of conformity assessment bodies generically described as *accreditation bodies.* Their function is to evaluate the competence of various types of conformity assessment bodies for conformance with accepted international codes of practice. The figure on the back page illustrates the role of various accreditation bodies and the codes of practice applicable to their recognition roles.

In effect, there are layers or hierarchies of recognition involved in many conformity assessment activities. While these layers are intended to add confidence to the overall process of conformity assessment,

they may also add to the possible confusion about the significance of marks, because the recognition of a conformity assessment body by an accreditation body may add yet another mark to the product or service.

5 Marks – Sources of misunderstanding

Some of the major sources of misunderstanding about marks and their significance are as follows:

5.1 Voluntary or mandatory marks?

Consumers are often unaware of whether a mark is applied for mandatory or voluntary purposes. Some marks are mandatory for regulated products in specific markets. Usually, these cover aspects of safety or the applicability of use of a product within a national system (such as network compatibility of terminal telecommunications equipment). In some markets the ownership of a mandatory mark may be held by a regulator. In other cases, the regulator may use available marks owned by conformity assessment bodies that apply them (i.e. the same mark) to both regulated and non-regulated products or services.

5.2 What is assured?

Consumers may also be unaware of the scope of endorsement of a specific mark. This may be due to the fact that some marks apply only to parts of a particular product or service standard or specification. For example, a product standard may cover safety, performance and durability requirements of a particular product, but the mark might be restricted to the safety clauses only. Such restrictions are often not clearly shown in the mark of a product.

5.3 Systems conformance or product conformance?

As mentioned in Section 3 of this report, a growing area of confusion related to marks is the significance of those covering suppliers' conformance to management systems standards (e.g. ISO 9000 series and ISO 14001) and those covering conformance to specific product or service standards. Some certification and accreditation bodies prohibit the use of marks covering systems standards on products, but others do allow this practice. The problem for consumers of distinguishing between systems conformance and product conformance becomes even greater when the same or very similar marks are used by a conformity assessment body for both management systems and product certifications.

5.4 Multiple marks?

Some suppliers are required to carry multiple marks on their products, or accompanying their services. Sometimes this may be due to a product's having to comply with mandatory marks requirements of different regulators in a particular market. For example, compliance marks could be required on a single product for electromagnetic interference and compatibility, electrical safety, energy rating, and network compatibility. In other cases, a single product may require multiple marks covering the same characteristic (such as electrical safety) because the product is sold in different markets and each market requires a separate mark to satisfy local demands. This may be so even if the multiple marks cover exactly the same product standard or specification.

[The costs and confusion caused by multiple marks is an issue of concern to both suppliers and consumers, and CASCO is currently developing guidelines and concepts which might provide models for reducing the proliferation of marks. The need for separate marks for separate markets is also an area where development of mutual recognition agreements between

regulators, accreditation and conformity assessment bodies may, in future, further reduce the proliferation of marks.]

5.5 Logos or marks?

Third party conformity assessment bodies (including accreditation bodies) usually have their own logos that are intended to provide a corporate identity, like the trademarks or brand names of suppliers of products or services. Some conformity assessment bodies also use their logos as marks, while others have corporate logos separate from their marks.

Occasionally, there may be some confusion between the significance of logos and marks, particularly if they both appear on products or certificates of conformity.

5.6 Ownership and transparency?

It is not always clear to a consumer which body has attached or supplied a mark for a product or service. Without such identification, it is difficult for a consumer to seek information on the significance of such a mark and the process by which it has been awarded to a supplier.

The processes by which marks are granted should be transparent. For the accreditation of some conformity assessment bodies, it is a requirement for such accreditation that the conformity assessment process be published, with details freely available to interested parties. In other cases it may be quite difficult for consumers to identify the processes used. For product certification, for example, there are quite different approaches, with varying degrees of surveillance of conformance, which are commonly recommended as conformity assessment processes, but it is rare that a consumer will understand which approach has been used, and be knowledgeable about the differences between them.

5.7 Single mark – multiple processes?

Some marks are generic in nature and may be capable of application through multiple processes. One example is the application of the mandatory CE marking to certain regulated products in Europe, to denote compliance with all essential requirements of applicable European Directives, following the completion of required conformity assessment procedures. For application of the CE marking, declarations of conformity are always required and, depending on the specific product category, there may also be a requirement for conformity assessment by various types of independent conformity assessment bodies (e.g. laboratories, product certifiers, quality systems certifiers and inspection bodies) that have been declared "notified bodies".

In specific cases, the CE marking may indicate compliance with either harmonized European Standards or with other standards judged to meet the essential requirements specified for particular product categories in the relevant EC Directives.

5.8 Who uses the mark?

Some marks are attached to products to meet regulatory requirements (for example, the CE marking in Europe), and the significance of such marks may need to be understood by importers, retailers and distributors of the affected products, but not necessarily by consumers. Other marks may be of interest to all parties, including regulators and consumers.

6 Regional marks and recognition

Historically, there have been a number of regional marks developed, including those in Europe for cables (HAR) and conformity to European standards (Key Mark). There is growing discussion about the possible adoption of other regional marks, which are

intended to recognize the equivalence of conformity assessment activities conducted within a region by different bodies. While the purpose of such marks is to reduce the need for numerous national ones, it is usual, in their introductory phases, that both regional and national marks continue to appear side-by-side on products and services. While a reduction in the proliferation of marks is an intended aim of such regional schemes, there are some concerns about access to them by conformity assessment bodies operating outside the regions. The schemes may be perceived as being a potential technical barrier to trade for parties exporting to these regions.

The concept of regional marks is being extended further into proposals for international marks such as those being considered by the International Accreditation Forum (IAF) and International Laboratory Accreditation Cooperation (ILAC).

Regional and international marks extend beyond the traditional first and third party classification. Such marks may enhance the efficacy of marks in general, but the problems of proper use and application addressed above will need to be taken into account in relation to them as well.

The hierarchy of marks of conformity (examples)

Marking body	Common types	International codes of practice
Accreditation Body	(1) Accreditation of Quality System Bodies	ISO/IEC Guide 61
	(2) Accreditation of Laboratories	ISO/IEC Guide 58
	(3) Accreditation of Product Certification Bodies	ISO/IEC Guide 61
	(4) Accreditation of Inspection Bodies	ISO/IEC TR 17010
	(5) Accreditation of Environmental Management Systems Bodies	ISO/IEC Guide 61
Recognizes competence of other conformity assessment bodies		
Conformity Assessment Body	(1) Quality Systems Certification Body	ISO/IEC Guide 62
	(2) Laboratory	ISO/IEC Guide 25*
	(3) Product Certification Body	ISO/IEC Guide 65
	(4) Inspection Body	ISO/IEC 17020
	(5) Environmental Management Systems Certification Body	ISO/IEC Draft Guide 66
Certifies conformance to specific product, service or management system standards, etc.		
Product or Service Supplier	(1) Manufacturer's declaration	ISO/IEC Guide 22, plus Product Standards, Systems Standards (e.g. ISO 9000/ ISO 14000), Specifications, Codes of Practice, etc.
Applies brand name, trademarks and other labels to products, in addition to conformity marks or logos of conformity assessment and accreditation bodies.		
End User		

* Future ISO/IEC 17025

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