What's in a Name: Accreditation vs. Certification?

by Roger Muse



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Despite the fact that accreditation and certification denote different concepts, they are often used synonymously. In reality, however, the terms are vastly different, describing the end result of entirely different processes.

The World Trade Organization announced in April its prediction that global export trade will approach $16.75 trillion this year. A key factor in the rampant evolution of global markets has been the acceptance of international standards and compliance programs that facilitate the movement of goods and services across national borders.

ISO, the International Organization for Standardization, is the world's largest standard-setting body. Its inventory of more than 17,000 publications includes requirements that are unique to individual industrial sectors and others that are intended for use across multiple sectors. The latter, known as generic standards, include the well-known ISO 9000 series for quality management and the ISO 14000 series for environmental management. More than a half-million organizations in more than 160 countries have already implemented one or both of these management systems, helping to make ISO a household name in many nations. The ISO member in the United States and seller of ISO standards is the American National Standards Institute (ANSI).

Many of ISO's standards include guidance on how to demonstrate that a product, person, service or system meets the requirements contained within a standard. How the assessment of conformity is performed—and by whom—can have a significant impact on the level of confidence buyers and regulators place on the assessment results.

In some cases, the supplier may offer a first-party statement of compliance. In others, the buyer conducts his or her own second-party assessment of conformity. Yet another option is to engage a third party that is recognized as being independent of both the provider and intended user.

Third-Party Assessment

Among the several terms that have been identified for third-party conformity assessment activities, two rise to the top because of common usage:

- Accreditation is a "third-party attestation related to a conformity assessment

body conveying formal demonstration of its competence to carry out specific conformity assessment tasks," as defined by ISO/IEC 17011 Conformity Assessment—General Requirements for Accreditation Bodies Accrediting Conformity Assessment Bodies.

- Certification is a "third-party attestation related to products, processes, systems or persons," as defined by ISO/IEC 17000 Conformity Assessment—Vocabulary and General Principles.

The hierarchy is structured in such a way that accreditation is one step higher than certification. Accreditation is reserved for those bodies performing some type of certification service. This might be an ISO/IEC 17025 accredited lab issuing an accredited calibration or testing certificate, an accredited certification body issuing an ISO 9001 (management system requirements) certificate, or an accredited product or personnel certifier whose responsibility is to certify a product. Accredited certification bodies are commonly referred to as CBs. A parallel example outside the standardization community is in higher education: college students receive degrees, a type of certification, through universities that have themselves been accredited.

Given the global awareness of the ISO management system standards, certification is most often associated with ISO 9001 and the environmental management systems standard ISO 14001. However, accredited certification programs exist for a range of management systems, including the ISO 27001 program for information security management and the ISO 22000 program for food safety management. Domestically, there also is a certification program for occupational health and safety management systems that is based on ANSI/AIHA Z10, the American national standard for occupational health and safety management systems.

IAF, ILAC and International Recognition

Who is watching over the accreditation bodies? Two groups share this responsibility:

- The International Accreditation Forum (IAF) oversees, evaluates and formally recognizes bodies that accredit organizations that certify management systems, products or persons. For example, in the United States the ANSI-ASQ National Accreditation Board is recognized as the organization that accredits all management systems certification bodies under the ANAB brand. Certification bodies accredited by ANAB have been found to be in compliance with ISO/IEC 17021, the principles and requirements for bodies providing audit and certification of management systems.

Besides being a member of IAF, ANAB also is a signatory of IAF Multilateral

Cooperative Arrangements (MLAs). IAF purposes to facilitate international trade by promoting international acceptance of accredited conformity assessment certificates. The MLAs are the vehicle by which IAF hopes to do this, by creating a network of certification bodies whose results are recognized internationally.

- The International Laboratory Accreditation Cooperation (ILAC) oversees, assesses and formally recognizes accreditation bodies that participate in accreditation of calibration and testing laboratories. U.S. accreditation bodies seeking ILAC recognition are likely to go through one of ILAC's regional co-operations such as the Asia-Pacific Laboratory Accreditation Cooperation (APLAC), or the Inter-American Accreditation Cooperation (IAAC), for example. In the United States, ACLASS: an ANSI-ASQ National Accreditation Board company, A2LA, NVLAP, IAS and L-A-B are recognized organizations that accredit calibration and testing laboratories. In addition to calibration and testing laboratories, some accreditation bodies accredit other organizations, such as inspection bodies and reference material producers (RPM).

ISO 9001 vs. ISO/IEC 17025

Part of the confusion between accreditation and certification arose when some certification bodies in the quality community began assessing laboratories to ISO/IEC 17025, a standard particular to determining competency of testing and calibration laboratories, and, therefore, the domain of ILAC-recognized accreditation bodies.

There are differences in the purpose, criteria and emphasis of the ISO 9001 quality system standard and those of the accreditation standard ISO/IEC 17025. Although the standards have been aligned, they are still separate. Demonstrating compliance with the criteria of one does not satisfy the conformity requirements of the other.

IAF and ILAC passed a joint resolution offering clarification and reaffirming that ISO/IEC 17025 is an accreditation rather than a certification activity. But confusion persists and there are still common questions about whether a company needs certification to ISO 9001, accreditation to ISO/IEC 17025 or both.

In short, ISO 9001 is a certification that applies to an entire organization. While effective as a management evaluation tool, this standard does not have enough technical content to provide an assurance that test, inspection or calibration data are accurate and reliable. Laboratories that do not manufacture products and perform calibration or testing as the primary function of the company, will typically need to meet the accreditation requirements of ISO/IEC 17025 and not necessarily the certification requirements of ISO 9001: 2000.

Suppliers seeking competent calibration or testing facilities that are underpinned

by a quality system should look for facilities that have been accredited to ISO/IEC 17025 and that have a scope of accreditation appropriate for the testing or calibration required. Equally as important, accreditation to ISO/IEC 17025 should be granted by an accreditation body recognized under the ILAC mutual recognition arrangement (MRA). Much like IAF and its MLAs, ILAC aims to facilitate international trade by promoting the acceptance of accredited test and calibration results. The MRA is the vehicle by which ILAC hopes to do this, by creating a network of accreditation bodies whose results are recognized internationally.

For companies offering more than laboratory services, it is becoming increasingly common for those organizations to be certified to ISO 9001 while the laboratory within the organization is accredited to ISO/IEC 17025. Ideally, the company would achieve ISO 9001 certification through an accredited certification body and ISO/IEC 17025 through an ILAC-recognized accreditation body.

Other ISO Requirements

Also, some organizations that are accredited to an industry-specific standard also may have an internal laboratory accredited to ISO/IEC 17025. For example, reference material producers and inspection bodies often seek both. An RMP is what a manufacturer would use to ensure the chemical they use is in fact that chemical at a certain amount; a verification and clarification of identity and amounts. An RMP will typically seek accreditation to ISO Guide 34, which is particular to determining competency of reference material producers, but also may have its laboratory accredited to ISO/IEC 17025.

Likewise, an inspection body accredited to ISO/IEC 17020, which is particular to criteria for the operation of inspection bodies, also may seek ISO/IEC 17025 accreditation for its laboratory. In both cases these companies also may be certified to a management system such as ISO 9001: 2000.

There is no MRA yet for RMPs or inspection body accreditation, but it is likely that such MRAs will fall under the auspices of ILAC and its regional co-operations in the future.

The Future of Conformity Assessment

It is estimated that standards and conformity assessment influence 80% of all exports—that means the dollars and cents impact in 2008 alone is nearly $13.5 trillion.

These numbers have prompted businesses to leverage compliance with standards—whether design-specific, performance-based or management systems—to boost their competitive position while also providing regulatory

confidence and protecting public safety. In turn, businesses are demanding globally accepted standards and globally accepted assessments of compliance.

ISO, along with a host of other internationally recognized standards bodies, is meeting the requirements for globally relevant standards, while accredited certification bodies are ensuring that organizations are compliant with those standards.

And in separate but parallel efforts to encourage free trade, IAF MLAs and the ILAC MRA have been created to establish networks of certification and accreditation bodies, respectively, whose results are recognized internationally. **Q**

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Tech Tips

- ISO/IEC 17000 defines certification as "third-party attestation related to products, processes, systems or persons."

- ISO/IEC 17011 defines accreditation as "third-party attestation related to a conformity assessment body conveying formal demonstration of its competence to carry out specific conformity assessment tasks."

- Accreditation bodies should be recognized by either the International Accreditation Forum or the International Laboratory Accreditation Cooperation.

Roger Muse
roger.muse@aclasscorp.com
Roger Muse is director of sales and marketing for the ANSI-ASQ National Accreditation Board (ACLASS and ANAB, Arlington, VA). Muse presented the topic at the 2008 Quality Measurement Conference. For more information, call (703) 351-9139, e-mail roger.muse@aclasscorp.com or visit www.aclasscorp.com and www.anab.org.