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Management of **ISO 9000** Activities in Pakistan

Squadron Leader (Retired)
Engr. Tariq Abdul Majid
Quality Management Consultant

A Working Paper prepared for deliberations by Pakistan Engineering Council
Sub-Committee on ISO 9000 (**12 May 1997**)



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Published 2007 by the The House of Quality
Office # 6, Mezzanine Floor, 25-Huma Plaza, Block B,
Fazl-ul-Haq Road, Blue Area, Islamabad, Pakistan

OR

#2, Street 50, Sector F-7/4, Islamabad, Pakistan

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Management of **ISO 9000** Activities in Pakistan

Introduction

Ever since ISO 9000 standards have made its presence and impact felt in the business community in Pakistan, there is also growing interest as well as concern shown in the government circles as to:-

1. What is ISO?
2. Who is responsible for monitoring and implementation of ISO standards in Pakistan?
3. What are ISO 9000 standards?
4. What is meant by certification? Who can certify? How much time it takes to certify? How much it costs?
5. What is the Pakistani equivalent of ISO 9000?
6. Should a company/organization develop a quality system based on ISO 9000 standards?
7. Is certification really necessary?
8. Where does public sector and small entrepreneurs fit in the scheme of ISO 9000?
9. What is self-certification? Why to self-certify?
10. Whom to approach for certification in Pakistan?
11. Who should control and regulate ISO 9000 activities in Pakistan?
12. What role PSI and PEC can play in enhancing quality standards of public sector organizations and small private companies?

The aim of this article is to answer each of these issues and concerns. However, while addressing them I would dilate more on those aspects which are generally not answered adequately in the commercial/business circles, and as such could be of more value to those involved in the public sector, NPOs, NGOs and small businessmen/ entrepreneurs.

What is ISO?

ISO (International Organization for Standardization) is an international specialized agency for standardization comprising national standard bodies of about 100 countries including Pakistan, and is situated at Geneva, Switzerland.

ISO's work covers all areas except those related to electrical and electronic engineering, which are covered by the International Electro-Technical Commission (IEC). The results of ISO's technical work are published as international standards or guides. [1]

ISO has 76 members (with full voting privileges, 20 correspondent members (observers) and 4 (documentation) subscribers. [2] Pakistan is also one of the subscribing member through Pakistan Standards Institute (PSI).

Pakistan Standards Institute (PSI)

PSI, which is Principal Body for Maintaining ISO Standards in Pakistan, is now under the administrative control of Ministry of Science and Technology, and is entrusted with the responsibility of procuring and selling those standards of ISO and other standardization agencies/bodies (of other countries), which are required in Pakistan. [3]

The main function of PSI is to draw voluntary standards by agreement among all the interested parties concerned and to promote their adoption on voluntary and compulsory basis. [4]

Its present activities include:-

1. Preparation, printing, sale and implementation of Pakistan standards,
2. Registration of inspection agencies,
3. Introduction of S I system,
4. Collaboration with the international organizations, such as ISO, International Electro-Technical Commission (IEC) and Organization International Metrology De Legal (OIML) and other national standards organizations, and
5. Dissemination of knowledge and information of Standardization and Quality Control.

One of the main tasks of the Institution is to prepare National Standards relating to commodities, standards, materials, practices, testing methods etc, and to reuse, alter and amend them from time and time. In the attempt to be in harmony with other nations in the world, PSI follows the same procedures for processing of standards, as recommended by ISO. [4]

Since its establishment (1951), PSI has prepared more than 3700 National Standards. [4] It also maintains a technical library of more than 1800 technical books besides a collection of 130,000 international and other national standards at Karachi. [1][4]

What are ISO 9000 Standards?

ISO was established in 1946 to develop a common set of standards in the fields of manufacturing, trade and communications to facilitate international exchange of goods and services. [2] Though ISO has generated thousands of standards, but ISO 9000 series of standards are having extensive impact on international trade as it is being increasingly used in their favour and interests by US and EC countries, in particular, as a substitute to their protection policies which they otherwise could not manipulate under WTO.

Developed in 1987, and revised in 1994, ISO 9000 is a series of five international standards (ISO 9000-9004) on quality management and quality assurance, used to document, implement, and demonstrate quality assurance system in any organization claiming to be producing a quality product, or delivering quality service under quality environment, through consistent procedures and processes.

ISO 9001-9003 is an internationally recognized family of specification for quality assurance and receiving certification to one of its three levels implies that a company's system - from accepting a purchase order to delivering product - are consistent. The most comprehensive level is ISO 9001 covering design and document control as well as other aspects of manufacturing and distribution. [5]

The aim of the ISO 9000 standards is to have a permanent positive influence on the product quality by improving the quality system of a manufacturer. [6] The salient features of the five parts of the series are:-

1. The first, ISO 9000, gives a general overview and instruction on how to select the appropriate standard for a given situation.
2. ISO 9004 is a guide for the quality management system of any company and has a general discussion of many of the essential elements of a quality system.
3. The heart of the ISO 9000 series of standards are the contractual standards, 9001, 9002 and 9003. These standards are intended to be used as part of a contractual document between supplier and buyer.
4. ISO 9001 is the most comprehensive of the standards, and covers all phases of a product life cycle from design to installation and service.
5. The clearly defined quality system requirements can be checked by the supplier, the customer or a third party.

The standard requires an initial audit by a third party accredited auditor and once a company is registered follow-up audits are completed once a year at minimum.

What is Certification?

There are three basic elements of ISO 9000.

1. Say what you do (i.e. state the process)
2. Do what you say (i.e. execute them)
3. Demonstrate your claims (i.e. certify or prove that the processes executed are in accordance with the statement.

There are two ways that certification can be done:-

1. Either self certify through internal audit, or
2. Obtain third party certification through independent external auditors.

Who can Certify?

Here it is important to note that ISO does not itself certify companies. There are nationally accredited certification agencies (who are accredited by their national standardization bodies) who offer certification schemes. There are about 220 such bodies presently operating world wide. [8]

Audit Time and Cost

For a company of approximately 400 people, two auditors can audit the company in four to five days, depending on the company's activities and state of conformity. However large organizations like PAC Kamra would take much more time.

Foreign companies normally charge \$1000 per man-day audit. Approximately 40% companies pass in the first audit but most of the companies clear in the second audit. That is why companies first prefer pre-audit assessments to cut down their certification costs.

PS 3000 -- Pakistani Equivalent of ISO 9000

PS 3000 is the Pakistan Standard equivalent for the ISO 9000 quality assurance standards. Though they are not specifically related to any industry nor to any product group, it must be complemented with the industry or product specific quality standards to ensure a quality product life cycle.

Since 1990, PSI has already adopted ISO 9000 standards as PS 3000 family standard. Except for imparting training courses to their own PSI and CTL (Central Testing Laboratories) officers, PSI has not made much headway in establishment and enforcement of standardization and quality control in the country. However, PSI can boast of one laudable achievement in this respect, i.e. getting a comprehensive Act, with the name of Pakistan Standards and Quality Control Authority, approved by the National Assembly on 5th September, 1994. Its clearance from the Senate and final Presidential approval is still awaited. [4]

Should we Develop Quality System Based on ISO 9000?

With the signing of WTO and advent of EC legislation, that has made ISO 9000 registration of certain products mandatory, the world has become more competitive and quality-conscious. Now in order to even stay in the world market, companies throughout the world, particularly US, Europe and Japan are rushing to embrace ISO 9000 quality standards.

In this great rush, however, two separate and distinct decisions are being treated as one.

1. The first question is whether a company should develop a quality system based on ISO 9000 standards.
2. The second is whether a quality system, once installed, be certified by an accredited registrar.

There is absolutely no doubt in anyone's mind that companies, in most of the cases, should answer "yes" to the first question, but "no" to the second, particularly those public organizations and private companies which are not involved in international trade/export. [7]

Is Certification Really Necessary?

Though establishing an ISO 9000 quality system would be wise from marketing point of view and may also produce significant savings, certification is altogether different. Only a company's position in the scheme of things would tell whether to go for third party certification or "self-certification".

The ISO 9000 series documents are written as two party documents between buyers and sellers and as such do not address certification. The pressure to obtain ISO systems certification comes from two basic sources:-

1. Governmental mandates (legal requirements) or
2. Customer demands (commercial requirements)

The legal requirement for ISO certification stems from governmental bodies requiring specific performance by a company in order to export specified products into their market place. An example of this is the European Community (EC) Product Directives. [7]

However, in most of the cases, it is the commercial pressure that is driving ISO 9000 certification. As such, certification is a pure commercial response. This commercial movement has succeeded both

because of the legal (EC) mandates and the competitive push to obtain certification when selling abroad. [7]

The premise behind certification is that a third party verifies that the seller's system actually meets all the ISO requirements. The question of whether the seller company has met the requirements of ISO is ultimately based upon the buyer's interpretation and acceptance of company's systems. [7]

Where does Public & Private Sector Fit in the Scheme of ISO 9000 ?

In order to determine as to where does a company/organization in the public and private sector fits in the scheme of certification – self-certification or third party certification – it must be determined exactly what their customers require in terms of quality systems development, how their competitors are doing, and what, if any, legal requirements effect their product or service. [7]

In most cases, certification of a supplier's ISO 9000 system is not necessary, unless a product or service is to be sold in a foreign market. But even when the certification is not felt necessary, it must be determined as to how much systems development short of certification would be required by the customers to satisfy their customers/clients.

It is also well understood that all the companies cannot achieve or afford certification as it would be unreasonable and costly. (The cost of certification through a foreign accredited auditor may go upto \$ 20000). However, at the same time, it must also be recognized that there are benefits of implementing an ISO 9000 system – simplified and easier audits, improved communication and consistent quality. [6]

It is, therefore, recommended that barring those companies which are directly involved in international trade (particularly exporting their products to Europe and US) all other public and private companies should be encouraged to go for "self certification" instead.

"Self Certification"

Self-certification would require that the self certifying companies keep their customers continually informed of their systems development progress. [7]

Upon completion and implementation of ISO 9000 quality system the companies may then seek an independent audit. Hiring an independent auditor will allow them to take their audit results to their customers with a higher level of confidence that their system actually meets the pertinent ISO requirements. Therefore, they should commit themselves to maintain their system and may get their success verified through independent audits.

Here Pakistan Engineering Council (PEC) can play a vital role in creating awareness in the public sector about the benefits of developing a quality system based on ISO 9000 standards but without third party certification.

Why Self Certification?

Self certification is becoming more viable because of growing concern about conflict of interest issues surrounding the third party certification process itself. These conflicts include registrars that both consult and certify or use what is known as "pre-assessment" as a consulting visit prior to actual certification audit. These problems, coupled with the high cost, have many companies, both buyers and sellers, questioning the value and validity of these certifications. [7]

Even if third party certification is considered necessary, this decision should be made independently of the decision to install an ISO system. With self certification, third party certification will only be a formality. However, when the decision is made about third party certification, the question arises - whom to approach.

Whom to Approach for Certification in Pakistan?

In the absence of any registrar accredited to our own national standards body (PSI), Pakistani companies are left with no choice and are forced to approach foreign accredited registrars for their certification or only to those in-country "pre-assessment auditors" who are accredited to those foreign registrars.

In addition there are only a few auditors in Pakistan who could even help companies "self-certify" themselves.

Controlling and Regulation of ISO 9000 Activities in Pakistan

It is, therefore, the need of the hour that PSI, being the principal national body on standardization and also a subscribing member to ISO, must revitalize itself, come to the forefront forcefully, and establish its credibility among the international standard organizations and other national standard bodies.

PSI must be seen involved not only in formulating national standards in keeping with our own environment and prevalent manufacturing/trade practices, but also be vibrant in guiding and advising public and private sector (particularly those involved in exports) about the benefits that they can accrue through adoption and implementation of ISO 9000 quality management system and certification. But at the same time, the pros and cons of both types of certification (self certification and third party certification) be highlighted through vigorous awareness campaigns of their own with government funding.

As yet, we have only seen Export Promotion Bureau involved in quality promotion campaigns in collaboration with other commercial concerns, but these sessions have been of little benefit to the small companies/entrepreneurs and public sector personnel because such training sessions are expensive and could not be afforded.

It is the prime responsibility of the PSI to come up with a viable solution to help save those Pakistan companies who cannot otherwise withstand the onslaught of ISO 9000 quality standards and also cannot afford costly third party foreign-accredited certifications but still want to compete in the midst of ISO 9000 certified companies.

Role for the Pakistan Engineering Council (PEC)

PEC can also generate their own programmes, with the help of major public and private sector engineering concerns, in:-

1. Promoting the concept of self certification.
2. Helping smaller companies develop quality systems short of certification.
3. Funding the training sessions for independent auditors who can self certify small companies at nominal charges.
4. Approach PSI to enact and accept self certification of companies, at least for in-country trade practices.

Conclusion

To conclude, PSI must take hold of the events as quickly as possible, reorganize itself with more vigour, and immediately start regulating ISO 9000 activities and in country certification process.

Meanwhile PEC should involve all engineering community in formulating and conducting extensive training sessions for adoption and implementation of quality management systems based on ISO 9000 standards with increased emphasis on the fact that at least in the public sector third party certification is not really necessary and just self certification would suffice. As soon as the public sector and small entrepreneurs would realize the benefits of developing a quality assurance system at affordable cost, we would see increase in productivity, improvement in quality of products and enhancement in efficiency of these organizations.

About the Author

Engr Tariq Abdul Majid (Squadron Leader Retired) has done BE (Avionics) from PAF College of Aeronautical Engg, Korangi Creek (Karachi) (1979), BSc (Hons) War Studies from PAF Air War College Karachi (1993), and MBA from School of Business & Commerce Islamabad (Preston University) (1996). He is a qualified Quality Lead Auditor. He has also undertaken many courses on Quality Control, Engineering Management, Total Quality Management (TQM), Quality Management System ISO 9000 and Environmental Management ISO 14000. He has extensive experience of handling large projects in the Communications and Electronics field. He has authored two Technical Manuals for the PAF on Infra-red Detection System and has also written many working papers on Engineering and Quality Management. Subject paper was submitted to Pakistan Engineering Council's sub-committee on ISO-9000 where it was deliberated upon on 12 May 1997.

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