

## مكانة إدارة الجودة ومعايير الجودة في الجزائر

### The place of quality management and quality standards in Algeria

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#### Abstract :

#### الملخص:

Throughout this article, we will study the place of quality management and quality standards in Algeria in Algerian companies by specifying the efforts led by the State, the role of IANOR by an interview and, in parallel, analyze the existing problems which hamper these efforts by an analytical study of organized conferences with all debates, as well as the problems of the QMS application according to a sample of 172 Algerian companies to face the fulfilled reatrd in the quality field.

خلال هذه المقالة ، سوف ندرس مكانة إدارة الجودة ومعايير الجودة في الجزائر في الشركات الجزائرية عن طريق تحديد الجهود التي تقودها الدولة ، ودور IANOR عن طريق مقابلة مع اهم مدراءها ، وبالتوازي مع ذلك ، نناقش المشاكل القائمة التي تعوق هذه الجهود وفقاً لدراسة تحليلية من المؤتمرات المنظمة مع جميع المناقشات ، فضلاً عن مشاكل تطبيق QMS وفقاً لعينة من 172 شركة جزائرية لمواجهة التأخر في مجال الجودة.

**الكلمات الدالة:** التقييس ، إدارة الجودة ، الشهادة ، الشركات الجزائرية.

**Keywords :** Quality management,

standardization, certification, Algerian companies.

### I. Introduction

The opening up of the national economy is pushing Algerian companies to compete the big foreign companies that have the best quality / price ratio at the moment, at the time when Algeria is about to join the International Trade Organization, which forces the Algerian officials to set a number of provisions mechanisms in the field of quality: as the Algerian quality standards, the Algerian price of quality ... etc, to face the globalization of the markets where the standardization and certification become for the economic actors tools of development of the exchanges as well as the implementation of management quality in its processes given its customer-oriented advantages.

Despite all these efforts, quality remains very little perceptible in the management system of the Algerian companies, which seem not to be interested, or give little interest in the product

standardization and production processes which influence in a negative way the national economy including the consumer.

For this purpose, we will ask the following problem:

"Are State's efforts sufficient to push Algerian companies to consider quality?"»

To facilitate the search, the following sub-questions may well be tackled:

- ✓ What are the different provisions actually made by the State in the field of quality?
- ✓ What is the role played by IANOR as the first international standardization institute at the level of Algeria?
- ✓ What is the real behavior of Algerian companies with respect to quality according to the various conferences and discussions held during this period and what are the proposed solutions?
- ✓ Are Algerian companies correctly using the QMS concept?

To answer, we will analyze Three essential points:

- ✓ The various actions carried out by Algeria in terms of promotion and awareness of the importance of the quality factor;
- ✓ The role of IANOR in the animation of the standardization and certification activity and the evolution of the QMS of Algerian companies;
- ✓ Weaknesses in quality management practices within Algerian companies according to research conducted in this area;
- ✓ Solutions proposed by quality organizations in debates and conferences.

The research in this article will be based on:

- ✓ An analytical study of the role of the State in the quality movement by aiming at the quality department of the Ministry of Industry and Mines;
- ✓ An interview with various heads of IANOR departments;

A census and an analysis of the various debates and conferences made on the quality topics explaining the reality of the Algerian companies as well as the proposed solutions.

## **II. THEORETICAL FRAMEWORK AND PREVIOUS STUDIES**

### **1. Efforts by the State and its institutions in the field of quality**

#### **a. Standardization, certification and quality management**

### **-Standard and standardization:**

The standard is a document established by consensus and approved by a recognized organization, which provides for common and repeated uses rules, guidelines or characteristics, for activities or their results, guaranteeing an optimal level of order in a context given (guide de la qualité du contrôle de la qualité de la normalisation, 2004).

Standardization is an activity capable of providing solutions of repetitive application to questions belonging to several fields in order to obtain an optimal degree of order in a given context, manifests itself in the development, publication and implementation of standards (guide de la qualité, et du contrôle de la qualité de la normalisation, 2004).

Accreditation and certification: According to Algerian Organization of Accreditation ALGERAC, accreditation consists of a certificate issued by a third party that provides a formal demonstration of the organization's competence to perform specific conformity assessment tasks.

According to AFNOR, certification is a procedure used to validate the conformity of a quality system to ISO 9000 standards by a competent and independent body and to give written assurance that a product, process or service is in accordance with the specified requirements. It is therefore the verification by an accredited body of the conformity of the quality system with a normative organization model.

Quality management system: Quality management system (QMS) is a set of policies, processes and procedures required for planning and execution (production/development/service) in the core business area of an organization (9000 stors, 2018).

### **b. Role of the state in the field of quality:**

#### **-Emergence of Algerian standards of quality**

The emergence of standardization in Algeria began in 1973 with the creation of the INAPI (Algerian Institute of Standardization and Industrial Property) with a minimal role. Starting in 1989, and with the abolition of the state monopoly on trade, the standardization activity was revived by the adoption of a number of laws and decrees for:

- The creation of Algerian standards of quality;
- The organization of the standardization activity;
- The creation of bodies responsible for standardization, etc.

#### **-Quality management arrangements in Algeria**

- Regulatory device:

The law protecting the consumer: create according to the law n ° 89-02 of February 7, 1989. Several executives have been promulgated and touch different aspects related to the field of

the quality, hygiene, labeling, information of the consumer, guarantee, materials of contact, additives, control of the quality and compliance (Promotion et contrôle de la qualité, 29 décembre 1992).

This law allows consumers to give (Zerfa, 2014):

The right to information that is ensured through the establishment of a sufficient labeling system that ensures proper use of the product;

The right to set up a consumer association with full power to bring to justice any economic agent who does not respect the quality of products and services.

The Law on Standardization: Law No. 89-23 of 19 December 1989 on standardization helped to fill the legal void that characterized the field of product quality and safety. There are two categories of standards:

- Algerian standards, which are drawn up and published on the basis of an annual plan and another multiannual development plan and which are subject to mandatory review every five years;
- Corporate standards covering all topics that are not subject to national standards or need to be clarified in more detail.

The creation of the Algerian Institute for Standardization (IANOR) through the restructuring of INAPI in 1998.

- Organizational device: It consists of :

Organization of public services in charge of quality control: which allows the supervision of the quality domain on three levels (central, regional and wilaya) and by an intermediary space that is the Algerian Center for Quality Control and Quality Control. Packaging (CACQE);

The supporting bodies and development of the associative framework: the Scientific and Technical Orientation Council which is the consultative body placed with the Algerian Center for Quality Control and Packaging and the National Association for the Promotion of Quality and Packaging. Quality (APROQ);

Quality control mechanisms: by the creation in 1985 of the Quality Department and the establishment of the CAQCE.

- **State aid programs in certification**

**-Program for the development of the National Quality System:** According to the specifications established by Ministry of Industry and Mines, it consists in encouraging the granting of financial assistance to successful companies with competitiveness and export objectives, through the certification of their system according to international standards, which will ultimately enable the full integration of management. quality in the Algerian company: ISO 9001, ISO 14001, ISO 45001, ISO 22000) and (ISO / TS 16949).

The company wishing to engage in a process of certification support and benefit from the planned financial assistance, must choose and establish a contract with one of the consulting firms listed on the short list established and decided by the Ministry responsible of standardization and accredited by the Algerian Body of Accreditation (ALGERAC) (listes des écoles et des bureaux d'étude, 2019).

There are 147 consulting firms for the certification of companies (accueil, 2019) in the national territory

The financial assistance provided under this program is:

- A State contribution of 80% of the cost in dinars, the support contract for setting up the management system (s) to be put in place, within the limit of two (02) million dinars per system;

- A contribution of the State at the rate of 80% of the cost in dinars, certification, within the limit of one (01) million dinars per system

- **PNMA:**

According to Rachid Moussaoui, Director General of ANDPME, the guides of the National Upgrading Program for SMEs (PNMAN-PME) provides for the granting of subsidies to any Algerian SME which adheres to the Program and implements eligible upgrading actions in different fields including the field of quality such as: setting up a QMS.

PNMAN accompanies companies in 4 different types of certifications:

According to the management system: ISO 9001, ISO 14001, OHSAS 18001 certification and Integrated Management System (QSE) certification;

According to sectoral standards: ISO 22000 certification (Food safety management system);

According to accreditations: ISO 17020 and ISO 17025

In addition, it offers two labs (guide de ANDPME, 2013):

- TEDJ label: This is a national quality mark, voluntary certification, issued by IANOR. The TEDJ certification system for products includes testing and evaluation of the QMS of the product concerned;

- CE marking: The CE marking certifies the conformity of the product with the essential safety requirements. It allows the circulation of the product throughout the European market for products for which this marking is required and to have a guarantee on product safety.

- **Industrial competitiveness promotion fund:**

Created by an executive decree n ° 2000-192 of July 16th, 2000, it is a support system which addresses the companies and conformity assessment bodies in their process of certification and accreditation according to the international standards, interested in the development of standardization, metrology, accreditation, industrial property ... etc.

The implementation of this program addresses two major concerns:

The need to implement a new dynamic of support for the company based on the search for performance;

The accompaniment of the company in its efforts to enter the market economy, in particular in the free trade zone with the European Union and the prospect of accession to the World Trade Organization (WTO).

- **Algerian quality award**

The institution of the award was made by Executive Decree No. 02-05 of January 06, 2002 for the development of the national standardization system. It was effectively launched in 2003 and it consists of rewarding, each year and by competition, the best body under Algerian law for their efforts in terms of improvement and development of quality leading to excellence.

The laureate of this prize will receive a reward of 2 million dinars (2000.000 DA) which will be supported in the framework of the budget of the State for the credits allocated to the ministry in charge of the standardization, with an honorary trophy and a diploma of honor.

- **Price Objectives**

According to the Directorate General for Industrial, competitiveness The participation in the Algerian Quality Award allows the candidate companies to benefit from several assets, namely:

The precise analysis of their quality approach using an analysis grid created for this purpose;

Motivation and involvement of all staff in the quality project;

Strengthening the brand image of the company through the price of quality;

Recognition of the efforts made by companies and institutions in the quest for quality;

Demonstration to customers of the level of compliance with quality requirements

Evaluation method

Based on the EFQM European Excellence model, the Algerian Quality Award is awarded by a jury based on a performance evaluation grid of the company to assess the value of the progress made in management. Quality.

Companies' applications are assessed based on the criteria defined in most of the major international quality awards: Management commitment; The strategy and objectives ; Listening to customers or users; Quality control; The measurement of quality; Improvement of quality; Staff participation; The results.

Since its launch in 2003, the Algerian quality prize has been awarded to the following winning companies

**Table 01 : winners of the Algerian quality prize from 2003 to 2018**

<b>-year</b>	<b>-Laureate</b>
-2003	-SAIDAL Group
-2004	-the Cement Factory of AinTouta « SCIMAT »
-2005	-Company BCR
-2006	-the National Salt Company « ENASEL »
-2007	-Algerian of Equipment and Metallic Infrastructures "ALRIM"
-2008	-Exceptional Transport and Handling Company of "TRANSMEX" Industrial and Electrical Equipment
-2009	-Port Company of Bejaia
-2010	-Port Company of Bejaia, 2010: National Company of Lakhdaria Paintings "ENAP"
-2011	-BENHAMADI Group «ANTAR TRADE
-2012	-New Society of Sanitary Ceramics of Ghazaouet
-2013	-National Company of Electrical Appliances Industries "ENIEM" TiziOuzou
-2014	-SarL KNAUF Plasters
-2015	-VENUS Laboratories - SAPECO and INFRAIL Company
-2016	-the prize has not been awarded
-2017	-the prize has not been awarded
-2018	-Cement works of Ain El Kébira “Sétif”

**Source:** PAQ Evaluator Training Notice,2018, P2.

## **2. IANOR:**

The Algerian Institute for Standardization was created by Executive Decree No. 98-68 of 21 February 1998 as part of the restructuring of the National Institute of Industrial Property (INAPI) amended and supplemented by Executive Decree No. 11 -20 of 25 January 2011. It is a public institution of industrial and commercial character endowed with the civil personality and the financial autonomy, it aims to implement the national policy of standardization.

IANOR is a member of:

- ✓ Arab Organization for Industrial Development and Mines (AIDMO);
- ✓ The International Organization for Standardization (ISO);



- ✓ The Technical Committee TC 176 which develops ISO 9000 standards;
- ✓ The Technical Committee TC 207 which elaborates the environmental management system through ISO 14000 standards.

IANOR is responsible for:

- ✓ The development, publication and dissemination of Algerian standards as well as the adoption of marks of conformity to Algerian standards and quality labels;
- ✓ The promotion of works, research, tests in Algeria or abroad and the development of test facilities necessary for the establishment of standards and the guarantee of their implementation;
- ✓ Training and awareness in the fields of standardization.

#### **- IANOR trades**

IANOR has formed a multi-disciplinary team experienced around four major professions at the service of companies and communities for:

- ✓ Elaborate the standards required by the economic actors. IANOR helps socio-economic actors to develop the normative frameworks they need for their strategic and commercial development, by facilitating their access to the standardization process, information and providing support services;
- ✓ Help stakeholders to apply normative standards. Through training, auditing, consulting and support services, IANOR helps companies to integrate, in their strategy as in their daily life, the repository approach and progress initiatives;
- ✓ Submit a certification offer. IANOR offers a product certification (TEDJ brand), based on Algerian normative standards as product certification becomes a commercial and marketing advantage towards more and more informed consumers.

#### **- IANOR's efforts on quality issues in Algeria**

Asked about the enthusiasm of Algerian companies for the standardization of their services and products, Mr. Hales, Director of IANOR indicated that "in 2018 more than 2,000 companies had used the services of IANOR, believing that this figure remains low », Taking into account the number of existing SMEs in Algeria. "In view of the number of our SMEs, we should have at least 25,000 customers per year, which is not currently the case," he insisted.

To reinforce the information given in this article, we conducted interviews with IANOR department heads to have more explanation on the causes of their Director's statement:

According to Mr. YAHIA CHERIF Adelane, head of product certification division "despite the help of the state, it should be known that the certification of management systems is a



voluntary approach and motivation specific to companies, to be certified or not, however in certain sector in order to answer the call for tender and to get a market, one can find as requirements in the specifications the certification of the management systems ISO9001,14001 ... etc, in this position the company is found in the obligation to be certified".

To this end, the IANOR Certification and Training Department is constantly proposing various solutions to encourage companies to be certified as:

- ✓ **IANOR Academy:** It is a training center in the fields of standardization of IANOR staff, executives of national companies and institutions, as well as economic operators, underlined the Director General, Djamel Hales. He said that this future training center is IANOR's own initiative and will be housed at its headquarters. In addition, they set up continuous training for members of technical standards committees, qualify them and prepare them to participate in ISO / IEC technical committees.
- ✓ **Global collaborations:** In the outlook for the current year, the Director also informed that IANOR and in collaboration with the Program of Support for the Implementation of the Association Agreement between Algeria and the Union-European (P3A), will launch an impact study of standardization on the Algerian economy. By adding, the signatures of Technical Cooperation Agreements with:  
  
The Saudi Authority for Standardization, Metrology and Quality (SASO);  
The Emirati Authority for Standardization and Metrology (ESMA);  
The Nigerian Standardization Organization (SON).
- ✓ **Promotional prices for standards:** Regarding access to IANOR standards and its labels, the Director of Information and Documentation said that his intuition had sold more than 4,000 standards in 2018, noting that the unit price of standards varies from one standard to another, depending on the nature of the standard and the sector concerned, and starts from 2,000 DA. As such, it has specified that currently client companies benefit from reduced tariffs of 50% for the acquisition of Algerian standards proposed by IANOR in the various sectors of economic activities.
- ✓ **Wide range of standards according to each domain:** Mr. Hales also informed that IANOR has 9,650 adopted standards in force, 39 national certified products and 71 technical committees dedicated to different economic sectors and responsible for the development and revision of standards in force with the use of 90 executives working at IANOR and 660 members and national experts mobilized per year. He specified that 972 basic standards, 887 standards in health-safety-environment, 1,035 for building materials, 1,408 for electrical engineering, 2,002 for mining-mechanical metallurgy, 1,510 for the food industry and 1,820 for chemistry (M.Hales, 2018).

- ✓ **Innovations in standards and certifications:** According to Mr YAHIA CHERIF, to make all staff adhere to the quality approach means no longer trying to impose without dialogue, but to listen to the other, adapt to its operation to bring it to understand and accept the changes induced by the project. To do this, and from the different analyzes carried out at the level of different companies, the person who could take charge of setting up the implementation of the QMS must be able to have a view of the whole of the organization of the strategic summit at the operational level. He proposed as actor the management control since it allows to:

Ensure that everyone sees the interest, understands the meaning;

Give all staff the means to participate to become actors and not spectators;

Reflect on the means available to managers to value each other's contribution and maintain motivation.

To do this, management control uses its skills to initiate communication, training, creation of working groups and identification of key actors to disseminate the change after analyzing the different types of staff that exist within the organization

### **III. METHOD AND PROCEDURES**

Through this passage, we will present:

- The reasons behind Algeria's delay in certification and standardization according to conferences and debates over the past decade;
- An analytical study of a sample of 100 Algerian companies to know the problems posed in the application of a QMS

#### **1. STUDY RESULTS (ANALYSIS AND DISCUSSION)**

##### **- Reasons for weak quality system**

For the acting president of the FCE, Ahmed Tibaoui, "it is not for lack of legislation or regulation that standardization or standards are in their infancy in Algeria." According to him, this state of affairs is a shared responsibility between institutions, companies and professional associations.

"Indeed, few companies are devoted to this aspect of things while the institution in charge of the supervision of the standardization process ... may not have all the fullness of the means which it should be endowed with. to fulfill the missions with which it is invested" (RABAH, 2014).

In addition, Mr. Abdelouahab TOUBAL, head of the certification department at ALGERAC (Algerian accreditation body), acknowledges that, "Algeria is lagging far behind certification in comparison with other countries, which have advanced in this field, as China ranked first worldwide ", despite the existence of the certification market in

Algeria since the late 1990s. He believes that" Currently in Algeria, the number of companies that are certified ISO is between 500 and 1000 "(BENAI, 2018).

Mr. Toubal noted that the market is evolving slowly, which, according to him, was essentially due to:

- The slow process that is not as easy as we think;
- Mentalities that are against change;
- The preparation of the management system that requires a lot of time (training of staff for example) ;
- The certification that remains so far voluntary for companies, which does not require them to move towards standardization, despite the existence of texts to require certification of compliance in calls for tenders and specifications, but, which are not firm.

According to the president of the Chamber of Commerce and Industry Chenoua (CCIC), SérandiMaâmar, "It should be noted that compared to our Tunisian and Moroccan neighbors, we are far, since their number is multiplied by 5 compared to Algeria ". For him it is a problem of managerial culture that must be inculcated (Seddiki, 2018).

In addition, all the legislative and regulatory texts published until then constitute an incomplete instrumentation to ensure, under optimal conditions, the control of quality in the production, importation and distribution of products.

In addition, Algerian companies will experience several obstacles in their management of quality due to different causes (Kamel, 2010):

□ Procedures not documented in a quality system: In Algeria, the company is required to document the procedures of its QMS and to communicate them to resolve quality problems, which is not the case where several procedures are not documented and it negatively influences the accounting data when calculating non-quality costs;

□ Low perception of the process approach: a low use of statistical control significantly reduces the volume of information in terms of monitoring and evaluation of the processes and therefore does not allow an objective reflection on their effectiveness and efficiency. Moreover, there is no exact perception of the process approach, based on the "PDCA cycle" principle;

□ Lack of staff training: companies do not give the necessary importance to training. They see it as an expense and not as an investment which will have a positive

impact on the achievement of quality objectives in particular and on the objectives of the company in general.

- Loss of Algeria in the quality system
- Lack of money in economic growth

Macroeconomic studies show that standardization contributes directly to the growth of the economy. It is estimated at 11% in the United Kingdom, 27.3% in Germany and ... at 0.04% in Algeria.

Mr. Hanifi Belaraoui, CEO of Belux, spoke of the shortfall in terms of GDP, in Algeria, in the absence of a developed normative system. According to simulations he presented, the shortfall is estimated at a hundred billion dollars between 1963 and 2013.

The integration of standards could allow Algeria to gain 2.4% growth in its forecast GDP by 2050 (RABAH, 2014).

- Lack of profit in world markets

According to Gérard Lambert, Sociad is working with the Ministry of Industry on upgrading and is currently working on the organizational plan to help companies obtain ISO certification: "Certification has become essential if you want to respond to an international tender. If you want to enter the foreign market and export you have to be ISO. It even became an obligation "(Seddiki, 2018).

- Solutions proposed by quality agents in Algeria

The solutions which will be proposed are chosen according to two methods:

- An analytical study of the various debates and conferences conducted in the last decade on the standardization and certification of Algerian companies;
- An analytical study drawn from a sample conducted by ourselves towards 70 Algerian companies to assess the situation of their QMS, know the problems and the solutions proposed by their quality managers.

Concerning the solutions proposed to improve the field of standardization and certification, we can summarize it by the points cited on the part of the president of the FCE, Mr. A. Tibaoui where it is necessary (RABHI, 2014):

- The creation of a regulatory marking (CE equivalent) for products which must meet certain technical standards and acquire the right of free movement throughout the national territory;

□ Strengthening of the bodies and institutions in charge of overseeing the Algerian standards system, compliance control, awareness raising to explain the value of standards and accreditation by providing them with appropriate means for better management of their respective missions;

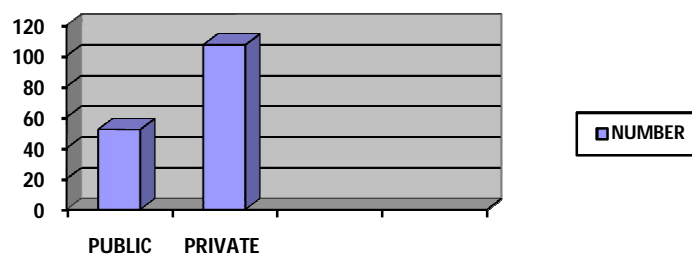
□ Strengthening the participation of the upgrade fund, for all companies (SMEs and others), in terms of quality management, certification and product labeling;

The organization of expert training and assistance training for companies by various certification and quality consultancy offices, whether national or international, and which have had agreements with the Ministry of Industry to support interested companies in the different points of the quality domain

#### - **Problems in the application of QMS**

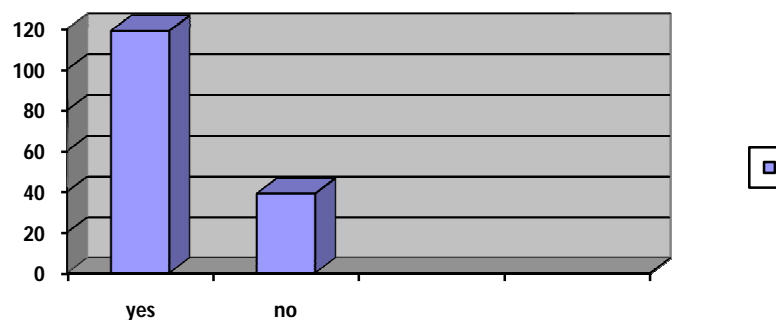
According to a study conducted near 158 Algerian companies by a survey sent to quality managers via the LinKedin network including 32,9% public and 67.7% private. We found that in total, the QMS applies at a rate of 75.3% across all businesses (119 companies).

**Figure 1:**Number of companies involved



**Source:** Survey developed by the researchers

**Figure 2:**Number of companies applying QMS



**Source:** Survey developed by the researchers

According to the answers given by the quality managers of the companies interviewed, we can summarize the causes of the weakness of a QMS as follows:

- The Algerian boss sees quality as costs and not as a gain they do not have the concept of costs generated by non quality;
- Lourd A cumbersome document system: despite the fact that the standard requires a documented quality management system and not a document system, which disturbs all the people who participate in the contribution of quality information;
- Quality managers often focus on the application of the standard chapter by chapter and word by word, which is far from the main goal of a QMS which is listening and customer satisfaction;
- Lack of autonomy given to employees which negatively affects communication;
- Companies consider these standardization and certification actions as an end in themselves or only as a marketing tool to attract future customers;
- For SMEs, they are limited in their analysis to the data provided by their accountant, which is based on conventional indicators. They do not have tools for financial measurement of their activities and processes, their costs, and therefore their quality;
- For large companies, Quality services are completely disconnected from management control services and therefore from the information system and develop their indicators without leaving their corner;

The non-quality overcosts due to the lack of collaboration between the management control service and the quality managers.

#### **IV. Conclusion**

The quality management system represents a pillar of growth for the company by ensuring an efficient organization, a profitability of its activity and an optimization of its profits. In addition, International Standards allow companies that hold the certification (s) on the basis of these international standards, to highlight technical, economic and societal advantages.

To ensure the development of the quality field, the competitiveness of Algerian companies at the national and international level as well as the economic growth, each organization must participate in its improvement:

- ✓ Within Algerian companies: appreciate the culture of the QMS for all staff, not as a documentary system to be applied in a square way but as a way of life of the company be part of its strategy;
- ✓ For the role of the State: the reinforcement by bodies and institutions in charge of the supervision of the Algerian normative system, of training and awareness-raising, as well as the requirement of certification in the invitations to tender in the various areas.

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