

The Quality Management in General and the Environment Management: A Natural Relationship

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Abstract: - The quality management and the environment management are components of management in general. There are complementary relations and conceptual equivalences between the standards of the ISO 14000 group (environment) and those of the ISO 9000 group (quality). The complementarity has one of the systems already functioning, and we can use it in order to implement the other one, because there are structure and principle similarities between the two managerial concepts. The conceptual equivalence means the fact that the two systems are based on the so-called Deming cycle, circle or spiral.

In 1997, at the level of the UNO International Standards Organization (ISO), the following standards were gathered into one audit standard available for quality and for environment: ISO 10011, 14010, 14011, 14012 (SR EN ISO 19011 proposed for 2002 – Guidelines for the audit of the quality management systems as well as for the environment management), which could lead to the creation of a common management system for both quality and environment, having a common textbook. But as far as it seems, there are enough reasons, especially technical ones, which will maintain the two management subsystems as two different and separate entities.

Key-Words: - quality management , environment management, environment, ISO

1 Introduction

Motto: “The management of quality aims at the well-being of the user; the management of the environment aims at the collective well-being.” Michel Perigord [1]

This structure of requests - quality management and the environment management - can be presented by the following picture: fig.1.

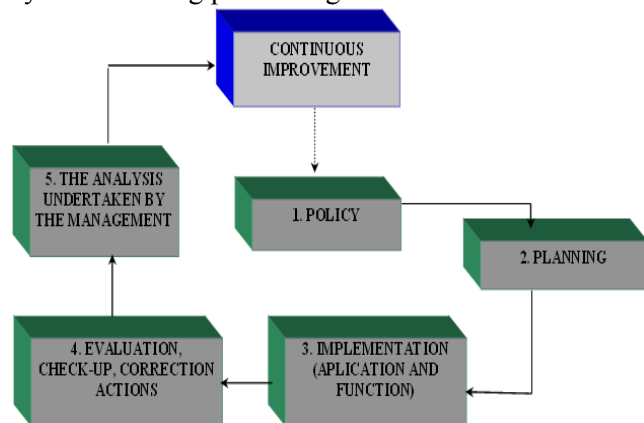


Fig.1 The structure of requests for a management study.

The line suggests that, after having finished an implementation cycle, the results can be so encouraging that could lead to ambitious objectives of the environment policy or of the quality policy. The similarities are maybe even greater at the level of the standards referring to the audit.

In order to contribute to the development of the less developed regions from Romania, regions taken into account by the cohesion policy of the European Union, Romania must make significant investments in the environment infrastructure, especially in the water sectors, the waste and the quality of the air sectors. Also, Romania must invest in the development of efficient systems for the management of the environment (especially in the water and waste sectors), with the purpose of offering a better quality of the services towards the population and of creating a competitive business environment. The viable management systems are, as well, necessary for the protection or the revaluation of the natural resources.[4]

The new European dimension enforces, as a key condition for the sustainable adhesion into the EU, a

better quality of the environment. Although Romania has recorded a significant progress since 1990, numerous efforts and resources are necessary for the achievement of the EU standards. The transition periods have been negotiated for some of the fields that need the greatest financial efforts for conformation (the supply of drinking water, the building/rehabilitation of waste water disposal stations, the closing of the inadequate storage houses, the management of the waste from the wrapping and the wrappings themselves, the control of the industrial pollution) and which cannot be implemented until the writing date of this article. [6]

Through the quality of the environment we understand its status at a certain moment, resulted from the integration of all the structural and functional elements, capable to ensure a satisfactory atmosphere to multiple necessities of man's life. The quality of the environment results from the implementation of the artificial human structures into the natural structures.

The beginning of any activity of protecting the environment from a country is realised through the organisation and the assurance of the system functioning and monitoring the environment as a whole and its components. [7]

In other words, Romania needs current concepts:

1. an integrated system for all the environment factors;
2. a global system on different matter levels, including the connection to the world network.

The environment monitoring represents an assembly of operations regarding the supervision, the evaluation, the prognosis and the warning with the purpose of the operative intervention in order to maintain the balance status of the environment. As a tool of the managerial activity in the environment field, the monitoring must ensure an informational flux, structured on specific sectors as well as between the sectors regarding the pollution sources and the quality of the environment, the use and the status of the natural resources. [8]

In general, the standards are created in order to impose requests. Neither the standards from the ISO 14000 group make exception. An EMS generally must respect three demands (paragraph 4.2 from the SR EN 14001):

- to start from an environment policy;
- to be structured on the Deming cycle: Plan – Do – Check – Act
- to have as a consequence the continuous improvement. [9]

We can easily notice that these requests are almost identical with the ones from the standards referring to the management of quality from the ISO

9000 group. This resemblance is perfectly explainable, if we take into account the scientific origin and the common practice.

There are of course differences: if the EMS deals with actions, products and services, the quality system deals with the products and services only. [10]

Below there is a table of equivalence at a global level. Some analyses go further to make the paragraphs and the points of the paragraphs parallel in order to emphasise the profound affinities between the two management subsystems:

Tabel 1 Profound affinities between the two management subsystems

ENVIRONMENT	QUALITY
SR EN ISO 14050 – Management of the environment. Vocabulary	ISO 8402 – Management of quality and the assurance of quality. Vocabulary.
SR EN ISO 14001 – Systems of management of environment. Specifications and a user's guide	SR EN ISO 9001 (2001) – Systems of management of quality. Requests.
SR EN ISO 14004 – Systems of management of environment. Guide regarding the principles, systems and techniques of application	
SR EN ISO 14010 – Guide for the audit of the environment. General principles.	SR EN ISO 10011-1 – Guide for the audit of the quality. Part 1. Audit.
SR EN ISO 14011 - Guide for the audit of the environment. The audit of the systems of management of the environment.	SR EN ISO 10011-3 - Guide for the audit of the quality. Part 3. Audit.
SR EN ISO 14012 - Guide for the audit of the environment. Criteria of qualification for auditors of the environment.	SR EN ISO 10011-2 - Guide for the audit of the quality. Part 2. Audit.

2 The creation of a management system for the environment. The elaboration of an environment policy

“We have become more sensitive to the implications on a long term of the actions on a short

term.” (John Naisbitt)[2]

The requests which must be fulfilled by an environment policy are established in fig 2.

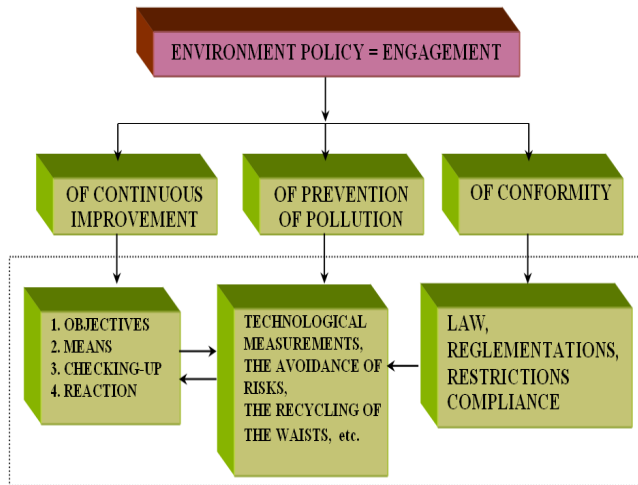


Fig 2. The requests of an environment policy

The features of the environment policy:

- to come from the highest level;
- to be adequate and its objectives to be properly dimensioned;
- to be documented, implemented, maintained and developed;
- to be transparent.

3 The planning

The principles of planning the environment activities are stipulated in the SR EN ISO 14001:

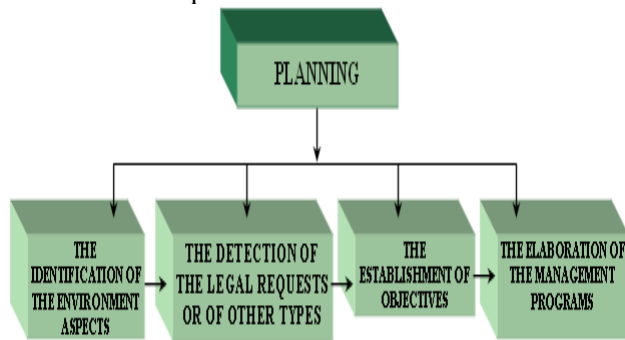


Fig 3. The principles of planning the environment activities

3.1 The identification of the environment aspects

As we can see in fig 4, the procedure of identification of the environment aspects contains three activities, which enrol in the direction of the arrows. [11]

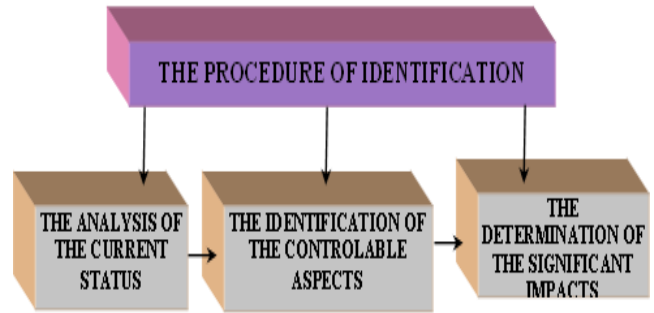


Fig 4. The procedure of identification of the environment aspects

The current situation analysis is achieved in a similar study the environment balance. The level of this balance depends on the size and the complexity of the organisation, as well as its position, as a basic activity in Annex no. 6A from the Order 184/1995 of the former MAPPM, currently the Ministry of the Environment and of the Sustainable Development. For example, the power plants other than the nuclear ones fill in the position IV.4. We must underline that this balance of the environment is not one used for authorization and thus it is not an official document which is to be forwarded to the authorities, but it is an internal analysis, because neither the design nor the implementation of an EMS is compulsory, as we have shown before. That is why this balance can be achieved – and it is preferably to be achieved – by the persons who can exploit effectively this system, without the legal authorized elaborator being compulsory. Of course, the moment when the EMS is functioning, this analysis will be examined by other persons, in conformity with the principle of transparency. Thus, it is advisable that this balance respond to all the exigencies of the Order 184/1997 of the same Ministry, using the evaluation of risk as well, if there is the case. [12]

The environment aspects are “elements of the activities, products or services of an organisation which can interact with the environment”, which can have a significant impact on the environment.

The environment aspects can also be classified using the degree of involvement of the organisation in their management, into controllable and uncontrollable (the last being in general elements of major force). It is advisable (this thing is really practised in the developed countries, for instance the USA) to identify another type of environment aspect, the controllable or influenced one by the organisation, even if the standard does not impose this notion. In this category there are the situations in which two or more types of organisations possess activities, generate products and deliver services which interact with the environment. In this last situation, the organisations must collaborate in order

to quantify and to distinguish between these aspects. We must emphasise the fact that all the environment aspects will be recorded, regardless of whether they are significant or not. The difference between their treatments lies in the fact that the significant aspects are continuously subjected to specific procedures. [13]

The impact on the environment is the result of the interaction of these environment aspects with the environment itself. These influences can be beneficial or damaging, they can also be characterised by the great or small development. The definition from the SR EN ISO 14001 paragraph 3.4 is: any modification of the environment, beneficial or damaging, which results from the activities, the products or the services of an organisation. [14]

In order to characterise such an influence as a significant impact, various criteria of signification are used, which are not imposed by the standards:

The criteria of signification can be [3]:

- the seriousness of the impact (which, for instance, can be evaluated – without limitation to it – through the use of the values imposed by the environment standards or by the technical environment norms).

- the persistence of the impact on the environment, which depends on the life and action duration of the pollution agent (for instance, in case of the waste or of the radioactive emissions it depends on the type of life of the radionuclide, etc.). This criterion can be evaluated using the duration of the eventual de-pollution or ecological reconstruction.

- the sensitivity of the receiving environment factor, which can be evaluated using the chance of natural reversibility of the damages produced on the environment. For instance, if the impact damages protected endemic species, at the number limit for its survival, the sensitivity will be very high.

4 Conclusion

As a conclusion, why a new perspective on the public management? Because the traditional model is excessively oriented towards the market solutions. It contains a clear distinction between the entity which orders the projects (the politics), the one which executes (the technology) and the one which benefits from the services (the population). On the contrary, the democratic techniques are focusing on the continuous interactive and participating process which takes into account the political dimension (social, cultural) of the technical decisions and vice-versa. Moreover, it follows the integration of a

feedback from the part of those who implement the project, as well as from the part of those who will benefit from (or will be affected by) it. [15]

The final decision belongs to the authorities most of the times. The problem is that the policies which follow the Decide – Announce – Defend (DAD) algorithm confront with the legitimacy crisis that leads to the depth of the conflict or to a lower efficiency of the policy itself. That is why a fair participatory process is necessary which includes the business sector, the local community and the authorities. If we used a scale for the citizens' participation in the decisional process, we would have at opposing poles the information stage (with the promise “We will keep you up to date with what we decide”) and the empowerment stage (with the promise “We will practise your decisions”). [16]

The first model, which means a low degree of implication, is the “order”. There follows the middle model of manipulation, according to which the citizens' opinions are deliberately shaped through manipulation, in the prejudice of the own interests. There is a third model, the “consensus” model. This one manages to ensure the involvement of many individuals either in the negotiation between the parties, or in the deliberative dialogical process.

The idea of civic participation on a large scale remains an ideal, if not a utopia. Democracy itself would enter a crisis if there were not large segments of the society which manifests apathy and inaction. The conditions are much more difficult in the transition countries, which could not get rid of the privations yet. Inglehart thought that post-materialism attracts a change of individual's preferences and requests. Once satisfied the basic needs, the man feels the need to be acknowledged by the state as an individual within collectiveness and becomes more preoccupied by superior values like the environment or art. [17]

In a more and more global world, the idea of community itself loses its value, and this happens easier in the countries with a socialist past. Nevertheless, the concept “think globally, act globally!” is still available. The deliberative democracy is based on this principle. It is about the process of information or education; it is about the responsibility; about the empowerment. There is a purpose and a means at the same time. Finally, we make the path by walking ...

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