The Environment Management Versus The Quality Management

Mariana Ciobanu[1], Mirela Mazilu[1], Sabina Mitroi [1], Marius V. Ciobanu[2]

***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.

***Keywords*— environment management, environment, ISO. quality management.**

I. INTRODUCTION

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]

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.

Environmental management is not, as the phrase could suggest, the management of the *environment* as such, but rather the management of interaction by the modern human societies with, and impact upon the environment. The three main issues that affect managers are those involving politics (networking), programs (projects), and resources (money, facilities, etc.). The need for environmental management can be viewed from a variety of perspectives. A more common philosophy and impetus behind environmental management is the concept of carrying capacity. Simply put, carrying capacity refers to the maximum number of organisms a particular resource can sustain.

The concept of carrying capacity, whilst understood by many cultures over history, has its roots in Malthusian theory. Environmental management is therefore not the conservation of the environment solely for the environment's sake, but rather the conservation of the environment for humankind's sake.

This element of sustainable exploitation, getting the most out of natural assets, is visible in the EU Water Framework Directive.

Environmental management involves the management of all components of the bio-physical environment, both living (biotic) and non-living (abiotic).

This is due to the interconnected and network of relationships amongst all living species and their habitats. The environment also involves the relationships of the human environment, such as the social, cultural and economic environment with the bio-physical environment.

As with all management functions, effective management tools, standards and systems are required. An environmental management standard or system or protocol attempts to reduce environmental impact as measured by some objective criteria.

The ISO 14001 standard is the most widely used standard for environmental risk management and is closely aligned to the European Eco-Management and Audit Scheme (EMAS). As a common auditing standard, the ISO 19011 standard explains how to combine this with quality management.

ISO 14001 is a standard for environmental management systems to be implemented in any business, regardless of size, location or income.

The ISO 14000 series standards provide guidelines for environmental management.

The ISO 14001 standard on environmental management systems, in particular, is used by thousands of companies and other organizations world-wide, and more adopt it every day. In addition, a growing number of governments refer to the ISO 14000 standards in developing their environmental regulations.

Faculty of Enginnering and Management of Technological System
[1]University of Craiova, [2]Inspectorate District of Frontier Police– Mehedinti,
Address: Calugareni 1, street, Code 220037, Drobeta Turnu Severin, Romania

These standards are therefore increasingly significant for the global environment and sustainable development.

The aim of the standard is to reduce the environmental footprint of a business and to decrease the pollution and waste a business produces. The most recent version of ISO 14001 was released in 2004 by the International Standards Organisation (ISO) which has representation from committees all over the world.

The ISO 14000 environmental management standards exist to help organizations minimize how their operations negatively affect the environment. In structure it is similar to ISO 9000 quality management and both can be implemented side by side.

In order for an organisation to be awarded an ISO 14001 certificate they must be externally audited by an audit body that has been accredited by an accreditation body. In the UK, this is UKAS.

Certification auditors need to be accredited by the International Registrar of Certification Auditors. The certification body has to be accredited by the Registrar Accreditation Board in the USA, or the National Accreditation Board in Ireland.

Other environmental management systems (EMS) tend to be based on the ISO 14001 standard and many extend it in various ways:

- The Green Dragon Environmental Management Standard is a five level EMS designed for smaller organisations for whom ISO 14001 may be too onerous and for larger organisations who wish to implement ISO 14001 in a more manageable step-by-step approach
- BS 8555 is a phased standard that can help smaller companies move to ISO 14001 in six manageable steps
- The Natural Step focuses on basic sustainability criteria and helps focus engineering on reducing use of materials or energy use that is unsustainable in the long term
- Natural Capitalism advises using accounting reform and a general biomimicry and industrial ecology approach to do the same thing
- US Environmental Protection Agency has many further terms and standards that it defines as appropriate to large-scale EMS.
- The UN and World Bank has encouraged adopting a "natural capital" measurement and management framework.

The European Union Eco-Management and Audit Scheme (EMAS) - is the EU voluntary instrument which acknowledges organisations that improve their environmental performance on a continuous basis.

The more than 4.100 registered organisations are legally compliant, run an environmental management system and report on their environmental performance through the publication of an independently verified environmental statement.

They are recognised by the EMAS logo, which guarantees the reliability of the information provided. Certified organisations include industrial companies, small and medium enterprises, services, third sector organisations, administrations and international organisations (including the European Commission and the European Parliament themselves[20]).

Other strategies exist that rely on making simple distinctions rather than building top-down management "systems" using performance audits and full cost accounting.

For instance, Ecological Intelligent Design divides products into consumables, service products or durables and unsaleables - toxic products that no one should buy, or in many cases, do not realize they are buying.

By eliminating the unsaleables from the comprehensive outcome of any purchase, better environmental management is achieved without "systems".

"Today's businesses must comply with many Federal, State and local environmental laws, rules, and regulations. It's vital to safeguard your company against compliance short-cuts.

This approach leaves you vulnerable to violations of the law, in addition to missing important environmental liabilities." [20]

Walter A. Shewhart made a major step in the evolution towards quality management by creating a method for quality control for production, using statistical methods, first proposed in 1924.

This became the foundation for his ongoing work on statistical quality control. W. Edwards Deming later applied statistical process control methods in the United States during World War II, thereby successfully improving quality in the manufacture and other strategically important products.

In recent times some themes have become more significant including quality environment, the importance of knowledge management, and the role of leadership in promoting and achieving high quality.

Disciplines like systems thinking are bringing more holistic approaches to quality so that people, process and products are considered together rather than independent factors in quality management.

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]

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.

Total Quality Management - this is a management strategy aimed at embedding awareness of quality in all organizational processes. It is designed to improve any organization (state, district) at any level administration). Dr. W. Edwards Deming quality principles can serve as a guide for success in project achievement.

Quality management can be considered to have three main components: quality control, quality assurance and quality improvement. Quality management is focused not only on product quality, but also the means to achieve it. Quality management therefore uses quality assurance and control of processes as well as products to achieve more consistent quality.

ISO 9000 is a family of standards for quality management systems. ISO 9000 is maintained by ISO, the International Organization for Standardization and is administered by accreditation and certification bodies. The rules are updated, the time and changes in the requirements for quality, motivate change. Recently, the November 15, 2008, has made changes to the requirements of ISO 9001.

Some of the requirements in ISO 9001 (which is one of the standards in the ISO 9000 family) include

- a set of procedures that cover all key processes in the business;
- monitoring processes to ensure they are effective;
- keeping adequate records;
- checking output for defects, with appropriate and corrective action where necessary;
- regularly reviewing individual processes and the quality system itself for effectiveness; and
- facilitating continual improvement

A company or organization that has been independently audited and certified to be in conformance with ISO 9001 may publicly state that it is "ISO 9001 certified" or "ISO 9001 registered". Certification to an ISO 9001 standard does not guarantee any quality of end products and services; rather, it certifies that formalized business processes are being applied.

Although the standards originated in manufacturing, they are now employed across several types of organizations. A "product", in ISO vocabulary, can mean a physical object, services, or software.

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]

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

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.

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]

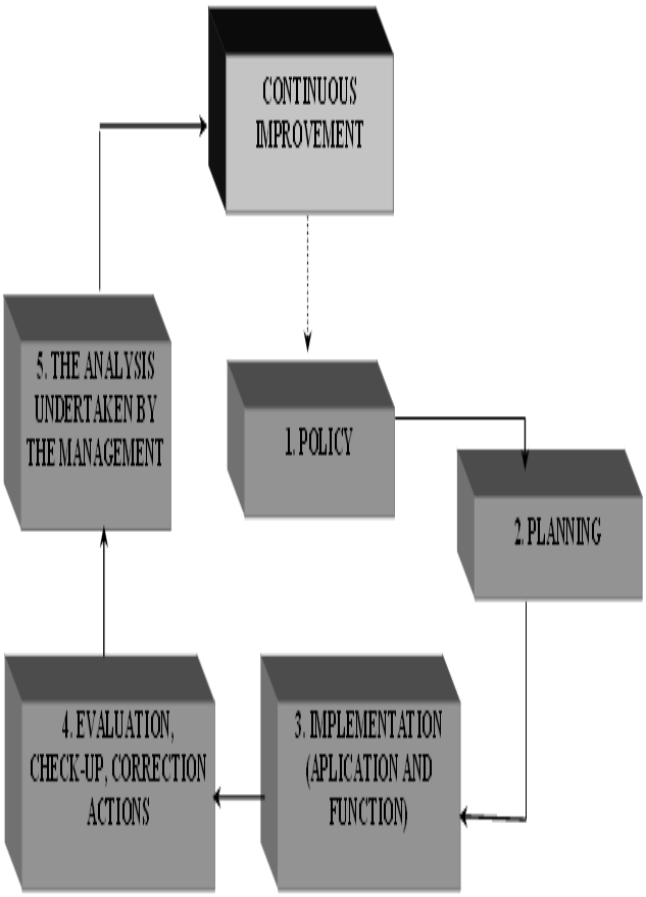

Fig.1 The structure of requests for a management study.

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 (see Fig 2)
- to have as a consequence the continuous improvement. [9]

Fig 2 The plan, do, check, act (PDCA) methodology of quality [21]

The image shown here represents a summary of the classic approach to quality control broadly known as continuous improvement. It is sometimes called the Deming Wheel because it was popularized by quality control pioneer Dr. W. Edwards Deming.

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 14011 - Guide for the audit of the environment. The audit of the systems of management of the environment.	SR EN ISO 10011-1 – Guide for the audit of the quality. Part 1. Audit. 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.

II. 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 3.

An important issue is the one regarding the level and rhythm of social-economical development.

Discussing this concept, it is necessary to:

a) Economical increase up to a level that covers, in contemporary conditions, the needs of the members of society. This means the development of economical growth reported to environment, time and space factors. In time, it must go on. Regarding our point of view, this matter means a development to sustain natural and human factors, adding the fact that has to be permanent, respecting the dynamic ecological balance, a healthy one. From here, we have a few problems:

- How large can an economy be reported to its natural resources and ecological system, as factors of its base?
- Which limits and how long could be kept in a dynamical balance the ecological system of the country, as long as the import and export modify the dimension and the quality of the economical activity?

- Can be ensured the lasting economical social and health development only by economical growth?
It's obviously it can't be given only the main answers:
- To the first question, the answer is offered by a limit where it takes places premature exhausting of some natural resources and the violation of ecological dynamic balance.
- To the second question the answer is that the limit of sustainability and economical healthy growth is presented by harming of the ecological general dynamical balance.
- To the third answer of the question, we must take account of the fact that for sustainable and healthy economical development we need a social development too, that means a social structure and a state by a law based on social justice.

Deep social unbalances produce not only economical unbalances but ecological once every unbalance depending on each other. Besides the economical sustainable growth needs a practical realization of amoral healthy system, an ecological conscience without it will be undermined.

b) Another point is that of necessity of internalization of costs imposed to the environment by the economical agents who use the environment factors as, some free goods and the costs of the fixing damages to be thrown to society, to one part of it or to other agents. Due to this tendency, the damage of the environment starts to develop with a larger energy. To end up this situation, economical agents, as people too, should be obliged by authorities to pay themselves the ecological damages that they produce, meaning to change ecological costs which them to be external, into internal cost of their own activity.

The law jurisdiction of the internalization is compulsory. It must establish the limits and conditions in which the toxic elements of the productions can be evacuated in the natural environment or progressive fires for such evacuations or special taxes that follow to be paid according to the dimension and character of the unwanted evacuation. The internalization of costs has consequence an impulse to the rational decreasing of a whole work consumes on a product unity, in the some time offering the necessary economical impulse to assure the environment protection.

c) A special problem is that if pollution prevents work and environment deterioration of recovering of the quality is only a consumer of internal net product or it is a value creator of net internal product. It's true that the authors of the theory „economical dilemma of pollution" sustain that the environment protection wouldn't do than to consume PIB and by this to block the economical growth that couldn't be possible without pollution. The truth is, that:
- the environment protection activity influences positively to increasing national income because acting right to physical and psychical health of the members of society goes to increasing of man power;
- it influences the growth of productivity of the social work and contributes to maintaining it to a high level because it eliminates or reduces the disease periods which on pollution conditions or natural environment deterioration are out numbered;
- influencing positively the people's health, it increases life time without talking the fact that it reduces the number of the retiring being ill and it offers possibility to develop a creative activity for a long time without remember the fact that man's life itself becomes more beautiful and full of satisfaction;
- the action of natural environment protection and insertion of the right quality is, in time, protected of resources because on one side, it preserves natural environment necessary to human existence and production too, and on the other side, goes to savings of resources eliminating wastes, using them more complex or recycling the wastes which could have harmed the environment. Not once, the activity of natural environment protection increases the level of the quality.
- Beside these points: environment protection is less expensive than repairing the damages. So as a consequence, the activity of environment protection is a productive work that maintains the value or creates a new value and PIB.

The productive character of maintaining and restoring the environment's value, new value creative and internal net product as a part of the action of environment protection, means one of the most important elements that needs to be taken into consideration in any programmer of economical activity.

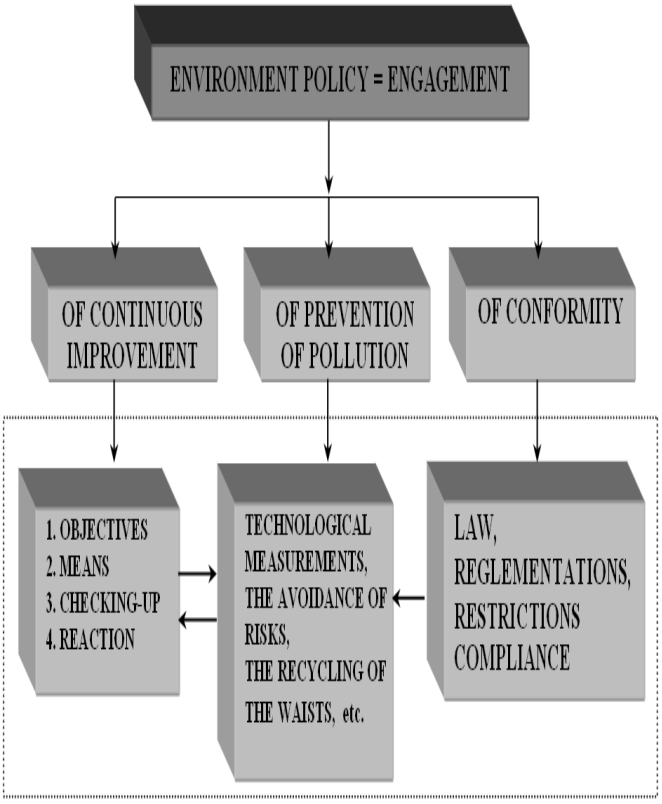

Fig 3. The requests of an environment policy

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.

III. THE PLANNING

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

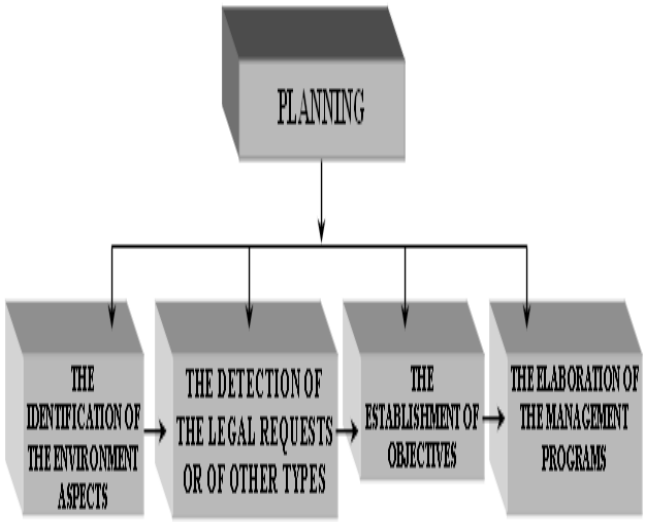

Fig 4. The principles of planning the environment activities

III.1 THE IDENTIFICATION OF THE ENVIRONMENT ASPECTS

As we can see in fig 5, the procedure of identification of the environment aspects contains three activities, which enrol in the direction of the arrows. [11]

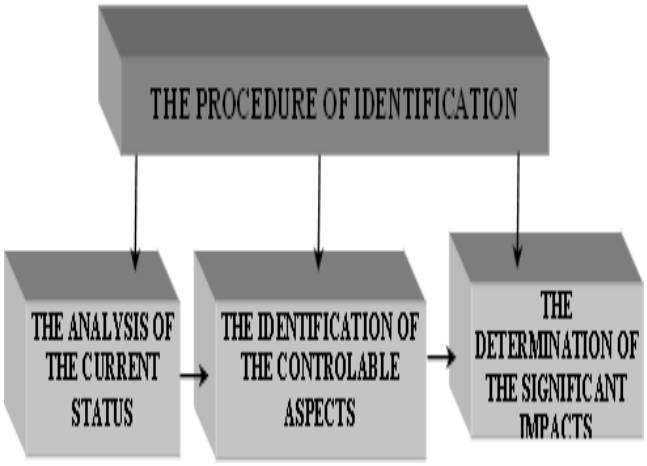

Fig 5. The procedure of identification of the environment aspects

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.
The exigencies of the environment protection must be achieved simultaneously at the micro level as well as at the macroeconomic level, at the level of the individual as well as at the level of the national and international community.
At all these levels, it is important to act in order to modify the current tendencies to deteriorate the environment, in order to permanently maintain a fair balance between the satisfaction of the more and more diversified needs of the human society and the protection of all the environment factors.
Because, with a determined price, the size of the profit is reversed proportionally with the size of the cost, each entrepreneur tends to dispose, as much as possible, of the expenses connected to the environment protection, except for the case when the negative consequences on the environment do not threat his/her own income.

Ignoring the protection of the environment by the entrepreneurs, contributing to its degradation, they cause damages to the entire human community and to himself/herself.

The conception about the development phenomenon of the entrepreneur must be changed. The entrepreneur must give up the technical and simplifying attitude regarding the economic growth.

This process is more complex than the most sophisticated models can capture. A realistic vision on the limits within which the entrepreneur can enrol economic activities of exploitation of nature and of production of goods and services necessary to the satisfaction of social needs is absolutely necessary in order to maintain the balance between the wish and the real possibilities of the society.

His/her behaviour cannot be developed from the imitative vision of reality, especially in today's conditions when the focus is set on the danger of disturbing the balances of the natural environment, with unpredictable consequences on the human life. Regarding this matter, we mention the ways of action at this level:
a) the creation of capable techniques and technologies, on the one hand, to use more efficiently the natural resources, to introduce within the economic circuit new non-renewable and renewable natural resources, to allow the substitution of some non-renewable and exhaustible resources with some renewable resources, to increase the efficiency of the recycling and recuperating processes, and, on the other hand, to avoid the degradation of the environment, to use environmental friendly techniques and technologies, to use eco-techniques and eco-technologies.
b) Even from the stage of research and design of the new units, as well as of the products and services, one must do everything to eliminate the causes which engage the degradation of the environment.
c) The work considering the supplementary costs involved in the protection of the environment, taking into account the fact that the prevention expenses are smaller than the ones to cure this phenomenon.
d) The improvement of the product quality, the adoption of some solutions of modular building, which allow the easy replacement of the physically and morally used parts in order to expand the life and to avoid the deterioration of the environment.
e) Rethinking the agriculture, the transportation, the constructions etc. in conformity with the terms of the viable economic systems from an ecologic point of view, through the superior revaluation of the existing specific resources in each ecosystem and the correct and ample use of the science conquests etc.

The protection of the environment must become a national priority for all the states of the world. De-balancing the environment is a phenomenon with severe consequences on nature and on the human being and that is the reason why all sovereign national states must take measures for the reduction and the extinction of its consequences:
a) The rational use, with maximum economy, of the natural resources. In this way, they must assess the potential resources and must examine the de-balancing tendencies related to the resources and the environment, in order to anticipate and avoid the bad consequences of the lack of materials and energy and the unwanted environmental impacts;
b) Deciding the optimum consume share of the non-renewable natural resources in order to preserve them a longer period of time, for the future generations' benefit not only for the present ones. The fairness of the resources usage is a much discussed problem not only among the members of the present generation, but also among the present and future generations.
c) The adoption of non-polluting technologies and the endowment of the production processes generating polluting agents with installations against pollution.
The orientation of the science and technology towards finding solutions for the preservation of energy and the raw materials and for the diversification of their sources. The realisation of a simpler production apparatus, more capable of adapting to the new restrictions and requests within the development process.
d) Recycling the wastes, one of the main sources of satisfying the needs of raw materials and materials. Through their processing, important quantities of raw material are saved and at the same time their role as a supplementary energy source.
e) The adoption of some severe measures against the different forms of pollution which eliminate the degradation or reduce the deterioration of the environment to the acknowledged standards. In order to reduce the damages that could be caused to each person in particular as well as to the national economy by emphasizing the ecological de-balances, the adoption of a legislation meant to ensure the protection of the environment is very important, to foresee the recorded means, in order to be able to close the economic agents which

produce outside the established norms, without any derogations.

f) The establishment of an economic policy which takes into account the entire existing economic interest system within the society and which uses not only legislative measures, but also the administrative measures, as well as the economic stimulants necessary for the economic agents to ensure the technical-ecologic progress and the economic-ecologic progress.

g) The expansion of the international-technical, scientific, economic cooperation actions, in the field of the protection of the environment, of the education and training of the population regarding the active participation in the environment protection etc.

The problem of the environment protection is at the same time a universal problem because it addresses to an entity which in its entireness is subjected to the degradation process.

The pollution phenomena do not know the distances, and the movement of the atmospheric masses from one continent to another is made with an amazing frequency and rigidity; at their turn, the waters coming from different parts of the world infiltrate within the underground waters, mix with each other and reduce or, on the contrary, concentrate the content of impurities in a wider frame, which does not take into account any type of frontiers.

At an international level, many states have adopted laws and have created institutions through which they try to put an end to the degradation of the environment and to implement a judicious, ecologic management of their own territories.

A general look over these legislations and institutions, but especially over the way in which they act, emphasizes the complex relationships, which sometimes turn them inefficient and thus useless.

There are countries where the hunger and the lack of homes, the lack of education and the endemic diseases represent priority problems.

The representatives of these countries claim that if pollution is the price of industrialisation, then their countries are ready to pay this price.

From this assertion we understand the necessary international character of the ecologic status of the Earth supervision, the developed societies must assume, using their material and intelligence resources, a great part of the obligations which the developing countries have, forced by imperious necessities to direct their efforts towards other priorities.

Their help may allow that all the worlds countries to evolve, wisely, towards industrialisation, as well as towards the preservation of the environment.

As a nation can difficultly elaborate its economy without taking into account the world situation and the one of its neighbours, it cannot imagine or refuse, a fight against pollution reduced to its territory.

Despite the efforts maid by everyone, the balance does not rise at the seriousness of the problem.

The objective factors, but most often subjective taking into consideration the states' conduct, make the environment to be considered another less important field of their economic policies.

The environment can wait, as if it is about something outside the human being, not about the human being itself, about its vital conditions, about the present conditions and the future ones.

Within a more and more urbanised society, the strategies from the organisation and urban development field must aim at the achievement of some objectives of protection of the environment; organising the urban space and the conflicts it may trigger (noise, pollution, traffic) have constituted starting points of the ecologic movements, these representing a political force through their foundation and action methods and through the expected effects.

"The connection which links the politics to the economy will appear clearer if we consider the latter as a part of biology having as objective the definition of the structure of the interaction between the species and their environment while the politics relates to the exercise of power and authority to which all the species living within a determined environment are subjected to."

A political ecology proposes to reconcile nature and society, the individual and the collective within a dialectic relation with the political economy so that the political action has expressed the most diverse strategies, propositions and plans.

The problem of the preservation of the environment exceeds the purely ecologic frame, integrating into an entire social, economic and political mechanism.

The contemporary human society is directly interested in such a problem, from the necessity of harmonising its relations with the environment, for optimising the life conditions, for the quality of life, that is in order to ensure a balance between the Management of the Environment and the Management of the Quality of Life. We can talk today about the beginning of an ecologic revolution capable of ending the crisis of the environment through which the human society passes within this historic period of its development.

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]

According to some ecologist's opinions, the imperative of the environment asks the ending of the economical growth as a survival matter.

Other economists consider the social economical imperative as and impulse for a permanent increasing as a matter of a social survival. Both of them consider these issues very important but not sufficient, the former referring to the protection and restoration of the eco-systems and the latter referring to the social progress and insertion of the economical stability.

The evolution of the economical social life can be interpreted into physical or quantitative terms or only in terms belonging to linear determine relationship.

Here are some notes on this kind of relationship and conclusions:

a) the economical growth expressed by evolution of PNB is not a final aim, only a mean, a tool because the final objective of social production and of the whole social economical activity being the growth of living level.

b) economical growth expresses by synthetically parameters as PNP is an important source of increasing individual welfare, beside the expenses growth for the protection of the environment.

According to some evaluating the total public private expenses calculated for the environment protection as a part of national product for some countries with developed economy raised to 25%, even more.

In USA, these expenses have been a 2% of PNP ($ 1.05 billion) and in London the decreasing of the smog is of £ 0.15 yearly for each citizen.

All these expenses as a part of national income contribute in a large measure to overflow this parameter with a certain percent that can't be found in products or services for unproductive consume, so that they diminish the life level of the people.

The economical growth offers great possibilities of development of the life level of people in the small countries. On this context, the matter should have belonged to the efficiency concept.

It's about a balance between nature and man, between environment and economical growth, between technology and ecology. The right solution is to accept the growth which offers advantages for man and society until the difference between the economical growth advantage and the cost of pollution reducing, including the environment protection too becomes null, until the expenses for the environment protection don't bring any additional of goods in order to increase the quality of life.

As a conclusion, the problem is not to increase the environment protection and economical growth. Null difference between advantages and costs goes to a predictable future only when the industrial technologies should be the same or develop slower then the damaging rhythm of the environment.

c) the request of stopping the economical growth on planetary or regional level can't have any consistency as long as on the large areas of the Earth there is a discrepancy between economical, technological, scientifically development and intensity of the functional connection of ecological request and economical growth.

d) the man issue is not to prevent economical increasing, especially in the new developed countries but to search and apply efficient economical and political tools in order to accomplish the requests of the economical growth to those of the environment protection by management and rational allocation of resources and improving environment conditions through those who use resources and pollute environment factors and harming man's health should impose economical restrictions by high prices, progressive taxes and others.

Correlated to this issue, the economist has some obligations: first of all, he must give explications regarding genesis of the opposition between maximum macro-economical development levels and perverting state of natural resources where the problem of the environment has an important place.

Secondly, economist should calculate damages caused by pollution and high rates of products use, so this way he should establish prices and taxes system very efficient together with prohibition measures, an adequate institutional and control system.

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 …

References:

[1] Fide Mihail Ciocodeica in the preface of *Valerie Baron's book*

[2] John Naisbitt, *Megatendencies*, Politica Publiching House, the collection Contemporary Ideas, Bucharest, 1989,

[3] Valerie Baron, *Pratiquer le Management de l'Environment,* ISO 14001 les Reponses a vos questions, ANFOR Publishing House, 1998, translation in Romanian: Practica managementului de mediu ISO 14001, Maria Mihaela Grigoriu, Tehnica S.A. Publishing House, 2001,

[4] **Angelescu A., Ponoran I., Ciobotaru V.,** - *The Environment and the sustainable development*, A.S.E. Publishing House, Bucharest, 1999,

[5] **Aur N.S.** – *Economic Geography of the World. Terra - resources and industrialisation*, Sitech Publishing House, 2002.

[6] **Bonnefous Ed**. – *Man or nature*, Politica Publishing House, Bucharest, 1976.

[7] **Brown L.** – *Global Problems of Man*, Tehnica Publishing House, Bucharest, 1996

[8] **Mazilu M**., - *Ecology and the Protection of the Environment*, Mirton Publishing House, Timişoara, 2004.

[9] **Mazilu M**., **Marinescu R**., - *To be afraid or not of globalisation…* International Workshop, 24th - 25th November, Romanian – American University, Bucharest, 2007

[10] **Mazilu M.,** The Dynamics and Manifestations of Globalisation***, published in European Research Studies Journal, Volume XI, Issue 3, 2008 Greece, pag.ISSN:1108-2976.***
www.ersj.eu/index.php?option=com_content&task=view&id=259&Itemid=167 - 25k

[11] **Mazilu M.**, *The globalization, the Environment and economic security on the perspective of the European Integration*, published in Journal of Environmental Protection and Ecology, Official Journal of the Balkan Environmental Association book 1, vol. 9, No.1, 2008, No.1099/23.10.2006, ISSN:1311-5065, p .159-167, SBC
http://thomsonscientific.com/cgibin/jrnlst/jlresults.cgi?PC=MASTER&ISSN=13115065

[12] **Mazilu M.**, **Ispas R., Marinescu R.**, *Lasting economical development – globalization – environment – tourism in the perspective of the European Integration*, article defended at Third Pan Hellenic Conference, International Conference on International Political Economy on The International Economy in the 21st Century: Towards Globalization or Regionalization?, organised by The Institute of International Economic Relations, Athens, 16th – 18th May 2008, Athens, Greece and published on
http://idec.gr/iier/new/3rd%20Panhellenic%20Conference/ISPAS-MAZILU-MARINESCU-%20LASTING%20ECONOMIC%20DEVELOPMENT-GLOBALISATION-%20TOURISM%20IN%20THE%20OUTLOOK%20OF%20EUROPEAN%20INTEGRATION.pdf

[13] **Mazilu M., Ciobanu M.,** *The Impact of European Integration on the national environment on quality,* article published in Proceedings of XXI International Serbian Symposium on Mineral Mining, ISBN 978-86-80987-63-7, COBISS.SR-ID 152797196, pg.244-249, University of Belgrade, 2008.

[14] **Ciobanu M., Ciobanu M., Mazilu M.,** *Global warming, decisive factor of uniformity seasons,* published in vol. Abstract Book, Global Conference on Global Warming 2008, organised by The Scientific and Technological research Council of Turkey, 6th – 10th July 2008, Istanbul, Turkey, ISBN 978-605-89885-0-7, pg. 131 and in vol. Conference Proceedings, pg. 1073-1083, ISBN 978-605-89885-0-7, www.gcgw.org, www.gcgw.org/ Abstract-book-GCGW08.pdf

[15] **Mitroi M.**, - *Eco-developement, an imperative of the third millennium*, Tribuna Economică Magazine, no. 48, Bucharest, 2002

[16] **Postelnicu Ghe., Postelnicu C**., - *Economy globalisation*, Economica Publishing House, Bucharest, 2000.

[17] **Ciobanu Mariana**, Ciobanu V. Marius "*Ecologic crisis situation management",* INCD ECOIND International Symposium "The Environment and Industry" – Simi 2007 – Bucharest, oct. 2007, ISBN: 1843-5831, P 391 – 395.

[18] Mazilu Mirela, Ciobanu Mariana, "*A New Challenge In The Current Economic System: Environment*", WSEAS International Conferences, Prague, Czech Republic, March, 2009.

[19] Ciobanu Mariana Mazilu Mirela, Sabina Mitroi, Marius V. Ciobanu, "*The Quality Management In General And The Environment Management: A Natural Relationship "*,WSEAS International Conferences, Prague, Czech Republic, March, 2009.

[20]http://www.calicheltd.com/environmental-services-texas.aspx,http://en.wikipedia.org/wiki/Environmental_management

[21]http://leadershipchamps.wordpress.com/2008/03/03/project-management-process-groups/