

Environmental Management

as an Exemplification
of the European Union
Law Principles

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Chapter I

Introduction

The Environmental Management System – EMAS (Eco-Management and Audit Scheme) is included in the Community Regulation (EC) No. 761/2001 of the European Parliament and of the Council, dated 19 March 2001, allowing voluntary participation by organizations in the Community Eco-Management and Audit Scheme. The EMAS system is one of the elements that creates the European Union law system. The above-mentioned regulations building the system are based on the European Environmental law principles, such as the prevention, precautionary, rectification of damage at source and polluter pays principles. These rules are included in art. 191 § 2 of the Treaty on the Functioning of the European Union changed by the Lisbon Treaty¹.

EMAS is the abbreviation established for the European Community regulation – The EU Eco-Management and Audit Scheme (EMAS), which is a voluntary management tool for companies and other organizations created in order to evaluate, report and improve their environmental performance². The role of regulations in the European Union law system should be stressed here. Regulations are norms that are generally binding and directly applicable in the Member States' law systems. The aim of giving EMAS such a law form stresses, inter alia, the importance of the norm. When considering the environmental management question, on

¹ Treaty on the Functioning of the European Union, EU OJ, C 306, 17.12.2007. The consolidated versions of the Treaty on the European Union and the Treaty on the Functioning of the European Union, European Union Official Journal 115/01, 9.05.2008.

² The first version of the EMAS regulation was adopted in 1993: Council Regulation (EEC) No. 1836/93 of June 1993, allowing voluntary participation by companies in the industrial sector in a Community Eco-Management and Audit Scheme – Official Journal of the European Communities, 10.07.1993.

the basis of the EMAS regulation, it should also be stressed that environmental management is founded on the grounds of prevention, reduction and, if possible, the elimination of environmental pollution at the source, which should take place at the enterprise level, i.e. at the source of pollution. The aim of such an approach to the problem is to reveal the degree of reasonable use of natural goods as well as to present the implementation of environmental friendly, “clean” technologies. Therefore, the main stipulation of environmental management is to protect the environment, which still remains under very strong influence of the industrial plants, however using a new method that is founded on a constant improvement of the enterprise as well as on new instruments, which entail a reduction of the negative environmental impact. Consequently, EMAS (Eco-Management and Audit Scheme) is a European Union system designated for those organizations whose aim is to stay in accordance with the environmental law and at the same time they aspire to self-improvement, simultaneously diminishing the negative environmental effect. The EMAS purpose is also to encourage the industrial plants – but not only them – to take responsibility for the environmental dangers generated by their actions. Furthermore, as a result of the environmental management implementation, organizations have the opportunity to decrease the above-mentioned environmental negative impact by their voluntary self-restraint. The implementation of the EMAS system also gives enterprises a chance to increase their competitiveness, as organizations performing on the basis of environmental management systems might become a guarantee for greater social confidence. In times when the issue of environmental protection is on the top of the list of priorities, as well as taking better care of natural goods, the companies that are concerned for their environmental friendly image obviously have a stronger market position. It should also be stressed that an efficiently working environmental management system contributes to the reduction of operational costs as well as to a general improvement of entrepreneurial activity.

EMAS is a norm that exemplifies the community environmental protection policy. First and foremost it should be mentioned that EMAS (Eco-Management and Audit Scheme) realizes the idea of sustainable development as well as the fact that EMAS is part of the European Environmental Policy.

Considering the notion of environmental management system in the light of the European Union Law, it is necessary to recall the European Environmental Policy and Strategies, as well as the sustainable development idea. The sources of this idea date back to the fifties of the previous century. It is possible to state that the sustainable development concept arose based on publications such as the one from 1950 entitled

“The Social Cost of Free Enterprise” written by Karl William Kappa³ or “The Population Bomb” by Paul Ehrlich⁴ from 1968. One of the most important publications in this stream is “Silent spring” written by Rachel Carson⁵ from 1962, which was recognized as a turning point in the way of understanding the issue of natural environment. It should also be stressed that in 1968 the Club of Rome⁶ emerged, which initiated the “zero growth” slogan⁷. The mentioned idea was a remedy for the global ecological problems. This notion became the subject of the first and second report of the Club – “Limits of the growth” from 1972 and “Mankind at the turning point” from 1974.

The sustainable development idea can be found in the European Union Environmental Policy as well as in the environmental policies of the Community Member States. Nowadays, sustainable development creates a basis for the preservation of natural goods along with economic and social development. All Environmental Protection Policies as well as the respective norms should be in line with the idea of sustainable development. This means that not only all Member States’ Environmental Policies should be in line with the concept of sustainable development, but also the respective rules concerning environmental law should realize this idea. This also means that all the sector policies, including the industrial policy, should follow the concept of sustainable development. The sustainable development concept can be treated as an answer for the dangers created in the natural environment by the extensive economic development, along with the wide exploitation of the natural resources. The sustainable development idea predicts the possibility of economic growth and at the same time it takes the issue of environmental protection into account. The factors that characterize sustainable development are the interdependence and the equivalence between economic growth, the state of the environment and social development. These three

³ Karl William Kappa, *The Social Cost of Free Enterprise*, Harvard University Press, Massachusetts 1950.

⁴ Paul Ehrlich, *The Population Bomb*, A Sierra Club–Ballantine Book, New York 1968.

⁵ Rachel Carson, *Silent Spring*, Penguin, London 1962.

⁶ The Club of Rome is a private, not-for-profit organization founded in 1968. Its mission is “to act as a global catalyst for change through the identification and analysis of the crucial problems facing humanity and the communication of such problems to the most important public and private decision makers as well as to the general public”. Its activities should: “adopt a global perspective with awareness of the increasing interdependence of nations. They should, through holistic thinking, achieve a deeper understanding of the complexity of contemporary problems and adopt a trans-disciplinary and long-term perspective focusing on the choices and policies determining the destiny of future generations”, <http://www.clubofrome.org/eng/about/3/>, [http://proekologia.pl/content.php?article.219, 10.02.2008](http://proekologia.pl/content.php?article.219,10.02.2008).

⁷ Dennis Meadows, *Granice wzrostu*, PWN, Warsaw 1973.

domains should, unlike thus far, evolve in a way that takes their correlation into consideration⁸. The primary purpose of the European Union in the realization of the sustainable development idea is to create a Europe that will be cleaner, prospering in a better way and fair⁹. According to the definition enclosed in the report prepared by the World Commission on Environment and Development entitled: “Our Common Future”, also called the Brundtland Report (report prepared by the Gro Harlem Brundtland Commission, Norwegian prime minister)¹⁰, “sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs” (...). “In essence, sustainable development is a process of change in which the exploitation of resources, the direction of investments, the orientation of technological development; and institutional change are all in harmony and enhance both current and future potential to meet human needs and aspirations”¹¹. Formulating the sustainable development idea was helpful in creating the Rio de Janeiro Declaration in 1992, which was accepted during the ONZ conference “Environment and Development”¹². The conference is also known as the First Earth Summit. The mentioned document had an appendix that was called Agenda 21, which was accepted in the form of a recommendation. The declaration authors stated that the “right to development must be realized in a way that allows a fair connection between growth and the environment needs of present and future generations”¹³. Taking into consideration the Polish law it should be mentioned that the sustainable development principle is included in the Polish Constitution in article 5.

The Rio de Janeiro Conference, which took place in 1992, was the event that gave the basis for connecting the idea of sustainable development with the idea of environmental management. The basic achievement of the conference was populating the idea of sustainable development¹⁴.

⁸ Grzegorz Zabłocki, *Rozwój zrównoważony – idee, efekty, kontrowersje*, Uniwersytet Mikołaja Kopernika, Toruń 2002, p. 42.

⁹ Available at: http://europa.eu/abc/europein2005/other_pl.htm, 22.11.2008.

¹⁰ Derived from the name of the Commission Leader.

¹¹ Our Common Future, Chapter 2: Towards Sustainable Development, From A/42/427. Our Common Future: Report of the World Commission on Environment and Development, UN Documents Gathering a Body of Global Agreements, available at: <http://www.un-documents.net/ocf-02.htm#I>, 6.01.2010.

¹² Available at: <http://www.unep.org/Documents.Multilingual/Default.asp?DocumentID=78&ArticleID=1163>, 6.01.2010.

¹³ Andrzej Papuziński, *Zrównoważony rozwój – od utopii do praw człowieka*, Oficyna Wydawnicza Branta, Bydgoszcz 2005, p. 115.

¹⁴ Eugeniusz Kośmicki, Konferencja w Johannesburgu a podstawowe problemy i instrumenty ochrony środowiska, *Ekonomia i Środowisko*, No. 21, Warsaw 2002, p. 62.

The most important document that was created by the Conference was the Rio Declaration, also called the “Earth Chart”. After the Rio de Janeiro Conference a new doctrine was implemented. The idea consisted in managing the economic processes by way of the environment. This new idea was called the “Environmental Management System”. On the European Union level the V Environmental Action Plan was accepted, which concerned sustainable development. At the same time also the idea of environmental management was implemented. In the OECD also a transformation program was accepted, which aimed to achieve sustainable development (“Transition towards Sustainable Development”). In June 2001, during the Göteborg session, the European Council accepted the strategy for sustainable development proposed by the European Commission¹⁵ (“A Sustainable Europe for a better world: A European Strategy for Sustainable Development”)¹⁶. The mentioned strategy supplemented the Lisbon strategy. The strategy proposed measures that assured the welfare of European citizens as well as measures concerning the climate changes, health dangers and poverty.

The sustainable development strategy concerning the issue of durable and harmonious economic growth obliges all European Union Policies to comply with the idea of sustainable development. This means that the European Union Policies should align themselves with each other and reinforce themselves in order to achieve the economic, social as well as environmental protection goals. Taking into account the above observations, it can be stated that sustainable development is one of the basic aims of the European Union. In June 2006 the European Council introduced changes in the Sustainable Development Strategy. The New Strategy stipulates a higher correspondence between economic growth and the natural environment. The new strategy aims at a more efficient and better protection of the natural environment. This aim will be achieved by a more productive management of the natural resources¹⁷.

It should also be stressed that the sustainable development concept is not only a theoretical model, but it is also reflected in the legal regulations concerning environmental management. As Stanisław Wrzosek observed, in every state that has implemented the international law

¹⁵ “The European Council agrees a strategy for sustainable development, which completes the Union’s political commitment to economic and social renewal, adds a third, environmental dimension to the Lisbon strategy and establishes a new approach to policy making”. Presidency Conclusions, Göteborg European Council, 15–16 June 2001, http://ec.europa.eu/governance/impact/background/docs/goteborg_concl_en.pdf, 12.01.2010.

¹⁶ Available at: http://ec.europa.eu/sustainable/sds2001/index_en.htm, <http://ec.europa.eu/environment/eussd/>, 12.10.2010.

¹⁷ Available at: http://ec.europa.eu/sustainable/welcome/index_en.htm, 12.10.2010.

rule, it is impossible to create the norms concerning the mentioned issue without having to take the idea of sustainable development into consideration¹⁸.

As regards the answer to the changes that took place during the environmental conferences concerning the idea of sustainable development, the International Organization for Standardization proposed a family of new norms in the field of environmental management called ISO. According to the ISO 14000 norm the management of each of the work stations in the production sphere and of every service should take into account the rational utilization of natural sources, water and energy, as well as pollution emission. Both environmental management systems – EMAS and ISO 14001 introduce the obligation of a constant improvement of the environmental management system, which means that organizations that have implemented one of the systems are obliged to use natural resources effectively and at the same time to sustain technological development.

It can be stated that the EMAS system is a norm created for the realization of the sustainable development idea for organizations that have implemented the system. Environmental management is deeply linked to the concept of sustainable development and by implementing the EMAS system in organizations the idea can achieve its real dimension. The environmental management system is a tool by which the idea of sustainable development is realized on organizational level.

The main aim of the European Union Environmental Policy is to achieve a high level of environmental protection, in accordance with the sustainable development concept. Together with the implementation of the Maastricht Treaty, the above-mentioned aim started to be treated as a permanent task of the European Union. The Environmental Policy also stipulates the goals that should be achieved. The European Union is achieving its environmental goals by introducing legal instruments, such as regulations and directives in particular. It should also be mentioned that the European Environmental Policy is realized by way of Environmental Action Plans. The aim of creating the Environmental Action Plans was first and foremost the lack of a regulation of environmental matters by the founding treaties. Because of that, the European Union institutions, together with national powers, started implementing elements of the Environmental Policy. The tool by which those elements were introduced were the mentioned Environmental Action Plans. The environmental management system EMAS was part of the realization of

¹⁸ Stanisław Wrzosek, „Ekorozwój w prawie polskim”, *Ekonomia i Środowisko*, No. 2, 2001, p. 168.

the Fifth Environmental Action Plan, entitled “Towards Sustainability”. The Fifth Environmental Action Plan was adopted in 1993 and amended in 1998. This Environmental Action Plan created the basis for the above-mentioned idea of sustainable development, treating this concept as a strategy which aim is to achieve a constant economic and social development, but also taking into account the environment and natural resources, which are, after all, a necessary condition for the further existence and development of mankind. The importance of the mentioned Action Plan is based on the fact that it changes the way of thinking about the problem of environmental protection. This document introduces the idea of co-responsibility for the environmental matter. It proposes a new way of treating the problem, stepping away from the previous method of normalization by norms signed by governments and industrial representatives. The idea consists in involving all participants of economic processes – governments, local governments, enterprises and society. The mentioned Action Plan suggests a complete change of attitude towards the problem of environmental protection. It suggests departure from the previous consumption model and introducing new methods of production based on new technologies¹⁹. This kind of action would undoubtedly have significant influence on environmental protection and on the limitation of the usage of natural resources. When adopting the Fifth Environmental Action Plan, the European Union decided to accept the legal norms, which enabled an increase of the voluntary standards of environmental protection. This is exactly the concept that the EMAS system realizes.

The aim of this introduction so far, was to properly place the EMAS system between the European Union Environmental Policy and the legal norms.

The aim of this paper is to present the systems of environmental management, as an exemplification of the Environmental Principles of the European Union Law. Firstly, I would like to prove that the general idea of environmental management and also the Eco-Management and Audit Scheme EMAS – as a law regulation²⁰, refer to the mentioned principles. I would also like to establish which of the principles that are included are the most clear. Secondly, I would like to examine to what extent the requirements of the environmental system as well as the rules for its implementation are in accordance with the Environmental Principles

¹⁹ Ibidem, p. 155.

²⁰ Regulation (EC) No.761/2001 of The European Parliament and the Council of 19 March 2001, allowing voluntary participation by organizations in a Community Eco-Management and Audit Scheme (EMAS).

of the European Union Law, which can be found in article 191 §2 of the Treaty on the Functioning of the European Union, changed by the Lisbon Treaty²¹.

When summarizing the idea of environmental management on the basis of the EMAS regulation²², it should be stressed that environmental management consists in counteraction (in the meaning of prevention), abatement and if possible the elimination of environmental pollution, especially on the production level (rectification of damage at source). The Polluter Pay Principle assures a reasonable management of natural resources as well as the use of environmentally friendly, “pure” technologies. Thus, the main idea of environmental management is to protect the natural environment, while still being under a very strong influence of enterprises, but using a new method, which is based on measures that involve self-development and continuous improvement²³, among others, in order to decrease the environmental impact and at the same time increase the efficiency of enterprises, compared to the previously applied, not environmentally efficient measures, such as fulfilling only direct obligations for example, like paying environmental taxes and fines for actions that are harmful to the environment.

The definition of environmental management contains elements that allow making a reference to the Environmental Principles of the European Union Law. These elements are prevention, rectification of damage and the polluter pays principle, but also the precautionary principle – however in my opinion this particular element does not refer to the Environmental Principles directly.

In order to achieve the result of proving the dependence between the Environmental Principles of the European Union Law and the environmental management concept, this paper is divided into three main chapters.

The first chapter will refer to the environmental principles. I would like to present them in order to clarify their concept and I will treat them as a point of reference for my further considerations. However, the idea is not to mention all of the Environmental Principles of the European

²¹ Treaty on the Functioning of the European Union, European Union Official Journal, C 306, 17.12.2007. The consolidated versions of the Treaty on the European Union and the Treaty on the Functioning of the European Union, European Union Official Journal 115/ 01, 9.05.2008.

²² This summary is made based on the definitions included in art. 2 of the EMAS regulation, for notions such as – environmental policy, environmental performance, prevention of pollution, continual improvement of environmental performance, environmental management system, etc.

²³ The concept of self-development together with the Deming Cycle will be presented later.

Union Law, but only the principles that are necessary for understanding the main argument. As far as I am concerned, these are: the prevention principle, the precautionary principle, the rectification of damage at source principle and the polluter pays principle. As already mentioned above, these are the principles included in article 191 §2 of the Treaty on the Functioning of the European Union²⁴. Therefore, this paper will not refer to the general principles, such as the subsidiary, proportional or integration principles, because these relate to the other, more general features of the environmental law, and not to the aspect directly linked to the actions of enterprises.

In my opinion, such a presentation of the above-mentioned four principles is an essential condition for proving the thesis contained in the title of this paper. In the first chapter I will stress the connection between the principles and the European Environmental Policy. Firstly, I will express the importance of including the principles in the Environmental Policy and, secondly, I will present the link between environmental management and the Environmental Policy, in order to also prove the accordance of environmental management with the European Environmental Policy.

The second chapter will present the concept of environmental management. This presentation will be mainly based on the EMAS system, its general idea and the basic definitions that are necessary to understand the environmental management notion, such as the definition of organization, management or enterprise. However, the chapter will not only include a presentation of environmental management on the basis of the EMAS system, but it will also show that environmental management can be implemented based on the ISO 14001 system. I will also mention the requirements of the systems and the rules for their implementation.

The chapter in which I would like to prove that environmental management is the right answer, including the environmental principles, will be divided into three parts. The first part will concern the idea of environmental management and the EMAS regulation; the second part will concern the requirements of the system; and the third part will concern the rules for the implementation of the system. Each of the mentioned parts will be based on the four environmental principles – the prevention principle, the precautionary principle, the rectification of damage at source principle and the polluter pays principle.

²⁴ Treaty on the Functioning of the European Union changed, EU OJ, C 306, 17.12.2007. The consolidated versions of the Treaty on European Union and the Treaty on the Functioning of the European Union, European Union Official Journal 115/ 01, 9.05.2008.

The methods used for the elaboration of this paper are based on moving from a general concept to a detailed one – this is how the paper is constructed. As regards the system for proving my thesis, I have chosen the comparative method.

Chapter II

Treaty Principles of the Environmental Law with respect to environmental protection

1. Treaty Principles of the Environmental Law

Prior to discussing the EU environmental principles in the context of environmental management, it is useful to make a division between them. The most accurate classification of principles, which responds the presented issue, is included in the provisions of the Treaty on the Functioning of the European Union¹. Before changes were introduced by the Lisbon Treaty, the above-mentioned classification of principles was included in the community pillar of the EU, where, in most cases, the environmental legislation was adopted. While analyzing the mentioned environmental provisions, it is possible divide them into two groups. The first one includes the general treaty principles, directly linked to environmental protection. In this group the principles such as subsidiarity, proportionality and integration should be included. Whereas the second group should include the precautionary, prevention, rectification of damage at source and polluter pays principles. Before the implementation of

¹ The consolidated version of the Treaty Establishing the European Community, Official Journal C 325, 24 December 2002, available at: http://europa.eu.int/eur-lex/en/treaties/dat/EC_consol.html, 15.03.2007.

the Lisbon Treaty, two of the principles mentioned in the first group – the subsidiarity principle and the integration principle – were included in articles 5² and 6³ of the EC Treaty⁴, so in the first part of the Treaty under the title “Principles”. These principles were incorporated in articles from 1 to 16 of the EC Treaty⁵ and generally referred to the Treaty basics, objectives, as well as institutional and procedural rules. The principles of subsidiarity and proportionality are prescribed by Protocol No. 2 – “On the Application of the Principle of Subsidiarity and Proportionality”⁶. The rule of integration is now included in article 11 of the Treaty on the Functioning of the European Union⁷. However, the rules that directly concern the matter presented in this paper are included in article 174 §2⁸ of the EC Treaty⁹ – which is now article 191 §2 of the Treaty on the

² EC Treaty art. 5: “The Community shall act within the limits of the powers conferred upon it by this Treaty and of the objectives assigned to it therein. In areas which do not fall within its exclusive competence, the Community shall take action, in accordance with the principle of subsidiarity, only if and in so far as the objectives of the proposed action cannot be sufficiently achieved by the Member States and can therefore, by reason of the scale or effects of the proposed action, be better achieved by the Community. Any action by the Community shall not go beyond what is necessary to achieve the objectives of this Treaty”.

³ EC Treaty art. 6: “Environmental protection requirements must be integrated into the definition and implementation of the Community policies and activities referred to in Article 3, in particular with a view to promoting sustainable development”.

⁴ The consolidated version of the Treaty Establishing the European Community, Official Journal C 325, 24 December 2002, available at: http://europa.eu.int/eur-lex/en/treaties/dat/EC_consol.html, 15.03.2007.

⁵ The consolidated version of the Treaty Establishing the European Community, Official Journal C 325, 24 December 2002, available at: http://europa.eu.int/eur-lex/en/treaties/dat/EC_consol.html, 15.03.2007.

⁶ Protocol No. 2 – “On Application of the Principle of Subsidiarity and Proportionality”, Official Journal of the European Union C 115/206, 9 May 2008, available at: <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2008:115:0201:0328:EN:PDF>, 12.01.2010.

⁷ Treaty on the Functioning of the European Union, Official Journal of the European Union , C 306, 17.12.2007; The consolidated versions of the Treaty on European Union and the Treaty on the Functioning of the European Union, European Union Official Journal C 115/ 53, 9.05.2008. Art. 11: “Environmental protection requirements must be integrated into the definition and implementation of the Union policies and activities, in particular with a view to promoting sustainable development.”, available at: <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2008:115:0047:0199:EN:PDF>, 12.01.2010.

⁸ EC Treaty, art. 174, §2 “Community policy on the environment shall aim at a high level of protection taking into account the diversity of situations in the various regions of the Community. It shall be based on the precautionary principle and on the principles that preventive action should be taken, that environmental damage should as a priority be rectified at source and that the polluter should pay”.

⁹ The consolidated version of the Treaty Establishing the European Community, Official Journal C 325, 24 December 2002, available at: http://europa.eu.int/eur-lex/en/treaties/dat/EC_consol.html, 15.03.2007.

Functioning of the European Union¹⁰. This article is complementary to the rules introduced in the mentioned first part of the Treaty and includes the principles that refer to the Community environmental policy. It was claimed that the principles contained in article 174 §2 of the EC Treaty¹¹ (now 191 §2 of the Treaty on the Functioning of the European Union) were the Community policy rules¹², being the general guidelines for the Community environmental policy¹³. However, when comparing to the rules enclosed in article 5 or 6 of the EC Treaty (now art. 11 in the Protocol), which were the systemic principles of the Community Law, it ought to be stressed that the principles mentioned in article 174 §2 (now 191 §2) were not the legally binding ones. They did not oblige to make any decisions on their basis. However, there are different opinions on this matter. According to some of the opinions on the doctrine, for example some German¹⁴ authors, these rules could have been treated as binding in the case of every single decision in the environmental area. Astrid Epiney¹⁵ says that “the principles of article 174 §2 are of a binding nature, because their non-respect by a specific Community measure can lead to the nullity of that measure”. It seems that her statement is also supported by Jan H. Jans¹⁶, who claims that the mentioned principles “will have to be¹⁷ translated by the European environmental legislation into concrete obligations for the Member States”. He suggests that “it will then be possible to interpret directives and regulations in the light of these principles”. Another viewpoint is presented by Ludwig Kramer¹⁸, who claims that the principles mentioned in article 174 §2 of the EC Treaty could only be enforced by the European Court “in very

¹⁰ Treaty on the Functioning of the European Union, EU OJ, C 306, 17.12.2007. The consolidated versions of the Treaty on European Union and the Treaty on the Functioning of the European Union, European Union Official Journal 115/ 01, 9.05.2008, available at: <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2008:115:0047:0199:EN:PDF>, 12.01.2010.

¹¹ The consolidated version of the Treaty Establishing the European Community, Official Journal C 325, 24 December 2002, available at: http://europa.eu.int/eur-lex/en/treaties/dat/EC_consol.html, 15.03.2007.

¹² Ludwig Kramer, *EC Environmental Law* (5th edition), Sweet & Maxwell, London 2003, p. 13.

¹³ Ibidem.

¹⁴ Astrid Epiney, *Umweltrecht in der Europäischen Union. (Environmental Law in the European Union)*, Cologne, Berlin, Bonn and Munich 1997, p. 108.

¹⁵ Ibidem.

¹⁶ Jan H. Jans, *European Environmental Law* (2nd edition), Europa Law Publishing, Groningen, August 2000, p. 31.

¹⁷ I.e., it is an obligation, not a possibility.

¹⁸ Ludwig Kramer, op. cit., p. 13.

extreme cases where a systematic disregard of the principles in the policy is demonstrated”.

Taking into account the wide discretion of community institutions in taking measures on a treaty basis, the opinion on the binding form of the principles in article 174 §2 (now 191 §2 of the Treaty on the Functioning of the European Union) cannot be accepted. It is especially not possible to talk about the binding character of the principles in article 174 §2 when keeping in mind its version that was introduced after¹⁹ the Single European Act²⁰. Before this amendment, under the Single European Act, the principles, as in case C-2/90²¹, could have been binding. In this judgment, the Court referred to article 174 – the version existing under the Single European Act. It was then possible for the ECJ to state that the Community Law provisions cannot be interpreted in a way that would lead to discrepancies with the general Community Law principles: (...) The principle that environmental damage should as a priority be rectified at source a principle laid down by art. 174 §2 for action by the Community relating to the environment means that it is for each region, commune or other local entity to take appropriate measures to receive, process and dispose of its own waste (...).

Currently, article 174 §2 refers to the Community policy in general, and not as it was before, i.e. to each of the Community actions. Therefore, it is not possible to apply those principles to every respective measure of the Community. If such an obligation existed, then each of the individual Community measures would have to take into account all of the principles prescribed in article 174 §2 of the EC Treaty²². Such a statement would lead to the conclusion that many of the Community provisions are invalid, because they are not in accordance with, for example, the “polluter pays” or the “rectification of damage at source” principle²³.

¹⁹ 1992 Maastricht Treaty, OJ C 191 of 29.07.1992.

²⁰ The environmental issues under the Single European Act provisions were contained in Title VII – environment; the environmental principles were included in art. 130r, §2 – “Action by the Community relating to the environment shall be based on the principles that preventive action should be taken, that environmental damage should as a priority be rectified at source, and that the polluter should pay. Environmental protection requirements shall be a component of the Community’s other policies”.

²¹ Case C-2/90, Commission vs. Belgium, ECR 1992/I-4431, available at: <http://curia.europa.eu>, 15.03.2007.

²² The consolidated version of the Treaty Establishing the European Community, Official Journal C 325, 24 December 2002, available at: http://europa.eu.int/eur-lex/en/treaties/dat/EC_consol.html, 15.03.2007.

²³ Maria Magdalena Kenig-Witkowska, *Prawo Środowiska Unii Europejskiej. Zagadnienia Systemowe (European Union Environmental Law, Systemic Issues)*, Lexis Nexis, Warsaw 2005, p. 81.

Having in mind such a conclusion, the aim of my paper is not to prove the invalidity of the EMAS or ISO system as environmental management systems, but to study to what extent the mentioned systems are in accordance with the discussed four rules.

Although these principles are not directly legally binding, they oblige the EU to base its environmental policy on them. The implementation of the principles prescribed in article 174 §2 (now 191 §2) is possible when the conditions²⁴ of §3 of this article are fulfilled. The obligation to take them into consideration refers to the entire European environmental policy. However, taking them into account is not a precondition for taking measures in environmental issues.

As the aim of my paper is to prove the accordance between the environmental principles of article 174 §2 (now 191 §2) and environmental management, in my opinion it is crucial to present those principles, their stipulations and, if possible, their position in the legal framework. While considering this interdependence, the above-mentioned remarks concerning the principles being legally binding and the consequences of this fact will also be taken into account.

The first principle that I would like to discuss is the “Polluter Pays Principle”.

2. The Polluter Pays Principle

The Polluter Pays Principle (PPP)²⁵ was passed by the OECD²⁶ in 1972 based on two recommendations²⁷ and a regulation²⁸, as an allocation of the costs of environmental pollution control, at the same time proving its fundamental significance and importance for the OECD member countries. Thus, the principle is one of the universal international rules of the international environmental law. The Rio de Janeiro Declaration²⁹

²⁴ These conditions are: available scientific and technical data, environmental conditions in the various regions of the Community, the potential benefits and costs of action or lack of action, the economic and social development of the Community as a whole and the balanced development of its regions.

²⁵ It should be mentioned that in the translations of this principle into other languages, this principle is interpreted either as “the polluter should pay” or as “polluter pays”.

²⁶ The OECD Council Recommendation on Guiding Principles Concerning the International Economic Aspects of Environmental Policies, C (72) 128 (1972); OECD Recommendation on Application of the Polluter Pays Principle to Accidental Pollution, C (74) 223 (1974).

²⁷ 1972, 1974.

²⁸ 1983.

²⁹ Rio Declaration on Environment and Development, available at: <http://www.unep.org/Documents.Multilingual/Default.asp?DocumentID=78&ArticleID=1163>, 1.05.2007.

made it a universal rule, instead of only a principle concerning socio-economically highly developed countries. The Rio Declaration states that this principle should be regarded in a wider context, i.e. “as an element of the concept of sustainable development”³⁰.

This principle is based on the opinion that the environment cannot be destroyed without any consequences. The polluter’s obligation is to take measures, which will aim at the prevention of damage creation. However, when the damage already exists, then the obligation is to eliminate the damage effect as well as taking equalizing and correcting measures³¹.

According to the OECD definition³², “the principle entails that the polluter should bear the expense of carrying out the measures decided by public authorities to ensure that the environment is in the ‘acceptable state’ and that the cost of these measures should be reflected in the cost of the goods and services that cause pollution in production or in consumption”. So, the aim of the OECD policy was to internalize the economic costs of pollution control, cleanup as well as the costs of the protection instruments and to “ensure that the governments did not distort international trade and investment by subsidizing these environmental costs”³³. This statement also refers to article 16 of the above-mentioned Rio Declaration, under which “National authorities should endeavor to promote the internalization of environmental costs and the use of economic instruments, taking into account the approach that the polluter should, in principle, bear the cost of pollution, with due regard to the public interest and without distorting international trade and investment”³⁴.

However, as Patricia Birnie and Alan Boyle³⁵ stated, the Rio Declaration understanding of the principle cannot be treated as a legally binding quality. In this document the polluter pays principle lacks the normative character of the rule of law. They say that “the most that can be said is that the states, intergovernmental regulatory institutions, and courts can and should take account of the principle in the development

³⁰ Patricia Birnie, Alan Boyle, *International Law & The Environment* (2nd edition), Oxford University Press, 2002, p. 92.

³¹ Anna Haładyj, *Ewolucja zasad ogólnych prawa ochrony środowiska. Rozprawa doktorska*, Katolicki Uniwersytet Lubelski (*Evolution of the general principles of the environmental law protection*, doctoral dissertation, Catholic University of Lublin), Wydział Prawa i Administracji, Lublin 2004.

³² Patricia Birnie, Alan Boyle, op. cit., p. 92.

³³ Ibidem.

³⁴ The Rio Declaration on Environment and Development, available at: <http://www.unep.org/Documents.Multilingual/Default.asp?DocumentID=78&ArticleID=1163>, 1.05.2007, defined also in the 1992 Paris Convention, 1992 Helsinki Convention.

³⁵ Patricia Birnie, Alan Boyle, op. cit., pp. 92–93.

of environmental law and policy, but they are in no sense bound by international law to «make polluters pay»³⁶.

It should be mentioned that this rule³⁷ was mentioned in the EU Environmental Law already in the First Action Plan on the Environment in 1973³⁸. The First Action Plan proclaimed that “(...) in principle, the polluter bears the costs of avoidance and removal of environmental damages. Some exceptions and regulations are acceptable, as far as they do not create significant international trade and investment distortions”³⁹. The Council Recommendation of 1975⁴⁰ elaborated this formula further. Firstly, it stipulated the principles of bearing the environmental protection costs, i.e. the expenses of preventive and restoration actions and, secondly, the recommendation also indicated who the polluter is. According to this document, everyone who burdens the environment directly or indirectly is a polluter. Although the recommendation does not have a legally binding force, the Council recommended that the Member States should conform to this principle.

Pursuant to the Fourth Environmental Action Plan⁴¹, the mentioned document⁴² from 1975 was still the guiding principle for the policy in this area.

It is then possible to say, as Jan H. Jans did⁴³, that the “polluter pays principle was one of the cornerstones of the Community environmental policy, even before it was incorporated into the Treaty”.

The Single European Act made the principle one of the Union principles. Subsequently, due to the validity of European Union Treaty⁴⁴, the

³⁶ Patricia Birnie, Alan Boyle, *op. cit.*, p. 93.

³⁷ It should also be added that apart from the mentioned Rio Declaration, the OECD Council Recommendations, The EC Treaty and other related instruments, the polluter pays principle is also included in the 1992 Agreement establishing the European Economic Area.

³⁸ The First Action Plan on the Environment, OJ 1973 C 112/ I. Cf. on the polluter pays principle in general Vandekerckhove (1994).

³⁹ It is possible to notice correspondence between the First Action Plan and the Rio Declaration statement – see previous remarks.

⁴⁰ 75/436 ECSC, EEC: The Council Recommendation of 3 March 1975 regarding cost allocation and action by public authorities on environmental matters, L 194, 25/07/1975 P. 0001–0004.

⁴¹ Fourth Environmental Action Plan, OJ 1987 C 328/I.

⁴² 75/436 ECSC, EEC: The Council Recommendation of 3 March 1975 regarding cost allocation and action by public authorities on environmental matters, L 194, 25/07/1975 P. 0001–0004.

⁴³ Jan H. Jans, *op. cit.*, note 17, p. 37.

⁴⁴ The European Union – the consolidated versions of the Treaty on the European Union and of The Treaty Establishing the European Community (consolidated text) Official Journal C 321E of 29 December 2006, available at: <http://europa.eu.int/eur-lex/lex/en/treaties/index.htm>, 1.05.2007.

principle was included in the Treaty of the European Community. This rule, as well as the remaining environmental protection rules of the EU, was not defined in normative terms. The definition of this rule includes guidelines concerning public assistance for environmental protection⁴⁵.

The legal basis of this rule was originally constituted by article 130r §2 of the EC Treaty, later in article 174 section 2⁴⁶ and now in article 191 §2 of the Treaty on the Functioning of the European Union⁴⁷, which says that the rule represents the support for the EU policy. The content of this article suggest a gradation of the actions in the environmental protection area – firstly prevention, according to the prevention and precautionary principles (which will be presented later), and subsequently the elimination of the damages that have already been caused. This means that prevention measures are the priority and when they do not suffice, then damage compensation becomes necessary. The principle was also mentioned in The Fifth Action Plan⁴⁸, where the payments are portrayed as instruments of the economy, which have to be in accordance with and driven by the market impact towards prevention and the encouragement to apply clean manufacturing processes⁴⁹. Moreover, according to the Fifth Plan, the payments constitute one of the most important elements of this principle. The discussed rule is also included in the Sixth Action Plan⁵⁰.

The reason for mentioning the rule «polluters pay» is also the previously mentioned Council Recommendation concerning the allocation of costs and actions undertaken by the public authorities with respect to environmental issues. The Recommendation says that “individuals and

⁴⁵ Community Guidelines on State Aid and Environmental Protection, OJ 2001, C 37/3.

⁴⁶ The consolidated version of the Treaty Establishing the European Community, Official Journal C 325, 24 December 2002, available at: http://europa.eu.int/eur-lex/en/treaties/dat/EC_consol.html, 15.03.2007.

⁴⁷ The Treaty on the Functioning of the European Union changed by the Lisbon Treaty, Official Journal of the European Union, C 306, 17.12.2007; The consolidated versions of the Treaty on the European Union and the Treaty on the Functioning of the European Union, European Union Official Journal C 115/ 53, 9.05.2008.

⁴⁸ “Towards Sustainability” the European Community Program regarding policy and action in relation to the environment and sustainable development (better known as The Fifth EC Environmental Action Program), available at: <http://ec.europa.eu/environment/actionpr.htm>, 1.05.2007.

⁴⁹ Jan Barcz, *Prawo Unii Europejskiej. Prawo materialne i polityki (European Union Law. Material Law and Policies)* (2nd edition), Wydawnictwo Prawo i Praktyka Gospodarcza, Warsaw 2005, p. 698.

⁵⁰ Decision No. 1600/2002/EC of the European Parliament and of the Council from 22 July 2002, laying down the Sixth Community Environment Action Program, published in OJ L 242 of 10/9/2002, available at: <http://ec.europa.eu/environment/newprg/docs.htm>, 1.05.2007.

legal entities that operate in the scope of the public or state law, and that are responsible for pollution, have to incur the costs of the actions necessary to eliminate the pollution or limit it and they have to comply with the standards set by the public authorities”⁵¹. When mentioning the Recommendation as a basis for the principle, we keep in mind that recommendations are not legally binding. However, despite the lack of the binding power, the Member States aim to develop that kind of attitude towards the pollution charges⁵².

According to the principle, the entity that damages the natural environment is obliged to incur the resulting consequences and costs. This also includes the costs of pollution prevention⁵³. The charge for environmental damage that every country must pay is ceded to the polluters. This is accomplished based on the system of charges for the disturbance of the environmental balance. According to Jan H. Jans⁵⁴, the main aim of the principle is “to charge the polluter with the costs of the action in order to combat the pollution they cause, which will encourage them to reduce that pollution and motivate to find less polluting products or technologies”⁵⁵.

Due to the fact that there are certain difficulties in determining who the real polluter is and what the charges should concern, one should concentrate on the economic aspect of the rule. The economic side of this issue conveys the fact that it is not society, which in fact could be taxed for it, that is the entity responsible for upsetting the balance of nature. Charging certain entities with appropriate payments is supposed to mobilize to minimize pollution and search for and implement new

⁵¹ Council Recommendation 75/436, EURATOM, ECSC, EEC, 3 March 1975, OJ 1975 L 194/1-4, available at: <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:31975H0436:EN:NOT,1.05.2007>.

⁵² Jan Barcz, *op. cit.*, p. 698.

⁵³ In the literature, four aspects can be found concerning the problem of the costs that are „paid” by the polluter. Firstly, the costs of damage prevention, which are the necessary costs. Secondly, the costs that are actually created while the environment is under protection. Thirdly, the costs that should have been incurred in order for the polluter to eliminate the environmental burdens. And finally, additional costs, which are the damages that are borne by third parties as well as society as a whole (additional social costs). There is also the theory of environmental utilization for the payment, where the costs of damage prevention are a profit for environmental quality, but they do not exceed it. Walter Frenz, *Das Verurascherprinzip im öffentlichen Recht, Schriften zum öffentlichen Recht, Band 737*, Duncker & Humboldt, Berlin 1997, p. 40 and the next.

⁵⁴ Jan H. Jans, *op. cit.*, p. 38.

⁵⁵ Thus, it can be said that there are two aspects to this principle: searching for less environmentally damaging products and technologies (in my opinion this one is strictly linked with the discussed matter of environmental management); and the economic aspect, i.e. the mentioned problem of charges.

standards concerning the natural environment. Therefore, the task of the European Union is to establish standards, determine the payments for environmental damage and also to implement a system of obligations for the entities that are responsible for pollution⁵⁶. Subsequently, companies are obliged to make the appropriate investments in the production process, “if they are to comply with the statutory standards”⁵⁷. This way of understanding the principle also “helps ensuring that the polluter bears the cost of pollution”⁵⁸.

As far as I am concerned, it is also crucial to answer the question why the polluter should pay for the caused damages. The answer to this question gives us the theory of the internalization of external costs. An entity that utilizes the environment is at the same time detrimental to other entities, is decreasing the number of natural resources used by the others as well, or simply pollutes the environment. By way of charges this relation between the polluter and society can be balanced.

On the other hand, there is also a different statement that can be found in the literature on the subject, According to this statement, the victims, being the user as well as the society as a whole⁵⁹, might both be the entities that bear the costs of environmental damages. That is why there is a possibility of replacing the polluter pays principle with a rule according to which the society bears the costs of environmental damages, mostly by the taxation system or the state subsidy system. However, in my opinion, this attitude is not entirely fair and I support the first interpretation of the presented principle. This approach also is not in accordance with the EC jurisdiction, like in the “Stadley” case⁶⁰, where it was stated that the polluter pays principle seems to require that the Community measures “must avoid putting burdens on persons and undertakings for the elimination of pollution to which they do not contribute”⁶¹.

The principle is particularly linked to the EU competition law, especially regarding the public assistance issue included in articles 87–89 of the Treaty establishing the European Community Union (now articles

⁵⁶ Commission White Paper on Environmental Liability, COM 2000/66 final.

⁵⁷ Jan H. Jans, op. cit., p. 38.

⁵⁸ Ibidem.

⁵⁹ M. Burchard-Dziubińska, „Ekonomiczne i ekologiczne aspekty restrukturyzacji przemysłu” (Ecological and Economic aspects of the industry restructuring), *Ekonomia i Środowisko*, Białystok 1998, p. 67.

⁶⁰ Case C-293/97 *The Queen v Secretary of State for the Environment and Ministry of Agriculture, Fisheries and Food, ex parte H.A. Standley and Others and D.G.D. Metson and Others*, [1999] ECR I-2603.

⁶¹ Jan H. Jans, op. cit., p. 38.

107–109 of the Treaty on the Functioning of the European Union)⁶². We should remember that there is a high level of conflict between this rule and the possibility of offering assistance in the field of environmental protection. Due to the fact that the aim of the above-mentioned recommendation is to achieve a successful sustainable resource management, Member States should not support entities that pollute the environment with taxes or subsidies.

Another thing that should be stressed is the presence of the principle in secondary legislation, as for example Directive 75/442 on waste⁶³. Article 15 of this Directive states the following: “In accordance with the «polluter pays» principle, the cost of disposing of waste, less any proceeds derived from treating the waste, shall be borne by: the holder who has waste handled by a waste collector or by an undertaking referred to in Article 8; and/or the previous holders or the producer of the product from which the waste came”. Another reference can be found in article 14 of the Directive 75/439⁶⁴, which states that “indemnities may be granted to collection and/or disposal undertakings for services rendered. These indemnities may be financed by a charge imposed on products, which after use are transformed into waste oil, or on waste oils. The financing of indemnities must be in accordance with the polluter pays principle”⁶⁵.

In the literature on the subject experts underline the unfortunate placing of the principle in the Treaty of the European Community. According to Ludwig Kramer⁶⁶, such a situation leads to anomalies having nothing to do with the law⁶⁷. Proving his point of view, Ludwig Kramer adds that usually the EU law norms do not mention who should pay for what, and there is also no other regulation, which would enable governments to implement this rule in practice. If the principle were legally binding, the lack of an executive rule for the principle would lead to a situation that is unacceptable from a legal point of view. Additionally, regarding the

⁶² The Treaty on the Functioning of the European Union changed by the Lisbon Treaty, Official Journal of the European Union, C 306, 17.12.2007; The consolidated versions of the Treaty on the European Union and the Treaty on the Functioning of the European Union, European Union Official Journal C 115/ 53, 9.05.2008.

⁶³ Council Directive 75/442/EEC of 15 July 1975 on waste, OJ 1975 L 194/47, later amended.

⁶⁴ Council Directive 75/439/EEC of 16 June 1975 on the disposal of waste oils, OJ 1975 L 194/31, later amended, art. 14: “The indemnities may be financed, among other methods, by a charge imposed on products, which after use are transformed into waste oils, or on waste oils. The financing of indemnities must be in accordance with the «polluter pays» principle”.

⁶⁵ Jan H. Jans, *op. cit.*, p. 39.

⁶⁶ Ludwig Kramer, *op. cit.*, p. 25.

⁶⁷ *Ibidem*, “Its transfer to the EC Treaty has led to all sorts of anomalies, which have not much to do with law”.

relation between the environment protection law and the competition law, Ludwig Kramer claims that “if a polluter who is not a tax-payer has an obligation to pay for the pollution he emits, subventions and public support intended for him will not be in accordance with the principle presented and should be banned”⁶⁸. The polluter pays principle cannot be legally binding, because the financial support for protecting the natural environment would not be implemented. Such a state of affairs would certainly lead to absurd situations.

To summarize, the polluter pays idea consists in shifting the burden of proof. It is the entrepreneur’s task to prove that his activity does not cause any danger to the environment, and not of environmental institutions, and that is why more severe requirements should be implemented⁶⁹.

Before talking about the next two principles, I think it is crucial to stress the differences between them and also to present their definitions. Prevention means the obligation to take into consideration the potential results of any action and consequently find the optimal solutions. However, the precautionary principle is a step forward compared to the prevention principle, because it shifts the burden of proof once the negative interaction results are determined. According to the prevention principle, the obligation to take proper actions is directly linked to demonstrating the negative results, whereas the precautionary principle always obliges to take precautionary actions for as long as the lack of a negative influence on the environment is not proven.

3. The Precautionary Principle

The legal base for this principle is article 191 §2 of the Treaty on the Functioning of the European Union⁷⁰ (previously art. 174 §2 of the EC Treaty), which refers to the universal international regulation that is formulated in a similar way. It is widely known that the sources of this rule are the international treaties from the 1930s, which concerned the issue of the natural environment. However, the matter was first raised by the OECD⁷¹ during the Second International Conference on the issue

⁶⁸ Ludwig Kramer, *op. cit.*, p. 26.

⁶⁹ Anna Haładyj, *op. cit.*

⁷⁰ The Treaty on the Functioning of the European Union changed by the Lisbon Treaty, EU OJ, C 306, 17.12.2007. The consolidated versions of the Treaty on European Union and the Treaty on the Functioning of the European Union, European Union Official Journal 115/01, 9.05.2008.

⁷¹ The Second International Conference on the Protection of the North Sea, Ministerial Declaration, London, United Kingdom, 24–25 November 1987, 27 ILM 835.

of the protection of the North Sea, where the importance of implementing such a principle was signaled. At that time there was a postulate that the full documentation on the environmental danger should be the basis for implementing such a rule. This provision was subsequently amended during the Third International Conference on the Protection of the North Sea⁷². In the Conference Declaration we can find a statement that allows taking the appropriate measures in order to prevent potential environmental damages created by durable substances, even if there is no scientific proof that there is a link between this kind of substances and their damaging effects on the environment. References to the precautionary principle have also been made during the Convention on the protection of the marine environment in the North–East Atlantic (OSPAR)⁷³.

An important success of the precautionary principle was also its incorporation into the Cartagena Protocol on Biosafety⁷⁴, as well as into the Stockholm Convention on Persistent Organic Pollution⁷⁵. The new precautionary rule was added to the Union Law by the Treaty of Maastricht, but the rule was also mentioned in the First and Fourth Environmental Action Plan, for example⁷⁶.

The precautionary principle was also included in the environmental and development declaration, which was passed during the Rio de Janeiro Conference in 1992 – and as the fifteenth rule of the Declaration⁷⁷ it gained almost a universal character⁷⁸. According to this rule, “in order to protect the environment, the precautionary approach shall be widely used by States according to their capabilities. Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental

⁷² The Third International Conference on the Protection of North Sea, Ministerial Declaration, The Hague, Netherlands, 8 March 1990, Yearbook of International Environmental Law 1990.

⁷³ The Convention on the protection of the marine environment in the North–East Atlantic (OSPAR) was opened for signature 22 September 1992, entered into force on 25 March 1998. Available at: <http://www.ospar.org/eng/html/welcome.html>, 8.05.2007. Other references to documents that include the precautionary principle can be found in Thomas J. Daemen, “The European Community’s Evolving Precautionary Principle – Comparisons with the United States and Ramifications for Doha Round Trade Negotiations”, *Environmental Law Review*, Vol. 12, No. 1, 2003.

⁷⁴ Cartagena Protocol on Biosafety, 29.01.2000, entered into force 11.09.2003. Available at: <http://www.biodiv.org/biosafety/default.aspx>, 8.05.2007.

⁷⁵ The Stockholm Convention on Persistent Organic Pollution, 22.05.2001, entered into force 17.05.2004, available at: http://www.pops.int/documents/convtext/convtext_en.pdf, 8.05.2007.

⁷⁶ Maria Magdalena Kenig-Witkowska, op. cit., p. 92.

⁷⁷ The Rio Declaration on Environment and Development, available at: <http://www.un.org/documents/ga/conf151/aconf15126-1annex1.htm>, 8.05.2007.

⁷⁸ Maria Magdalena Kenig-Witkowska, op. cit., p. 92.

degradation”⁷⁹. As Veerle Heyvaert⁸⁰ claims, this definition includes many “relative” and “contingent” notions, such as “serious” or “irreversible”. Therefore, this description of the principle does not give its clear definition. Since there is no detailed definition of this rule, it can be widely interpreted⁸¹. It has been suggested that perhaps such a wide formulation of the rule, especially when it comes to the content of article 191 § 2 of the Treaty, is an intentional move. On account of the fact that the principle can be widely interpreted, measures for protecting the natural environment can be introduced practically without limitations⁸². However, on the other hand, this way the principle can be misused. It is simply not always possible to make decisions within the framework of the precautionary principle when there is a lack of complete scientific data. This would lead to the situation where the rule “will become too universal and generic to retain any steering, normative force”⁸³.

The European Union refers to the principle in the 1992 Convention⁸⁴ on the issue of environmental protection concerning the North-East part of the Atlantic Ocean⁸⁵. According to this Convention, the precautionary rule means that “preventative measures are taken, when there are reasonable grounds for concern that substances or energy introduced directly or indirectly into the environment may bring about damage to human health, harm living resources, (...) even where there is no conclusive evidence of a causal relationship between inputs and effects”⁸⁶.

Therefore, according to the principle, there is a possibility for the Union to carry out preventive actions, even when there is not enough scientific evidence, i.e. a risk estimation, concerning the real impact of the company’s activity on the natural environment.

There are two ways of reacting to potential risk that has not yet been fully proved. The legislator has the possibility to react either on the basis of an *ex ante* or *ex post* strategy⁸⁷. The precautionary principle

⁷⁹ The Rio Declaration on Environment and Development (Rio de Janeiro, 3–14 June 1992) 31 *International Legal Materials*, 874.

⁸⁰ Veerle Heyvaert, “Guidance Without Constraint: Assessing the Impact of the Precautionary Principle on the European Community’s Chemicals Policy”, *Yearbook of European Environmental Law*, Vol. 6, 2006, p. 31.

⁸¹ Jan Barcz, *op. cit.*, p. 696.

⁸² Ludwig Kramer, *op. cit.*, p. 22.

⁸³ Veerle Heyvaert, *op. cit.*, p. 31.

⁸⁴ Previously mentioned.

⁸⁵ Convention on the protection of the marine environment in the North – East Atlantic (OSPAR) – opened for signature 22 September 1992, entered into force on 25 March 1998. Available at: <http://www.ospar.org/eng/html/welcome.html>, 8.05.2007.

⁸⁶ Ludwig Kramer, *op. cit.*, note 13, p. 22.

⁸⁷ Jonathan B. Wiener, Michael D. Rogers, “Comparing precaution in the United States and Europe”, *Journal of Risk Research*, Vol. 5, No. 4, 2002, pp. 320–321.

represents the *ex ante* approach, by predicting the potential dangers and then taking them into consideration in the decision-making process (“to foresee and forestall”)⁸⁸. The precautionary principle can also be considered in the context of a risk analysis, which includes 3 phases – risk assessment, risk management and risk communication⁸⁹. Here I think that we should agree with the Commission’s Statement⁹⁰. In this document the Commission has included the guidelines concerning the implementation of the precautionary principle: the ascertainment of the potential harmful impact on the natural environment; an estimation of the available scientific data; and the level of possible scientific uncertainty. According to this Statement, the precautionary principle is the “central plank” of the Community policy. The Commission claims that precautionary measures should be taken in cases of potential risk, i.e. “somewhere between the zones of actual and hypothetical risk”⁹¹. This document also points out that the precautionary principle is linked to risk management, which is the stage where political decisions are made concerning the acceptable risk levels and possible protection. However, at the same time the North American doctrine states that the precautionary principle is already incorporated in the scientific risk assessment procedures and that is why it should not be perceived as the basis for the risk management stage. It should also be mentioned that the US often claims that the precautionary principle as a part of risk management leads to trade protectionism and discrimination⁹². According to the United States the creation of a separate precautionary principle is unnecessary, because an appropriate scientific risk assessment and rational

⁸⁸ Carolyn Raffensperger, Joel Tickner (ed.) *Protecting Public Health and the Environment; Implementing the Precautionary Principle*, in: Island Press, Washington, D.C.1999, p. 32.

⁸⁹ Maria Talik, “Zasada przezorności a model podejmowania decyzji w obszarze ochrony środowiska” („The Precautionary Principle compared to decision-making models in the field of environmental protection”), *Prawo i Środowisko*, Vol. 3, No. 5, 2005, p. 134.

⁹⁰ Statement from the Commission on the precautionary principle, /* COM/2000/0001 final */, 52000DC0001, available at: <http://eur-lex.europa.eu>, 20.04.2007.

⁹¹ Veerle Heyvaert, *op. cit.*, p. 32.

⁹² It should be stressed the in general the attitude of the United States doctrine towards the precautionary principle can be described as “reluctant”. But as Veerle Heyvaert (based on David Vogel and Jonathan Weiner: “Comparing precaution in the United States and Europe”, *Journal of Risk Research* 5(4), 2002, pp. 317–349) states in her article – *op. cit.*, note 78, p. 28, saying that the US doctrine is in opposition to the precautionary principle is an “oversimplification” and the US attitude is much more “nuanced and complex than might first appear”. On the other hand, as Veerle Heyvaert claims, it also leaves no doubt that the EU utilization of the precautionary principle is indeed very broad and she refers to the ECJ judgment – Case C-393/01, *French Republic v. Commission* [2003] ECR I-5403 §83 – where it is said that “the precautionary principle may be used as little more than a label to stick on any policy or decision”.

scientific data should be enough⁹³. This statement is supported by Maria Talik⁹⁴, who says that the link between this principle and risk assessment is not without significance. However, she also claims that the opinion by which the precautionary principle has an important place in the risk management process cannot be left without approval. However, she suggests that while considering its broad aspect, also its impact on risk assessment should be considered⁹⁵, according to the new model of the scientific approach, i.e. precautionary science, consisting in a multidisciplinary attitude towards the discussed problem⁹⁶. However, while considering the problem of risk assessment, we also have to keep in mind that this measure can be interpreted in different ways. For example, the European Chemical Industry (CEFIC) considers risk assessment to be a measure that “identifies at each stage the degree of scientific knowledge and possible uncertainties”⁹⁷. CEFIC claims that preventive instruments have to be introduced already when “their urgency is demonstrated”⁹⁸. Simultaneously, The Position Paper of the European Environmental Bureau (EEB) says something different. It says that the precautionary principle justifies “early action already in the case of ignorance”⁹⁹, which is defined by them as “that which is not known; this also includes that which we are not aware that we don’t know – this is unimaginable and potentially limitless”¹⁰⁰. In this situation of two entirely different ways

⁹³ Isaac E. Grant, *Agricultural biotechnology and transatlantic trade. Regulatory barriers to GM crops*. CAB International Publishing, 2002, pp. 142–144 and Isaac E. Grant, William A. Kerr, “Genetically modified organisms in the World Trade Organization: a harvest of trouble”, *Journal of World Trade*, Vol. 37, 2003, pp. 1087–1089; Gary E. Marchant, “Biotechnology and the precautionary principle: right question, wrong answer”, *International Journal of Biotechnology*, Vol. 4, No. 1, 2002, p. 37; and in a different way: Carolyn Raffensperger, Joel Tickner and participants – Wingspread Conference on the Implementation of the Precautionary Principle (1998), which treated the precautionary principle in the wider way, Carolyn Raffensperger, Joel Tickner, *The American view on the precautionary principle in: Tim O’Riordan, James Cameron, Andrew Jordan, Reinterpreting the precautionary principle*, (2nd edition) Cameron May London 2001, pp. 183–214.

⁹⁴ Maria Talik, op. cit., p. 134.

⁹⁵ Ibidem.

⁹⁶ Carolyn Raffensperger, Joel Tickner, op. cit., note 86, p. 109.

⁹⁷ CEFIC Comments on the Application of the Precautionary Principle after the Decision of the Court of First Instance of the European Court of Justice on 11 September 2002 (5 December 2002). Available at: <http://www.cefic.org>, 8.05.2007; in Veerle Heyvaert “Guidance Without Constraint: Assessing the Impact of the Precautionary Principle on the European Community’s Chemicals Policy”, Vol. 6, *Yearbook of the European Environmental Law* (2006), p. 32.

⁹⁸ Veerle Heyvaert, op. cit., p. 32.

⁹⁹ Ibidem.

¹⁰⁰ EEB Position on the Precautionary Principle, December 1999, available at: <http://www.eeb.org/publication/general.htm>, 8.05.2007, in: Veerle Heyvaert, op. cit., p. 32.

of understanding the same matter, European institutions are trying to take both interpretations into account and to find a compromise.

If we go back to the matter of the *ex ante* and *ex post* reaction, we can summarize this discussion by bringing up a statement of Ludwig Kramer¹⁰¹, where he says that we have to reject the argument that the precautionary rule can be used only in situations when there is a scientific assessment. This is also based on the fact that article 191 §2 (former 174 §2) does not include such a requirement. He underlines that this kind of arguments have a strictly political meaning, aimed at avoiding this principle. He also claims that if such a requirement was formally binding, it would be included in a legal form.

The precautionary principle was introduced by the Maastricht Treaty, but unfortunately it was shadowed by different important issues, such as the “European Union” problem and the matter of the codecision procedure. However, it should be stressed that since the implementation of the Maastricht Treaty, the situation has changed drastically and the precaution principle has become a much more popular reference point for EU actions¹⁰². As Veerle Heyvaert¹⁰³ claimed, a “good moment” for the precautionary principle was also the trade conflict between the United States, Canada and the EU, which took place in 2000 and concerned beef hormones, when the Community was trying to support its stand on the basis of this principle.

Because of the mentioned facts and because of the decision of the Court of First Instance, the precautionary principle was regarded as a general rule¹⁰⁴ of the Union Law (although the Court’s standpoint concerning the precautionary principle was evolving). This statement has found its reflection in a sentence of the “Alpharma”¹⁰⁵ decision, which says the following: “In accordance with Article 130r(2) of the EC Treaty (now,

¹⁰¹ Ludwig Kramer, *op. cit.*, p. 22.

¹⁰² Veerle Heyvaert, “Facing the Consequences of the Precautionary Principle in the European Community Law”, *European Law Review*, Vol. 31, No. 2, 2006, p. 186.

¹⁰³ *Ibidem*.

¹⁰⁴ Veerle Heyvaert calls this principle the “central plank” of the Community policy.

¹⁰⁵ “Alpharma” Case T-70/99, *Alpharma Inc. v. Council* [2000] ECR II-3495, together with “Solvay” Case T-392/02, *Solvay Pharmaceuticals BV v. Council* [2003] ECR II-4555, and “Pfizer” Case T-13/99, *Pfizer Animal Health SA v. Council* [2002] ECR II-3305, concerned the antibiotics in animal feed. In these cases the Council removed the authorization of antibiotics provided by the mentioned pharmaceutical companies. The significance of this decision lies in the fact that it was taken without a complete scientific ground. In the “Alpharma” case the decision was made before obtaining the data from the experts. The role of the precautionary principle was even more important in the “Pfizer” case, because here the Council’s decision was made in opposition to the data provided by the experts. This behavior of the Council was then challenged before the Court of First Instance, which approved the Council’s decision, accepting hereby the importance of precautionary measures.

after amendment, Article 174(2) EC), the precautionary principle is one of the principles on which the Community policy on the environment is based”¹⁰⁶. This role of the precautionary principle was also expressed by the “Artegodaan” judgment later on, which said that: “the precautionary principle can be defined as a general rule of the EU law, which requires the authorities in charge to undertake certain measures to minimize potential risk concerning public health, safety and the environment, giving priority to the mentioned requirements, not the economic ones. Due to the fact that EU institutions are responsible, in all spheres of activities, for the protection of public health, safety and the environment, the precautionary principle can be regarded as an autonomous rule, which stems from the Treaty regulations mentioned above. As it was formulated in the regulations, the precautionary rule means that in the case of danger regarding public health, EU institutions are able to take certain measures without having to wait until the danger fully emerges”¹⁰⁷. This way of understanding the precautionary principle was revealed not only by the CFI, but also by the ECJ. As Veerle Heyvaert¹⁰⁸ stresses, taking into consideration the ECJ judgments, it is also possible to claim that “the ECJ maintains a threshold for regulatory intervention that is at least as low as the CFI’s”¹⁰⁹.

The precautionary principle is also described in the literature on the subject¹¹⁰ as a “trust-enhancing” principle of the Community Law. The aim of this kind of principles is to “consolidate the trust, which individuals should place in Union governance”¹¹¹. Thus, it is possible to say that by implementing this principle into the European norms, the EU can enjoy a higher confidence from European citizens on account of assuring them a higher level protection. However, there are also other opinions, like the Giandomenico Majone¹¹² statement for example, who claims

¹⁰⁶ Case T-70/99, *Alpharma Inc. v. Council* [2000] ECR II-3495, §135.

¹⁰⁷ Joint cases T-74/00, T-76/00, T-83/00, T-84/00, T-85/00, T-132/00, T-137/00, and T-141/00 *Artegodaan GmbH and Others v. Commission* [2002] ECR II-4945, §184.

¹⁰⁸ Veerle Heyvaert concludes that “indications of the Community decision-making process in specific cases where precautionary action might be advisable, suggest that the Council, the Commission and the Courts endorse quite a strong version of precaution, which does not require a completed substance-based risk assessment and does not necessarily depend on agreement by designated scientific expert committees before precautionary action can be undertaken. Acceptable trigger points for precautionary intervention are set at a low threshold”, op. cit., p. 35.

¹⁰⁹ Veerle Heyvaert, op. cit., p. 34.

¹¹⁰ Koen Lenaerts, “In the Union We Trust. Trust – Enhancing Principles of Community Law”, *Common Market Review*, No. 41, 2004, p. 317.

¹¹¹ *Ibidem*.

¹¹² Giandomenico Majone, “What Price Safety? The Precautionary Principle and its Policy Implications”, *Journal of Common Market Studies*, No. 40, 2002, pp. 89–109.

that this kind of interpretation of the principle can cause the “expansion of the regulatory judgment” of the EU, which in his viewpoint already seems to be broad. According to him “the precautionary principle may end up reinforcing the dominance of administrations over citizens, and thus erode the already precarious legitimacy of Community law”¹¹³. In order to summarize the matter of the range and importance of the precautionary principle I would agree with the opinion of Veerle Heyvaert¹¹⁴, according to which this cannot be strictly determined, as this principle can be understood both in its strong and weak version. The strong version allows the Community to adopt forceful regulatory measures in areas of high uncertainty¹¹⁵, while the weak one can be implemented more often, since it corresponds to the preventative attitude.

It should certainly be emphasized that the precautionary principle is a widely documented rule concerning both the environmental laws and the actions of EU institutions.

The precautionary principle is also mentioned in the secondary law, for example in Directive 85/337, concerning the cases of estimating the influence of some public and private enterprises upon the environment¹¹⁶. This Directive imposes the requirement of risk estimation before issuing certain decisions for all kinds of projects, which may have an impact on the environment. There are many examples of directives concerning genetically modified organisms, since this is the field in which this principle is widely applicable, because of insufficient scientific proof¹¹⁷. From the point of view of environmental management, one of the most important directives is Directive 96/61 (IPPC Directive), which concerns integrated prevention of pollution and its control¹¹⁸. The precautionary principle is taken into consideration while determining which available technologies are the best. One of the considered factors is “the necessity to prevent environmentally harmful emissions or reducing their influence upon the environment to the minimum”¹¹⁹.

¹¹³ *Ibidem*.

¹¹⁴ Veerle Heyvaert, *op. cit.*, p. 188.

¹¹⁵ *Ibidem*.

¹¹⁶ Directive 85/337, concerning the cases of estimating the influence of some public and private enterprises upon the environment, OJ 1985, L 175/40.

¹¹⁷ Council Directive 98/81/EC of 26 October 1998, amending Directive 90/219/EEC on the contained use of genetically modified micro-organisms, OJ 1998, L 330/13 or Council Directive of 23 April 1990 on the deliberate release of genetically modified organisms into the environment (90/220/EEC) OJ 1990, L 117/15.

¹¹⁸ Council Directive 96/61/EC of 24 September 1996, concerning integrated pollution prevention and control, OJ 1996, L 257/26.

¹¹⁹ Maria Magdalena Kenig-Witkowska, *op. cit.*, p. 94.

The heart of the matter, as summed up by Maria Magdalena Kenig-Witkowska¹²⁰, lies in the fact that when we deal with the serious assumption that a given enterprise may be damaging the natural environment, it is better to take preventive measures before having certain scientific evidence concerning the effects of such activities and before indicating the causal connection between the performed activities and the caused damage.

The precautionary principle is also mentioned in the ECJ jurisdiction. As Veerle Heyvaert¹²¹ estimates, there are now 7 cases where EC instruments are challenged for “taking insufficient account of the precautionary principle, and one where a Member State invoked the insufficient precautionary character of a Community act as a justification for its failure to comply with it”¹²². While referring to the jurisdiction of the precautionary principle, it should be added that currently the principle not only touches the sphere of environmental protection, but also the sphere of public health and food safety.

Now I would like to focus on two different cases with different results in order to show different interpretations of the precautionary principle by the ECJ.

The “Codacons” case¹²³ concerned the problem of GMO presence in products, as it is required to put this information on the labels of consumer products. However, such an obligation does not exist when the presence of the GM material is below 1 percent. Since there were some doubts with respect to whether the same percentage of GM material is also allowed in products for infants and young children, the issue was presented to the Italian Court. The Codacons association, which is an umbrella group of associations for the protection of the environment and of consumers and users, argued that on the basis of the precautionary principle (since the EU norms do not refer specifically to the presented issue) the possibility of including such substances into the alimentation destined for these consumer groups should not be allowed. The ECJ did not agree with the organization’s statement, as there was no reference to the “scientific uncertainty surrounding the health effects of intake of minimal quantities of GMO material by infants or young children”¹²⁴ in their claims.

¹²⁰ Ibidem.

¹²¹ Veerle Heyvaert, op. cit., p. 190.

¹²² Ibidem.

¹²³ Case C-132/03, *Ministerio della Salute v. Coordinamento delle associazioni per la difesa dell’ambiente e dei diritti utenti e dei consumatori (Codacons) and Federconsumatori*, [2005] ECR I-4167, available at: <http://curia.europa.eu>, 15.04.2007.

¹²⁴ Veerle Heyvaert, op. cit., pp. 191–192.

The second case shows a “modest victory for precaution”¹²⁵. This case¹²⁶ concerns the use of sulphites, nitrites and nitrates as food additives. Denmark wanted to maintain its pre-existing, stricter national standards following the procedure in article 95(4) to 7 of the EC. However, the Danish request to the Commission was rejected, because it claimed that the Danish proposals are exaggerated, even within the framework of health protection and, as the Court stated, “excessive in relation to this aim”¹²⁷. Consequently, Denmark decided to turn to the ECJ. According to the first statement of the ECJ, “differentiation in market regulations between the Member States on the basis of precautionary considerations, even in areas subjected to the harmonized Community standards”¹²⁸, is allowed, but only in situations where Member States are striving to maintain the pre-existing national regulations. The second part of the statement of the ECJ refers to the scientific advisory role. As previously mentioned, Denmark wanted to support stricter national standards for the use of the mentioned additives, but the Commission concluded that its standards are strong enough to protect human health. The Court turned to the Scientific Committee for Foodstuffs (“SCF”), whose opinion played a significant role in the judgment of the ECJ. This opinion was critical for the Community standards and it was included in Directive 95/2¹²⁹. It stated that the allowed limits of nitrites were not restrictive enough in order to efficiently protect human health. In this case, the ECJ considered the SCF research “relevant in assessing whether the Danish provisions were justified, and invalidated the Commission’s Decision”¹³⁰, which rejected the Danish request with regard to the nitrites and nitrates, because the Commission had failed to take the opinion of the SCF into account”¹³¹. However, it should also be stressed, that perhaps this success was achieved because it was supported by the state.

¹²⁵ Ibidem, p. 192.

¹²⁶ C-3/00 *Denmark v. Commission* [2003] ECR. I-2643, available at: <http://curia.europa.eu>, 15.04.2007.

¹²⁷ The Commission’s Decision 1999/830 on national provisions notified by the Kingdom of Denmark concerning the use of sulphites, nitrites and nitrates in foodstuff, [1999] O.J. L329/4 §44.

¹²⁸ Veerle Heyvaert, op. cit., p. 193.

¹²⁹ European Parliament and Council Directive No. 95/2/EC of 20 February 1995 on food additives other than colors and sweeteners (OJ No. L 61, 18. 3. 1995, §1), available at: <http://ec.europa.eu>, 17.04.2007.

¹³⁰ The Commission’s Decision 1999/830 on national provisions notified by the Kingdom of Denmark concerning the use of sulphites, nitrites and nitrates in foodstuff, [1999] O.J. L329/4.

¹³¹ C-3/00 *Denmark v. Commission* [2003] ECR. I-2643, available at: <http://curia.europa.eu>, 15.04.2007.

The Dr Olivieri¹³² case, for example, shows us that requests based on the precautionary principle submitted by individual persons (private protest) are, as Veerle Heyvaert claimed, “as good as non-existent”¹³³.

In conclusion, it can be said that no matter how diversified the ECJ jurisdiction may be, the precautionary principle can be considered as a basis of the ECJ judgments. But, even taking into account both ECJ judgments that have been described above, and also keeping in mind the rather exceptional situation in the second case (context of the derogation procedure), as far as I am concerned Veerle Heyvaert was right in saying the following: “even if future developments will relax the conditions under which insufficient precaution challenges can be made, it is undeniable that, to date, the role of the precautionary principle as a legal tool to compel Community institutions to take protective action has been marginal”¹³⁴.

4. The Prevention Principle

Based on the fact that Treaty on the Functioning of the European Union¹³⁵, and to be specific article 191, mentions the prevention principle next to the precautionary principle and based on the specificity of their content, they will be examined together. The general idea of the prevention principle consists in the simple notion that “prevention is better than cure”¹³⁶. The rule “allows action to be taken to protect the environment at an early stage”¹³⁷. So, the principle requires measures that prevent damage from “occurring at all”¹³⁸.

Considering the existence of the prevention principle in the European Environmental Law, it should be stated that the rule was first implemented into the Treaty by the Single European Act. Another European document that refers to the prevention principle is the Third Environmental Action Plan¹³⁹. It is crucial to mention this Plan, because the earlier

¹³² Case T-326/99 *Nancy Fern Olivieri v Commission of the European Communities and European Agency for the Evaluation of Medicinal Products* [2000] ECR II-01985.

¹³³ Veerle Heyvaert, op. cit., p. 195.

¹³⁴ Ibidem.

¹³⁵ The Treaty on the Functioning of the European Union changed by the Lisbon Treaty, EU OJ, C 306, 17.12.2007. The consolidated versions of the Treaty on the European Union and the Treaty on the Functioning of the European Union, European Union Official Journal 115/ 01, 9.05.2008.

¹³⁶ The Third Environmental Action Plan, OJ 1983 C 46/ I.

¹³⁷ Jan H. Jans, op. cit., p. 35.

¹³⁸ Ibidem.

¹³⁹ The Third Environmental Action Plan OJ 1983 C 46/ I.

mentioned slogan “prevention is better than cure” is its central theme. With the Plan the prevention principle will achieve its full effect, if the presented below conditions will be fulfilled. These conditions are: “the requisite knowledge and information must be improved and made readily available to decision-makers and all interested parties, including the public”¹⁴⁰; “it is necessary to formulate and introduce procedures for judgment, which all ensure that the appropriate facts are considered early in the decision-making process relating to activity likely to affect the environment significantly. The Environmental Impact Assessment Directive should be noted in this connection¹⁴¹. The preamble of the EIA Directive referring to the first three Environmental Action Programs, states «that the best environment policy consists in preventing the creation of pollution or nuisances at source, rather than subsequently trying to counteract their effects». For the same reason account should be taken of the consequences of the planning and decision-making process for the environment at as early stage as possible. Environmental impacts assessment is an excellent example of an instrument in which the principle of prevention plays the vital role”; and the third, important in this respect requirement of the Third Environmental Action Plan¹⁴² states that “the implementation of adopted measures must be monitored to ensure their correct application and their adaptation if circumstances or new knowledge should so require. Relevant in this respect are provisions in directives concerning the adaptation of technical and specific progress”¹⁴³.

The prevention principle is included not only in EU documentation, but it also occurs in international documents, such as the Rio de Janeiro Declaration¹⁴⁴.

The fifteenth principle of the Rio Declaration¹⁴⁵ is linked to the prevention principle. This principle states the following: “In order to protect the environment, the precautionary approach shall be widely applied by States according to their capabilities. Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent en-

¹⁴⁰ As for example in Council Directive 90/313, on the freedom of access to information on the environment, OJ 1990 L 158/56.

¹⁴¹ The Council Directive of 27 June 1985, on the assessment of the effects of certain public and private projects on the environment 85/337/EEC Reference: Official Journal No. L 175, 05/07/1985 P. 0040–0048.

¹⁴² The Third Environmental Action Plan, OJ 1983 C 46/ I.

¹⁴³ *Ibidem*.

¹⁴⁴ The Rio Declaration on Environment and Development, available at: <http://www.unep.org/Documents.Multilingual/Default.asp?DocumentID=78&ArticleID=1163>, 25.03.2007.

¹⁴⁵ *Ibidem*.

environmental degradation”¹⁴⁶. Principle 11 of the same Declaration imposes on countries the duty to implement an effective environmental law, standards, aims and management priorities. It says that “states shall enact effective environmental legislation. Environmental standards, management objectives and priorities should reflect the environmental and development context to which they apply. Standards applied by some countries may be inappropriate and of unwarranted economic and social cost to other countries, in particular developing countries”¹⁴⁷. Therefore, based on principle eleven of the Rio de Janeiro Declaration¹⁴⁸, we can assume that the prevention principle fulfills the requirements of the precautionary principle, giving the possibility to react even without scientific research concerning the level of impact on the environment, and that it is also included in the duty to take effective means, especially in the field of environmental law, to make a successful implementation and enforcement possible.

In the literature on the subject¹⁴⁹, there is also a claim that one should treat both principles similarly or even as the same principle¹⁵⁰, since prevention is sometimes called “the highest degree of the prevention” or included in the wider precautionary principle.

The argument for the above claim is that the principles are almost always given next to each other. The fact so far the Union has never used either of them separately may prove that the principles of precaution and prevention are inextricably linked. Another argument in favor of this claim is that both are not unambiguously defined in the EC Treaty. The opponents¹⁵¹ of this opinion claim that we are not supposed to mistake one principle for the other, because the precautionary principle reaches deeper into the roots of environmental protection.

Therefore, the essence of the principle lies in undertaking actions before the damage is done. In this respect, the estimation of the environmental impact appears to be most crucial. The environmental protection goals seem more likely to be achieved by preventive actions¹⁵², due to the fact that prevention is easier than retrieving the situation

¹⁴⁶ The Rio Declaration on Environment and Development. Available at: <http://www.vilp.de/Plpdf/p061.pdf>, 25.03.2007.

¹⁴⁷ Ibidem.

¹⁴⁸ The Rio Declaration on Environment and Development, available at: <http://www.unep.org/Documents.Multilingual/Default.asp?DocumentID=78&ArticleID=1163>, 25.03.2007.

¹⁴⁹ Ludwig Kramer, op. cit., p. 23.

¹⁵⁰ Wybe Th. Douma, “The precautionary principle in the European Union”, *Review of the European Community and International Environmental Law*, No. 9, 2000, p. 133.

¹⁵¹ Jan H. Jans, op. cit., p. 35.

¹⁵² Magdalena Kenig-Witkowska, op. cit., note 24, p. 99.

or compensating the damage, “especially due to the fact that environmental damage can be irreversible and its compensation impossible to be achieved”¹⁵³. This is also reflected in Directive 85/337¹⁵⁴, according to which the best policy with respect to the environment is the prevention of appearing pollution and nuisances, and not the later attempts to get rid of their effects. The same attitude is also present in another secondary law provision, which is Directive 94/62 on packaging and packaging waste¹⁵⁵. According to this Directive, “the best means of preventing the creation of packaging waste is to reduce the overall volume of packaging”¹⁵⁶.

It is possible to compare the prevention and precautionary principles and show the differences between them. However, the distinction can be rather hard, because both of them refer to “uncertain” notions, which are difficult to strictly define, because of their wide meaning, such as “scientific uncertainty”, “risk” or “potential risk”. So in order to analyze these principles, it is necessary to explain the notions of “risk”, “probability” and “scientific uncertainty”. Risk is understood as a function of two parameters: the probability of a certain event occurring that will cause damage and the magnitude of the damage. Also the notions of “probability” and “uncertainty” should be explained. Some risk categories are well known and demonstrated repeatedly, whereas some of them are to a large extent scientifically uncertain¹⁵⁷. So, in cases of this large scientific uncertainty, when the impact between human activity and the environment cannot be precisely estimated, then we can talk about the precautionary principle. Whereas the prevention principle refers to situations when the consequences of a certain activity are scientifically estimated, i.e. the prevention principle is used when the scientific data concerning the effects of a certain performance are enough to accurately estimate the probability degree of their occurrence and at the same time the size of the probable damage. Naturally, uncertainty also occurs with the prevention principle, because 100% certainty is not possible when it comes to the environment.

¹⁵³ *Ibidem*.

¹⁵⁴ The Council Directive of 27 June 1985, on the assessment of the effects of certain public and private projects on the environment 85/337/EEC Reference: Official Journal NO. L 175, 05/07/1985 P. 0040–0048.

¹⁵⁵ The European Parliament and Council Directive 94/62/EC of 20 December 1994, on packaging and packaging waste, Official Journal L 365 , 31/12/1994 P. 0010 – 0023, available at: <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:31994L0062:EN:HTML, 2.05.2007>.

¹⁵⁶ Jan H. Jans, *op. cit.*, p. 35.

¹⁵⁷ Jonathan B. Wiener, Michael D. Rogers, *op. cit.*, p. 320.

As far as I am concerned, this way of understanding these principles is justified. The scientific uncertainty criteria show the proper nature of these principles. Thus, based on the above remarks, prevention includes known risk, whereas precaution refers to potential risk and the potential damage is so important that it cannot be ignored. However, these principles are complementing one another, ensuring a high level of environmental protection together.

5. Rectification of damage at source

Rectification of damage at source, also called the “proximity principle”, is a rule introduced by the Single European Act¹⁵⁸ into the Community Law.

The idea of this principle consists in the obligation of repairing the caused environmental damage in the place of its formation or in another, but the most proximate, place. According to the “source” rule “the environment should preferably not be prevented by using end-of-pipe technology”¹⁵⁹.

It would be rather hard to talk about this principle without dividing it into two parts¹⁶⁰. The first one refers to the general liability concept, which includes the compensation obligation. The second aspect refers to the above-presented prevention principle. The mentioned prevention, according to the discussed principle, should be applied at the source, i.e. at the beginning of the technological process. As Maria Magdalena Kenig-Witkowska¹⁶¹ suggests, the rectification of damage at source principle consists in a repetition of the prevention principle but complemented by the “source” principle.

According to the judgments of the ECJ¹⁶², which mainly concern the problem of industrial waste, and the opinions on the doctrine¹⁶³, this principle is more about regulations concerning the elimination of emissions rather than establishing quality standards¹⁶⁴. It is often the case that

¹⁵⁸ Inserted into the Treaty in 1987.

¹⁵⁹ Jan H. Jans, *op. cit.*, p. 36.

¹⁶⁰ Maria Magdalena Kenig-Witkowska, *op. cit.*, note 24, p. 101.

¹⁶¹ *Ibidem*.

¹⁶² For example: Case C-2/90 *Commission v. Belgium*, ECR 1992/I-4431, and this standpoint is expressed more directly in cases: Case C-422/92 *Commission v. Germany*, ECR 1995/I-1097 and Case C-209/98 *Entreprenfirforeninges Affalds/Miljosection (FFAD) v. Kobenhavns Kommune*, ECR 2000/I-3743.

¹⁶³ Maria Magdalena Kenig-Witkowska, *op. cit.*, p. 101.

¹⁶⁴ Hanna Sevenster, “The environmental Guarantee After Amsterdam: Does the Emperor have New Clothes?”, *Yearbook of European Environmental Law* 2000, pp. 291–310.

quality standards are a “second option”¹⁶⁵ in relation to emission regulations. This means that Member States have the possibility to choose between complying with the emission regulations and complying with the quality standards. However, Member States are only allowed to take advantage of such a possibility if they can prove before the Commission that the quality standards are maintained in the entire area touched¹⁶⁶ by pollution¹⁶⁷. Alternatively, there is Council Directive 92/112/EEC from 15 December 1992, on procedures for harmonizing the programs for the reduction and eventual elimination of pollution caused by waste from the titanium dioxide industry¹⁶⁸, and in particular article 8, which states the following: “Member States may choose to make use of quality objectives coupled with appropriate limit values applied in such a way that the effects in terms of protecting the environment and avoiding distortions of competition are equivalent to that of the limit values laid down in this Directive”. So, there is a clear possibility for the Member States to choose the quality objectives, however, their decision requires the Commission’s approval¹⁶⁹.

With respect to the mentioned dependence, it should be stressed that quality standards are still less privileged measures in the EU environmental legislation.

At this stage of discussing the rectification of damage at source principle, and especially taking into account the subsequent chapter about the relations between environmental management and the EU principles, it should be emphasized that the attitude of the European Union

¹⁶⁵ “Second-best solution” – Jan H. Jans, *op. cit.*, p. 36

¹⁶⁶ “Throughout the area affected by the discharges” – Jan H. Jans, *op. cit.*, p. 36.

¹⁶⁷ Based on art. 6 §1 of the Council Directive 76/464/EEC of 4 May 1976, on pollution caused by certain dangerous substances discharged into the aquatic environment of the Community, OJ 1976, L 129/23 18/05/1976, not in force anymore, which in art. 6 states that “The Council, acting on a proposal from the Commission, shall lay down the limit values which the emission standards must not exceed for the various dangerous substances included in the families and groups of substances within List I. These limit values shall be determined by: (a) the maximum concentration of a substance permissible in a discharge, and (b) where appropriate, the maximum quantity of such a substance expressed as a unit of weight of the pollutant per unit of the characteristic element of the polluting activity (e.g. unit of weight per unit of raw material or per product unit). Where appropriate, limit values applicable to industrial effluents shall be established according to sector and type of product. The limit values applicable to the substances within List I shall be laid down mainly on the basis of: – toxicity, – persistence, – bioaccumulation, taking into account the best technical means available” and more clearly on the basis of art. 8 §1 of Directive 92/112.

¹⁶⁸ Council Directive 92/112/EEC of 15 December 1992, on procedures for harmonizing the programs for the reduction and eventual elimination of pollution caused by waste from the titanium dioxide industry, OJ L 409 of 31.12.1992.

¹⁶⁹ Jan H. Jans, *op. cit.*, p. 36

towards this principle does not necessarily have to stay the way it currently is¹⁷⁰. According to article 191 of the Treaty on the Functioning of the European Union¹⁷¹, the EU has no legislative obligation based on the presented principle. Although the European Union may implement emission standards in its legislation instead of quality standards, the EU is not obligated to do so. The European Union has the possibility to utilize the emission standards as well as the quality standards to the same extent¹⁷². It should be stressed that since 1991–1992 the first symptoms of a wider utilization of the quality standards in the Community practice are occurring, especially in the cases of water and air pollution¹⁷³.

In order to summarize this part of the idea of the rectification of damage at source principle, it should be emphasized that the presented rule enables the European Union to create norms according to the discussed rule, but at the same time it does not require an elaboration of such provisions¹⁷⁴.

Going back to the definition of the principle that was indicated at the beginning, it was said that the source principle can be also be called the “proximity principle”. Examples of this way of interpreting the principle are the ECJ judgments in the Wallon Waste case¹⁷⁵ or the Commission v. Germany case¹⁷⁶ and the *Entreprenfirforeninges Affalds/Miljosection (FFAD) v. Kobenhavns Kommune* case¹⁷⁷. In the first one, the problem refers to the “discriminative character” of the action undertaken by the Wallon authorities concerning the import of waste material. The ECJ stated that the “proximity rule” means that authorities have to take measures, “which are necessary to ensure the reception, processing and removal of their own waste” on every level, whether it is regional, municipal or local. The waste material should then be stored in the closest possible place of their production in order to limit their transport. The Court concluded that “in view of the differences between the waste produced and various locations and the connection with the place of it production,

¹⁷⁰ Maria Magdalena Kenig-Witkowska, op. cit., p. 103.

¹⁷¹ The Treaty on the Functioning of the European Union changed by The Lisbon Treaty, EU OJ, C 306, 17.12.2007. The consolidated versions of the Treaty on the European Union and the Treaty on the Functioning of the European Union, European Union Official Journal 115/ 01, 9.05.2008.

¹⁷² Maria Magdalena Kenig-Witkowska, op. cit., p. 103.

¹⁷³ Ludwig Kramer, op. cit., p. 25.

¹⁷⁴ Ibidem.

¹⁷⁵ Case C-2/90 *Commission of the European Communities v Kingdom of Belgium*, [1992], ECR I-4431.

¹⁷⁶ Case C-422/92 *Commission v. Germany*, [1995] ECR I-1097.

¹⁷⁷ Case C-209/98 *Entreprenfirforeninges Affalds/Miljosection (FFAD) v. Kobenhavns Kommune*, [2000] ECR I-3743.

the Wallon restrictions could not be considered discriminatory¹⁷⁸. In this case the “source principle” was treated as a “proximity” principle, which is one of the rules that concern the Community legislation in the field of waste management.

However, it seems that in the following two cases, C-422/92 and C-209/98, the “source” principle was applied even more directly. In the first one, Germany was obliged by the Court to adapt the provisions concerning waste storage in Germany, based on the “source” rule. However, in the second case the Court admitted that Member States are allowed to impose export restrictions on waste materials if this is necessary for environmental protection in the light of the rectification of damage at source principle.

It should be mentioned here that there are two ways of understanding the “source” principle. The first interpretation is based on a comparison of the two elements (the elimination of emissions and establishing quality standards) and the second way of interpreting the principle is based on a comparison to the “proximity” principle.

¹⁷⁸ Jan H. Jans, *op. cit.*, p. 37.

Chapter III

Environmental management in enterprises

1. History and the main stipulations of the idea

The environmental management issue is mainly the result of the basic interrelation between the constant increase of global demand and the restricted level of natural resources. During the 1960s and 1970s the environmental issues, which had not been raised until that time, were starting to be noticed both in the social and political sphere. The scope of this problem influences the awareness of people with respect to environmental issues, because they are no longer just local problems¹, but have started to be perceived from a global perspective. One begins to notice more and more frequent and widespread threats, such as: the greenhouse effect, acid rain, depletion of the ozone layer, soil, rivers and seas polluted by heavy metals, salts, and insecticides². The interest with respect to environmental awareness used to consist only in fixing the environmental damage and establishing natural reserves, without paying attention to what really caused the environmental problems.

¹ Theoretically they are not new.

² Matthias Kramer, Maria Urbaniec, Andrzej Kryński, „Międzynarodowe zarządzanie środowiskiem”, Vol. I, „Interdyscyplinarne założenia proekologicznego zarządzania przedsiębiorstwem”, *Studia Ekonomiczne*, Warsaw 2004, p. 57. (“Internationales Umweltmanagement”, Band I, „Interdisziplinare Rahmenbedingungen einer umweltorientierten Unternehmensführung, International environmental management”, Vol. I, “Interdisciplinary stipulations of pro-ecological enterprise management”).

However, there are certain factors that influence the environment. These are factors related to economic growth, socio-economic factors and factors determined by the economic system. The analysis of these factors is based on the “syndrome concept” method³, which is a classification of environmental degradation causes. There are three kinds of syndromes: usage (improper use of natural resources); development (the human–environment issue, which results from short-term developmental processes); and decrease (environmental damage caused by incorrect waste removal)⁴. Such systematization enables us to divide certain tasks for enterprises. Companies that are said to perform the most polluting activities have to meet the legal, market and social demands. At the same time, these demands are confronted with ecological requirements, which are constantly increasing. Some of these ecological requirements are: responsibility for waste disposal; the duty to meet the increasing cost of waste recycling; rising prices of energy and raw materials; responsibility for the environment and even the responsibility for damages caused despite having legal limits; verification of companies’ risk to cause environmental pollution by banks and insurance firms before settling credit terms for them⁵. We should keep in mind that it is not just the sole enterprise, but also all the cooperating entities that can influence environmental damage⁶. That is why the problem of environmental management should not be considered just in terms of the enterprise, but also the mentioned affiliations must be taken into account when solving the problem. However, some entrepreneurs believe that acting in accordance with the regulations of environmental protection restricts their freedom of activity. Nevertheless, the belief that environmental management is in fact a stimulating factor is gaining more and more popularity⁷.

As a result of this a situation, the need arose to create a theory and practice in the field of environmental management.

Environmental management is, above all, an expression of the following principle: “think globally, act locally”⁸. What does this rule mean? First of all, it means that organizations should focus on local, most immediate

³ “Syndromes as unwanted and erroneous results (or the as an example of environmental degradation), which are developed by natural and civilization tendencies and their reciprocal interdependencies, which can be noticed in many regions of the world”, in: *ibidem*, p. 59.

⁴ *Ibidem*, p. 60.

⁵ *Ibidem*, p. 478.

⁶ As for example suppliers, manufacturers, recycling services.

⁷ Matthias Kramer, Maria Urbaniec, Andrzej Kryński, *op. cit.*, p. 485.

⁸ Stefan Kozłowski, *Przyszłość ekorozwoju (The Future of Eco-Development)*, Wydawnictwo KUL, Lublin 2005, p. 60.

actions, aiming to decrease the emission of harmful substances. It should be emphasized that environmental management is inextricably associated with the ecological transformation of companies, which leads to an improvement of the functioning of environmental parameters. These parameters are: a permanent and ecologically sustainable development and especially a decrease in resource and energy consumption in production, transport, storage, etc.; environmentally friendly changes in production technologies; a reduction of waste and pollution generated by the company; a decrease in the devastating impact of products and services upon the environment; ensuring that the environmental requirements are fulfilled; and a rational management of natural resources at every stage of activity, including the process of obtaining materials and components by own means as well as the post-manufacture and/or post-consumption stage of production⁹.

The 1960s and 1970s were the beginning of a new era of environmental company management, when some new separate company units started to be created in order to monitor the emission of pollution as well as to supervise the functioning of cleaning devices. A comprehensive approach towards environmental protection in companies appeared in the 1980s. At that time new technologies, matching the environmental requirements, started to be used. As Bazyli Poskrobko summarizes, theoretically, the concept of permanent and sustainable development, i.e. the macroeconomic view, or the concept of integrated management, i.e. the theory of management view, appeared exactly at that time. Integrated management in relation to usage management, environmental protection and shaping the environment all fell under the notion of environmental management¹⁰.

German and Swiss enterprises were the first ones to unite the two systems – the environmental management and general management system. The German model in the 1980s had its pioneer – the company Winter & Sohn – whose motto was: “the protection of the environment

⁹ Stanisław Czaja, Bogdan Fiedor, *W zgodzie z wymogami rynku i środowiska (In accordance with the market and environmental requirements)*, Ekoprofit, Warsaw 1999, pp. 39–43, and also: Janusz Penc, *Strategie zarządzania. Strategie dziedziczone i ich realizacja. Zintegrowane zarządzanie strategiczne (Management Strategies. Domain Strategies and their Realization. Integrated Strategic Management)*, Agencja Wydawnicza Placet, Warsaw 1995, pp. 174–176, in: Jan Jabłoński, *Zarządzanie środowiskowe jako warunek ekologizacji przedsiębiorstwa. Próba modelu teoretycznego (Environmental management as a condition for the ecological development of enterprises)*, Wydawnictwo Politechniki Poznańskiej, Poznań 2001, p. 7.

¹⁰ Bazyli Poskrobko, *Zarządzanie środowiskiem (Environmental management)*, PWE, Warsaw 1998, p. 285.

is an important task in all of the company's activities and on every level of management"¹¹.

Consequently, environmental management is, above all, the expression of a new approach towards company management in accordance with the environmental protection norms, and not only a response to the obligation of obeying them. Environmental management is becoming a more and more popular alternative to following the ordering and controlling regulations¹².

In the 1990s a systematization of the functioning definitions in the field of environmental management took place. Before that, the notions "pro-environmental company management", "environmental protection in the enterprise", "environmental management in the enterprise" and "environmental management system" were used interchangeably¹³. The term "pro-environmental company management" means all the activities of an enterprise that have a positive impact on the environment. Therefore, pro-environmental company management is a superior notion, which contains not only the technical aspects of company management, but also the management methods. The notion "environmental protection in the enterprise" includes all technical actions¹⁴ concerning the maintenance of the air cleanliness, water and soil protection, recycling, waste utilization and the prevention of noise and radiation. These actions are divided into additive actions (concerning particular devices) and integrated actions (concerning products). They are aimed at the maintenance or creation of environmental conditions¹⁵. The next notion that requires explanation is "environmental management in the enterprise". This definition should be based on the Deming Cycle, in which the management function is treated "(...) as a part of the general management functions serving to prevent the negative influence of the company upon the environment, to implement and realize the environmental policy, and also to control processes that are crucial from the environmental point of view (...)"¹⁶.

¹¹ Matthias Kramer, Maria Urbaniec, Andrzej Kryński, op. cit., p. 480.

¹² There is an entirely new tendency in the legal and social approach of enterprises towards the protection of the environment. This tendency, observed in the United States, consists in opting for co-operation with enterprises, rather than confronting them with the consumers, fully aware of the dangers resulting from exploiting the environment.

¹³ Matthias Kramer, Jan Brauweiler, Zygfryd Nowak, *Międzynarodowe zarządzanie środowiskiem, Instrumenty i systemy zarządzania* Tom II (*International environmental management, Instruments and management systems*), C.H. Beck, Warsaw 2005, p. 115.

¹⁴ Matthias Kramer, Jan Brauweiler, Zygfryd Nowak, op. cit., p. 117.

¹⁵ Ibidem.

¹⁶ Ibidem.

As a result of environmental management, the environmental protection issue started to be perceived as one of the basic functions of the company on all its levels (normative, strategic and operational). Based on the rule of constant improvement, activities related to environmental protection in the enterprise are performed regularly, and not just their planning and implementation, but also their control and audit¹⁷. According to Matthias Kramer, Jan Brauweiler and Zygryd Nowak¹⁸ the notion of environmental management includes both the active and proactive actions of a particular enterprise with respect to the environment. Pro-environmental company management consists in technical aspects and those related to management, and based on the environmental management system it can be regarded as a holistic idea.

Finally, we should explain that the notion of the environmental management system indicates (using the definition of the ISO 14001 norm) “a part of the general management system consisting in the organizational structure, planning, responsibility, principles of conduct, procedures, processes and resources serving to prepare, implement, realize, evaluate and maintain the environmental policy”¹⁹.

2. The ISO and EMAS systems – stipulations and basic definitions

Along with the fast development of economic entities and their activity, as well as their use of the newest technologies, which are not always environmentally friendly, the necessity arose for paying greater attention to the effects of their activity, especially the influence on the natural environment. It is generally known that the functioning of most enterprises leaves an impact on the environment. Because of that, there are norms that, on the one hand, enable imposing sanctions on entities that drastically damage the natural environment, and, on the other hand, these norms also impose the obligation to adapt the activity of enterprises in order to minimize their destructive impact on the environment.

A new value, concerning the above-mentioned issues, appeared in 1972 during the United Nations environmental protection conference in Stockholm²⁰. In 1984 The World Commission on Environment and

¹⁷ Ibidem, p. 118.

¹⁸ Ibidem.

¹⁹ Ibidem, p. 120.

²⁰ Available at: www.business-service.com.pl, 10.02.2007.

Development was created. Within three years, this Commission prepared a report entitled “Our common future”, which introduced new ideas of sustainable development (eco-development) on international level²¹. These actions lead to the creation of the World Business Council for Sustainable Development in 1990. In 1991 the Business Card for Sustainable Development, also called the Rotterdam Card, was published by the International Chamber of Commerce, including 16 guidelines for entrepreneurs wanting to realize the idea of sustainable development. This new attitude was also reflected in program documents, such as the Fifth Environmental Action Program, entitled “The way to sustainability”, published in 1993. This Program focused on the role of the industry in economic growth and emphasized that it is crucial for enterprises to take responsibility for the natural habitat. The Program assumed an increase in the quantity of instruments that could be applied in the field of environmental protection, emphasizing the role of market mechanisms that could be used in order to make companies be actively engaged in achieving compatibility with certain requirements concerning environmental protection²². Practically at the same time, in 1990, the European Commission came up with the idea of preparing new documents regarding the relation between the environment and enterprises. These documents would determine new qualities in the sphere of limiting the harmful impact of companies upon the environment. Furthermore, a new system based on voluntary participation was created. It required the implementation of the environmental management system and EMAS registration. In the 1990s a number of national standards concerning environmental management were created: the I.S. 310 standard in Ireland, the NSF 110 standard in the United States and the CSA Z750-94 standard in Canada²³, as well as the BS 7750 standard in the United Kingdom (the most important of all). The British standard was the first international standard (despite being a national standard in Great Britain) and it became a basis for the ISO 14001 norm, which was created later, and for the eco-management and audit system (EMAS) – and after their implementation it was removed.

²¹ Ibidem.

²² Robert Pochyluk, *Wspólnotowy System Ekozarządzania i Audytu (EMAS). Poradnik dla Organizacji (The Community System of the Eco-Management and Audit Scheme (EMAS), Handbook for Organizations)*, Rotterdam, Royal Haskoning 2005, p. 8.

²³ Robert Pochyluk, “Zasady wdrażania systemu zarządzania środowiskowego zgodnego z ISO 14001 i EMAS” (“Rules of the implementation of environmental management in accordance with the ISO 14001 and EMAS systems”), *Problemy Jakości*, No. 10, 1998, p. 26 and the next in: Piotr Rogala, Tomasz Brzozowski, *System Zarządzania Jakością i Środowiskiem (The Environmental and Quality Management System)*, Wydawnictwo Akademii Ekonomicznej im. Oskara Langego we Wrocławiu, Wrocław 2003, p. 56.

In 1992 the International Organization for Standardization (ISO) created the SAGE (Strategic Action Group on the Environment), which is an advisory group, whose aim was to study the needs for the elaboration of environmental management standards²⁴. The actions of SAGE and discussing the issue during the Rio de Janeiro Conference in 1992, lead to the initiation of the Technical Committee ISO/207 in 1993. The basic ISO 14001 standard, issued in 1996²⁵ and accepted by the European Normalization Committee (CEN), obtained the name EN ISO 14001:1996, which started the expiration of the European national standards mentioned earlier (including the most popular one – BS 7750).

These developments on European as well as global level have lead to the creation of two environmental management systems.

Before discussing the environmental management systems, their general definitions have to be given.

In order to be able to define the notion of environmental management, the definitions of the terms “management”, “organization” and “environment” should be given.

The environment, according to the law concerning its protection and shaping, is understood as the sum of all natural elements, in particular the surface of the Earth, including soil, fossils, water, air, fauna and flora, a landscape in its natural state, as well as in the state of being modified by human activities²⁶.

Management means managing a company according to a scheme, which includes certain aims²⁷ and actions that are essential in organizations with a regulated labor division, which is maintained to gain certain aims by means of the economic usage of resources²⁸.

For the term “organization” I would like to use the definition of R.L. Ackoff. According to R.L. Ackoff, an organization is a system operating purposefully, consisting of at least two purposely acting elements having a common objective on account of which a functional division of duties takes place in the system, and its functional, separate elements can, by mutual actions, react in the form of observations or connections²⁹.

²⁴ Available at: www.business-service.com.pl, 10.02.2007.

²⁵ Ibidem.

²⁶ Matthias Kramer, Jan Brauweiler, Zygfryd Nowak, op. cit., note 189, p. 119.

²⁷ Andrzej K. Koźmiński, *Zarządzanie. Teoria i praktyka (Management. Theory and Practice)*, WN PWN, Warsaw 1998, p. 156.

²⁸ Ibidem.

²⁹ Zygfryd Nowak, *Zarządzanie środowiskiem*, Vol. I (*Environmental Management*), Wydawnictwo Politechniki Śląskiej, Gliwice 2001, p. 34.

The term “organization” is a wide concept. When considering environmental management systems, this concept should be narrowed down to only enterprises. From a legal point of view, the definition of an enterprise is the one accepted by the European Commission: “an enterprise should be considered to be any entity engaged in economic activities, regardless of its legal form, including in particular entities engaged in a craft activity and other activities on an individual or family basis, partnerships or associations regularly engaged in economic activities”³⁰.

However, even though the environmental management system applies for the most part to companies, we should remember that both the ISO 14001 norm and the EMAS regulation concern organizations, i.e. a broader context. In this context, the term “organization” includes not only the companies that are engaged in production and service activities, but also public administration units and public services³¹.

For the purpose of this study, let’s assume that the best definition of environmental management system is the one proposed by the European Commission, according to which the concept of environmental management includes the general management system, which entails the organizational structure, activities, procedures and rules for formulating and implementing the ecological policy³².

The undeniably successful implementation of the quality providing systems, including a series of ISO 9000 norms that were first published in 1987, served as a prototype for the environmental management system. The environmental management system is partly based on the complex quality management called Total Quality Management (TQM). The definition of TQM was included in the BS 7850 norm, according to which Total Quality Management means a philosophy of management and company practice aiming to find the most efficient way of making use of human and material resources in achieving company goals. The PN-ISO 8402: 1996 norm also includes a definition stating that TQM is a method of managing the organization, which is focused on quality, based on the participation of all organizational members with the aim

³⁰ Commission recommendation of 6 May 2003, concerning the definition of micro, small and medium-sized enterprises (notified under document number C(2003) 1422) (Text with EEA relevance) (2003/361/EC), available at: http://europa.eu/eur-lex/pri/en/oj/dat/2003/l_124/l_12420030520en00360041.pdf, 20.02.2007.

³¹ Robert Pochyluk, *op. cit.*, p. 8.

³² Art. 2 §k of the Environmental Management System Requirements of Regulation (EC) No.761/2001 of the European Parliament and of the Council of 19 March 2001, allowing voluntary participation by organizations in the Community Eco-Management and Audit Scheme (EMAS) (OJ L 114, 24.4.2001, §1).

to achieve long-term success, consumer satisfaction and profits for all organizational members and society³³. Some of the rules of Total Quality Management, which are also the basis for environmental management, are: engaging all the employees in the implementation and functioning of the system; proper task performing; a collective approach towards problem solving; and investment in human capital. However, in order to implement the TQM system, there has to be a common participation and engagement of the employees, providing a proper organizational structure, and the needs of internal and external purchasers have to be observed continuously for a smooth circulation of information³⁴. The environmental management system is based on the guidelines of the quality management system, but besides the environmental issues, there are also other aims regarding the activity of the enterprise.

The environmental management system needs a management model based on the Deming Cycle (created by W. Steward, spread by W.E. Deming), which consists of four steps plan – establish the aims, priorities of actions and methods of achieving them; do – implement the aims, in accordance with the guidelines; check – monitor and evaluate the results if they were achieved according with the plan; act – review the plan and eliminate mistakes that could appear, also modify the plan for improvement before the next implementation³⁵ – P-D-C-A. The system is based on the Deming Cycle, just as is the quality management system, in order to increase the effectiveness of the enterprise by way of constant improvement of its functional processes. Every improvement should become a norm that is introduced into the cycle. The implemented standard is revised and consequently replaced by a new one. Such an activity is thought to improve the quality and effectiveness of the functioning of the enterprise.

In the literature on the subject the introduction of a new quality system, i.e. Total Quality Environmental Management (TQEM) is emphasized. This system is based on the philosophy of TQM, which is used to actively create environmental strategies for companies³⁶.

At the end of these deliberations on environmental management it should be added that by participating in either the ISO or the EMAS

³³ Robert Pochyluk, Piotr Grudowski, Jarosław Szymański, *Zasady wdrażania systemu zarządzania środowiskowego zgodnie z wymaganiami normy ISO 14001 (The rules for the implementation of the environmental management system in accordance with the ISO 14001 norm)*, EKOKONSULT, Gdańsk 1999, p. 24.

³⁴ Ibidem, p. 25.

³⁵ See the remarks below.

³⁶ Robert Pochyluk, Piotr Grudowski, Jarosław Szymański, op. cit., p. 26.

system, entrepreneurs have the possibility to obtain certificates confirming their environmentally friendly management. This way enterprises that are registered in either the ISO or the EMAS system can demonstrate that they perform their activity in a clear and efficient way. It is generally believed that organizations that participate in the EMAS system treat their activity in a responsible way and control all threats and risk. However, on the other hand, enterprises that choose one of the environmental management systems expect that this will help them in keeping down the costs related to the implementation of more efficient (integrated with production) technology. The implementation of such a system is also associated with a limitation of responsibility, the development of a wider interest in environmentally friendly products and a minimization of resource costs, waste utilization and energy use³⁷.

The above-mentioned systems are based on voluntary limitations for the sake of the environment, but they also have a certain impact upon the improvement of the functioning of an enterprise. According to Mariusz Jendra, the EMAS system is a form of self-mastering of a company, which is the result of the willingness to accept more and more challenges concerning environmental protection³⁸.

Both the EMAS and the ISO system lead to, as already mentioned, an improvement of competitiveness. This is the result of greater confidence placed in companies that are part of either system by society (authorities, clients and consumers). Moreover, the costs reduction undoubtedly influences the increase of company profits. By registering in the systems, companies can also expect to be granted exemptions from or allowances for payments concerning economic activity related to the environment, i.e. ecological payments and taxes, and also a more lenient attitude towards reporting requirements. By implementing either of the systems, companies become associated with the pursuit of perfection and transparency of the organization³⁹.

In the next chapter the ISO and the EMAS systems will be discussed in more detail. I will begin with describing their requirements and stages of their implementation and subsequently I will forecast their effects.

³⁷ Matthias Kramer, Jan Brauweiler, Zygfryd Nowak, op. cit., p. 115.

³⁸ Mariusz Jendra, "Dobrowolne samoograniczenie dla środowiska" (*Voluntary limitations for the sake of the environment*), *Gazeta Samorządu i Administracji* 2005, No. 26, p. 41.

³⁹ Available at: www.emas-polska.pl, 10.02.2007.

3. Environmental Management on the basis of the EMAS system

3.1. Requirements of the environmental management systems

The requirements⁴⁰ of the implementation of the EMAS system are included in the EMAS regulation in ANNEX I of the norm.

The implementation of the EMAS system in an enterprise requires going through several stages. The order of these stages is also predetermined. The effectiveness of the EMAS system does not only depend on fulfilling all the requirements, but also on the order in which these requirements are fulfilled.

Naturally, the first step is making the decision to implement the system, which should be taken by the company management. This decision should be considered thoroughly. It is advisable to present the taken decision to the employed staff.

The next step is to elaborate a plan for the implementation of environmental management. This phase is necessary in order to estimate the available resources and to select the people that will be involved in the procedure, especially a direction representative who will be controlling the implementation process.

The third and very important step is included in article I-A.3.1 of Annex I of the regulation. This stage consists in the identification of the main problems related to the activity of the company, as well as its products and services. These are called the environmental aspects⁴¹. All the environmental aspects should be identified, both the direct⁴² and

⁴⁰ The requirements of the implementation of the EMAS system are presented on the basis of the EMAS regulation (EC) No.761/2001 of the European Parliament and of the Council of 19 March 2001, allowing voluntary participation by organizations in the Community Eco-Management and Audit Scheme (EMAS) (OJ L 114, 24.4.2001, §1) and on Robert Pochyluk, op. cit.

⁴¹ In the EMAS regulation, environmental aspects are defined as follows: an “environmental aspect” is an element of the activity of an organization, its products or services that can interact with the environment (Annex VI); a significant environmental aspect is one that has or can have a significant environmental impact.

⁴² Some examples of the direct effects stipulated in the EMAS regulation are: emissions in the air; releases to water; avoidance, recycling, reuse, transportation and disposal of solid and other wastes, particularly hazardous wastes; the use and contamination of land; the use of natural resources and raw materials (including energy); local issues (noise, vibration, odor, dust, visual appearance, etc.); transport issues (both for goods and services and employees); risks of environmental accidents or impact occurring or likely to occur as a consequence of incidents, accidents and potential emergency situations; effects on biodiversity.

indirect⁴³ ones. It is also required to identify the legal requirements that are applicable within the organization. Subsequently, the organization has to evaluate the specified environmental aspects and select those that are relevant. This specific order is the result of the fact that the mentioned legal requirements are crucial criteria in estimating the relevant environmental aspects⁴⁴. These steps need to be completed in the initial phase of the implementation procedure in order to be able to rely on this information in the next stages of the process. The obtained information at this stage will serve as reference points in later stages. The elaboration of the relevant environmental aspects is the “key” document that influences the other elements of the system, such as environmental policy, objectives and targets, monitoring and measurement, or operational control.

These results⁴⁵ can be achieved by an environmental review⁴⁶. Here the difference between the ISO 14001 and the EMAS system should be mentioned. According to the ISO provisions there is no formal necessity to perform such a review, only the identification of the environmental aspects is required, whereas in the EMAS regulation this step is a vital one⁴⁷. It is also stressed in the literature on the subject⁴⁸ that in many cases an environmental review helps understanding the relations between the organization and the environment better. At the end of an environmental review an appropriate report should be prepared.

Another crucial requirement is the elaboration of an environmental policy⁴⁹. The environmental policy determines the general direction of the environmental actions of an organization and at the same time it lays down the rules according to which the organization will conduct its

⁴³ Some examples of the indirect effects stipulated in the EMAS regulation are: product related issues (design, development, packaging, transportation, use and waste recovery/disposal); capital investments, granting loans and insurance services; new markets; choice and composition of services (e.g. transport or the catering trade); administrative and planning decisions; product range compositions; the environmental performance and practices of contractors, subcontractors and suppliers.

⁴⁴ That is why such estimation takes place after the identification of the legal requirements.

⁴⁵ Stipulation of the significant environmental aspects.

⁴⁶ In the EMAS regulation, the environmental review is defined as an initial comprehensive analysis of the environmental issues, impact and performance related to activities of an organization (Annex VII).

⁴⁷ However, those organizations that have already obtained the ISO 14001 certificate might be released from this obligation.

⁴⁸ Robert Pochyluk, *op. cit.*, p. 37.

⁴⁹ The regulation defines environmental policy as the overall aims and principles of action of an organization with respect to the environment, including compliance with all the relevant regulatory requirements regarding the environment and also a commitment to continual improvement of environmental performance. The environmental policy provides a framework for setting and reviewing environmental objectives and targets.

activities. It is possible to prepare this document prior to the identification of the environmental aspects. However, as the environmental policy should take into account the specificity of the organization in question, it is advisable to prepare the environmental policy after determining the environmental aspects. Since the environmental policy is the foundation of the system, it is important to elaborate it as thoroughly as possible. By having an environmental policy an organization shows everyone that it is aware of its negative impact on the environment and at the same time that it is willing to minimize these negative effects. According to the EMAS regulation, an environmental policy should: “a) be appropriate to the nature, scale and environmental impacts of its activities, products and services; b) include a commitment to continual improvement and prevention of pollution; c) include a commitment to comply with applicable legal requirements and with other requirements to which the organization subscribes, which relate to its environmental aspects; d) provide the framework for setting and reviewing environmental objectives and targets; e) be documented, implemented and maintained; f) be communicated to all persons working for or on behalf of the organization; g) be available to the public”⁵⁰. As stated in points b) and c), an environmental policy should enclose a set of specific declarations that have to be achieved, such as continual improvement of the organization, prevention of pollution and compliance with the applicable legal requirements.

The measures by which the above-mentioned stages⁵¹ can be achieved and at the same time the next step of the EMAS system implementation, is the elaboration of a system of procedures that are provided in Annex I-A of the EMAS regulations⁵². As a starting point, the first group of the procedures should be prepared. These procedures are: the identification and evaluation of the environmental aspects; the identification of the legal requirements; the identification of the need for training; communication (in order to achieve a sufficient flow of information between the organizational units and between the organization and its environment, since the EMAS regulation stresses the importance of an “open dialogue” with the environment)⁵³; and the supervision of documentation. After their elaboration, the procedures should be implemented.

⁵⁰ Art. I-A.2 of (EC) No.761/2001 of the European Parliament and of the Council of 19 March 2001, allowing voluntary participation by organizations in the Community Eco-Management and Audit Scheme (EMAS) (OJ L 114, 24.4.2001, §1).

⁵¹ But also the ones that will be discussed later on.

⁵² (EC) No. 761/2001 of the European Parliament and of the Council of 19 March 2001, allowing voluntary participation by organizations in the Community Eco-Management and Audit Scheme (EMAS) (OJ L 114, 24.4.2001, §1).

⁵³ Robert Pochyluk, op. cit., p. 38.

The next phase concerns planning. This step includes environmental objectives⁵⁴, targets⁵⁵ and the programs⁵⁶ by which they are to be obtained. All these elements are defined in article 3 of the EMAS regulation⁵⁷, which contains the basic definitions. These elements are necessary to fulfill the main requirement of environmental management, which is the constant improvement and minimization of the negative impact on the environment (as stated in the regulation – “the continual improvement of environmental performance”)⁵⁸. However, organizations must also comply with the applicable legal requirements, which is stated in Annex I of the regulation as follows: “the objectives and targets shall be measurable, where practicable, and consistent with the environmental policy, including the commitments to prevention of pollution, to compliance with applicable legal requirements and with other requirements to which the organization subscribes, and to continual improvement”⁵⁹.

The environmental management program is a plan that helps putting the environmental policy into practice, while the objectives and targets are the means by which the requirements of the environmental policy can be fulfilled. The objectives and targets should be based on the identified relevant environmental aspects⁶⁰. Thus, the objectives, targets and programs should be strictly linked to the identified environ-

⁵⁴ “Environmental objective” means a general environmental goal, arising from the environmental policy, that an organization sets for itself to achieve and that is quantified where possible.

⁵⁵ “Environmental target” means a detailed performance requirement, quantified where possible and applicable to the organization or parts thereof, which arises from the environmental objectives and needs to be set and met in order to achieve those objectives.

⁵⁶ “Environmental program” means a description of measures (responsibilities and means) taken in order to achieve environmental objectives and targets and the deadlines for achieving the environmental objectives and targets.

⁵⁷ (EC) No. 761/2001 of the European Parliament and of the Council of 19 March 2001 allowing voluntary participation by organizations in the Community Eco-Management and Audit Scheme (EMAS) (OJ L 114, 24.4.2001, §1).

⁵⁸ The EMAS regulation contains the definition for the notion “continual improvement of environmental performance” in art. 3: “continual improvement of environmental performance shall mean the process of enhancing, year by year, the measurable results of the environmental management system related to an organization’s management of its significant environmental aspects, based on its environmental policy, objectives and targets; the enhancing of the results need not take place in all spheres of activity simultaneously”.

⁵⁹ (EC) No.761/2001 of the European Parliament and of the Council of 19 March 2001, allowing voluntary participation by organizations in the Community Eco-Management and Audit Scheme (EMAS) (OJ L 114, 24.4.2001, §1).

⁶⁰ However, this is not a strict formula, because sometimes organizations decide to focus on aspects that are different from the relevant ones and then it is possible to prepare the appropriate objectives and targets for them.

mental aspects and the elaborated environmental policy. If we want to create the dependence between the environmental objectives, targets and programs, it has to be stated, as it is enclosed in the regulation, that a program needs to be established, implemented and maintained by the organization in order to achieve the objectives and targets of the organization⁶¹.

The next step is the elaboration of environmental procedures. These procedures are strictly linked to the previously prepared environmental aspects.

The first group includes the operational procedures, i.e. operational control described in Annex I-A.4.6. Operational control consists in the administration and supervision of the processes, products and services in order to eliminate or limit the negative impact of the organization on the environment. So, the task of the organization is to supervise and realize all the processes and actions related to relevant environmental aspects. Operational control should also be maintained in accordance with the environmental policy, its objectives and targets. Based on the above, operational control could be defined as “the sum of all measures that are used for the permanent supervision of the processes, actions, operations, products and services that are the source of the relevant environmental aspects”⁶².

The monitoring and measuring⁶³ procedure is strictly linked to operational control. This determines the method and the frequency of conducting the “key” measurements. The range of monitoring and measuring depends on the relevant environmental aspects as well as on the accepted objectives and targets. By way of these procedures the organization controls its negative environmental impact⁶⁴. Monitoring and

⁶¹ I-A.3.3 of the EMAS regulation (EC) No. 761/2001 of the European Parliament and of the Council of 19 March 2001, allowing voluntary participation by organizations in the Community Eco- Management and Audit Scheme (EMAS) (OJ L 114, 24.4.2001, §1), “The organization shall establish, implement and maintain a program(s) for achieving its objectives and targets”.

⁶² Robert Pochyluk, op. cit., p. 86.

⁶³ Art. I-A.5.1. of Annex I in the EMAS regulation (EC) No.761/2001 of the European Parliament and of the Council of 19 March 2001, allowing voluntary participation by organizations in the Community Eco-Management and Audit Scheme (EMAS) (OJ L 114, 24.4.2001, §1), “The organization shall establish, implement and maintain a procedure(s) to monitor and measure, on a regular basis, the key characteristics of its operations that can have a significant environmental impact. The procedure(s) shall include the documenting of information to monitor performance, applicable operational controls and conformity with the organization’s environmental objectives and targets. The organization shall provide calibrated or verified monitoring and measurement equipment”.

⁶⁴ Robert Pochyluk, op. cit., p. 40.

measuring provides information about the realization of the objectives and targets, but also on the organizational performance and whether it is in accordance with the legal requirements. The aim of this procedure is to improve organizational efficiency in the field of environmental performance.

The last in the group of these procedures are emergency preparedness and response⁶⁵. Taking into consideration the main aim of the implementation of environmental management, these procedures are important, because they help organizations prevent accidents that could have an enormous influence on the environment and they foresee reactions in case of emergencies, so that the potential negative impact is minimized.

All the presented procedures should specify the roles of the employees, their liabilities and entitlements.

Now let's move forward to the next step in the implementation of environmental procedures. The implementation of environmental procedures should be registered in order to have documented proof for the realization of the necessary actions. At the same time, it will be a source of information when verifying the results and for the elaboration of an environmental statement⁶⁶.

The following step concerns the preparation of the second group of systemic procedures, which will be used in the next stages of the implementation process. The procedures that should be prepared are the following: a procedure(s) for dealing with actual and potential non-conformities and for taking corrective and preventive actions⁶⁷; control of records⁶⁸; and internal audit⁶⁹.

⁶⁵ Art. I-A.4.7 of Annex I in the EMAS regulation (EC) No. 761/2001 of the European Parliament and of the Council of 19 March 2001, allowing voluntary participation by organizations in the Community Eco-Management and Audit Scheme (EMAS) (OJ L 114, 24.4.2001, §1), "The organization shall establish, implement and maintain a procedure(s) to identify potential emergency situations and potential accidents that can have an impact(s) on the environment and how it will respond to them. The organization shall respond to actual emergency situations and accidents and prevent or mitigate associated adverse environmental impacts. The organization shall periodically review and, where necessary, revise its emergency preparedness and response procedures, in particular after the occurrence of accidents or emergency situations. The organization shall also periodically test such procedures where practicable".

⁶⁶ Annex III of the EMAS regulation (EC) No.761/2001 of the European Parliament and of the Council of 19 March 2001, allowing voluntary participation by organizations in the Community Eco-Management and Audit Scheme (EMAS) (OJ L 114, 24.4.2001, §1).

⁶⁷ I-A.5.3.

⁶⁸ I-A.5.4.

⁶⁹ I-A.5.5.

When all the required phases are completed, after a certain period of time the environmental management system and its effects should be evaluated. Such an evaluation consists of two elements:

- periodical estimations of the conformity with legal and other requirements;
- internal audits⁷⁰.

These periodical estimations are usually conducted by comparing the results obtained by the monitoring procedure and the measurements stipulated in the legal requirements.

The objective of internal audits is to check whether the environmental management system is performing according to its stipulations. In order to be able to conduct internal audits, an audit program has to be elaborated, which will guarantee an efficient audit procedure.

Another way to check the proper functioning of the system is the management review⁷¹. The aim of the management review is to analyze the environmental management efficiency in achieving the stipulated targets, the legal conformity and the reduction of environmental impacts. As a result of the review, changes could be introduced to the environmental policy, as well as modifications in the targets and objectives or other important improvements.

The last document that is required is the environmental statement. This document is characteristic for the EMAS system, being a part of the external communication idea. The ISO 14001 norm does not require the publication of this statement, whereas the EMAS system does. The aim of the statement is to inform society about the achieved results with respect to the environmental impact of the organization in question. The environmental statement contains general information about organizational performance in relation to environmental protection. The environmental statement should be verified and approved by an environmental verifier and published after his approval is granted.

⁷⁰ Annex II of the EMAS regulation (EC) No.761/2001 of the European Parliament and of the Council of 19 March 2001, allowing voluntary participation by organizations in the Community Eco-Management and Audit Scheme (EMAS) (OJ L 114, 24.4.2001, §1).

⁷¹ Art. I-A.6. of Annex I of the EMAS regulation EC No.761/2001 of the European Parliament and of the Council of 19 March 2001, allowing voluntary participation by organizations in the Community Eco-Management and Audit Scheme (EMAS) (OJ L 114, 24.4.2001, §1) defines the notion as follows: "Top management shall review the organization's environmental management system, at planned intervals, to ensure its continuing suitability, adequacy and effectiveness. Reviews shall include assessing opportunities for improvement and the need for changes to the environmental management system, including the environmental policy and environmental objectives and targets".

3.2. Certification procedure

In order to register the environmental management system in the EMAS system, organizations have to have their system verified by an environmental verifier. He will also check whether all the data that is included in the environmental statement is credible and properly presented. If everything is as required, he will approve the statement. Thus, in order to register the organization has to fulfill all the above presented requirements⁷², such as the environmental review, environmental audit (to estimate the environmental effects), environmental statement, controlled environmental review.

After the statement has been approved, the organization should prepare an application for registration and submit it to the appropriate state organ, which is specified by each respective state. This organ will check if all the requirements are fulfilled, and then it will register the organization in the EMAS system.

3.3. Effects of implementation

It should be stressed that in many cases environmental management is implemented by organizations in order to achieve a certain level of economic improvement. Most of the time, organizations that implement the EMAS system have a commercial profile, which makes this economic aim perfectly understandable. Another argument for the implementation of this system is simply the environmental protection aim. However, these two aims are not mutually exclusive, because efficient environmental management will help the organization to obtain a positive economic effect by investing in a limited amount of resources.

Benefits in commercial organizations can be achieved by reducing costs. By implementing environmental management, costs such as energy, materials, investments, equipment, payment, fees and labor can be potentially reduced⁷³.

Organizations that have implemented environmental management use limited amounts of energy and natural resources, which means that there is a higher chance to achieve economic advantage. The implementation of environmental management will help organiza-

⁷² Art. 3 of the EMAS regulation EC No.761/2001 of the European Parliament and of the Council of 19 March 2001, allowing voluntary participation by organizations in the Community Eco-Management and Audit Scheme (EMAS) (OJ L 114, 24.4.2001, §1).

⁷³ Robert Pochyluk, *op. cit.*, p. 44.

tions identify possibilities for decreasing the consumption of natural resources and energy and consequently the related energy costs will also decrease.

Another thing that should be mentioned is that one of the main aims of environmental management is to limit the negative environmental impact by way of pollution prevention. This makes all the “end of pipe” devices less useful, which reduces the potential expenditure for such instruments, since this kind of devices (for example sewage plants) require investments as well as exploitation costs.

On account of the fact that exceeding certain emission limits is usually linked with environmental payments or fees, the implementation of environmental management may result in a reduction of these costs, since its aim is that the acceptable emission limits are not exceeded.

The costs of labor can be reduced if the implementation of the environmental management system will provoke an improvement of the work efficiency of employees.

Another benefit of the implementation of the EMAS system is the possibility to build a more positive image of the organization. However, this benefit is difficult to estimate, which does not make it any less important though.

Finally, the costs of the implementation of the system should be mentioned. The costs depend on the method of implementation. If an organization does not implement the system on its own, then the greatest costs are the consultants' fees, who help with the introduction of the system. Besides these costs, there are the verification and registration expenses, which are also significant⁷⁴.

In conclusion, it can be said that organizations that have implemented the EMAS system are not only more competitive in the market, but are also obligated to a continuous improvement and at the same time to a permanent control of the impact they have on the environment. All these factors undoubtedly influence the development of organizations. As already mentioned, organizations that have implemented the EMAS system are obligated to constantly control their activity, decrease their negative impact on the environment and permanently eliminate those elements of their activity that are environmentally unfriendly. These obligations persuade the organizations to be active in the sphere of environmental protection, and simultaneously they enable and mobilize the organizations to a constant self-cultivation. Moreover, the requirements of the EMAS system raise the quality of the organizational

⁷⁴ Ibidem.

activity, which of course leads to a higher competitiveness. The system logo informs about all the mentioned organizational advantages.

On account of the above-mentioned advantages, environmental management systems are becoming more and more popular⁷⁵.

⁷⁵ In 2006, 5000 organizations were registered in the EMAS system, available at: <http://www.emas.mos.gov.pl/5000.html>, 8.05.2007.

Chapter IV

Systems of Environmental Management as an exemplification of the EU Environmental Principles

The aim of this chapter is to answer the question whether there is a link between the environmental management systems and the principles of the Environmental Law of the European Union. Discussing such a dependence is important, because it shows how the principles of the European Environmental Law can influence the system and how these principles are reflected therein. When describing such a relationship, it is also possible to notice how the environmental principles of the environmental management system can exist in reality, because of the actions of enterprises that have implemented the system. In my opinion, this issue is also crucial while considering environmental management, because one of the main aims¹ of the system is to limit the harmful effects that companies have on the environment by implementing this kind of management and consequently fulfilling the idea of the principles as well.

I would like to begin with answering the following question: is the general idea of environmental management in line with the environmental principles included in article 191 §2 of the Treaty on the Functioning of the European Union?

¹ The other aim is to achieve positive economic results on account of the EMAS system – see the previous chapter.

As far as I am concerned, in order to answer this question it is necessary to explain the general idea of environmental management.

According to the current Sixth Community Action Plan entitled “Our Future, Our Choice” (2001–2010)², the EMAS system is a measure that helps organizations comply with environmental provisions, as well as with the implementation of production and consumption patterns in order to give them a sustainable character. One of the priority tasks of the Plan is encouraging the utilization of the EMAS³ system in a broader way⁴. For example, companies that are participating in the system have the possibility to publish detailed and independently verified information concerning their influence on the environment and this way they are encouraged to perform in a more environmentally friendly way. Thus, the general idea of environmental management is to treat this instrument as a measure by which the damaging effects on the environment caused by enterprises is constantly reduced and at the same time the implementation of the system enables an optimal use of the organizational resources. Environmental management consists in an early identification (detection) of the problems, an efficient implementation of the improvement measures and, at the same time, better financial results can be obtained by implementing this system.

Within the framework of the EU Principles, prevention principle and the rectification of the damage at source principle seem to be the most connected to the idea of environmental management. This statement is based on a general understanding of environmental management. This connection can be seen in the fact that the main purpose of implementing this kind of system is to limit the contamination produced by an enterprise. Enterprises preferably want to introduce preventive measures in order to achieve such an aim. Also, in order to obtain such a result, the appropriate action should be undertaken at the “source” of the pollution, which is the enterprise itself.

Although, considering the precautionary aspect of the environmental management will not be so obvious as the just mentioned features, in my opinion it is possible to state, that the general idea of environmental management and its implementation is also linked to the precautionary principle. Companies that implement one of the systems, the EMAS or the ISO 14001 system, are not obligated to have accurate data

² Sixth EU Environmental Action Plan, *Our Future, Our Choice*, available at: http://ec.europa.eu/environment/newprg/pdf/6eapbooklet_en.pdf, 10.03.2007.

³ In the EMAS registration there are now 5000 organizations, mostly German organizations. EMAS Participants, available at: http://europa.eu.int/comm/environmet/emas/about/participate/sites_en.htm, 10.03.2007.

⁴ Stefan Kozłowski, op. cit., p. 400.

about the pollution that they are producing. There is also no obligation for any organization that has a significant impact on the environment to implement either of the systems. So, we can assume that organizations that want to be in accordance with the precautionary principle are implementing one of the environmental management systems. The statement with respect to the accordance between the precautionary principle and the EMAS regulation can be supported by Veerle Heyvaert. She claims that after the introduction of the Commission Communication on the Precautionary Principle⁵ in 2000, the Community provisions concerning health and environmental issues are in accordance with the precautionary principle. She said that “since the Commission Communication in 2000 was devoted to the precautionary principle, the principle has sprung up in virtually every health and environmental policy document issued by Community institutions, and frequently features in the preambles, and at times even in the actual binding text of new pieces of EC health and environment”⁶. Keeping in mind the just mentioned statement and the fact that the binding version of the EMAS regulation was implemented in 2001, so after the Commission Communication, as well as the fact that with no doubt the EMAS system refers to environmental issues, it can be concluded that the regulation indeed has a “precautionary” character.

With respect to the polluter pays principle, I think that this principle should be treated separately and within the framework of costs internalization, because the environmental management system is not directly linked to this principle.

As far as I am concerned, the general idea of environmental management is in line with the EC environmental principles. However, it is crucial to distinguish these elements of the regulation that refer to the mentioned rules included in the article 191 §2 of the Treaty on the Functioning of the European Union (former article 174 §2 of the EC Treaty).

In my opinion, the points from the system requirements that should be examined to prove my theory are⁷: environmental policy⁸, environmental

⁵ Communication from the Commission on the precautionary principle, /* COM/2000/0001 final */, 52000DC0001, available at: <http://eur-lex.europa.eu>, 20.04.2007.

⁶ Veerle Heyvaert, *op. cit.*, note 78, p. 27.

⁷ Annex I A. Environmental Management System Requirements of Regulation (EC) No.761/2001 of the European Parliament and of the Council of 19 March 2001, allowing voluntary participation by organizations in the Community Eco-Management and Audit Scheme (EMAS) (OJ L 114, 24.4.2001, §1).

⁸ I-A.2.

aspects, environmental review as well as the points that are enclosed in the provisions concerning paper implementation and operation⁹, i.e. operational control and objectives, targets and program(s)¹⁰.

As the aim of my thesis is to demonstrate the link between the EU principles and environmental management, I would like to reveal how each of the principle is enclosed in the mentioned aspects of the environmental management systems.

Before discussing the environmental policy, being the most important document that every organizational activity should be based on, within the framework of the prevention principle, the first thing is to indicate is the environmental policy definition.

In article 2 of the EMAS regulation, environmental policy is defined as “the organization’s overall aims and principles of action with respect to the environment including compliance with all relevant regulatory requirements regarding the environment and also a commitment to the continual improvement of environmental performance; the environmental policy provides the framework for setting and reviewing environmental objectives and targets”¹¹.

Thus, there are three principles that need to be mentioned when talking about the environmental policy, on which environmental management is based:

- compliance with all relevant regulatory requirements regarding the environment;
- pollution prevention;
- continual improvement and development.

The environmental policy is the main stipulation, reference point, according to which environmental management is being implemented. The second principle of the policy is pollution prevention, which is defined in the following way: “pollution prevention shall mean the use of processes, practices, materials or products that avoid, reduce or control pollution, which may include recycling, treatment, process changes, control mechanisms, efficient use of resources and material substitution”¹².

⁹ I-A.4.

¹⁰ I-A.3.

¹¹ Regulation (EC) No.761/2001 of the European Parliament and of the Council of 19 March 2001, allowing voluntary participation by organizations in the Community Eco-Management and Audit Scheme (EMAS) (OJ L 114, 24.4.2001, §1).

¹² Art. 2 §d of the Regulation (EC) No. 761/2001 of the European Parliament and of the Council of 19 March 2001, allowing voluntary participation by organizations in the Community Eco-Management and Audit Scheme (EMAS) (OJ L 114, 24.4.2001, §1).

This principle is in accordance with the prevention principle, but it can also be said to be in accordance with the rectification of damage at source principle, on account of the reference to the quality measure.

Based on the environmental policy, organizations demonstrate their awareness of the impact they have on the environment and they voluntarily minimize these negative effects.

When discussing the prevention obligation, it should be stressed that both aspects of this principle are fulfilled in this case. The principle says that prevention should be taken into account at the earliest stage of activity and continue in every phase. Enterprises fulfill this requirement by efforts to eliminate the source of pollution, in order to not let the contamination be created. Based on the prevention principle, enterprises that have implemented environmental management step away from the “end of pipe” concept, which was previously widely implemented. So the idea is to solve the problem during the production process, not after.

Environmental management also contains the element of “continual improvement of environmental performance”, defined in article 2 of the EMAS regulation¹³. It can be assumed that by this stipulation the preventive character can be achieved as well. The preventive character of environmental management is included in the mentioned provision, because it also focuses on the quality process. Enterprises that implement environmental management reject the “end of pipe” way of thinking, which is a complete opposite notion compared to the preventive one. The “end of pipe” idea is based on the purification at the end of the production, by eliminating pollution using sewage plants, for example, or by devices that minimize atmospheric emissions. These measures are usually more expensive, because they require additional investments into costly specialist devices that decrease or eliminate the created pollution. In view of the preventive aspect of environmental management and also of the environmental policy, the “end of pipe” attitude is not enough for companies that want to implement the ISO 14001 or the EMAS system. With the prevention principle being in force, in order to achieve the quality certificate companies need to look for alternative solutions that, for example, eliminate industrial waste formation. This does not of course mean the rejection of existing methods of waste disposal, but merely encourages companies to implement a new paradigm. This new approach

¹³ Art. 1 §2 of the Regulation (EC) No. 761/2001 of the European Parliament and of the Council of 19 March 2001, allowing voluntary participation by organizations in the Community Eco-Management and Audit Scheme (EMAS) (OJ L 114, 24.4.2001, §1).

requires searching for and utilizing the “clear production” concept, in other words, clear technology¹⁴. These aims can be achieved by the BAT. The best available technology (BAT) is a measure by which the obligation stipulated in the environmental policy for pollution prevention and the continuous improvement of companies can be achieved. The “best available technology” means the technology that is the most appropriate from the point of view of prevention, reduction and elimination of pollution, and at the same time in accordance with the already mentioned definition of the “prevention of pollution”. This attitude also shows a different, mentioned in the beginning, aspect of environmental policy, i.e. the rectification of damage at source principle. As it was stated in the previous chapter, this principle is closely linked to the prevention principle, but amended by the “source” notion. According to this principle, environmental damage prevention should take place at the beginning of the technological process, which is in line with my previous observations. This means that all of the made observations regarding the “end of pipe” approach are also applicable when discussing this principle. In my opinion, they might be even more justified in the case of the rectification of damage at source principle, because here the “source” of the pollution – the company – is even more emphasized. In this case, on account of the definition, the focus on the change of attitude and on taking the necessary measures in order to eliminate contamination in the earliest possible phase of its creation, is obvious. At the same time, the rectification of damage at source principle is also in line with the last requirement of the environmental policy, i.e. constant improvement and development. As mentioned in the previous chapter, every environmental management system¹⁵ is based on the Deming Cycle, being the way of achieving the stipulated in the last sentence aims. Therefore, by means of a constant improvement and development of the enterprise, the second aspect of the principle, the quality standards, can be fulfilled.

To summarize this part of my observations, I think that it is possible to claim that there is a correspondence between the environmental policy, as the main stipulation of the environmental management system, and the prevention as well as the rectification of damage at source principles.

I would like to discuss the environmental aspects next. The environmental aspects in the EMAS regulation are defined as “the elements of an organization’s activity, products or services that can interact with the

¹⁴ Ryszard Pochyluk, Piotr Grudowski, Janusz Szymański, op. cit., p. 55.

¹⁵ But also quality management systems.

environment; a relevant environmental aspect is an environmental aspect that has or can have a relevant environmental impact”¹⁶.

In my opinion, the presence of such a provision and identifying the company’s main “environmental problems” has, per se, a preventive character. The reason for such a stipulation is to indicate the main issues that high attention should be paid to, in order to deal with them and eliminate them by way of environmental management. As far as I am concerned, the identification of such aspects corresponds to the main aim of environmental management, which is reducing the degree of pollution formation, in order to achieve positive environmental effects based on the system. The preventive character of the implementation of the environmental management system is established already at the moment of determining those relevant aspects. It should also be stressed that according to the interpretation of the prevention principle, it does not only require the elimination of pollution or a reduction of the negative effects, but also, or according to some authors¹⁷ mainly, paying the appropriate attention to the planning moment and trying to eliminate those negative environmental effects at this early stage already, by utilizing the available knowledge or assessment procedures concerning the environmental impact. This approach is very much in line with the principle of identification of relevant environmental aspects. Thus, identifying the relevant environmental aspects serves as a basis for setting environmental objectives and targets, i.e. the measures by which the environmental management aims will be obtained. Therefore, in conclusion, it is impossible to disagree with the presented thesis about the correspondence between the principle and the requirement of identifying the relevant environmental aspects .

In order to determine the environmental aspects, the EMAS requires an environmental review, defined as “an initial comprehensive analysis of the environmental issues, impact and performance related to activities of an organization”¹⁸, in case the organization that wants to implement the system has not delivered the appropriate data. So, in order to achieve the same results, the organization can elaborate the environmental aspects. However, if the company was not able to prepare them on time, it has to perform an environmental review in order to establish its current

¹⁶ Art. 2 §f of the of the Regulation (EC) No.761/2001 of the European Parliament and of the Council of 19 March 2001, allowing voluntary participation by organizations in the Community Eco-Management and Audit Scheme (EMAS) (OJ L 114, 24.4.2001, §1).

¹⁷ Maria Magdalena Kenig-Witkowska, *op. cit.*, p. 100.

¹⁸ Art. 2 §e of the Regulation (EC) No.761/2001 of the European Parliament and of the Council of 19 March 2001, allowing voluntary participation by organizations in the Community Eco-Management and Audit Scheme (EMAS) (OJ L 114, 24.4.2001, §1).

position as far as the environment is considered. Therefore, since the aim of the stipulation on environmental aspects and the environmental review is very similar, and assuming¹⁹ the preventive character of the stipulation on environmental aspects, it is possible to conclude that the environmental review has a preventive character as well.

The aspects identified by the organization are divided into two groups, the direct and indirect ones. The identification of the direct environmental aspects is clearly linked to the prevention principle. However, based on my earlier observations, I believe that the identification of the indirect aspects can also be treated as an exemplification of the precautionary principle. As it is defined in the article 6.3 of Annex VI²⁰, the indirect²¹ environmental aspects are the result of the activities, products and services of an organization over which the organization may not have full management control. The mentioned definition takes into account the possibility of potential environmental contamination. This means that as the environmental aspect, which should be considered is treated not only the direct²² actions of enterprise actions of enterprises but also those actions that have a potential environmental impact. In my opinion, such a stipulation is an example of an inclusion of the precautionary principle. According to the precautionary principle, the lack of scientific evidence of pollution²³ is not a reason for not undertaking measures in order to avoid the eventuality of serious and irreversible environmental damages.

¹⁹ Based on earlier observations.

²⁰ Art. 2 §f of REGULATION (EC) No.761/2001 of the European Parliament and of the Council of 19 March 2001, allowing voluntary participation by organizations in the Community Eco-Management and Audit Scheme (EMAS) (OJ L 114, 24.4.2001, §1).

²¹ Examples of indirect effects are included in art. 6.3 of Regulation (EC) No.761/2001 of the European Parliament and of the Council of 19 March 2001, allowing voluntary participation by organizations in the Community Eco-Management and Audit Scheme (EMAS) (OJ L 114, 24.4.2001, §1). These are: product related issues (design, development, packaging, transportation; use and waste recovery/disposal); capital investments, granting loans and insurance services; new markets; choice and composition of services (e.g. transport or the catering trade); administrative and planning decisions; product range compositions; the environmental performance.

²² Some examples of the direct effects stipulated in the EMAS regulation are: emissions in the air; releases to water; avoidance, recycling, reuse, transportation and disposal of solid and other wastes, particularly hazardous wastes; the use and contamination of land; the use of natural resources and raw materials (including energy); local issues (noise, vibration, odor, dust, visual appearance, etc.); transport issues (both for goods and services and employees); risks of environmental accidents or impact occurring or likely to occur as a consequence of incidents, accidents and potential emergency situations; effects on biodiversity – art. 6.2 of Regulation (EC) No.761/2001 of the European Parliament and of the Council of 19 March 2001, allowing voluntary participation by organizations in the Community Eco-Management and Audit Scheme (EMAS) (OJ L 114, 24.4.2001, §1).

²³ Or the occurrence of the process or phenomenon in general.

Therefore, even though an organization that wants to implement the environmental management system does not have sufficient data on the environmental influence of the indirect aspects, it does have to take them into consideration while preparing their environmental management system. According to article 6.3 of Annex VI, the organization has to consider what kind of influence it can have over these aspects and what measures can be undertaken in order to reduce this impact²⁴.

When elaborating the environmental aspects, it is not required that the exact impact on the environment is given in the form of strictly determined quantitative and quality data. According to article 7.2 of Annex VII²⁵ however this article refers to the environmental review²⁶, they can be utilized if it is possible to estimate them. Also this provision supports the theory that the regulation has a precautionary character, because exact data is not required in order to implement accurate measures.

In my opinion, all the mentioned observations support the theory that the elaboration of the environmental aspects as well as the environmental review are an example of the precautionary principle.

These two presented principles, the prevention and precautionary one, are linked by one of the aims of the Community Environmental Policy, which is a high level of environmental protection.

Here I would also like to shortly refer to another principle, namely the rectification of damage at source principle. As already observed when discussing the environmental policy question, it might be useful here to focus in particular on the second aspect²⁷ of the principle (the first aspect relates to the general law principle, demanding damage rectification, which is also linked to damage liability and also assuming its reparation). This second aspect corresponds to the prevention principle, which should be applied at the source of the pollution creation.

²⁴ Art. 6.3 of Regulation (EC) No.761/2001 of the European Parliament and of the Council of 19 March 2001, allowing voluntary participation by organizations in the Community Eco-Management and Audit Scheme (EMAS) (OJ L 114, 24.4.2001, §1) states that “in the case of these indirect environmental aspects, an organization shall consider how much influence it can have over these aspects, and what measures can be taken to reduce the impact”.

²⁵ Art. 7.2 §b of Regulation (EC) No.761/2001 of the European Parliament and of the Council of 19 March 2001, allowing voluntary participation by organizations in the Community Eco-Management and Audit Scheme (EMAS) (OJ L 114, 24.4.2001, §1) states that: “an identification of all environmental aspects with a significant environmental impact in accordance with Annex VI, qualified and quantified as appropriate, and compiling a register of those identified as significant”.

²⁶ See previous observation concerning the dependence between environmental aspects and environmental review.

²⁷ Maria Magdalena Kenig-Witkowska, *op. cit.*, p. 101.

As long as the identification of the environmental aspects²⁸ shows which elements of the company performance have a significant impact on the environment, these elements can be treated as an exemplification of the rectification of damage at source rule. The task of the company is to pay attention to certain aspects of its activity, in order to eliminate them. Consequently, this means that these problems have to be eliminated by the company itself, first by defining the problems and then by implementing environmental management, which will resolve them.

It is also possible to say that this assumption is not entirely correct, because the company only has to verify what the problematic environmental questions are at this stage. However, in my opinion, at this stage the company is already undertaking action in order to rectify the damages of its performance. Therefore it is possible to conclude that such an indication is indeed in accordance with the discussed principle.

The next issues that I would like to discuss are the more technical aspects of the implementation of environmental management. These are its objectives, targets, program and the operational control, in other words, the measures necessary to achieve the goals included in the environmental policy and to consider the environmental aspects.

When discussing the environmental targets²⁹ and objectives³⁰, it should be stressed that they are considered to be the instruments by which the requirements included in the environmental policy can be achieved. Objectives and targets are also assigned for the previously identified environmental aspects.

In my opinion, it is possible to indicate the preventive character of those two elements. As it is stated in article A.3.3. of Annex I of the EMAS regulation, “the objectives and targets shall be measurable, where practicable, and consistent with the environmental policy, including the commitments to prevention of pollution, to compliance with applicable legal requirements and with other requirements to which the organization subscribes,

²⁸ Also the environmental review, as previously observed.

²⁹ The environmental targets are defined in art. 2 of Regulation (EC) No.761/2001 of the European Parliament and of the Council of 19 March 2001, allowing voluntary participation by organizations in the Community Eco-Management and Audit Scheme (EMAS) (OJ L 114, 24.4.2001, §1), as “the detailed performance requirement, quantified where practicable, applicable to the organization or parts thereof, that arises from the environmental objectives and that needs to be set and met in order to achieve those objectives”.

³⁰ The environmental objectives are defined in art. 2 of Regulation (EC) No.761/2001 of the European Parliament and of the Council of 19 March 2001, allowing voluntary participation by organizations in the Community Eco-Management and Audit Scheme (EMAS) (OJ L 114, 24.4.2001, §1), as “an overall environmental goal, arising from the environmental policy, that an organization sets itself to achieve, and which is quantified where practicable”.

and to continual improvement”³¹. So, clearly, the preventive character of the targets and objectives is even included in their definition in the regulation. According to Robert Pochyluk³², the determination of the objectives and targets is rooted in the preventive approach, i.e. in focusing on the reasons of the problem, and not on its effects. Based on these two elements and the approach determined by the environmental aspects, the stated objectives and targets can be fulfilled. The company’s objectives or targets can be based on, for example, reducing the quantity of production waste and resources utilization, reducing or eliminating the level of damaging emissions into the environment, redesigning the products in order to decrease their negative environmental impact during the production process as much as possible, or promoting environmental awareness³³ among the company employees³⁴. Clearly, all these examples, being the targets or objectives determined by the company, relate to the prevention principle, i.e. the possibilities of avoiding harming the environment, rather than to the results of company performance. This preventive aspect of setting the objectives and targets can be achieved by continual development of the company, which is also mentioned in the definition.

This way of understanding the targets and objectives also links them to the rectification of damage at source principle, in my opinion. As long as the mentioned elements are able to reduce the negative environmental effects on company level³⁵, we can draw the link between the rectification of damage at source principle and the objectives and targets.

³¹ The environmental targets are defined in art. 2 of Regulation (EC) No.761/2001 of the European Parliament and of the Council of 19 March 2001, allowing voluntary participation by organizations in the Community Eco-Management and Audit Acheme (EMAS) (OJ L 114, 24.4.2001, §1).

³² Robert Pochyluk, op. cit., note 198, p. 66.

³³ When discussing the aspect of environmental awareness of employees, it should be mentioned that the EMAS regulation does include such a provision. According to art. A.4.2. in Annex I, “the organization shall identify training needs associated with its environmental aspects and its environmental management system. It shall provide training or take other action to meet these needs, and shall retain associated records. The organization shall establish, implement and maintain a procedure to make persons working for it or on its behalf aware of: the importance of conformity with the environmental policy and procedures and with the requirements of the environmental management system; the significant environmental aspects and related actual or potential impacts associated with their work, and the environmental benefits of improved personal performance; their roles and responsibilities in achieving conformity with the requirements of the environmental management system; and the potential consequences of departure from specified procedures”. Regulation (EC) No.761/2001 of the European Parliament and of the Council of 19 March 2001, allowing voluntary participation by organizations in the Community Eco-Management and Audit Scheme (EMAS) (OJ L 114, 24.4.2001, §1).

³⁴ Robert Pochyluk, op. cit., note 198, p. 66.

³⁵ See the examples mentioned above.

The last aspect to mention at this point are the environmental programs, which are defined as “a description of the measures (responsibilities and means) taken or envisaged to achieve environmental objectives and targets and the deadlines for achieving the environmental objectives and targets”³⁶. As it is stated in the definition, the aim of the programs is to help the targets and objectives to come into force. Concluding, based on the created programs, the preventive character of environmental management, as well as its aim in relation to the rectification of damage at source principle, can be achieved.

The next element in the group of technical aspects is operational control. Operational control means “the group of devices that are applied for the constant supervision of the processes, actions, operations, products or services, which are the source of the relevant environmental aspects”³⁷.

Within the framework of effective environmental management, the task of the organization is to assure the supervision and the realization in certain conditions all of the actions and processes of the company, which are linked to the relevant environmental aspects by operational control. As Robert Pochyluk³⁸ states, the aim of operational control is based on the rectification of damage at source principle. According to him operational control consists in the management and supervision of the processes, products or services related to the relevant environmental aspects in order to eliminate or reduce the damaging impact on the environment “at the source”. However, in my opinion not only the rectification of damage at source principle applies here. Since the targets related to the relevant environmental aspects can be achieved by operational control, it is possible to state that in this case the prevention principle

³⁶ Regulation (EC) No. 761/2001 of the European Parliament and of the Council of 19 March 2001, allowing voluntary participation by organizations in the Community Eco-Management and Audit Scheme (EMAS) (OJ L 114, 24.4.2001, §1).

³⁷ Operational control is determined by art. A.4.6 in Annex I of Regulation (EC) No.761/2001 of the European Parliament and of the Council of 19 March 2001, allowing voluntary participation by organizations in the Community Eco-Management and Audit Scheme (EMAS) (OJ L 114, 24.4.2001, §1), according to which “the organization shall identify and plan those operations that are associated with the identified significant environmental aspects consistent with its environmental policy, objectives and targets, in order to ensure that they are carried out under specified conditions, by: establishing, implementing and maintaining a documented procedure to control situations where their absence could lead to deviation from the environmental policy, objectives and targets; and stipulating the operating criteria in the procedure(s); and establishing, implementing and maintaining procedures related to the identified significant environmental aspects of goods and services used by the organization and communicating applicable procedures and requirements to suppliers, including contractors”.

³⁸ Robert Pochyluk, *op. cit.*, p. 85.

is also applicable. Hence, operational control is a measure by which this principle becomes effective.

Because of the reasons mentioned below, I have decided to treat the “polluter pays” principle separately and that is why so far no observations were made regarding the relation between environmental management and this principle.

Based on the definition of the polluter pays principle, it is obvious that this principle is strictly linked to the direct aspects of environmental damage liability. This principle is included in many of the environmental provisions of the Community, for example Directive 2004/35 on environmental liability in relation to the prevention and remedying of environmental damage³⁹, or Directive 75/442 on wastes⁴⁰, which simply consists in paying the costs of the environmental damages created by company performance. I would like to prove that there are also different aspects of the polluter pays principle, which might be linked to environmental management.

As the basic aim of the EU environmental system is the internalization (in the meaning of putting into the interior dimension), of the costs which are the result of the natural resources exploitation, it is possible to claim that the polluter – pays principle is the exemplification of this aim. The most obvious example of internalization is the shift of these costs onto the entity that creates the pollution, in accordance with the polluter pays rule. At times, the principle is sometimes modified, like in the case of plastic containers, where the cost of their production as well as the cost of their storage after utilization is divided between the producer and the consumers. So in this case, the polluter pays principle is partly changed into a consumer pays principle.

Comparing the general tendency, which is the internalization of the natural resources exploitation concept, with the idea of the environmental management implementation, it should be stressed, that enterprises performing on the environmental management bases treat the costs internalization as its secondary aim. However, this norm, as well as the companies implementing it, does not reject such an effect. The main objective is a constant improvement of management, in order to achieve cost minimization.

³⁹ Directive 2004/35/CE of the European Parliament and of the Council of 21 April 2004, on environmental liability in relation to the prevention and remedying of environmental damage, available at: <http://eur-lex.europa.eu>, 20.03.2007.

⁴⁰ Council Directive 75/442/EEC of 15 July 1975, on waste, changed by Council Directive 91/156/EEC of 18 March 1991, amending Directive 75/442/EEC on waste, available at: <http://eur-lex.europa.eu>, 20.03.2007.

However, taking into consideration the effectiveness of environmental protection, measured by the degree of the exterior costs shifting onto the producer of the contamination, the environmental management systems should be highly evaluated⁴¹. Based on this statement, as well as the relation between cost internalization and environmental management, it is possible to claim that the polluter pays principle is included in the environmental management systems.

The most important function of the European Environmental Law is to assure that the current and future external costs of company performance are internalized in the widest sense of the meaning⁴². This entails the realization of the polluter pays principle, and the task of the EU Law is to encourage companies, either by coercive or voluntary measures, to compensate the negative impact of their performance on the environment. Compensation for the caused damage does not only involve paying direct costs⁴³, but also implementing the above-mentioned indirect voluntary measures, which are the environmental management systems. This statement is justifiable, as long as it is possible to say that environmental management systems make it possible for enterprises to reduce the damage they cause to the environment by their performance. In order to support this theory, I would like to bring up the aim of environmental management once more, which is “promoting continual improvements in the environmental performance (the results of the management of relevant environmental aspects of a company, which are the elements of organizational activity, products or services that can interact with the environment; a relevant environmental aspect is one that has or can have a relevant environmental impact⁴⁴) of organizations”⁴⁵. Hence, the main aim of environmental management is the improvement of the environmental performance of organizations. This improvement can be achieved by companies by applying the best available technologies. I do

⁴¹ Artur Nowak, “Prawna ochrona środowiska naturalnego w Unii Europejskiej jako płaszczyzna wzajemnej stymulacji przedsiębiorstw i instytucji prawotwórczych” („The legal protection of the natural environment in the EU as a ground for a mutual stimulation of enterprises and legislative institutions”), *Studia Europejskie*, Warsaw, 1998, p. 42.

⁴² But, at the same time, without disturbing the free movement of goods, capital, services and people.

⁴³ Paying penalties for the caused environmental damage.

⁴⁴ Art. 2 §c and f of Regulation (EC) No.761/2001 of the European Parliament and of the Council of 19 March 2001, allowing voluntary participation by organizations in the Community Eco-Management and Audit Scheme (EMAS) (OJ L 114, 24.4.2001, §1).

⁴⁵ Art. 1 §2 of Regulation (EC) No.761/2001 of the European Parliament and of the Council of 19 March 2001, allowing voluntary participation by organizations in the Community Eco-Management and Audit Scheme (EMAS) (OJ L 114, 24.4.2001, §1).

not agree with Ludwig Kramer⁴⁶, who claims that the Best Available Technologies, used by companies that have implemented environmental management systems, based on the principles included in article 174 §2 of the EC Treaty (now art. 191 § 2 of the Treaty on the Functioning of the European Union), are “an empty formula”. The erroneousness is clear once we consider the fact that the Commission has a right of action against a Member State before the Court of Justice of the European Union, especially based on article 258 of the Treaty on the Functioning of the European Union (former article 226 of the EC Treaty)⁴⁷, and to accuse it of permitting an enterprise situated on its territory to reject the use of technologies that are best for the environment and the most efficient from an economic point of view⁴⁸.

To talk about the relation between the European Union Environmental Principles and the EMAS regulation’s requirements, we have to have in mind that all the requirements do not exist only in the legal sphere but they need to be implemented by enterprises. This statement leads to the conclusion that besides the obvious correspondence between the regulation and the mentioned principles, the environmental management systems bring the principles to life and make companies implement them in reality.

⁴⁶ Ludwig Kramer, *op. cit.*, note 13, p. 42.

⁴⁷ Art. 258 of the Treaty on the Functioning of the European Union: “If the Commission considers that a Member State has failed to fulfill an obligation under the Treaties, it shall deliver a reasoned opinion on the matter after giving the State concerned the opportunity to submit its observations. If the State concerned does not comply with the opinion within the period laid down by the Commission, the latter may bring the matter before the Court of Justice of the European Union, 9.5.2008 Official Journal of the European Union C 115/161”.

⁴⁸ Artur Nowak, *op. cit.*, note 291, p. 50.

Chapter V

Conclusion

The aim of my study was to support the thesis that environmental management is an exemplification of the principles included in article 191 §2 of the Treaty on the Functioning of the European Union (former article 174 §2 of the EC Treaty).

In order to prove my theory, I have decided to present the matter of environmental management, its general idea, the main stipulations as well as the requirements that need to be fulfilled in order to implement the environmental management system, because without these observations it would not be possible to make references to the environmental principles, which I have also discussed.

In my opinion, environmental management, which I have discussed based on the EMAS regulation, is an exemplification of the environmental principles enclosed in article 191 §2 of the Treaty on the Functioning of the European Union. In other words, I believe that the environmental management systems include the following principles: the polluter pays principle, the precautionary principle, the prevention principle and the rectification of damage at source principle.

I have proven my theory by establishing a clear connection between certain aspects of the EMAS regulation, in my opinion the most important ones, and the mentioned principles. As far as I am concerned it is not possible to negate this character of the EMAS system, since the requirements of the regulation are in accordance with the mentioned principles. These requirements are the identification of the relevant environmental aspects, the environmental review and the environmental policy, i.e. the instruments the entire system is based on, making them the main point of reference.

The provisions concerning the elements by which environmental management is introduced in organizations such as operation control, determining the objectives and targets of the organization and establishing programs by which these objectives and targets will be achieved, are also in line with the discussed principles. Hence, also in this field the correspondence between the EMAS regulations and the principles of article 191 §2 of the Treaty shows that the general idea of environmental management system is in line with the environmental principles.

My study proves that the environmental principles are legally binding, because they are reflected in the environmental management systems, and by implementing the environmental management systems, companies are also fulfilling these principles and are consequently giving them a binding force.

In my opinion, this kind of research is crucial when discussing the real presence of the principles of the EU Environmental Law. This matter is widely discussed not only in this study, but also in the ECJ and CFI judgments. With my paper, I would like to support the thesis that the principles are not only present in European provisions, like the EMAS regulation, but also in the actual actions and measures undertaken by companies. In my opinion, this kind of understanding of the effectiveness of these principles gives them an even stronger and real existence.

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