



ENVIRONMENTAL STATEMENT



	NAME	OCCUPATION	SIGNATURE
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Preface by the President of AKTOR

In the rapid changing world that we live in, we believe that the **protection** and the **preservation** of the environment are prerequisites for the survival of mankind. Thus they constitute part of the general philosophy and business policy of AKTOR.

The compliance with the legal requirements as well as the continual improvement of our environmental performance are the basic axes of our environmental strategy aiming at the general **sustainable development** and the improvement of life quality of the entire society.

The Chairman and General Director
of AKTOR S.A.

Dimitrios Koutras

1. INTRODUCTION

AKTOR has developed and implements an Environmental Management System (EMS), according to the guidelines of the European Regulation (EC) 761/2001 EMAS “Eco Management and Audit Scheme”. The EMS is under constant audit by an independent Certification Body.

This Environmental Statement has been prepared in the framework of the requirements of the aforementioned Regulation and the Verification of the EMS by an independent Certification Body, with the aim at providing environmental information to the public and all interested parties, regarding the construction activity of AKTOR.

The data included in this Environmental Statement concern the environmental policy, the environmental impacts and performance, as well as the results based on the environmental objectives and targets that the company has set.

Finally, crucial to the development of this Environmental Management System under EMAS as well as to the general environmental vision of AKTOR, has been the continuous aid and support of the experienced Architect Engineer Mr. Loukas Giannakoulis, expert in this field.

2. INFORMATION ON AKTOR S.A.

AKTOR is a leading construction company in Greece. AKTOR possesses dynamic management, employs a large number of engineers and other specialized personnel, that constitute the most significant asset on which AKTOR bases its development course.

Based on human resources, accumulated specific expertise and experience and new technology equipment, AKTOR constructs the most significant and modern infrastructure and development projects as well as private works in the country, while it is also activated in the rest of Europe and in the Middle East.

The construction sectors in which AKTOR is activated are:

- Roads and technical infrastructure projects
- Tunnels
- Hydraulic projects
- Building and industrial projects
- Port projects
- Electromechanical projects
- Energy and power generation plants
- B.O.T. Projects (co-financed projects)
- Environmental, landscape restoration and other projects.

Within AKTOR's activities, through its affiliated companies, are included the following:

- environmental technology projects
- water resources management projects
- renewable energy sources projects
- utilization and trade of quarry products, etc.

Among it the most significant projects AKTOR has already constructed or is currently implementing, the following ones are included:

- Attiki Odos Highway
- Rion – Antirion Bridge
- Spata Airport
- Egnatia Motorway
- P.A.T.H.E. Motorway
- Railway projects for the Railway Organization of Greece
- Olympic Projects: Olympic village, Media village in Pallini, Aesthetic Integration of the Olympic Sport Complex of Athens (OSCA), International Broadcasting Centre (IBC) Athens, Access improvements around OSCA, Extension of Kimis Avenue from the National Motorway to the Olympic village
- Suburban Railway
- Athens Metro
- Electromechanical installations in projects such as: IBC, Athens Concert Hall, Attiki Odos Highway, Athens Metro, Underwater tunnel Aktio-Preveza and industrial installations, such as Natural Gas networks and stations for the Public Gas Corporation, Automation systems for fuel loading terminals of the Hellenic Refineries, Control room for the tunnels of Egnatia and Attiki Odos Highways, etc.
- Wastewater treatment plants of Athens, in Psitallia
- Building projects: Hospitals, Schools, Management buildings, Industrial buildings, Commerce buildings, tourism installations, etc.
- Restoration of buildings, etc.



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AESTHETIC INTEGRATION OLYMPIC SPORT COMPLEX ATHENS



RION- ANTIRRION BRIDGE



KAKIA SKALA TUNNEL



ELECTROMECHANICAL INSTALLATIONS ATTIKI ODOS HIGHWAY



LANDSCAPE RESTORATION IMITOS HIGHWAY



IMITOS HIGHWAY VIEW



3. ENVIRONMENTAL POLICY

The respect and protection of environment are part of the broad philosophy of AKTOR's business strategy, representing the basic principles on which the long term, environmentally friendly planning of the development of the company is based.

Focusing at the protection of environment the Management of the company commits itself to:

- **the compliance with all current national and European legislative and other regulatory requirements**
- **the continual improvement of the environmental performance and contribution to the sustainable development.**

The targets of the Environmental Policy are through the Environmental Management System's installation, proper implementation and constant audit by an Independent Certification Body are:

- **the prevention of pollution** through the implementation of technologies and construction methods most friendly to the environment.
- **the minimization of waste** through recycling, reuse and control of generated waste.
- **the minimization of noise, vibrations and other nuisances** through integrated planning of project's implementation, in order to decrease the impacts on society, traffic, public networks, the protected areas, etc.
- **the protection of archaeological sites and monuments of our cultural heritage**
- **the rehabilitation of green sites and the landscape of the projects in general** through environmental programs, according to the approved environmental studies and environmental conditions of each project.
- **the proper management of raw materials** for the construction of projects and the wise use of the natural resources in general, such as energy, water etc.
- **the aesthetic integration and harmonic integration** of the worksites to the environment in which the projects of AKTOR are implemented.
- **the protection of the employees** and the assurance of such conditions that contribute to the balanced management of problems due to the interaction between the working and broader environment.
- **the reinforcement of the environmental awareness** of the employees, through continuous informing and training.

4. ENVIRONMENTAL MANAGEMENT SYSTEM

The Environmental Management System (EMS) of AKTOR constitutes an integrated system for the overall and proper management of environmental issues regarding its construction activity.

The construction activity in general and the parameters that may have an impact on the environment are analyzed and approached through the EMS, while preventing measures and actions are defined and taken.

The EMS that AKTOR applies, consists of four issues, besides this present Environmental Statement. These issues are:

- i. Issue I : Environmental Management Folder (EMF)**, regarding the general EMAS requirements, the Environmental Policy and the objectives, the structure and organization of the company, the responsibilities and duties of relevant personnel and, finally, the environmental issues of the construction activity.
- ii. Issue II : Environmental Management Procedures (EMP)**, in which the procedures required by EMAS, are included.
- iii. Issue III : Environmental Management Directives (EMD)**, regarding the environmentally implementation of the projects works.

The EMS, that the personnel of AKTOR implements, is based on the guidelines of EMAS aiming at the compliance with the Environmental Policy during construction activity and with the belief that the application of this System upgrades the level of AKTOR, ensures the implementation of the Policy, while achieves a continual improvement of the environmental performance in advantage of the environment and the society as a whole.

The EMS that AKTOR applies is based on certain Structure and Organization of the company, as well as on accustomed procedures for control, monitoring, measuring and recording the environmental impacts to the immediate and broader environment in which the projects, that AKTOR undertakes, are implemented.

It is in this framework, that the Top Management of the company has developed during the past years the Department of Environment, Health and Safety (EHS), aiming at the integrated and responsible promotion and implementation of the environmental policy and the EMS, in every aspect that AKTOR or Affiliate Companies are operating.

The Department of EHS employs expert and competent personnel on issues of environment, health and safety, to whom specific responsibilities have been assigned. The communication with the Top Management, the other Departments, the Affiliated companies and the worksites of AKTOR is presented in the general organizational chart of the company (Annex I), as well as in the organizational chart of the EHS Department (Annex II). The responsibilities and duties are elaborated in detail inside the EMS.

Furthermore, in the EMS of AKTOR there is a typical organizational chart that is applied in the worksites and in other activities of the company (Annex III).

In this typical organizational chart are defined the basic personnel in the worksites, its position in the company hierarchy and the way of communication with the chief of the project.

The General Project Manager of each project, in straight collaboration with the Department of EHS has the full responsibility for the promotion and application of the Environmental Policy and of the EMS of AKTOR in every level of the worksite.

In this effort, the work site engineer responsible on environmental issues, the engineers of the project and anyone else deemed necessary are properly authorized with tasks, bearing the responsibility for the implementation of the Policy and the EMS in every level of the project, by all employees. The General Project Manager or worksite Manager of each project provides his employees with full support to exercise their duties.

A basic element of the environmental management system is the informing and training of the human resources of the company on issues regarding the protection of the environment and the improvement of the environmental awareness of the employees.

It is a conviction of the Management that the success of the effort to implement such an environmental management system premises the realization of the basic principles of protection and respect of the environment, resulting in a factual personal contribution of every employee.

Schematically, the Environmental Management System that AKTOR operates is presented in the attached “Graph I: Flow Chart of the EMS – EMAS” and “Graph II: Project Environmental Management Chart” and is structured as follows:

i. Issue I : Environmental Management Folder

This Issue represents the first and basic controlled document of the Environmental Management System that AKTOR applies, with EMAS.

The objective of Issue I is to define the basic guidelines of the EMS which derive from the requirements of EMAS and which are implemented by all the personnel of AKTOR.

Furthermore this Issue aims at:

- the notification, and the promotion of the environmental policy and the procedures as requirements of the EMS to all the hierarchy levels of AKTOR
- describe and establish the guidelines for an integrated and effective Environmental Management System
- provide improved practices to the total operation of AKTOR and facilitate the Environmental Management activities for in advantage of the society
- provide the official documentation of EMS implementation by AKTOR, according to the European Regulation 761/2001 for EMAS.

Annex of Issue I : Environmental Management Manual

This Annex constitutes the Environmental Management Manual which mentions the company's basic framework and operating principles for managing the environmental aspects, based on which the overall environmental management for the construction of each project, is organized.

The environmental instructions and directives apply and should be implemented by all relevant parties in the project, such as subsidiaries, suppliers, etc.

ii. Issue II : Environmental Management Procedures

The procedures support the operation of the system and include basic rules applied and maintained during the operation of the EMS.

Their purpose is to ensure that: every activity is implemented with due compliance by all relevant personnel involved in the EMS, the activity is effective in its implementation and finally there is mean to monitor and control it.

All the procedures are maintained in the Procedure Issue of the EMS, a copy of which can be given only by the Department of EHS, while each recipient is required to maintain an updated copy and operate according to the procedures included in it.

The procedures are distributed to the relevant personnel, the responsible personnel of each operation of AKTOR, as well as any other executives specified, according to their role in the EMS.

iii. Issue III : Environmental Management Directives

The Environmental Management Directives concern the execution of works in the work sites, aiming at the protection of the environment, and are maintained during the entire duration of each project of AKTOR.

According to the Greek legislation, "environmental conditions of construction and operation of the project" are approved by the relevant governmental authorities. The compliance with these terms is a legislative obligation.

For the material compliance with the approved environmental conditions, these Directives have been developed aiming at the legal compliance of AKTOR with environmental issues as well as with protection of the environment.

The environmental management directives are implemented by the personnel of AKTOR, while they constitute a contractual obligation of AKTOR's subcontractors.

5. ENVIRONMENTAL ASPECTS AND IMPACTS

Environmental aspect is an element of the construction activity that interacts with the environment.

Environmental impact is any change to the environment, whether adverse or beneficial wholly or partially resulting from the construction activity.

In AKTOR the environmental aspects from the entire construction activity have been identified and the relevant environmental impacts have been assessed, in order to set the environmental targets of the company.

The significant environmental aspects, during construction or operation phase of the projects, are the following:

- **emissions to air**
- **releases to water**
- **pollution and contamination of land**
- **solid, special and hazardous waste**
- **excavation and demolition materials**
- **used oils, batteries and tyres waste**
- **specific issues such as archaeological sites, cultural heritage, sensitive and/or protected areas**
- **local issues such as noise, vibrations, dust, visual nuisance, social nuisances etc.**

All these aspects are important for the entire construction activity of AKTOR, while, for each project they give rise to the significance of the environmental impacts, according to the construction or operation phase, the immediate and broad environment, the conditions particularities, the legal requirements, the environmental terms etc.

6. ENVIRONMENTAL OBJECTIVES AND TARGETS

The environmental objectives and targets regarding the environmental aspects of the construction activity are:

OBJECTIVES	TARGETS
Minimization of dust and air pollution	Prevention and settlement of dust through drenching, covering of all the transported loads with special impenetrable cover and frequent maintenance of machinery and vehicles regarding their air emission levels as stated by the legislation
Minimization of water pollution	Collection and management of work site waste water and prohibition of disposal of waste into water recipients
Minimization of soil and landscape degradation	Scheduled and integrated management of the following chain: "land – excavation materials – raw materials – disposal – land restoration" to each project
Solid and other waste management	Prevention, minimization, recycling, reuse of materials
Special and hazardous waste management	Delivery to specialized companies, approved by the government, for the disposal and management of hazardous waste, and demonstrative data for their proper management
Used oils, batteries and tyres waste management	Regeneration of used oils Recycling of old batteries Collection of tyres, for disposal to sanitary landfill or future recycling
Minimization of noise, vibrations, nuisances and protection of the cultural heritage	Use of machinery with "CE" certificate and labelling regarding noise, installation of noise barriers, compliance with the vibration levels, respect for the society, aesthetic upgrading, harmonic integration of projects into the near and broad environment, and cooperation with archaeological authorities
Excavation and demolition materials management	Proper management of these products and reuse or integration into the construction

The following results or performances given below in chapter (7), have resulted through a collective effort to achieve the basic objectives and targets of AKTOR.

7. SUMMARY OF ENVIRONMENTAL PERFORMANCE

AKTOR maintains aggregated environmental performance data from the worksites and the main offices.

This performance concern those results that can be quantified as well as those that are not quantifiable, although they constitute part of the basic environmental requirements of each project, such as aesthetic upgrading of sites, harmonic integration of projects into the environment, protection of cultural heritage, traffic arrangements etc.

The performance for the period of May 2002 – May 2004 is summarized:

ENVIRONMENTAL PERFORMANCE 2002-2004	QUANTITIES	UNITS	MANAGEMENT METHOD
Paper	26.750	Kg	Collection and delivery for recycling
Used oils	59.360	Kg	Collection and delivery for regeneration
Old batteries	274	Pieces	Collection and delivery for recycling
Electric and electronic equipment waste (screens, PCs, CD-ROMS, Modems, UPS, Fax, keyboards, etc)	67 screens 29 printers 48 PCs 250 components	Pieces	Collection and delivery for recycling with issuance of proper management certificate
Toner, ink cartridges	127	Pieces	
Special waste (last decade)	15.440	Kg	Delivery and transportation to Germany for destruction and final disposal
Tree planting Irrigation	1.179.525 220	Pieces 1000 M ²	Trees, bushes, vegetation Irrigation
Excavation materials environmental management	5.330.000 30.000.000	M ³	Raw materials, backfilling, site restoration, integration into projects Old quarries of Attica restoration
Old metals (scrap)	500.000	Kg	Collection and delivery for recycling
Cultural heritage	Not quantifiable		Continuous measurements of noise and vibrations, air emissions control, aesthetic fencing – panels, nuisances minimization etc
Special natural beauty areas	Not quantifiable		Nuisances minimization, prevention of site and nature alteration etc
Traffic arrangements and interventions	Not quantifiable		Integrated, scheduled and prompt notification of the public, proper labelling, communication with interested parties, etc



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For its quantifiable environmental performance AKTOR keeps all demonstrative data for the proper and ecological management of the waste.

According to these results the company aims at the continual environmental improvement and performance in the future.

The fact which is regarded as most significant in AKTOR is the collective effort and participation of the entire workforce, which is achieved mainly through the continuous awareness and training of the personnel in all executives of the company.

The company organizes training cycles, every 6 months, with duration of more than 123 hours each. This training is implemented with the cooperation and participation of experts such as the Hellenic Institute for Occupational Health and Safety.

Those seminars are conducted in the headquarters of AKTOR (Athens), as well as in other cities, where large work sites exist, e.g. Ioannina, Veria and Thessaloniki, aiming at the awareness – training of the engineers and staff of the company, in environmental issues and health and safety issues at work.

Thus in the period of May 2002 – December 2003, 154 engineers have been trained, while the employees are daily informed either in the work sites or other work areas.

In the context of the broad development strategy, as well as the environmentally friendly orientation, AKTOR has proceeded in the gradual renewal of its construction mechanical equipment, resulting in the fact that now, approximately 70% of the equipment value, corresponds to modern equipment newer than 3 years old.

Furthermore AKTOR invests in environmental technology, such as the technology applied in road projects for the restoration of the pavement, through recycling and reuse of inert materials, thus contributing in the preservation of precious natural resources. This investment reaches approximately 1.5 million euros.

Environmental performance and legislation

In general the environmental impacts from the construction activity are directly linked and depended on the type of the project and the construction method.

Thus for example, in a port project there could be significant impacts on sea environment, while a building project, which is constructed inside an urban, area could have impacts on the society with nuisances from the operation of the worksite.

Approved environmental conditions exist for the construction of each project, which are issued according to the legislation aiming at the protection of near and broader environment, in which each project is implemented.

Thus, the compliance with the environmental conditions during the projects implementation is a legal one, while resulting in environmental performance of each project, quantified or not.

Moreover, the compliance with both legal requirements and legislation are a commitment of the Management of AKTOR and a basic axis of our environmental policy.

AKTOR possesses a special intranet electronic webpage for the legislation that concerns the construction activity, as well as other activities of the company. This webpage is accessible by the personnel, the worksites and the affiliated companies of AKTOR, ELLINIKI TECHNODOMIKI TEB A.E. and its other affiliated companies.

8. VALIDATION OF ENVIRONMENTAL STATEMENT

After on-site audits, which have been realised in both Central Offices and construction sites, representational of the construction sectors in which AKTOR is activated, and after having checked all relevant data and information,

I verify that:

the Environmental Policy, the Environmental Program, the Environmental Management System, the Environmental Statement and the Environmental Performance of the company “AKTOR S.A., with headquarters in 18, Fillelinon street, P.C. 15232, Halandri, Athens, Greece”, fulfil the requirements of the European Regulation EC 761/2001 of the European Parliament and of the Council of 19 March 2001 for the voluntary participation by organisations in the Community Eco-Management and Audit Scheme (EMAS).

The information that is stated in this present Environmental Statement is clear and accurate and the Environmental Aspects of the audited projects have been identified and the relevant Environmental Impacts have been evaluated.

The audited construction sites are:

- Site of Attiko Metro at Votanikos, Line 3, Tunnel construction project
- Site of Attiko Metro at Agios Antonios Peristeri, Electromechanical installations project
- Site at Agios Kostantinos, Road project
- Site of Lamia Hospital, Building project

Revised Environmental Statements will be validated and will be published annually.

The next Environmental Statement will be written, validated, and will be delivered for registration to the register Entity of the Ministry of Environment Physical Planning and Public Works, on October 2005.

AKTOR’s Environmental Management System with EMAS is implemented at the Central Offices and to the construction sectors: Road, Building, Tunnel, Pipe, Port, Hydraulic electromechanical and energy projects, Self-financed projects, Landscape restoration projects.

Athens: 01.10.2004

Dr. Chem. Engineer PANAGIOTIS AHLADAS

Accreditation number of Verifier: 183 (Accreditation Certificate No. 183 to ISO/IEC Guide 66 and THE Regulation 761/2001 – EMAS)

TÜV HELLAS S.A.

24, El. Venizelou Str / 15341 Ag. Paraskevi / Athens / Greece



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9. INFORMATION ON REGISTRATION

For further information or comments on the present Environmental Statement and the Environmental Performance of AKTOR S.A.:

Name / Distinctive Title	AKTOR S.A.
Address	Fillelinon 18, Xalandri, P.C.152 32
Telephone / FAX	+30-210-6873881 / +30-210-6842182
e-mail	nsiouta@aktor.gr
Internet address	www.aktor.gr
Competent Person for Contact	Niki Siouta, Environmental Director
Activity Code NACE	45.1, 45.2 , 45.3, 45.4
Number of Employees	1000
Verifier Name	Dr. Panagiotis Ahladas – TÜV Hellas
Accreditation Number	183 (Accreditation Certificate No. 183 to ISO/IEC Guide 66 and THE Regulation 761/2001 – EMAS)
Accreditation Field	Code NACE 45 / Construction
Next Environmental Statement Verification Date	November 2005
Name of the executive authority, authorities, under which the corporation falls and personal data of the contact competent person of this authority:	

Corporation Representative

Niki Siouta, Civil Engineer
Environmental Engineer / Candidate Doctor at Aristotle University of Thessaloniki
AKTOR S.A.'s Environmental, Health and Safety Director
AKTOR S.A.'s Top Management Representative

10. NEXT ENVIRONMENTAL STATEMENT DATE

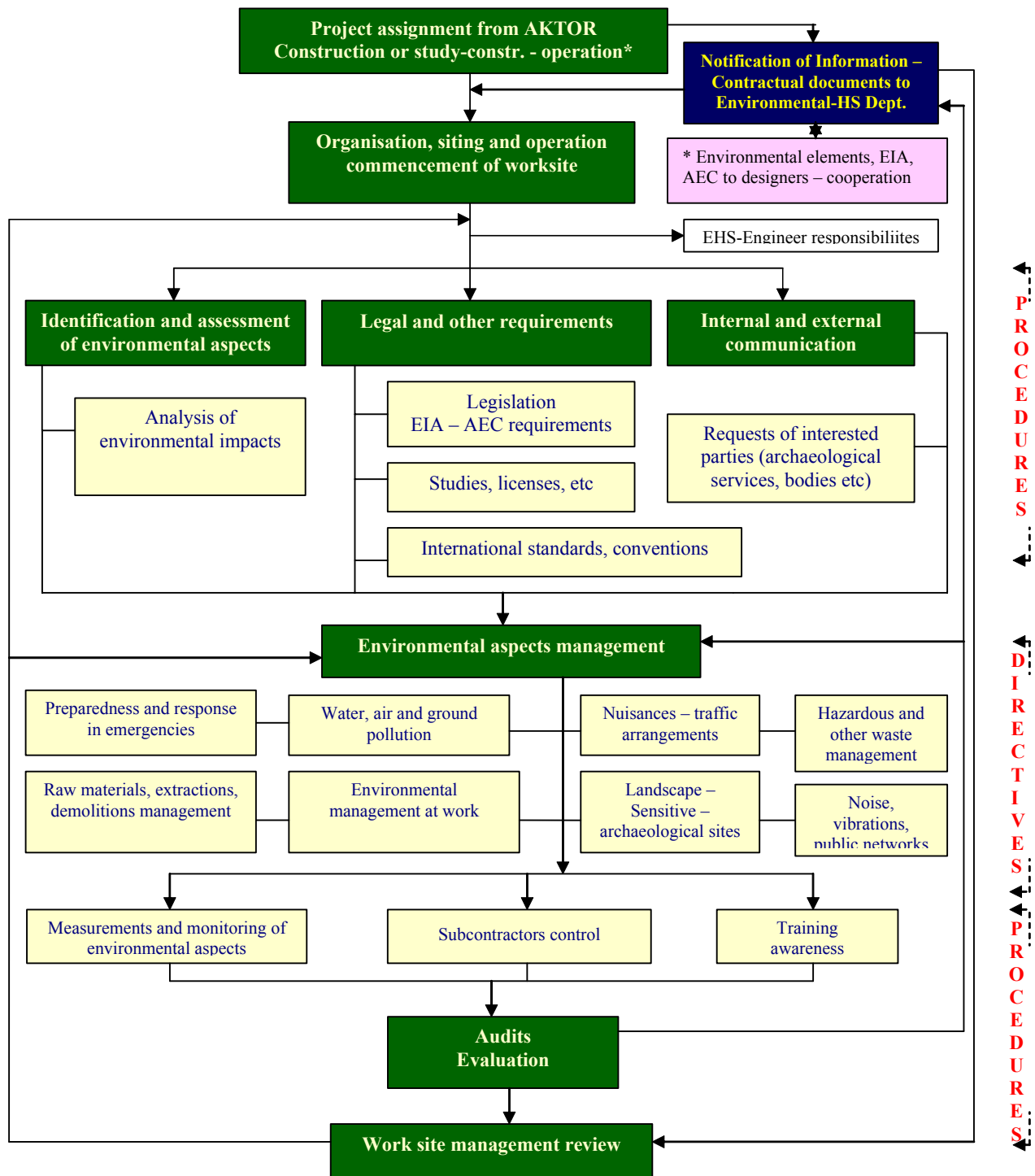
The next Environmental Statement, as mentioned on verse 9 of the present statement, will be written, validated, and published, on October 2005. The aggregate Environmental Statement will be written, validated, and published, on October 2007. In the aforementioned statement will be included, among other information, the results of the environmental programs for the triennium October 2004 – October 2007.

In the annual versions of the Environmental Statement will be recorded:

- The environmental performance
- Any significant change in the activities, products and services of AKTOR S.A.

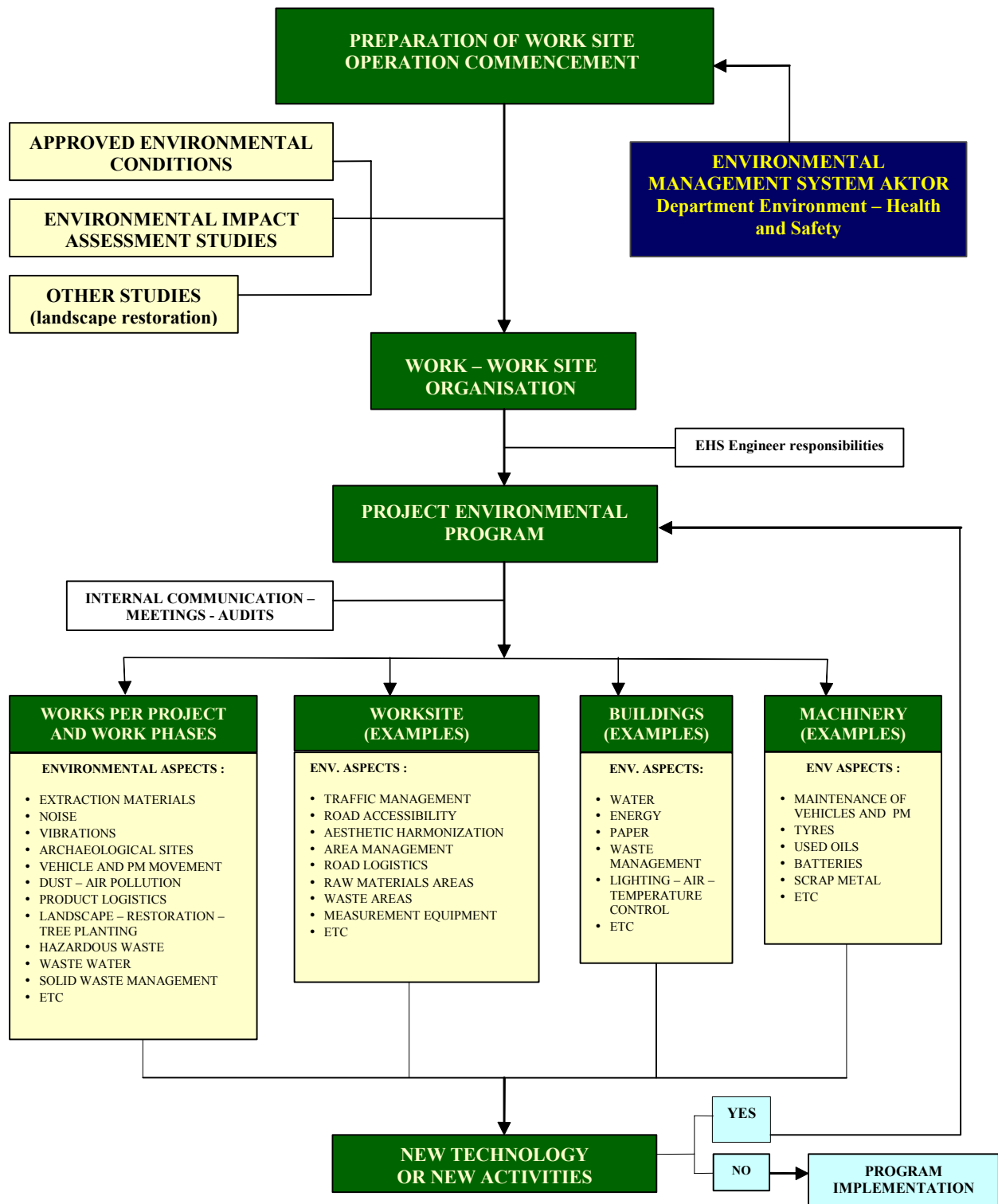
Annual internal audits will be conducted, the findings of which will constitute the input for the review of the Environmental Management System by the Top Management of AKTOR S.A., as well as the annual audit of the Environmental Management System by the environmental verifier of TÜV HELLAS.

Athens: 16.05.2004

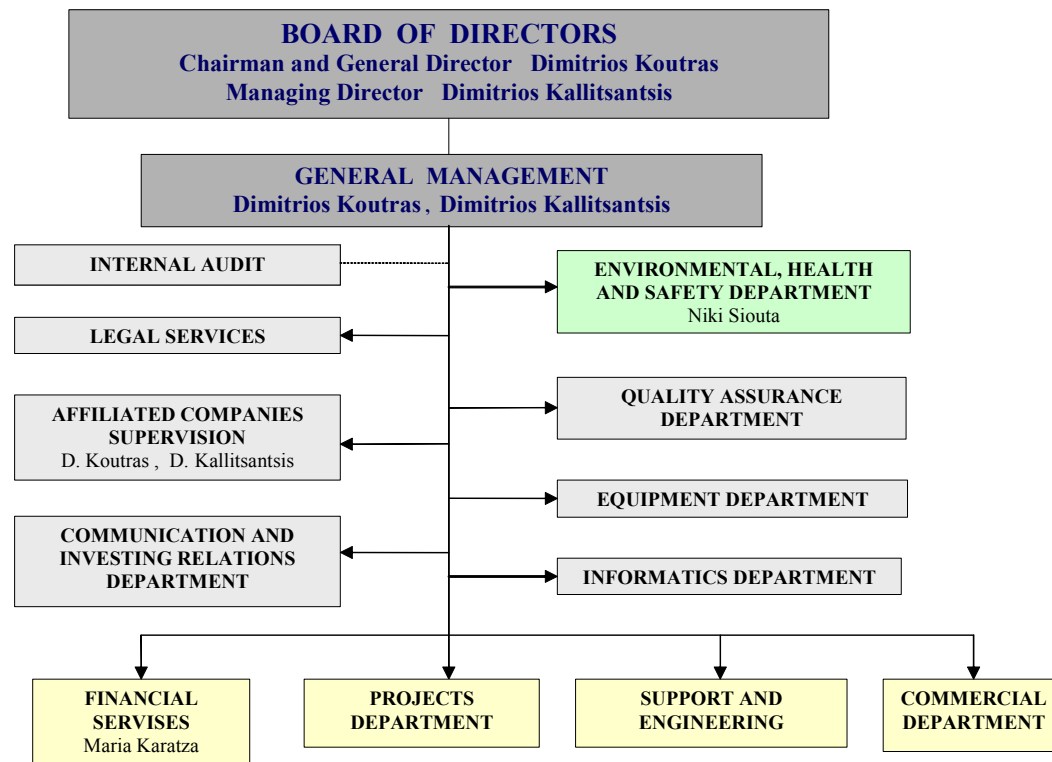
**GRAPHS – CHARTS I
FLOW CHART OF EMS – EMAS**

PROCEDURES
**DIRECTIVES
PROCEDURES**




GRAPHS – CHARTS II

PROJECT ENVIRONMENTAL MANAGEMENT CHART

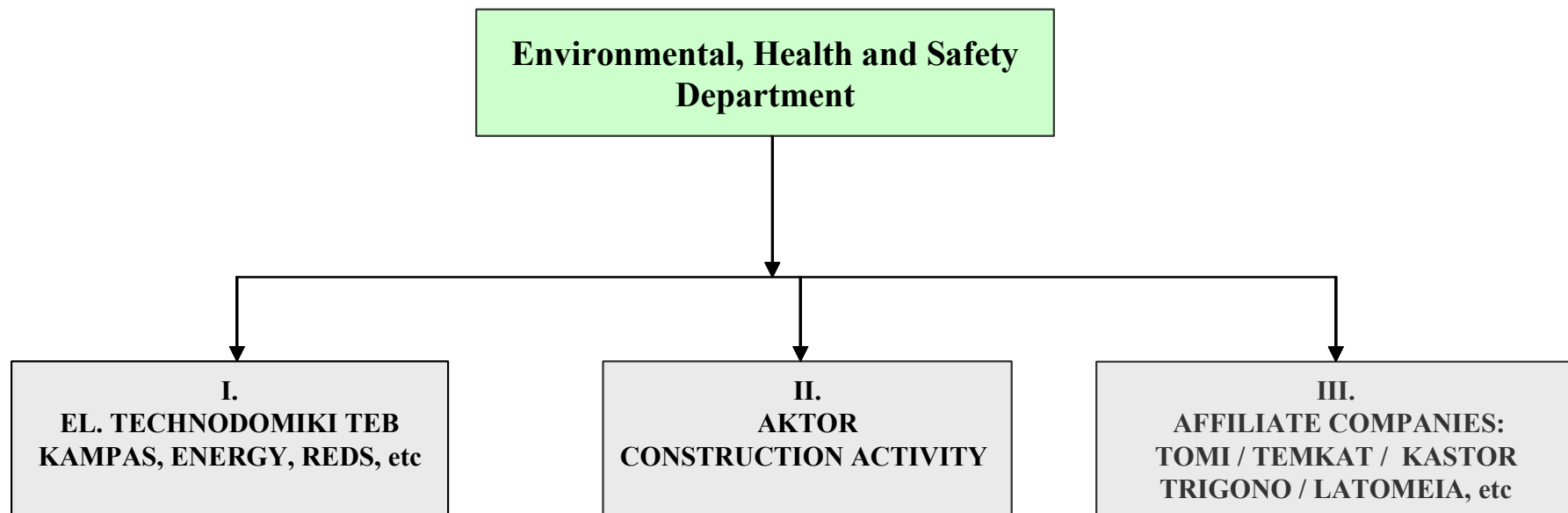


ANNEX I AKTOR S.A. FLOW CHART



MEMO: Command Line 
 Communication Line 
 Support Line 

Approved by the Chairman and General Director

**ANNEX II
ENVIRONMENTAL HEALTH AND SAFETY DEPARTMENT (EHS-D) STRUCTURE AND OPERATION**

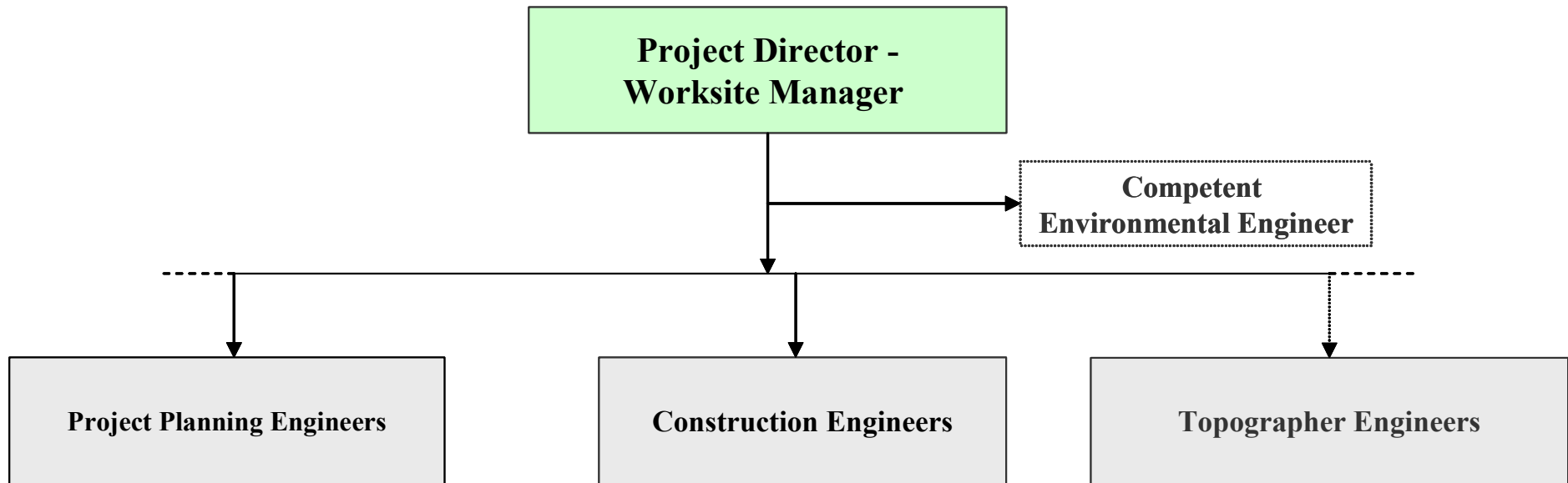
Approved by the Chairman and General Director

Dimitrios Koutras

Issuance Date: 06.04.04

MEMO:
Command and Support Line on
environmental, health and safety issues

**ANNEX III
PROJECT TYPICAL FLOW CHART**



Approved by the Project Director – Worksite Manager

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Issuance Date: 06/04/ 2004