

SEMIANNUAL PROGRESS REPORT FOR THE IMPLEMENTATION OF ENVIRONMENTAL TERMS DURING THE CONSTRUCTION PERIOD

PROJECT: "DESIGN – CONSTRUCTION – FINANCING – OPERATION – MAINTENANCE & EXPLOITATION OF THE PROJECT 'IONIA ODOS MOTORWAY FROM ANTIRIO TO IOANINA, PATHE MOTORWAY ATHENS (METAMORFOSSI I/C) – MALIAKOS (SKARFIA) & PATHE CONNECTING BRANCH OF SCHIMATARI – HALKIDA'

SECTION: IONIA ODOS

- 1. Antirio – Southern end of Agrinio bypass (Kefalovryso)**
- 2. Agrinio Bypass**
- 3. Northern end of Agrinio Bypass (Kouvaras) – Southern end of Arta Bypass (Komboti) and Northern end of Arta Bypass (Filippiada) – Ioannina (Eleoussa)**
- 4. Arta Bypass**



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**IONIA ODOS MOTORWAY
FROM ANTIRIO
TO IOANNINA**

**CONCESSIONAIRE OF THE PROJECT: NEA ODOS S.A.
CONSTRUCTOR: EURO IONIA JOINT VENTURE**



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JANUARY 2009

ANTIRIO – SOUTHERN END OF AGRINIO
BYPASS (KEFALOVRYSSO)

A. PERMITS & APPROVALS		
No.	SUBJECT	PROGRESS - PROBLEMS
A.1	Installation permits for any activity or to facilitate the completion of various works. (Environmental Term d2)	<p>All foreseen by the legislation permits and approvals, including the environmental licensing possibly required, are obtained, when needed.</p> <p>The relevant Special Technical Implementation Studies (STIS) for all required sites (quarries, borrow pits, disposal sites and worksites) have been submitted to the Service and their approval is expected. The submission of the studies as well as the progress of the approval procedure are as follows:</p> <p><u>Gravel extraction from Evinos river</u></p> <p>Kalfa location: Submission to the Service with Protocol No. 135680/10.12.07. Approval is expected.</p> <p>Paradission location: Submission to the Service with Protocol No. 135681/10.12.07. Approval is expected.</p> <p><u>Construction sites</u></p> <p>Agios Georgios location - Evinos river: Submission to the Service with Protocol No. 102919/04.04.08. Approval is expected.</p> <p>No permit from the relevant Forest Service was required for all works performed this particular period (geotechnical investigations - drills), since these were conducted outside the forest boundaries.</p> <p>For any work or installation, an intervention permit is needed which is granted by the Forest Service responsible.</p> <p>With respect to the abrogation of re-forestation, in accordance with Law 3555/2007 (ratification of the Concession Agreement)/ Article 4/ Par. 4a and Law 2445/1996/ Article 2/ Par. 1g, <i>'The occupancy, reclamation or coverage of forests or forest areas that are included in the boundaries specified in the designs of Annex 7 and in accordance with the terms and conditions of the agreement are permitted.'</i> This law approves the change of use, abrogates the re-forestation and grants intervention permits and permits for felling works to the above sites'.</p> <p>Various proposals to be reviewed have been submitted to the Service (EYDE/EPA & IO) that concern optimizations of the alignment. The Service's opinion is expected in order to further proceed to the obtainment of the environmental permit. (EYDE</p>



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A. PERMITS & APPROVALS		
No.	SUBJECT	PROGRESS - PROBLEMS
		<p>A/1/00/01/27/475/ 20-8-08 & ETDE A/1/00/01/2/355 7-11-08).</p> <p>Following the Service's opinion (EYDE/EPA & IO) on the optimization proposals submitted, files of article 13 of the Joint Ministerial Decision 11014/2003 shall be submitted to EYPE/YPEXODE in order to begin the amendment of the Environmental Terms.</p>
A.2	<p>Archaeological Services (Environmental Term d3)</p>	<p>Before the commencement of the works that were performed at this particular period (at the entrance of the Kalidona tunnel) the responsible Archaeological Service was notified accordingly. (Document with protocol no. IC-X-CO-SI08N-PRO6166/IS/ IS, 05/12/08).</p> <p>So far, no antiquities have been found. In the event there are antiquities, the environmental term d3.1 shall be taken into account.</p> <p>With respect to the coverage of the expenses incurred during the archaeological surveys, article 1, par 13.2 of Law 3555/2007 shall apply.</p>
A.3	<p>Quarries - Borrow pits (Environmental Term d2.6)</p>	<p>For all new sites where materials have been delivered, the required STISs have been submitted, as referred to in term d2.1 of paragraph A1, and the relevant opinion of the responsible Archaeological Services shall be requested in order to obtain the appropriate environmental permit.</p>



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B. CONSTRUCTION ISSUES		
No.	SUBJECT	PROGRESS - PROBLEMS
B.1	Buildings - toll stations - Motorists Service Stations/ O&M Centers (Article 2.5, Article 2.6, Article 2.7)	With respect to the environmental permit of the new toll stations for Motorists Service Stations/O&M Centers, the relevant permit procedures shall be followed.
B.2	Disposals / Excavations /Explosives (Environmental Terms d10.2, d2.7 & d2.8)	For the disposal of non-appropriate excavation materials, the E1 disposal sites have been approved for this part of the project (protocol no. 101105/07.02.08/EYPE).
B.3	Rehabilitation / worksites (Environmental Terms d2.4, d5)	<p>It has been ensured that the layout planning of these installations abide by the afore-mentioned restrictions. This issue is being reviewed at the Special Technical Implementation Studies submitted.</p> <p>An Environmental Management Plan has been drawn up as part of the Environmental Monitoring & Control Program which includes control procedures for all works referred to in the environmental terms,. The Program will be presented to the joint venture's supervising engineers, as well as to any subcontractors that will provide the joint venture with services.</p> <p>The final landscaping designs and the corresponding irrigation designs have been assigned and are currently being drafted and submitted to the Independent Engineer.</p>
B.4	Miscellaneous construction terms (Environmental Terms d4, d17, d26)	<p>The term on the development of worksite infrastructure concerns the operation of the project.</p> <p>The term on the implementation of modern methods and technologies for direct entry into the Kalidona tunnel has been taken into account in the relevant design prepared and has been submitted to the Independent Engineer.</p> <p>The Euroionia Joint Venture has a department for Environment, Health and Safety staffed with the required personnel. The responsibilities and obligations of the department's staff are described in the Quality Management System of the Joint Venture.</p>
B0.5	Superficial runoffs (Environmental Terms d7 & d22)	The relevant hydraulic designs in which all necessary terms are taken into account have been assigned, prepared and will be submitted to the Independent Engineer.

C. WORK-SITE MANAGEMENT ISSUES		
No.	SUBJECT	PROGRESS - PROBLEMS
C.1	Water protection - Liquid Waste (Environmental Terms d7 & d9)	<p>The content of the Environmental Term 7 shall be taken into account during the preparation of the relevant hydraulic designs.</p> <p>The content of the Environmental Term 9 shall be taken into account during the preparation of the relevant rehabilitation designs.</p> <p>Liquid waste shall be managed based on the relevant terms. An Environmental Management Plan has been drawn up as part of the Environmental Monitoring & Control Program which includes protection measures for all works referred to in the environmental terms. The Program will be presented to the joint venture's supervising engineers, as well as to any subcontractors that will provide the joint venture with services.</p>
C.2	Air protection & noise (Environmental Terms d12, d13, d25)	<p>An Environmental Management Plan has been drawn up as part of the Environmental Monitoring & Control Program which includes protection measures for all works referred to in the environmental terms .</p> <p>In particular with respect to dust, based on the works foreseen, the following shall be implemented:</p> <ul style="list-style-type: none"> • Construction site roads will be regularly wet. • The trucks that transfer materials will not be overloaded and all trucks transferring loose materials will be covered. • The trucks will be cleaned before they exit the construction site and the existing road network that will be used to reach the construction sites will be regularly cleaned from residuals. <p>The technical report for the layout of the station will be prepared and submitted for approval to EYPE/YPEXODE. The operation of the station is related to the operation phase of the project.</p>

C. WORK-SITE MANAGEMENT ISSUES		
No.	SUBJECT	PROGRESS - PROBLEMS
C.3	Noise – Mobile noise barriers - Vibrations (Environmental Terms c, d16, d18)	<p>With respect to the noise during the construction of the project, an Environmental Management Plan has been drawn up as part of the Environmental Monitoring & Control Program which includes control procedures for all works referred to in the environmental terms,. The Program will be presented to the joint venture's supervising engineers, as well as to any sub-contractors that will provide the joint venture with services.</p> <p>With respect to the provision of placing noise barriers, a Special Acoustics Study for Noise Protection has been assigned, is being prepared and will be submitted for approval to EYPE/YPEXODE.</p> <p>In any case, after the commencement of the works, the relevant legislation on noise will be taken into account, which is referred to in term c.</p> <p>An explosion methodology design will be drawn up, provided that there is a possibility to cause vibrations in buildings or other structures, based on which all issues related to the implications, risks of explosions and measures to prevent and control, will be resolved.</p>
C.4	Solid and hazardous waste (Environmental Term d6 & d23)	<p>With respect to waste management during the construction of the project, An Environmental Management Plan has been drawn up as part of the Environmental Monitoring & Control Program which include scontrol procedures in compliance with the environmental terms. The Program will be presented to the joint venture's supervising engineers, as well as to any subcontractors that will provide the joint venture with services. In any case, after the commencement of the works, the relevant legislation will be taken into account, which is referred to in the adjacent terms.</p>
C.5	Fire protection/prevention (Environmental Terms d15)	<p>An Environmental Management Plan has been drawn up as part of the Environmental Monitoring & Control Program which includes control procedures in compliance with the environmental terms.</p> <p>In any case, after the commencement of the works, the fire protection measures will be inspected in the machinery and worksites.</p> <p>With respect to the construction site at Agios Georgios, CH.21 for which the relevant Special Technical Implementation Study has been submitted to EYPE, the Service will ask for the opinion of the relevant Archaeological Services.</p>

C. WORK-SITE MANAGEMENT ISSUES		
No.	SUBJECT	PROGRESS - PROBLEMS
C.6	Safety / Pollution caused by accident (Environmental Term d11, d8 & d19)	<p>The relevant worksite signage will be installed before the commencement of the works.</p> <p>A Risk Assessment Study has been assigned in relation to various ecologically-sensitive locations (Evinos) in order to assess the need for constructing separation and restraint tanks.</p> <p>An emergency plan has been drawn up by the Concessionaire and has been approved. This plan specifies measures to timely collect and remove hazardous substances while preventing pollution of the water/soil resources, etc.</p> <p>This Emergency Plan includes all measures/required equipment etc. that will be needed in case of accident and leakage of non-biodegradable substances, including the necessity to construct Pollution Control Units.</p> <p>The term regarding the rescue / escape of trapped people in emergency situation at the Kalidona tunnel has been taken into account based on the risk analysis study being currently implemented for the tunnel.</p>
C.7	Public Utility Organizations – Traffic Management (Environmental Terms d9 & d10)	<p>A contact with all involved Public Utility Organizations has been made (in accordance with par 7 of the Special Conditions of Contract) in order to identify the areas for networks relocation. This information has been given to the Designers/Consultants in order to take it into account when drawing up their designs.</p> <p>Traffic management will be carried out based on the relevant traffic designs, through which adequate and safe communication will be ensured throughout the entire construction phase.</p> <p>The issue will be soon resolved. This issue is being controlled through monitoring the Environmental Terms. During the preparation of this report, no need for structures that block access has arisen.</p>



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AGRINIO BYPASS

A. PERMITS & APPROVALS		
No.	ACTIVITY	PROGRESS - PROBLEMS
A.1	Installation permits for any activity or to facilitate the completion of various works. (Environmental Term d2)	<p>No additional sites are required for this particular section.</p> <p>Approved sites for sand/gravel extraction (d8 and d9) are already used with permits obtained from the Cadastral Service of Etelokarnania with protocol no. 702/Φ440/005/Γ 05.03.2007.</p> <p>An Environmental Management Plan has been drawn up as part of the Environmental Monitoring & Control Program which includes control procedures for all works referred to in the environmental terms.</p> <p>For the disposal of non-appropriate excavation materials, the E1 disposal sites have been approved for this part of the project (protocol no. 101105/07.02.08/EYPE).</p> <p>The construction site for this section has been established during previous contract works at the southern part of the Agrinio bypass. This site has been defined by the relevant Special Technical Implementation Studies. The disposal of excavation products in flumes or river beds is avoided.</p> <p>The responsible Forest Service has been informed on the works carried out this particular period (document with protocol no.: 5872 10/12/08)</p> <p>For any work or installation, an intervention permit is needed which is granted by the Forest Service responsible.</p> <p>With respect to the abrogation of re-forestation, in accordance with Law 3555/2007 (ratification of the Concession Agreement)/ Article 4/ Par. 4a and Law 2445/1996/ Article 2/ Par. 1g, <i>'The occupancy, reclamation or coverage of forests or forest areas that are included in the boundaries specified in the designs of Annex 7 and in accordance with the terms and conditions of the agreement are permitted.'</i> This law approves the change of use, abrogates the re-forestation and grants intervention permits and permits for felling works to the above sites'.</p>
A.2	Archaeological Services (Environmental Term d3)	The responsible Archaeological Service has been informed on the works carried out this particular period (Aggelokastro I/C) (document with protocol no.: IC-X-CO-SI000-PRO4197/ICH/IS, 21/07/08)



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A. PERMITS & APPROVALS		
No.	ACTIVITY	PROGRESS - PROBLEMS
A.3	Quarries - Borrow pits (Environmental Term d2b)	Referred above in section A1.



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B. CONSTRUCTION ISSUES		
No.	SUBJECT	PROGRESS - PROBLEMS
B.1	Buildings - toll stations - Motorists Service Stations - O&M Centers	With respect to the environmental permit of the new toll stations for Motorists Service Stations/O&M Centers, the relevant permit procedures shall be followed.
B.2	Excavations - Explosives - Disposal (Environmental Terms d2c, d2c & d6a)	<p>All products that will derive from the foreseen and approved excavation designs will be used to manufacture concrete or any other material, provided that they are proved to be appropriate (after several laboratory tests).</p> <p>For the disposal of non-appropriate excavation materials, the E1 disposal sites have been approved for this part of the project (protocol no. 101105/07.02.08/EYPE).</p> <p>All terms have been taken into account in the road works design IC-C-EN-S113N-IJ-0200-000-ALI-000-FL.002.01.01.01-C submitted and approved (Approval Certificate: IC0003/10-07-2008, Code: IC.U.IE.S113N.MO-0200.000.A) for Aggelokastro I/C. In the alignment at the area of Aggelokastro I/C, the cuts are less than 30m and may be 15m in height max. Therefore, there is in no need for small realignment of the axis or for the construction of a cut & cover. The proposed formation of the embankments arises from the geotechnical study so that safety is ensured.</p> <p>With respect to the large cut which is being created at CH.13+400, a new geotechnical study is under development which will be submitted in order to resolve several serious geotechnical issues.</p>
B.3	Rehabilitation / Work-sites (Environmental Term d2, d7)	<p>The permits granted to construction sites by preparing and approving a Special Technical Implementation Study ensures the implementation of the Environmental Term, that is the exclusion of construction site layout in river beds.</p> <p>The final landscaping designs have been assigned, are currently being drafted and will be submitted to the Independent Engineer.</p>
B.4	Miscellaneous construction terms (Environmental Terms d6c d11)	<p>The requirement for the provision of passages in the form of slab-paved culverts with a width at least suitable for the movement of animals has already been met by the constructed technical structures of the existing work at the Agrinio bypass which has been built on the State's responsibility.</p> <p>Following the Service's opinion (EYDE/EPA & IO) on the proposal submitted about the Aggelokastro I/C optimization proposal, a file of article 13 of the Joint Ministerial Decision 11014/2003 shall be submitted to EYPE/YPEXODE in order to follow the procedure for the</p>



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B. CONSTRUCTION ISSUES		
No.	SUBJECT	PROGRESS - PROBLEMS
		environmental permit.
B.5	Superficial runoffs Environmental Term 4a	<p>The hydraulic works are already built at the largest part of this section. Where hydraulic designs (non-completed parts) are required, these are being prepared and will be submitted to the Independent Engineer.</p> <p>More specifically, with respect to the Aggelokastro I/C, the hydraulic design IC-C-EN-S113N-IJ-0200-203-HYD-FL.00000.00.01-B has already been submitted and approved (Approval Certificate: IC0003/10-07-2008, Code: IC.U.IE.S113N.MO.0200.000.A). The approved design ensures the implementation of the environmental term. Moreover, the largest part of the alignment in the area has been conducted over a cut and therefore, there will be no need for flood prevention at the adjacent agricultural areas.</p> <p>There are no irrigation networks in the area that could be affected by the works performed.</p>



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C. WORK-SITE MANAGEMENT ISSUES		
No.	SUBJECT	PROGRESS - PROBLEMS
C.1	Water protection - Liquid Waste (Environmental Term d5c)	Liquid waste is being managed based on the relevant terms. An Environmental Management Plan has been drawn up as part of the Environmental Monitoring & Control Program which includes control procedures for all works referred to in the environmental terms.
C.2	Air Protection & Noise (Environmental term d5h)	<p>An Environmental Management Plan has been drawn up as part of the Environmental Monitoring & Control Program which includes protection measures for all works referred to in the environmental terms.</p> <p>In particular with respect to dust, based on the works foreseen, the following are implemented:</p> <ul style="list-style-type: none"> • Construction site roads are regularly wet. • The trucks that transfer materials are overloaded and all trucks transferring loose materials will be covered. • The trucks drive on the existing asphalt-layered road before they exit the construction site. Despite this, the existing construction site network is being cleaned to remove any residuals (dirt, stones, etc.)
C.3	Noise - Mobile noise barriers - Vibrations (Environmental Term d9)	<p>With respect to the noise during the construction of the project, An Environmental Management Plan has been drawn up as part of the Environmental Monitoring & Control Program which includes control procedures to resolve noise problems in accordance with the environmental terms. The Program will be presented to the joint venture's supervising engineers, as well as to any subcontractors that will provide the joint venture with services.</p> <p>When needed, sound measurements will be conducted at the locations indicated by the Environmental Term d9c.</p> <p>When the sound measurements result in a noise level higher than the permitted limits, measures will be taken, among which is the placement of temporary noise barriers.</p>

C. WORK-SITE MANAGEMENT ISSUES		
No.	SUBJECT	PROGRESS - PROBLEMS
C.4	Solid and hazardous waste (Environmental Term d5)	With respect to waste management during the construction of the project, An Environmental Management Plan has been drawn up as part of the Environmental Monitoring & Control Program which includes control procedures for the management of these materials in accordance with the environmental terms. The Program will be presented to the joint venture's supervising engineers, as well as to any sub-contractors that will provide the joint venture with services.
C.5	Fire protection/prevention (Environmental Term d8)	An Environmental Management Plan has been drawn up as part of the Environmental Monitoring & Control Program which includes control procedures in compliance with the environmental terms. In any case, after the commencement of the works, the fire protection measures will be inspected in the machinery and worksites.
C.6	Safety / pollution caused by accident ¹	An emergency plan has been drawn up by the Concessionaire and has been approved. This plan specifies measures to timely collect and remove hazardous substances and prevent pollution of the water/soil resources, etc. The emergency plan includes all measures/required equipment etc. that will be needed in case of accident and leakage of non-biodegradable substances, including the necessity to construct Pollution Control Units. In this case, desorption materials such as sand, chippings or a special geotextile will be used immediately after run out. Such materials will exist in the central constructionsite for immediate use. Their disposal will be carried out in accordance with the instructions for disposing toxic waste.
C.7	Public Utility Organizations – Traffic Management (Environmental Term d5)	The vertical roads, the infrastructure works, the structures of the slab-paved culverts and the majority of the side roads have been constructed during a previous contract work and have been foreseen in the relevant design. The design of the remaining side roads is under development and will be submitted to the Independent Engineer. During the construction phase, the existing mass transport infrastructures are not blocked between the residential districts.

¹ It is important to note that the Joint Ministerial Decision No. KYA 84982/96/11-04-1997 that describes the Environmental Terms for the Agrinio bypass, does not provide for any terms related to safety/pollution caused by accident. Nevertheless, the renewal of the Environmental Terms for the said section, in accordance with the Joint Ministerial Decision No. 105886/3-7-08 takes into account the Joint Ministerial Decision No. 142128/26-7-05 entitled 'Approval of environmental terms for the project Ionia Odos'. Antirio – Kefalovyrsso (Southern end of Agrinio bypass). In the Joint Ministerial Decision No. 142128/26-7-05, terms d8, d11 and d19 concerning the pollution caused by accident for the section 1 of Ionia Odos Motorway, are listed in the table of the Agrinio bypass.

**NORTHERN END OF AGRINIO BYPASS (KOUVARAS) – SOUTHERN END OF ARTA
BYPASS (KOMBOTI) & NORTHERN END OF ARTA BYPASS (FILIPPIADA) –
IOANNINA (ELEOUSSA)**

A. PERMITS & APPROVALS		
No.	SUBJECT	PROGRESS - PROBLEMS
A.1	Installation permits for any activity or to facilitate the completion of various works. (Environmental Terms d3, d4, d5, d10 & d12)	<p>All foreseen by the legislation permits and approvals, including the environmental licensing possibly required, will be obtained, when needed.</p> <p>The relevant Special Technical Implementation Studies (STIS) for all required sites (quarries, borrow pits, disposal sites and worksites) have been submitted to the Service and their approval is expected. The submission of the studies as well as the progress of the approval procedure are as follows:</p> <p><u>Borrow pits</u> Pinakoulia location: Submission to the Service with Protocol No. 102908/04.04.08. Approval is expected. <u>Tornefto location:</u> Submission to the Service with Protocol No. 103284/ 14.04.08. Approval is expected.</p> <p><u>Disposal pits</u> A Special Technical Implementation Study is being drawn up.</p> <p><u>Gravel extraction</u> Prossilio location: Submission to the Service with Protocol No. 100473/18.01.08. Approval is expected.</p> <p><u>Construction sites</u> Location: Ambelia - Terovo - Rapsei: Submission to the Service with Protocol No. 4040/14.07.08. Approval is expected.</p> <p>The permit from the relevant Forest Service was required for all works performed this particular period (geotechnical investigations - drills, pits).</p> <p>With respect to the abrogation of re-forestation, in accordance with Law 3555/2007 (ratification of the Concession Agreement)/ Article 4/ Par. 4a and Law 2445/1996/ Article 2/ Par. 1g, 'The occupancy, reclamation or coverage of forests or forest areas that are included in the boundaries specified in the designs of Annex 7 and in accordance with the terms and</p>



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A. PERMITS & APPROVALS		
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		<i>conditions of the agreement are permitted.' This law approves the change of use, abrogates the re-forestation and grants intervention permits and permits for felling works to the above sites'.</i>
A.2	Archaeological Services (Environmental Term d12a, d15)	<p>Before the layout and installation of the worksites, the opinions on the Environmental Term 12a will be taken into account.</p> <p>The relevant Forest Service was notified before the commencement of the works performed this particular period (geotechnical investigations - drills, pits).</p> <p>Regarding the Environmental Term d15, the section from Amfilohia I/C to Komboti I/C and the location "Paliokoulia" were taken into account as to their significance during the phase of the future design preparation.</p>
A.3	Quarries - Borrow pits (Environmental Term d8)	The need for delivery is mainly covered by the excavation products and any further needs estimated will be ensured by the sites referred to in paragraph A1.



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B. CONSTRUCTION ISSUES		
No.	SUBJECT	PROGRESS - PROBLEMS
B.1	Buildings - toll stations - Motorists Service Stations - O&M Centers	With respect to the environmental permit of the new toll stations for Motorists Service Stations/O&M Centers, the relevant permit procedures shall be followed.
B.2	Excavations - Explosives - Disposal (Environmental Terms d9, d11 & d40)	<p>The Environmental Term has been taken into account in order to find possible sites to dispose materials and will be taken into account for the preparation of the respective Special Technical Implementation Studies that will be submitted to EYPE. The implementation of the term with respect to the protection of water recipients from the disposed soil material will be controlled via the Environmental Monitoring & Control Program.</p> <p>All redundant excavation materials (after separation) will be transferred to approved disposal sites. No need to dispose materials during the current report has arisen.</p> <p>The term for the modern methods and technologies that allow direct entry of the tunnels in the mountain by limiting the open excavations will be taken into account as a fact for the relevant designs.</p>
B.3	Rehabilitaion / constructionsites (Environmental Terms d)	<p>It has been ensured that the spatial planning of these installations abide by the afore-mentioned restrictions, as specified in the Special Technical Implementation Studies submitted.</p> <p>An Environmental Management Plan has been drawn up as part of the Environmental Monitoring & Control Program which include control procedures for all works referred to in the environmental terms. The Program will be presented to the joint venture's supervising engineers, as well as to any subcontractors that will provide the joint venture with services.</p> <p>The content of terms d13 and d14 will be examined when there is a need for such installations.</p> <p>No need for reconstruction of any site during the report's time has arisen, but in any case, the term will be observed. The observance of the term will be controlled by the Environmental Monitoring & Control Program.</p> <p>The final landscaping designs have been assigned, are currently being drafted and will be submitted to the Independent Engineer.</p>
B.4	Miscellaneous construction terms (Environmental Terms d2, d3 & d44)	<ul style="list-style-type: none"> i) An interchange at CH.175+700 has been designed (submission to the Independent Engineer on 0-09-08) ii) A tunnel with a total length of 1 Km has been designed (submission to the Independent Engineer on 07-08-08) iii) The term on the level lowering of the motorway in the area of Episkopiko has been taken into account. In the area of the over-



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B. CONSTRUCTION ISSUES		
No.	SUBJECT	PROGRESS - PROBLEMS
		<p>pass at Episkopiko, the embankments have a height of 3m (Motorists Service Station - Episkopiko - height of 3m)</p> <p>The term for the addition of wire-fence at the parts of the project that have a distance of less than 300 m from the lake Amvrakia has been taken into account along with the term that ensures the passage of the animals during the construction phase.</p> <p>Various proposals to be reviewed have been submitted to the Service (EYDE/EPA & IO) that concern optimizations of the alignment. The Service's opinion is expected in order to further proceed to the obtainment of the environmental permit.</p> <p>Following the Service's opinion (EYDE/EPA & IO) on the optimization proposals submitted, files of article 13 of the Joint Ministerial Decision 11014/2003 shall be submitted to EYPE/YPEXODE in order to begin the amendment of the Environmental Terms.</p>
B.5	Superficial runoffs (Environmental Term d43, d28, & d45)	<p>The relevant hydraulic designs in which the necessary terms are taken into account have been assigned, prepared and will be submitted to the Independent Engineer.</p> <p>The term for the construction of large embankments and special structures will be taken as a fact for the preparation of the designs.</p> <p>The term for protection measures from corrosion of natural slopes will be taken into account at the hydraulic design.</p>



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C. WORK-SITE MANAGEMENT ISSUES		
No.	ACTIVITY	PROGRESS - PROBLEMS
C.1	Water protection - Liquid waste	Liquid waste shall be managed based on the relevant terms. An Environmental Management Plan has been drawn up as part of the Environmental Monitoring & Control Program which includes protection measures for all works referred to in the environmental terms. The Program will be presented to the joint venture's supervising engineers, as well as to any subcontractors that will provide the joint venture with services.
C.2	Air protection and noise (Environmental Term c, d23, d24, d25, d26, d27, d46)	<p>An Environmental Management Plan has been drawn up as part of the Environmental Monitoring & Control Program which includes protection measures for all works referred to in the environmental terms.</p> <p>In particular with respect to dust, based on the works foreseen, the following shall be implemented:</p> <ul style="list-style-type: none"> • Worksite roads and piles of materials will be regularly wet. • The trucks that transfer materials will not be overloaded and all trucks transferring loose materials will be covered. • The trucks will be cleaned before they exit the worksite and the existing road network that will be used to reach the worksites will be regularly cleaned from residuals. <p>The technical report for the layout of the station will be prepared and submitted for approval to EYPE/YPEXODE. The operation of the station is related to the operation phase of the project.</p>
C.3	Noise - Mobile noise barriers - Vibrations (Environmental Terms d31, d33, d34, d35, d37 & d38)	<p>With respect to the noise during the construction of the project, An Environmental Management Plan has been drawn up as part of the Environmental Monitoring & Control Program which includes control procedures to resolve noise problems in accordance with the environmental terms has been drawn up. The Program will be presented to the joint venture's supervising engineers, as well as to any subcontractors that will provide the joint venture with services.</p> <p>The Acoustics Study for noise protection under development examines the areas with a distance less than 200m from the town limits as well any existing sensitive uses in areas outside the town limits.</p> <p>When construction works with vibrations are conducted, the parameters referred to in the Environmental Term will be monitored and if they exceed the limits, the appropriate measures will be taken.</p>

C. WORK-SITE MANAGEMENT ISSUES

No.	ACTIVITY	PROGRESS - PROBLEMS
C.4	Solid and hazardous waste (Environmental Term d17, d18, d6.2)	With respect to waste management during the construction of the project, An Environmental Management Plan has been drawn up as part of the Environmental Monitoring & Control Program which include control procedures in compliance with the environmental terms, has been drawn up. The Program will be presented to the joint venture's supervising engineers, as well as to any subcontractors that will provide the joint venture with services. In any case, after the commencement of the works, the relevant legislation will be taken into account, which is referred to in the adjacent terms.
C.5	Fire protection (Environmental Term d30)	An Environmental Management Plan has been drawn up as part of the Environmental Monitoring & Control Program which includes control procedures in compliance with the environmental terms, has been drawn up. In any case, after the commencement of the works, the fire protection measures will be inspected in the machinery and worksites.
C.6	Safety / pollution caused by accident (Environmental Term d22, d39, d41)	<p>The relevant construction site signage will be installed before the commencement of the works.</p> <p>A Risk Assessment Study has been assigned in relation to various ecologically-sensitive locations (Evinos) in order to assess the need for constructing separation and restraint tanks.</p> <p>An emergency plan has been drawn up by the Concessionaire and has been approved.. This plan specifies measures to timely collect and remove hazardous substances while preventing pollution of the water/soil resources, etc.</p> <p>This Emergency Plan includes all measures/required equipment etc. that will be needed in case of accident and leakage of non-biodegradable substances, including the necessity to construct Pollution Control Units.</p> <p>The term regarding the rescue / escape of trapped people in emergency situations at the Ambelia tunnel at CH.117 will be taken into account based on the risk analysis study being currently implemented for the tunnel.</p>
C.7	Public Utility Organizations – Traffic Management (Environmental Term d, d, d)	<p>A contact with all involved Public Utility Organizations has been made (in accordance with par 7 of the Special Conditions of Contract) in order to identify the areas for networks relocation. The data have been given to the Designers/Consultants in order to take it into account when drawing up their designs.</p> <p>The term for the examination of a small relocation of the alignment is taken into account for the preparation of the designs.</p>



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C. WORK-SITE MANAGEMENT ISSUES

No.	ACTIVITY	PROGRESS - PROBLEMS
		The observance of the term on the retention of access to the villages/towns will be controlled through the implementation of the Environmental Terms. Within the time period of this report, no need to for structures that block access to the said part of the motorway has arisen.



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ARTA BYPASS

A. PERMITS & APPROVALS		
No.	SUBJECT	PROGRESS - PROBLEMS
A.1	Installation permits for any activity or to facilitate the completion of various works. Environmental Term d2	<p>No works or activities during the preparation of this report were conducted and therefore there is no need for such installations.</p> <p>The works and the materials will be covered by already licensed installations of subcontractors in the area. In the event, new sites and installations are required for the construction, the procedure for obtaining an environmental permit will be followed.</p> <p>An Environmental Management Plan has been drawn up as part of the Environmental Monitoring & Control Program which includes control procedures for all works referred to in the environmental terms.</p>
A.2	Archaeological Services	
A.3	Quarries - Borrow pits (Environmental Term d2b)	<p>No works or activities during the present report period were conducted and therefore there is no need for such installations.</p> <p>The works and the materials will be covered by already licensed installations of subcontractors in line the Environmental Term d2b.</p>



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B. CONSTRUCTION ISSUES		
No.	SUBJECT	PROGRESS - PROBLEMS
B.1	Buildings - toll stations - Motorists Service Stations - O&M Control Centers	With respect to the environmental permit of any new toll stations for Motorists Service Stations/O&M Control Centers, the relevant permit procedures shall be followed.
B.2	Disposal - Excavations - Explosives (Environmental Term d2c)	Due to the nature of the works, no additional sites such as quarries and disposal sites were needed for the reference time period.
B.3	Rehabilitation / construction sites (Environmental Terms d2e, d8)	<p>If there is a need to use such sites, the term will be observed after the completion of the works.</p> <p>The final landscaping designs have been assigned, are currently being drafted and will be submitted to the Independent Engineer.</p> <p>An Environmental Management Plan has been drawn up as part of the Environmental Monitoring & Control Program which includes control procedures for the implementation of landscaping works.</p>
B.4	Various construction terms	-
B.5	Superficial runoffs (Environmental Term 12)	The said requirements of these Environmental Terms mainly concern the existing project. Moreover, all environmental issues related to the design are inspected upon submission of the Design to the Independent Engineer and are documented by the Environmental Protection Report, which accompanies each Design.



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C. WORK-SITE MANAGEMENT ISSUES		
No.	SUBJECT	PROGRESS - PROBLEMS
C.1	Water protection - Liquid waste (Environmental Term d5c)	Liquid waste shall be managed based on the relevant terms. An Environmental Management Plan has been drawn up as part of the Environmental Monitoring & Control Program which include control procedures for all works referred to in the respective environmental term.
C.2	Air protection and noise (Environmental terms 5h & 5i)	<p>An Environmental Management Plan has been drawn up as part of the Environmental Monitoring & Control Program which includes protection measures for all works referred to in the environmental terms.</p> <p>In particular with respect to dust, based on the works foreseen, the following shall be implemented:</p> <ul style="list-style-type: none"> • The roads will be regularly wet provided that they are not layered with asphalt. • The trucks that transfer materials will not be overloaded and all trucks transferring loose materials will be covered. • The trucks will drive on the existing asphalt-layered road before they exit the worksite. Despite this, the existing worksite network will be cleaned to remove any residuals.
C.3	Noise- Mobile noise barriers	With respect to the noise during the construction of the project, An Environmental Management Plan has been drawn up as part of the Environmental Monitoring & Control Program which includes control procedures to resolve noise problems in accordance with the environmental terms. The Program will be presented to the joint venture's supervising engineers, as well as to any subcontractors that will provide the joint venture with services.
C.4	Solid and hazardous waste (Environmental Term d5b)	With respect to waste management during the construction of the project, An Environmental Management Plan has been drawn up as part of the Environmental Monitoring & Control Program which includes control procedures for the management of these materials in accordance with the environmental terms. The Program will be presented to the joint venture's supervising engineers, as well as to any subcontractors that will provide the joint venture with services.



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C. WORK-SITE MANAGEMENT ISSUES		
No.	SUBJECT	PROGRESS - PROBLEMS
C.5	Fire protection (Environmental Term d9)	An Environmental Management Plan has been drawn up as part of the Environmental Monitoring & Control Program which include control procedures in compliance with the environmental terms. In any case, after the commencement of the works, the fire protection measures will be inspected in the machinery and worksites.
C.6	Safety, pollution caused by accident	An emergency plan has been drawn up by the Concessionaire and has been approved. This plan specifies measures to timely collect and remove hazardous substances and prevent pollution of the water/soil resources, etc. The Emergency Plan includes all measures/required equipment etc. that will be needed in case of accident and leakage of non-biodegradable substances, including the necessity to construct or not Pollution Control Units. In this case, desorption materials such as sand, chippings or a special geotextile will be used immediately after run out. Such materials will exist in the central worksite for immediate use. Their disposal will be carried out in accordance with the instructions for disposing toxic waste.
C.6	Public Utility Organizations – Traffic Management (Environmental Terms d9 & d10)	It concerns the existing section of the motorway and the Environmental Terms concern a previous contract work. All issues related to the design are inspected upon submission of the Design to the Independent Engineer and are documented by the Environmental Protection Report, which accompanies each Design.