



# **SEMI-ANNUAL PROGRESS REPORT FOR THE IMPLEMENTATION OF ENVIRONMENTAL TERMS DURING THE CONSTRUCTION PHASE**

**IONIA ODOS MOTORWAY FROM ANTIRIO TO IOANNINA**

**CONCESSIONAIRE OF THE PROJECT: NEA ODOS S.A.  
CONSTRUCTOR: J/V EURO IONIA**

**JANUARY 2010**



**SEMI-ANNUAL PROGRESS REPORT FOR THE IMPLEMENTATION OF ENVIRONMENTAL  
TERMS DURING THE CONSTRUCTION PHASE**

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**ANTIRIO – SOUTHERN END OF AGRINIO BYPASS (KEFALOVRYSO)**

**(JMD 142128/25.07.2005)**

<b>A. PERMITS AND APPROVALS</b>		
S/N	SUBJECT	PROGRESS – PROBLEMS
<b>A.1</b>	Installation permits for any activity or necessary installation for the construction of works.	<p>All foreseen by the legislation permits and approvals, including the environmental permit 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 Ministry 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></p> <ul style="list-style-type: none"> <li>• STIS (Protocol No. 15264/07-10-2009) for BP A1 has been elaborated and submitted to EYPE.</li> <li>• STISs for the new positions BP A2 – location “Koutsospyrou” and BP A5 – location “Zabara” have been submitted to EYPE/YPEKA (Protocol No. 18383/18-12-2009).</li> <li>• TIS and STIS have been elaborated and are being submitted for positions BP A3 – location “Sar-li”, BP A4 – location “Rema Ragou” and BP A6 – location “Diamantopoulou”.</li> </ul> <p><u>Quarry</u></p> <p>Location “Kremasti” (QP 08): CH 40+000: An STIS was submitted to EYPE with Protocol No. 101816/03-03-08. From 7/04/09 all required positive opinions of bodies/revocation of reforestation, etc. have been submitted to EYPE. Additional data were submitted to EYPE with Protocol No. IC-C-S1000-Pro14900/NIK/sfa. EYPE’s approval is expected. The relevant submission for intervention approval by the forest department with Protocol No. CC-X-SB-S10000EIO, dated 9/07/09 was conducted.</p> <p><u>Gravel extraction from Evinos river</u></p> <p>Kalfa location: Submission to EYPE with Protocol No. 135680/10.12.07. Approved with EYPE Protocol No. 141647/5.8.09.</p> <p>Paradission location: Submission to EYPE with Protocol No. 135681/10.12.07. Approved with EYPE Protocol No. 141647/5.8.09.</p>

<b>A. PERMITS AND APPROVALS</b>		
S/N	SUBJECT	PROGRESS – PROBLEMS
		<p><u>Worksites</u></p> <p>Kalavrouza area: Submission of STIS to EYPE with Protocol No. 14753/23.09.09 for worksite area around k.p. 10+500 of the axis.</p> <p>Gavrolimni area: Submission of STIS to EYPE with Protocol No. 14753/23.09.09 for worksite area around k.p. 12+000 of the axis.</p> <p>Agios Georgios location - Evinos river: Submission to EYPE with Protocol No. 102919/04.04.08. Re-submission to EYPE with Protocol No 11939/26-06-09. Approval of STIS by EYPE (document with Protocol No. 141505, 23/09/09).</p> <p>Aetoliko area (CH. 39+000): An STIS was submitted to the Service (IC-C-CO-S111N-PRO6030/EM/em/) and following EYPE's remarks a re-submission was carried out Rev A(24-04-09). The relevant Antiquities Service Approval was issued Φ666/ΣΤ/ΛΣΤ/4184/29-06-09. Furthermore, the relevant supporting documents for the "characterization" were submitted to the Forest Service (IC-C-CO-SL11N-PRO11748 GEP/MAG) on 19/06/09.</p> <p>With respect to the main project, the procedure of intervention permit and revocation of reforestation (Law 355/2007 art.4, par. 4 (a) (Gazette 81A/16.04.2007), Law 2445/1996 (Gazette 274A) paragraph 1 per.c of Article Two) is not required.</p> <p>The process has been implemented for the ancillary works within the forest areas. Revocation of reforestation for the quarry at Kremasti with Protocol No. 2572/26-06-2009 at the Forest Service of Messologi. The relevant supporting documents for the worksite of Aetoliko were submitted: (IC-C-CO-SL11N-PRO 11748 GEP/MAG) (19/06/09).</p> <p>As far as the additional works that were executed in this period of time (geotechnical researches, works in Kalidona tunnel and coating of materials in MSS Evinochori, drillings, preliminary tunnel works, etc.) no permit was necessary by the competent Forest Service because they were located outside the forest area.</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 revocation 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. 1c, <i>'The occupancy, reclamation or coverage of forests or forest areas that are included in the boundaries speci-</i></p>

A. PERMITS AND APPROVALS		
S/N	SUBJECT	PROGRESS – PROBLEMS
		<i>ified in the designs of Annex 7 and in accordance with the terms and conditions of the agreement are permitted.' This law approves the change of use, revokes the re-forestation and grants intervention permits and permits for felling works to the above sites."</i>
<b>A.2</b>	Archaeological Services	<p>The responsible Archaeological Services were notified of the following cases:</p> <p>a) Opinion for the project "Worksite Installations in Evinos river" to 22<sup>nd</sup> EBA (Ephory of Byzantine Antiquities) (Protocol No. 12036/30.06.09) and reply with positive opinion of 22<sup>nd</sup> EBA (Protocol No. 1944, 14.07.09).</p> <p>b) Commencement of construction works of section K.P. 25+000 to K.P. 42+972 to the ΛΣΤ' Archaeological Service and 22<sup>nd</sup> EBA (document with Protocol No. 14998, 29.09.09).</p> <p>c) Commencement of construction works of section K.P. 25+450 to K.P. 26+450 to the ΛΣΤ' Archaeological Service and 22<sup>nd</sup> EBA (document with Protocol No. 13950,31.08.09).</p> <p>c) Suggestion by an archaeologist to monitor the excavation works which was submitted to the ΛΣΤ' Archaeological Service (document with ref. no. IC-X-CO-S108N-PRO8466/IM/sfa, 07.04.09)</p> <p>d) Submission of vibrations data in the area of Kalidona tunnel to the ΛΣΤ' Ephory of Antiquities (document with Protocol No. 14563,18.09.09).</p> <p>e) Submission of additional data from the explosions vibrations check in the area of Kalidona tunnel to ΛΣΤ' Ephory of Antiquities (document with Protocol No. 15301,07.10.09).</p> <p>f) Suggestion by an archaeologist to monitor the excavation works for the needs of the construction of the project from k.p. 24+400 to k.p. 42+970, submitted to the ΛΣΤ' EPKA (Mesologgi) with ref. no. IC-X-CO-S108N-PRO-8466/IM/sfa, 07.04.09).</p> <p>g) Commencement of construction works of the section from k.p. 25+000 to k.p. 42+972 to ΛΣΤ' ECPA (Mesologgi) with IC-X-CO-S1000-PRO- 14998/Νικ/sfa της 29-09-2009.</p> <p>Ancient ruins was found during cuts at the area of ancient Kalidona. The ΛΣΤ' Archaeological Service sent a notification (document with ref. no. Φ666/Α2/ΛΣΤ/381, 23.01.09) to commence the rescue investigations. No construction works are carried out at this particular area.</p>

<b>A. PERMITS AND APPROVALS</b>		
<b>S/N</b>	<b>SUBJECT</b>	<b>PROGRESS – PROBLEMS</b>
		<p>In the event new antiquities are found, the process referred to in the relevant Environmental Terms will be followed.</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>
<b>A.3</b>	Borrow pits – Quarries	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.
<b>B. CONSTRUCTION ISSUES</b>		
<b>S/N</b>	<b>SUBJECT</b>	<b>PROGRESS - PROBLEMS</b>
<b>B.1</b>		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>B.2</b>	Disposal / Excavations / Explosives	<p>No works are performed in Klokova area.</p> <p>The term on the disposal of inappropriate excavation products is a criteria used during searching locations for possible disposal sites and will be taken into account during the preparation of the respective STIS that will be submitted to the EYPE.</p> <p>In the event that during the construction phase, excavation locations containing waste or other solid waste are found, these will be separated from the excavation materials and will be appropriately disposed. Also, it has been ensured that excavation materials which are free of foreign substances are kept free of waste. During the preparation period of the present report all the excavation materials are reused in fillings and coatings. If required, any additional or inappropriate materials will be disposed in approved areas.</p>
<b>B.3</b>	Rehabilitation/ Worksites	It has been ensured that the layout planning of concrete and asphalt mix production plants abide by the afore-mentioned restrictions, as specified in the Environmental Term. This issue is reviewed in the submitted STIS and the implementation of the stipulated protective measures is checked. In particular, as far

<b>B. CONSTRUCTION ISSUES</b>		
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		<p>as the concrete production unit that is installed in Evinos worksite, in Agios Georgios, Mesologgi all the aforementioned restrictions are followed. The installation is around 1000m away from Agios Georgios area and in order to protect Evinos river, two water collection tanks have been constructed.</p> <p>A general Environmental Management Plan in terms of the Environmental Monitoring and Control Program, which includes control procedures for all works referred to in the environmental terms, has been drawn up. The Plan has been presented to the joint venture's supervising engineers, as well as to any subcontractors that provide the joint venture with their services.</p> <p>The E.T. are followed in the concrete production plant that operates in Evinos worksite. In particular, the dust is minimized via the atomization with a water tank, the transportation of aggregates is conducted with closed transportation tapes, the storage bunkers have dust separation filters and the concrete production system is a wet-typed closed one. There are no bitumen production plants and when required there will be a supply by an external environmentally licensed partner. With respect to the remaining section of the project, there are no operating stone processing installations or concrete production and bitumen plants.</p> <p>In the worksite area of Aetoliko as well as in the areas of Kalavrouza and Gavrolimni, such installations are provided, while the protection measures of the term refer to the relevant STIS. Their implementation after the installation according to the EMCP (Environmental Monitoring &amp; Control Program) will be checked.</p> <p>For any new worksite installation (or installation from the subcontractor) STISs are being prepared and will be submitted as usual to EYPE for approval. The protection measures referred to in STIS will be observed and will include all details referred to in the respective environmental term. The implementation of the E.T. will be inspected via monitoring in line with the EMCP.</p> <p>The final landscaping plans and the corresponding irrigation plans have been assigned, are currently being drafted and will be submitted to the Independent Engineer. The rehabilitation works and their budget is an integral part of each STIS (disposal sites, borrow pits, worksites, etc.). With respect to this section, the rehabilitation landscaping design with Protocol No. IC-C-CO-S103N-PRO18495/GEP/mag dated 23.12.09 has been submitted and its approval by the I.E. is expected.</p> <p>Flora is being retained via the rational storage, condensation etc. in order to be used in landscaping rehabilitation works after the completion of the main works.</p>

<b>B. CONSTRUCTION ISSUES</b>		
<b>S/N</b>	<b>SUBJECT</b>	<b>PROGRESS - PROBLEMS</b>
<b>B.4</b>	Various construction terms	<p>The term for the creation of worksite infrastructure to serve the needs of the project concerns the operation of the project.</p> <p>The term for the implementation of modern methods and technologies for the direct entrance to ancient Kalidona tunnel has been taken into account in the design of the tunnel that was elaborated and has been submitted to the Independent Engineer with Protocol No. 5216/22-10-08.</p> <p>The design of the eastern front of Kalidona tunnel has been approved by the I.E. via the document IC0035 DAC 5/03/09. Based on this design, no surface excavations will be performed at &gt;5m, except for the temporary ones. The layout planning of the front will be carried out via excavation and re-embankment. A landscaping design will follow.</p> <p>The term on the wild fauna has been taken into account at the studies already drawn up. This issue will be included in the Environmental Impact Assessments.</p> <p>The Euroionia Joint Venture has a department of 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>
<b>B.5</b>	Surface runoffs	<p>The relevant hydraulic designs in which all necessary terms are taken into account have been assigned, prepared and submitted to the Independent Engineer.</p> <p>The term on the protection of natural slopes from corrosion has been taken into account and will continue to be taken into account in the future at the preparation of the existing or future studies.</p>



<b>C. WORK-SITE MANAGEMENT ISSUES</b>		
<b>S/N</b>	<b>SUBJECT</b>	<b>PROGRESS - PROBLEMS</b>
C.1	Water protection - Liquid waste	<p>The content of the Environmental Term about uninterrupted flow of surface water shall be taken into account during the preparation of the relevant hydraulic designs.</p> <p>The content of the Environmental Term about any type of modification or intervention to an existing infrastructure work will be taken into account during the elaboration of the relevant rehabilitation designs.</p> <p>A contact with all the 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. The necessary actions will be carried out to rehabilitate the irrigation networks and passages from other irrigation channels to the area with respect to the positive opinion about the hydraulic design from the respective Service of Aetoloakarnania. In particular documents have been sent to:</p> <ul style="list-style-type: none"> <li>a) Water Supply – Sewage Company of Messologi for the relocation of Networks located within the project’s gauge (document with Protocol No. 16245, 30.10.09).</li> <li>b) Greek Telecom for the relocation of Networks located within the project’s limits (document with Protocol No. 16246, 30.10.09).</li> <li>c) Water Supply-Sewage Company of Messologi for the supply of information regarding the existence of underground networks within the project’s limits and the relocation of any existing underground networks (document with Protocol No. 16406, 27.10.09).</li> <li>d) Electric Supply Company for the relocation of PPC networks located within the project’s limits from K.P. 22+090 – K.P. 24+600 (document with Protocol No. 15093, 02.09.09).</li> <li>e) Electric Supply Company for the relocation of PPC networks located within the project’s limits from K.P. 24+400 – K.P. 42+972 and supply of information on the existence of underground networks (document with Protocol No. 15044, 21.07.09).</li> <li>f) Greek Telecom for the relocation of Networks located within the project’s limits from K.P. 24+400 – K.P. 42+972 and supply of information on the existence of underground networks (document with Protocol No. 15043, 21.07.09).</li> <li>g) Electric Supply Company for the relocation of high voltage PPC networks located within the project’s limits around K.P. 4+435 (document with Protocol No. 14086, 4.09.09).</li> </ul>

<b>C. WORK-SITE MANAGEMENT ISSUES</b>		
<b>S/N</b>	<b>SUBJECT</b>	<b>PROGRESS - PROBLEMS</b>
		<p>Liquid waste shall be managed based on the relevant terms. An Environmental Monitoring &amp; Control Program in terms of the overall Plan for Environmental Management which will include protection measures for all works referred to in the environmental terms, has been drawn up. The Program has been presented to the joint venture's supervising engineers, as well as to any subcontractors that will provide the joint venture with their services.</p> <p>With respect to the management of used oils, batteries, tires, etc. relevant agreements with licensed management companies have been signed and depending on the constructional procedure and the payment of the temporary containers, they are delivered for further management. The dangerous waste are temporarily stored in special areas within the worksites, while in some cases the relevant conformance documents are requested by the suppliers and the separate subcontractors.</p> <p>Finally, where required special cleaning areas of vehicles and machines have been constructed in the worksites using a waterproof tank for the collection of waters.</p>
C.2	Air and noise protection	<p>An Environmental Monitoring &amp; Control Program in terms of the overall Plan for Environmental Management which includes protection measures for all works referred to in the environmental terms, has been drawn up.</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"> <li>• Worksite roads and piles of aggregates are regularly sprayed. Especially during the summer months care is taken for the continuous spraying of both the worksite roads and the urban network near the worksites. Special attention is paid to the spraying of worksite roads near residential areas and areas with increased human activity.</li> <li>• Special care is taken so that trucks are not overloaded with loose materials, while the trucks that transfer materials are covered.</li> <li>• The trucks are cleaned before they exit the worksite and the existing road network is cleaned when deemed necessary.</li> </ul> <p>With respect to the installation of measurement station, the appropriate actions are taken to determine any possible locations so that they are submitted for approval to EYPE/Ministry. The operation of the station is related</p>

<b>C. WORK-SITE MANAGEMENT ISSUES</b>		
<b>S/N</b>	<b>SUBJECT</b>	<b>PROGRESS - PROBLEMS</b>
		to the operation of the project.
C.3	Noise - Movable noise barriers - Vibrations	<p>With respect to the noise during the construction of the project, an Environmental Monitoring &amp; Control Program in terms of the overall Plan for Environmental Management which includes control procedures to resolve noise problems in accordance with the environmental terms, has been drawn up. The Program has been presented to the joint venture's supervising engineers, as well as to any subcontractors that will provide the joint venture with their services. In addition, noise measurements are conducted in defined control spots by using the appropriate equipment so that noise levels at the worksites are followed.</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 for noise will be taken into account, which is referred to in term c.</p> <p>Construction works with a possibility to create vibrations will be equipped with a measurement and recording system in order to monitor all significant variables.</p>
C.4	Solid and hazardous waste	<p>With respect to waste management during the construction of the project, an Environmental Monitoring &amp; Control Program in terms of the overall Plan for Environmental Management, which includes control procedures in compliance with the environmental terms, has been drawn up. The Program has been presented to the joint venture's supervising engineers, as well as to any subcontractors that will provide the joint venture with their services.</p> <p>With respect to the management of used oils, batteries, tires, etc. relevant agreements with licensed management companies have been signed and depending on the constructional procedure and the payment of the temporary containers, they are delivered for further management. The dangerous waste are temporarily stored in special areas within the worksites, while in some cases the relevant conformance documents are requested by the suppliers and the separate subcontractors.</p> <p>In any case, domestic waste is transferred to the local authorities via bins located in the work areas upon the Authorities requests or via bin leasing by private owners or under the responsibility of the site manager.</p>

<b>C. WORK-SITE MANAGEMENT ISSUES</b>		
<b>S/N</b>	<b>SUBJECT</b>	<b>PROGRESS - PROBLEMS</b>
		The term for the correct operation of installations concerns the operation.
C.5	Fire prevention	<p>An Environmental Monitoring &amp; Control Program in terms of the overall Plan for Environmental Management, which includes control procedures in compliance with the environmental terms, has been drawn up.</p> <p>In any case, after the commencement of the works, the fire protection measures will be inspected in the machinery and worksites, while all specifications and requirements of the Health &amp; Safety Plan of the Project should be observed. Special attention should be given to areas that are near forests and fields during the summer months.</p> <p>With respect to the worksite area of Agios Georgios, K.P .21+000 for which the relevant STIS (d2.1 term) has been submitted, the opinion of the relevant Archaeological Services was requested.</p>
C.6	Safety / Pollution caused by accident	<p>The relevant signage will be installed at the worksites before the commencement of the works, as described in the H&amp;S Plan of the Project and the relevant worksite signage or traffic studies required.</p> <p>An Intervention Plan, which is a part of the Policing and Fire Fighting Agreement between the Concessionaire and the Ministry of Internal Affairs, has been drawn up.</p> <p>The Intervention Plan for Emergency Situations specifies measures to timely collect and remove hazardous substances while preventing pollution of the water/soil resources, etc.</p> <p>This Intervention 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 or not.</p> <p>The term has been taken into account based on the risk analysis study submitted to the Independent Engineer.</p>
C.7	Public Utility Organizations – traffic settlement	<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. In particular, document have been sent to:</p> <p>a) Water Supply - Sewage Company of Messologi for the relocation of Networks located within the project's limits (document with Protocol No. 16245, 30.10.09).</p> <p>b) Greek Telecom for the relocation of Networks located within the project's limits (document with Protocol No. 16246, 30.10.09).</p> <p>c) Water supply-sewage Company of Mesologgi for the supply of information on the existence of underground networks within the project's limits and the relocation of any underground networks (document with Protocol No.</p>



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<b>C. WORK-SITE MANAGEMENT ISSUES</b>		
<b>S/N</b>	<b>SUBJECT</b>	<b>PROGRESS - PROBLEMS</b>
		<p>16406, 27.10.09).</p> <p>d) Electric Supply Company for relocation of PPC networks located within the project's limits from K.P. 22+090 – K.P. 24+600 (document with Protocol No. 15093, 02.09.09).</p> <p>e) Electric Supply Company for relocation of PPC networks located within the project's limits from K.P. 24+400 - K.P. 42+972 and supply of information on the existence of underground networks (document with Protocol No. 15044, 21.07.09).</p> <p>f) Greek Telecom for the relocation of Networks located within the project's limits from K.P. 24+400 – K.P. 42+972 and supply of information on the existence of underground networks (document with Protocol No. 15043,21.07.09).</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>Special care will be given according to the term of retention of access to the residential areas. This issue will be 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**

**(JMD 84982/96/11.04.1997, JMD 105886/03.07.08**

**& JMD 144713/23.9.09)**

<b>A. PERMITS AND APPROVALS</b>		
<b>S/N</b>	<b>ACTIVITY</b>	<b>PROGRESS – PROBLEMS</b>
<b>A.1</b>	Installation permits for any activity or installation necessary for the construction of works.	<p>A file for the construction and operation of the foreseen toll stations of the motorway's section has been drawn up and submitted, according to article 13 of JMD 11017/703/Φ104/14.03.2003 (ΕΥΠΕ Protocol No. 144265/22.09.2009). With respect to this specific section, the above mentioned environmental license concerns the lateral toll stations: Aggelokastro, Chalikio, Ag. Ilias, Kouvaras and Rigani. The E.T. of the project were modified pursuant to the file with JMD 144713/23.9.09. of ΕΥΠΕ.</p> <p>Approved sites for sand extraction D8 and D9 are already used with permits obtained from the Cadastral Service of Aetolokarnania with protocol no. 702/Φ440/005/Γ 05.03.2007.</p> <p>An Environmental Monitoring &amp; Control Program in terms of the overall Plan for Environmental Management, which includes control procedures for all works referred to in the environmental terms, has been drawn up.</p> <p>The project has been delivered to circulation, while some additional completion works are being realized. The disposals that took place during the construction were temporary and within the occupation zone. With respect to the disposal of inappropriate excavation products the disposal pit E1 has been approved for this section (document with Protocol No.</p>



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<b>A. PERMITS AND APPROVALS</b>		
<b>S/N</b>	<b>ACTIVITY</b>	<b>PROGRESS – PROBLEMS</b>
		<p>101105/07.02.08 EYPE).</p> <p>The old project of the Southern section of Agrinio Bypass constitutes a worksite area of this section. This site has been defined by the relevant studies of the said project. The disposal of excavation products in streams or river beds is avoided.</p> <p>The responsible Forest Service was not updated during this particular period because the works were performed outside forest areas.</p> <p>For any work or installation, an intervention permit, which is granted by the Forest Service responsible, is needed.</p> <p>With respect to the revocation 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. 1c, <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, revokes the re-forestation and grants intervention permits and permits for felling works to the above sites"</p>
<b>A.2</b>	Archaeological Services	<p>Due to the nature of the works completed (completion of the road) the Archaeological Service was not updated during the report period. For any additional completion or installation work, a permit and approval is needed and granted by the responsible Forest Service.</p>
<b>A.3</b>	Borrow pits – Quarries	<p>Referred above in section A1.</p>



<b>B. CONSTRUCTION ISSUES</b>		
<b>S/N</b>	<b>SUBJECT</b>	<b>PROGRESS – PROBLEMS</b>
<b>B.1</b>	Buildings - toll stations - Motorists Service Stations - O&M Control Centres	<p>A File for the construction and operation of the foreseen toll stations in the above section of the motorway has been drawn up, submitted and approved according to article 13 of JMD 11017/703/Φ104/14.03.2003 (EYPE Protocol No. 144265/22/09/2009). With respect to this section, the above mentioned environmental license concerns the lateral toll stations: Aggelokastro, Chalikio, A. Ilias, Kouvaras and Rigani. The E.T. of the project were amended based on the file with JMD 144713/23.9.09 of EYPE.</p> <p>With respect to the environmental license of EMC and MSS, the relevant licensing procedures will follow.</p>
B.2	Excavations / Explosives / Disposal	<p>All products deriving from the foreseen and approved excavation designs were used to manufacture embankments or any other road works, only after they were proved to be appropriate (after several laboratory tests).</p> <p>Disposal was temporary and within the occupancy zone. Furthermore, for the disposal of non-appropriate excavation materials, E1 disposal site has 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 present alignment in 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 relocations of the axis or for the construction of a cut &amp; cover. The proposed formation of the embankments arises from the geotechnical study so that safety and stability conditions are ensured.</p> <p>With respect to the large cut at CH. 13+400, the following apply:</p> <ul style="list-style-type: none"> <li>• During the excavation phase of the previous subcontractor, landslide failures and creeping movements presented. The construction was paused and the excavations were re-embanked to restore the failures and movements. At this phase in order to construct the road, the slopes declination was re-defined so as to discharge the problematic area</li> </ul>

<b>B. CONSTRUCTION ISSUES</b>		
<b>S/N</b>	<b>SUBJECT</b>	<b>PROGRESS – PROBLEMS</b>
		<p>(by removing materials) and to significantly reduce the creeping movement of the land.</p> <ul style="list-style-type: none"> <li>• The solution of mild slopes offers greater safety in the event of earthquake in the area, where the cuts will be moved causing minor compression failures to the pavement, which can be easily repaired.</li> <li>• Any other solution to this problem (e.g. Cut &amp; Cover) would be established at a problematic area of possible failure and the compression movements in the event of earthquake would cause irreversible damage.</li> </ul> <p>Following the above, it is clear that the large cut has arisen as a need to manage landslides. Its layout planning in scales with mild declination in combination with the appropriate landscaping measures will lead to its smooth integration into the surrounding area.</p>
<b>B.3</b>	Rehabilitation/ Worksites	<p>The permits granted to worksites by preparing and approving STIS by EYPE/YPEXODE ensures the implementation of the E.T., i.e. the exclusion of the spatial planning of the worksites in river beds.</p> <p>The landscaping recovery design has been approved by The I.E. with IC.C.IE.S113N.CE.DAC005924, dated 15.12.09 for the section of the bypass from k.p. 0+620 to k.p. 13+541.</p>
B.4	Various construction terms	<p>The requirement for ensuring uninterrupted moving of fauna has already been met by the constructed technical structures of the existing work in Agrinio bypass, which has been built under the State's responsibility.</p> <p>A File for the construction and operation of the foreseen toll stations of this section of the road has been drawn up, submitted and approved according to article 13 of JMD 11017/703/Φ104/14.03.2003 (EYPE Protocol No. 144265/22/09/2009). For this specific section the above environmental license concerns the lateral toll stations: Aggelokastro, Chalikio, Ag. Ilias, Kouvaras and Rigani. The E.T. of the project were amended according to the file with JMD 144713/23.9.09. of EYPE.</p>
B.5	Superficial runoffs	<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 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 E.T. Moreover, the largest part</p>

<b>B. CONSTRUCTION ISSUES</b>		
<b>S/N</b>	<b>SUBJECT</b>	<b>PROGRESS – PROBLEMS</b>
		<p>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>

<b>C. WORK-SITE MANAGEMENT ISSUES</b>		
<b>S/N</b>	<b>SUBJECT</b>	<b>PROGRESS – PROBLEMS</b>
<b>C.1</b>	Water protection - Liquid waste	<p>Liquid waste is being managed based on the relevant terms. An Environmental Monitoring &amp; Control Program in terms of the overall Plan for Environmental Management, which includes control procedures for all works referred to in the environmental terms, has been drawn up.</p> <p>In the area of this project there are no worksite installations and the service is conducted by the licensed worksites of the old contract in the Southern section of Agrinio Bypass and Evinos.</p> <p>Urban wastes that may arise are channeled in the urban local authorities network.</p> <p>With respect to the management of used oils, batteries, tires, etc. relevant agreements with licensed management companies have been signed and depending on the constructional procedure and the payment of the temporary containers, they are delivered for further management. The dangerous waste are temporarily stored in special areas within the worksites, while in some cases the relevant conformance documents are requested by the suppliers and the separate subcontractors.</p>
<b>C.2</b>	Air and noise protection	<p>An Environmental Monitoring &amp; Control Program in terms of the overall Plan for Environmental Management, which includes protection measures for all works referred to in the environmental terms, has been drawn up.</p> <p>In particular with respect to dust, based on the works foreseen, the following are implemented:</p> <ul style="list-style-type: none"> <li>• Worksite roads are sprang with water on a regular basis.</li> <li>• The trucks that transfer materials are not overloaded and all trucks transferring loose materials will be covered.</li> <li>• The trucks drive on the existing asphalt-layered road before they exit the worksite. Despite this, the existing work-</li> </ul>



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<b>C. WORK-SITE MANAGEMENT ISSUES</b>		
<b>S/N</b>	<b>SUBJECT</b>	<b>PROGRESS – PROBLEMS</b>
		site network is being cleaned to remove any residuals (dirt, stones, etc.).



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<b>C. WORK-SITE MANAGEMENT ISSUES</b>		
<b>S/N</b>	<b>SUBJECT</b>	<b>PROGRESS – PROBLEMS</b>
<b>C.3</b>	Noise - Movable noise barriers - Vibrations	<p>With respect to the noise during the construction of the project, an Environmental Monitoring &amp; Control Program in terms of the overall Plan for Environmental Management, 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 their services.</p> <p>Furthermore, noise measurements are conducted in specific control points using the appropriate equipment in order to monitor the respect of the worksite noise levels more frequently.</p> <p>The measurements will be repeated in all the successive phases during which this section undertakes a different traffic role in connection with the realization of the remaining sections of “Agrinio Wide Bypass”.</p>

<b>C. WORK-SITE MANAGEMENT ISSUES</b>		
<b>S/N</b>	<b>SUBJECT</b>	<b>PROGRESS – PROBLEMS</b>
		<p>When 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> <p>The measurements will be repeated in all the successive phases during which this section undertakes a different traffic role in connection with the realization of the remaining sections of "Agrinio Bypass".</p>
<b>C.4</b>	Solid and hazardous waste	<p>With respect to urban waste disposal, an agreement with the Municipality of Stratos has been made (there is a relevant document) to collect waste in special bins using garbage trucks.</p> <p>There is an agreement for the disposal of mineral oils with ELTEPE S.A. (relevant agreement).</p> <p>Furthermore, an Environmental Monitoring &amp; Control Program in terms of the overall Plan for Environmental Management, which includes control procedures in compliance with the environmental terms, has been drawn up. The Program has been presented to the joint venture's supervising engineers, as well as to any subcontractors that will provide the joint venture with their services.</p>
<b>C.5</b>	Fire prevention	<p>An Environmental Monitoring &amp; Control Program in terms of the overall Plan for Environmental Management, which includes control procedures in compliance with the environmental terms, has been drawn up.</p> <p>In any case, all the content of the H&amp;S Plan should be applied.</p>
<b>C.6</b>	Safety / pollution caused by accident <sup>1</sup>	<p>An Intervention Plan, which is part of the Policing and Fire Fighting Agreement between the Concessionaire and the Ministry of Internal Affairs, has been drawn up.</p> <p>The Intervention Plan for Emergency Situations specifies measures to timely collect and remove hazardous substances while preventing pollution of the water/soil resources, etc.</p> <p>This Intervention 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>

<sup>1</sup> It is important to note that the JMD No. 84982/96/11-04-1997 that describes the E.T. for Agrinio bypass, does not provide for any terms related to safety/pollution caused by accident. Nevertheless, the renewal of the E.T. for the said section, in accordance with the JMD No. 105886/3-7-08 takes into account the JMD No. 142128/26-7-05 entitled 'Approval of environmental terms for the project Ionia Odos'. Antirio – Kefalovryso (Southern end of Agrinio bypass). In the JMD No. 142128/26-7-05, terms id8, 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.

<b>C. WORK-SITE MANAGEMENT ISSUES</b>		
<b>S/N</b>	<b>SUBJECT</b>	<b>PROGRESS – PROBLEMS</b>
		In the case of accidents, adsorption 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 after-use-disposal will be carried out in accordance with the instructions for disposing toxic waste.
C.7	Public Utility Organizations – traffic arrangements	<p>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.</p> <p>During the construction phase, the existing mass transport infrastructures are not blocked between the residential districts.</p>

**NORTHERN END OF AGRINIO BYPASS (KOUVARAS) – SOUTHERN END OF ARTA  
BYPASS (KOMBOTI) AND NORTHERN END OF ARTA BYPASS (FILLIPIADA) –  
IOANNINA (ELEOUSA)**  
**(JMD 141564/25.07.2005)**



<b>A. PERMITS AND APPROVALS</b>		
<b>S/N</b>	<b>SUBJECT</b>	<b>PROGRESS – PROBLEMS</b>
<b>A.1</b>	Installation permits for any activity or installation necessary for the construction of the works.	<p>All foreseen by the legislation permits and approvals, including the environmental licensing possibly required, will be obtained, when needed.</p> <p>The relevant STIS for all required sites (quarries, borrow pits, disposal sites and worksites) have been submitted to EYPE and their approval is expected. The submissions of the studies as well as the progress of the approval procedure are as follows:</p> <p><u>Borrow pits</u> STIS approved for borrow pit BBP10 with Protocol No. n138434/3.7.09. TED (Technical Exploitation Design) and STIS are drawn up for borrow pit BP14 (K.P. 180+500), in its new boundaries. The submission of STIS is foreseen after the completion of the TED design. In addition, the written consent of the Local Councils of the Municipality is required and expected.</p> <p><u>Quarries</u> Toubanos location (QN 08): Submission to EYPE with Protocol No. 12215/6.7.09 of the J/V and approval of STIS by EYPE with Protocol No. 141902/3.9.09. Ag.Georgios Glukorizo location: Submission to EYPE with EYPE Protocol No. 101995,06/03/08 and J/V Protocol No. 2525/IK/ΕΣ/05.03.08. Approval is expected. Selitoura location (QN 13): (EYPE Protocol No. 2196, 03/02/09 and J/V Protocol No. 6871/IM/kla/30.01.09). Approved with EYPE Protocol No. 135889/21.7.09.</p> <p><u>Disposal pits</u> Pouliana location: (EYPE Protocol No. 143101/04.08.09 and J/V Protocol No. 13265/03.08.09). The approval is pending.</p> <p><u>Gravel extraction</u> Prosilio location: (EYPE Protocol No. 100473/18.01.08 and J/V Protocol No. 2026/IK/ΕΣ/14.01.08). There is no interest in this area. Revocation of STIS with EYPE Protocol No. 144166,08.09.09.</p> <p><u>Worksites</u> Sikoula location: STIS is drawn up and will be submitted to EYPE shortly.</p> <p>The permit from the relevant Forest Service was required for all works performed during this particular period. More specifically:</p>

<b>A. PERMITS AND APPROVALS</b>		
<b>S/N</b>	<b>SUBJECT</b>	<b>PROGRESS – PROBLEMS</b>
		<p>a) Approval to commence the excavation works in the section of the project from k.p. 177+200 to k.p. 178+500 from Ioannina Forest Department with J/V Protocol No. IC-C-CO-S3000-PRO- 11954/MG/jma, dated 12-06-2009.</p> <p>b) Interventions within the limits of Ionia Odos from K.P. 168+800 to K.P. 170+000 to the Directory of Forests of Ioannina and Preveza Prefectures (J/V Protocol No. 12736,20.07.09).</p> <p>c) Application for opinion on the Environmental License for borrow pit BP11, in Paliokoulia location to Amfilochia Forest Department (J/V Protocol No. 13645,11.08.09).</p> <p>With respect to the ancillary works, the required process in line with Law 998/79 precedes the submissions of STIS: Regarding the proposed locations for the disposal sites, a relevant document will be submitted to the Forest Service.</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. 1c, <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, revokes the re-forestation and grants intervention permits and permits for felling works to the above sites'.</p>
A.2	Archaeological Services	<p>Before layout planning and installation of the worksites, the opinions of the above will be taken into account.</p> <p>The section from Amfilohia I/C to Komboti I/C and the location "Paliokoulia" have been taken into account as to their archaeological significance during the phase of the design; the remaining areas will be taken into account during the phase of future elaboration of designs.</p> <p>Before the commencement of works that were executed during this specific period of time, the competent Archaeology Department was notified in all cases. More specifically:</p> <p>a) Application for the opinion on Environmental License for borrow pit BP11, in Paliokoulia location to ΑΣΤ' Ephory of Antiquities (EA) and the 22<sup>nd</sup> Ephory of Byzantine Antiquities (EBA) (J/V Protocol No. 13645/11.08.09).</p> <p>b) Suggestion of locations of test openings from k.p. 124+500 to k.p. 129+626 and from k.p. 145+706 to k.p. 170+000 ΑΓ' EA (J/V Protocol No.12855/22.07.09).</p> <p>c) Interventions within the gauge of Ionia Odos from k.p. 168+800 to k.p. 170+000 to ΑΓ' EA, 18<sup>th</sup> EBA of Arta-Preveza, Department of Contemporary Monuments and Technical Structures of Epirus, IB' EA and 8<sup>th</sup> EBA (J/V Protocol No. 12736/20.07.09).</p> <p>The alignment of the project in the area of "pente pigadia" follows the approved change without any minor relocation or other change. Consequently and based on the findings of the DEC, the proximity of Frourio and the environment are not affected by</p>

<b>A. PERMITS AND APPROVALS</b>		
<b>S/N</b>	<b>SUBJECT</b>	<b>PROGRESS – PROBLEMS</b>
		the area. The 18 <sup>th</sup> EA with its document referenced 2911/14-12-2009, approves the construction of section of Ionia Odos, next to Ochiro of Pente Pigadia, in Klisoura Municipality, Municipality of Anogi, Prefecture of Preveza.
A.3	Borrow pits – Quarries	The need for delivery is mainly covered by the excavation products and any further estimated needs will be ensured by the sites referred to in paragraph A1.

<b>B. CONSTRUCTION ISSUES</b>		
<b>S/N</b>	<b>SUBJECT</b>	<b>PROGRESS – PROBLEMS</b>
<b>B.1</b>	Buildings - Toll Stations – MSS - EMC	With respect to the environmental permit of the new toll stations for Motorists Service Stations/E&M Centres, the relevant permit procedures shall be followed.
<b>B.2</b>	Disposal / Excavations / Explosives	<p>The E.T. that concerns the disposal of inappropriate materials has been taken into account in order to find possible sites to dispose materials and has also been taken into account for the preparation of the respective STISs that were submitted to EYPE. The implementation of the E.T. with respect to the protection of water recipients from the disposed soil material is controlled via the Environmental Monitoring &amp; Control Program.</p> <p>All redundant excavation materials (after separation) will be transferred to the approved disposal sites.</p> <p>According to the layout planning design of Ambelia tunnel exit (IC-C-CO-S323N-MO-0200-000-TUN-PRX-FL.093.IS.01.01-0 and IC-C-CO-S323N-MO-0200-000-TUN-GTD-FL.193.IS.01.01-0) no surface excavations arise at the front &gt;5m, except for the temporary ones. The layout planning of the front will be carried out via excavation and re-embankment. The design will be inspected in order to ensure that it complies with the environmental term.</p>
<b>B.3</b>	Rehabilitation/ Worksites	It has been ensured that the layout planning of concrete and asphalt mix production units abide by the afore-mentioned restrictions, as specified in the submitted STISs.

<b>B. CONSTRUCTION ISSUES</b>		
<b>S/N</b>	<b>SUBJECT</b>	<b>PROGRESS – PROBLEMS</b>
		<p>An Environmental Monitoring &amp; Control Program in terms of the overall Plan for Environmental Management which will include control procedures for all works referred to in the environmental terms, has been drawn up. The Program has been presented to the joint venture's supervising engineers, as well as to any subcontractors that will provide the joint venture with their services.</p> <p>The content of terms d13 and d14 will be examined when there is a need for such installations.</p> <p>For the section from K.P. 170+000 to 196+000 a concrete production plant is currently being used with the environmental term in force.</p> <p>Site clearance has been carried out within the occupancy zone of the project. In cases of new works the implementation of term d7 will be checked.</p> <p>No need for reconstruction of any site during the report time period has arisen, but in any case, the term will be observed. The observance of the term concerning the planting of all the surfaces that can be planted will be controlled by the Environmental Monitoring &amp; Control Program.</p> <p>It has been ensured that the relevant landscaping plans are assigned and drawn up in order to be submitted to the Independent Engineer for approval.</p>
<b>B.4</b>	Various construction terms	<p>i) The Terovo I/C in K.P. 175+708 has been included in the Finalized Design of the subsection (Ref. no. IC-C-CO-S322N-PRO11353/10-06-2009).</p> <p>ii) A tunnel with an approximate length of 900m has been included in the Finalized Design, a layout planning design of the tunnel is currently under preparation and the exit layout planning design has been submitted. IC-C-CO-S323N-MO-0200-000-TUN-PRX-FL.093.IS.01.01-0 &amp; IC-C-CO-S323N-MO-0200-000-TUN-GTD-FL.193.IS.01.01-0.</p> <p>iii) The Finalized Design includes a hypsometrical lowering. In the area of the overpass at Episkopiko, the embankments have a height of 3m (Motorists Service Station - Episkopiko - height of 4m) – (Prot. No. IC-C-CO-S323N-PRO6595/MC/js/2009).</p> <p>The term that ensures access to wild fauna will be taken into account during the construction phase if there are parts of the project in a distance less than 300m from the Lake Amvrakia.</p> <p>The compliance with the term about modernization, optimization, expansion or modification of the project is being reviewed in terms of Environmental Impact Assessments of the final designs so that there is compatibility of the design phase with the requirements of this term. It has been included in the designs under preparation and also during the construction phase.</p>

<b>B. CONSTRUCTION ISSUES</b>		
<b>S/N</b>	<b>SUBJECT</b>	<b>PROGRESS – PROBLEMS</b>
		<p>Various proposals to be reviewed have been submitted to the Service (EYDE/EPA &amp; 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 as provided by article 13 of the JMD 11014/703/Ø104/14.3.2003, (OGG 332B).</p> <p>Following the Service's opinion (EYDE/EPA &amp; IO) on the optimization proposals submitted, dossiers 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>B.5</b>	Surface runoffs	<p>The relevant hydraulic designs, in which the necessary terms are taken into account, have been assigned, prepared and submitted to the Independent Engineer.</p> <p>The term for holding the embankment is taken into account as a fact for the preparation of the designs.</p> <p>The term for the protection from corrosion of natural slopes is taken into account during the elaboration of hydraulic designs.</p>

<b>C. WORK-SITE MANAGEMENT ISSUES</b>		
<b>S/N</b>	<b>ACTIVITY</b>	<b>PROGRESS - PROBLEMS</b>
<b>C.1</b>	Water protection - Liquid waste	<p>An Environmental Monitoring &amp; Control Program in terms of the overall Plan for Environmental Management, which includes protection measures for all works referred to in the environmental terms, has been drawn up. The Program has been presented to the joint venture's supervising engineers, as well as to any subcontractors that will provide the joint venture with their services. Urban wastes that may arise are channeled to the urban waste collection network of the local authorities.</p> <p>With respect to the management of used oils, batteries, tires, etc. relevant agreements with licensed management companies have been signed and depending on the constructional procedure and the payment of the temporary containers, they are delivered for further management. The dangerous waste are temporarily stored in special areas within the worksites, while in some cases the relevant conformance documents are requested by the suppliers and the separate subcontractors.</p>

<b>C. WORK-SITE MANAGEMENT ISSUES</b>		
<b>S/N</b>	<b>ACTIVITY</b>	<b>PROGRESS - PROBLEMS</b>
C.2	Air and noise protection	<p>An Environmental Monitoring &amp; Control Program in terms of the overall Plan for Environmental Management, which includes protection measures for all works referred to in the environmental terms, has been drawn up.</p> <p>The Program has been presented to the supervising engineers of the J/V and the subcontractors that will offer their services to the J/V. In addition, noise measurements are conducted in specific points using the appropriate equipment, in order to monitor the noise level at the worksites more frequently.</p> <p>In particular with respect to dust, based on the works foreseen, the following are implemented:</p> <ul style="list-style-type: none"> <li>• Worksite roads and piles of materials are regularly sprayed. During the preparation of this report, there was no need to frequently spray the area due to weather conditions.</li> <li>• The trucks that transfer materials are not overloaded and all trucks transferring loose materials are covered.</li> <li>• During the drilling works, a mechanical equipment will be used that will hold dust.</li> <li>• 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.</li> </ul> <p>The stations specifications and installation study is being under development and will be submitted to EYPE/YPEXODE for approval. The operation of the station is related to the operation phase of the project.</p>
<b>C.3</b>	Noise - Movable noise barriers - Vibrations	<p>With respect to the noise during the construction of the project, an Environmental Monitoring &amp; Control Program in terms of the overall Plan for Environmental Management, which includes control procedures to resolve noise problems in accordance with the environmental terms, has been drawn up. The Program has been presented to the joint venture's supervising engineers, as well as to any subcontractors that will provide the joint venture with their services. In addition, noise measurements are conducted in specific points using the appropriate equipment, in order to monitor the noise level at the worksites more frequently.</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 as any existing sensitive uses in areas outside the town limits. This term is included in all finalized road works designs and its implementation in the Environmental Impact Assessments is analysed so that the possible installation of noise barriers are taken into account in a distance of 200 m from the town plan.</p> <p>Following the sound measuring process, if the produced worksite noise exceeds the applicable sound limits, then the issue</p>

<b>C. WORK-SITE MANAGEMENT ISSUES</b>		
<b>S/N</b>	<b>ACTIVITY</b>	<b>PROGRESS - PROBLEMS</b>
		<p>should be addressed using the Environmental Management Plan and taking the appropriate corrective measures, among which is the installation of temporary noise barriers. In any case, no sonorous works will be performed when worksites are adjacent to residential areas in order to avoid breaching of the peace.</p> <p>The Environmental Management Plan and the Environmental Monitoring &amp; Control Program control the compliance with the applicable legislation for noise. In any case, the legislation applicable on noise is referred to in term c.</p> <p>With respect to the term on activities with vibrations, such works have not yet occurred. When construction works with vibrations are conducted, the parameters referred to in the E.T. will be monitored via vibration monitoring programs and if they exceed the limits, the appropriate measures will be taken.</p>
<b>C.4</b>	Solid and hazardous waste	<p>With respect to waste management during the construction of the project, an Environmental Monitoring &amp; Control Program in terms of the overall Plan for Environmental Management, which includes control procedures in compliance with the environmental terms, has been drawn up. The Program has been presented to the joint venture's supervising engineers, as well as to any subcontractors that will provide the joint venture with their services.</p> <p>With respect to worksites of the project in K.P.. 118+350 – K.P. 129+629 and from K.P. 145+706 – K.P. 170+000, an agreement with the Municipality of Xerovounio and Filippiada has been made on the disposal of urban waste, which is collected in special bins of the Municipalities using garbage trucks. There is an agreement for the disposal of mineral oils with ELTEPE S.A. (relevant agreement).</p> <p>With respect to worksites of the project at K.P. 170+000 – K.P.196+000, the approved subcontractor's manufacturing area is currently being used, where the term constitutes an E.T. of the installation. An inspection was carried out as described in the Environmental Monitoring &amp; Control Program and the results showed full compliance with the term (inspection checklist 07/09). Full compliance has also been ensured in the construction sites (box culverts) at the same section. As far as the separate subcontractors the production of the relevant contracts and certificates of delivery of such waste is required.</p>
<b>C.5</b>	Fire prevention	<p>An Environmental Monitoring &amp; Control Program in terms of the overall Plan for Environmental Management, which includes control procedures in compliance with the environmental terms, has been drawn up.</p> <p>It has been ensured that all machinery have fire extinguishers and in any case after the commencement of the works, all fire prevention measures are inspected in the work front in order to assure the existence of fire prevention equipment.</p>

<b>C. WORK-SITE MANAGEMENT ISSUES</b>		
<b>S/N</b>	<b>ACTIVITY</b>	<b>PROGRESS - PROBLEMS</b>
<b>C.6</b>	Safety / pollution caused by accident	<p>The relevant worksite signage will be installed at the worksites before the commencement of the works, as described in the H&amp;S Plan and the relevant worksite signage or traffic studies required.</p> <p>The Intervention Plan, which is a part of the Policing and Fire Fighting Agreement between the Concessionaire and the Ministry of Internal Affairs, has been drawn up.  The Intervention Plan for Emergency Situations specifies measures to timely collect and remove hazardous substances while preventing pollution of the water/soil resources, etc.</p> <p>This Intervention 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 or not.</p> <p>A risk analysis study from accidental pollution has been submitted with ref. no. IC-L-CO-S215N-PRO5876/EM/em on 17/11/2008 for the section in Amvrakia.</p> <p>A risk analysis study is currently under development for Ambelia tunnel.</p>
<b>C.7</b>	Public Utility Organizations – traffic arrangements	<p>The networks have been designed and the relevant documents with all involved Public Utility Organizations have been submitted (in accordance with par 7 of the Special Conditions of Contract) in order to proceed to the necessary actions. The data have been given to the Designers/Consultants in order to be taken into account when drawing up their designs. In particular the following have been sent to:</p> <p>a) Electricity Supply Company for the Passing of High Voltage Network from K.P. 119+200 to K.P. 129+626 and from K.P. 145+706 to K.P. 170+000 (J/V Protocol No.: 14564, 18.09.09).  b) Administrator of National System of Gas for the supply of information regarding the existence of underground gas tubes within the limits of the project and the relocation of any underground tubes (J/V Protocol No.: 12733, 07.07.09).  c) Electricity Supply Company for the relocation of network from K.P. 90+700 to K.P. 92+300 (J/V Protocol No.: 13945, 20.08.09).  d) Electricity Supply Company for the relocation of High Voltage Network from K.P. 166+370 (J/V Protocol No.: 14569, 18.09.09).  e) Electricity Supply Company for the relocation of high voltage network from K.P. 76+618 to K.P. 119+200 (J/V Protocol No.: 13945, 20.08.09).  f) Electricity Supply Company for the relocation of high voltage network from K.P. 76+618 to K.P. 119+200 (J/V Protocol No.: 15515, 9.10.09).  g) Electricity Supply Company for the relocation of pillars from K.P. 76+000 to K.P. 118+300 (J/V Protocol No.: 18025, 11.12.09).</p> <p>This term is taken into account during the elaboration of designs. This is documented through the Environmental Impact Assessments</p>





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<b>C. WORK-SITE MANAGEMENT ISSUES</b>		
<b>S/N</b>	<b>ACTIVITY</b>	<b>PROGRESS - PROBLEMS</b>
		<p>of the Final Plan. In accordance with the submitted Final Road Work Designs and the Final Plan's Environmental Impact Assessments for subsections 302 (IC-C-CO-S322N-CW-0200-000-ENV-EPR-RP.000-01-01-0/11-06-2009) and 303 (IC-C-CO-S323N-CW-0200-000-ENV-EPR-RP.000-01-01-0/26-05-2009), the alignment does not cut the approved boundaries of the villages and passes at a distance greater than 100m from them. Small residential units that are located near the project are: Pente Pigadia – Briga and Krounes. They are small agricultural areas with non-delimited districts and old installations. Furthermore, no building comes into contact with the project.</p> <p>The observance of the term on the retention of access to the villages/towns is controlled through the implementation of the E.T. Within the time period of this report, no need to construct structures that block access to the said part of the motorway has arisen. Special care is given so that the access to neighbouring properties is not blocked.</p>



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**ARTA BYPASS**

**(JMD 120756/96/03.06.1997, JMD 132550/31.07.2003 & JMD  
137938/31.12.2003)**

<b>A. PERMITS AND APPROVALS</b>		
<b>S/N</b>	<b>SUBJECT</b>	<b>PROGRESS - PROBLEMS</b>
<b>A.1</b>	Installation permits for any activity or installation necessary for the construction of works.	<p>During the preparation of this report, no need for such installations has arisen and the materials are covered by licensed installations of subcontractors in the area. Furthermore, an Environmental Monitoring &amp; Control Program in terms of the overall Plan for Environmental Management, which includes control procedures for all works referred to in the environmental terms, has been drawn up.</p> <p>Service is performed by the offices in Kambi, Arta. There are two worksites at Kambi and Gorgomylos with ref. no. EYΠE 107730/05.09.08. Furthermore, an Environmental Monitoring &amp; Control Program in terms of the overall Plan for Environmental Management, which includes control procedures for all works referred to in the environmental terms, has been drawn up.</p> <p>With respect to the works that were executed during this specific period (construction of safety barrier in the central island, completion of island with plants and improvement works of the existing road in general), no communication or intervention permit were requested by the competent Forest Department due to the fact that the work front is located outside the forest area. For any work or installation requiring intervention permit, this will be provided by the competent Forest Department.</p> <p>As far as the revocation of reforestation, pursuant to Law 3555/2007 (Ratification of Concession Agreement)/Article 4/ Par. 4a and Law 2445/1996/ Article 2/ Par. 1c, "<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. This law approves the change of use, revokes the re-forestation and grants intervention permits and permits for felling works to the above sites.</i>"</p>
<b>A.2</b>	Archaeological Services	Due to the nature of works (improvement of the existing road), it was not necessary to inform or receive a permit by the competent

<b>A. PERMITS AND APPROVALS</b>		
<b>S/N</b>	<b>SUBJECT</b>	<b>PROGRESS - PROBLEMS</b>
		Archaeological Department. If required, the term will be followed.
<b>A.3</b>	Borrow pits – Quarries	No works or activities were performed during the preparation of this report that would need such installations. The works and the materials are covered from the already licensed installations of subcontractors of the area according to the E.T. d2.b.

<b>B. CONSTRUCTION-RELATED ISSUES</b>		
<b>S/N</b>	<b>SUBJECT</b>	<b>PROGRESS – PROBLEMS</b>
<b>B.1</b>	Toll Station Building works – MSS - E&M Centres	With respect to the environmental permit of any new toll stations for Motorists Service Stations/E&M Centres, the relevant permit procedures shall be followed.
<b>B.2</b>	Disposal / Excavations / Explosives	Due to the nature of works (improvement of the existing road), no new additional areas were required. No disposals was required during this specific period of time. In case there are disposals in the future, they will be conducted within the limit zone and will be temporarily covered until reused.
<b>B.3</b>	Rehabilitation/ Worksites	Service is conducted from the offices in Kambi, Arta while there are two licensed worksite areas in Kambi and Gorgomilos with Protocol No. EYΠE 107730/05.09.08. After using these areas, the term will be followed rehabilitating the areas upon the completion of works.  The relevant final planting designs have been assigned, elaborated and will be submitted to the I.E. for approval.  An Environmental Monitoring & Control Program in terms of the overall Plan for Environmental Management, which includes control procedures for the implementation of planting works, has been drawn up.
<b>B.4</b>	Various construction terms	-
<b>B.5</b>	Surface runoffs	The requirements of the specific E.T. concern mainly the existing project. Additional issues of E.T. that relate to the design are controlled by the I.E. during the submission of the Design and documented by the Environmental Protection Report, which accompanies every Design submission.

<b>C. WORK-SITE MANAGEMENT ISSUES</b>		
<b>S/N</b>	<b>SUBJECT</b>	<b>PROGRESS - PROBLEMS</b>
<b>C.1</b>	Water protection - Liquid waste	<p>With respect to the disposal of urban wastes, an agreement has been made with Xyrovounio and Fiippiada Municipalities (see relevant document) to collect the wastes, which will be put in special Municipality bins using a waste collection vehicle.</p> <p>As far as the disposal of oils there is an agreement with the Licensed Management Companies.</p> <p>An Environmental Monitoring &amp; Control Program in terms of the overall Plan for Environmental Management, which includes protection measures for all works referred to in the environmental terms, has been drawn up. The Program has been presented to the joint venture's supervising engineers, as well as to any subcontractors that will provide the joint venture with their services.</p>
<b>C.2</b>	Air and noise protection	<p>An Environmental Monitoring &amp; Control Program in terms of the overall Plan for Environmental Management, which includes protection measures for all works referred to in the environmental terms, has been drawn up.</p> <p>In particular with respect to the dust, based on the works foreseen, the following are implemented:</p> <ul style="list-style-type: none"> <li>• Worksite roads are regularly sprayed if no asphalt is installed.</li> <li>• It is aimed to avoid overloading the trucks that transport materials, while the ones that transport loose materials are covered.</li> <li>• The trucks mainly circulate in the existing asphalt road of Arta Bypass before they exit the worksite.</li> </ul>
<b>C.3</b>	Noise - Movable noise barriers	<p>With respect to the noise during the construction of the project, an Environmental Monitoring &amp; Control Program in terms of the overall Plan for Environmental Management, which includes control procedures to resolve noise problems in accordance with the environmental terms, has been drawn up. The Program has been presented to the joint venture's supervising engineers, as well as to any subcontractors that will provide the joint venture with their services.</p> <p>If required, noise measurements will be conducted in specific points using the appropriate equipment in order to monitor the compliance with the noise levels.</p>
<b>C.4</b>	Solid and hazardous waste	<p>With respect to the disposal of urban wastes of the project, an agreement (see relevant document) with the Municipality of Xyrovounio and Filippiada has been made to collect the wastes in special bins of the Municipalities using a refuse collection vehicle. There is an agreement for the disposal of mineral oils with the Licensed Management Companies.</p> <p>With respect to waste management during the construction of the project, an Environmental Monitoring &amp; Control Program in terms of the overall Plan for Environmental Management, which includes control procedures in compliance with the environmental terms, has been drawn up. The Program has been presented to the joint venture's supervising engineers, as well as to any subcontractors that will provide the joint venture with their services.</p>

<b>C. WORK-SITE MANAGEMENT ISSUES</b>		
<b>S/N</b>	<b>SUBJECT</b>	<b>PROGRESS - PROBLEMS</b>
C.5	Fire prevention	In this section, the works are executed in excluded areas of the existing road of Arta Bypass.. Service is conducted from the offices of the J/V in Kambi, Arta where there are fire-extinguishers. In addition, it is ensured that fire-extinguishers are present in all the machines of the project and the cars executing improvement works in Arta Bypass.
C.6	Safety / pollution caused by accident	<p>The Intervention Plan, which is a part of the Policing and Fire Fighting Agreement between the Concessionaire and the Ministry of Internal Affairs, has been drawn up.</p> <p>The Intervention Plan for Emergency Situations specifies measures to timely collect and remove hazardous substances while preventing pollution of the water/soil resources, etc.</p> <p>This Intervention Plan includes all the 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 or not.</p>
C.6	Public Utility Organizations – traffic arrangements	It concerns an existing section of the motorway and the E.T. concern the previous contract. In any case, issues related to the design are checked by the I.E. during the submission of the Design and documented by the Report of Environmental Protection, which accompanies each Design submission.