



**SEMI-ANNUAL PROGRESS REPORT FOR THE  
IMPLEMENTATION OF ENVIRONMENTAL TERMS  
DURING THE CONSTRUCTION, OPERATION &  
MAINTENANCE PHASE**

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OPERATION & MAINTENANCE PHASE**

**PROJECT: "DESIGN – CONSTRUCTION – FINANCING – OPERATION –  
MAINTENANCE AND EXPLOITATION OF THE PROJECT "IONIA ODOS  
MOTORWAY FROM ANTIRIO TO IOANNINA, PATHE ATHENS (METAMORFOSI  
I/C) – MALIAKOS (SKARFIA) AND PATHE CONNECTING BRANCH  
SCHIMATARI – CHALKIDA"**

**SECTION: ATHENS PATHE (METAMORFOSI I/C) – MALIAKOS (SKARFIA) AND  
PATHE CONNECTING BRANCH SCHIMATARI – CHALKIDA**

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



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**A' SEMESTER 2011**

**JULY 2011**



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**METAMORFOSSI – YLIKI**  
**(JMD 126119/08.02.2007)**



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S/N	SUBJECT	PROGRESS DESCRIPTION – PROBLEMS
<b>A.</b>	<b>Issues of Permits/Approvals</b>	
A.1	Permits – approvals for any activity or installation required for the construction	<p>The foreseen by the legislation permits and approvals, including the environmental permit possibly required, are obtained, when needed.</p> <p>For the implementation of any partial additional activity or expansion that is not described in the Environmental Impact Assessment (EIA) and consequently not covered by the Approval of Environmental Terms (AET) a relevant environmental permit shall be obtained by EYPE/YPEXODE.</p>
A.2	Ancillary works	The requests for granting environmental permit to the ancillary works carried out by EYPE/YPEXODE regardless the category they fall, in accordance with the Joint Ministerial Decision No. 16393/2332/5.8.2002.
A.3	Archaeological Services	<p>The works performed during the reference period in the said section focused on operations of improvement, rehabilitation and widening within the existing expropriation area (there is a positive opinion of the Archaeological Service). Nevertheless, a contact will be held by the competent Departments of Antiquities, where necessary, as happened in previous reference periods.</p> <p>The proposed by EIA location for the Motorists Service Stations in Afidnes was dismissed relinquished. The final locations of the Motorists Service Stations for the section 'Metamorfossi - Yliki' are located in Kapandriti I/C and Thiva I/C, while the building of the Management is built in Varibobi. Therefore, the ecclesiastic monument is not affected and no measures are required for its protection.</p>
A.4	Forest areas	The areas where works for the widening and the improvement of the road in the said section take place, fall within the expropriated zone, are not categorized as forest areas or areas to be re-forested and currently do not affect trees. Therefore, there is no need for the Forest Service to issue an intervention permit for the said works. If such a need arises in the future, the procedure referred to in the particular environmental term will be followed.



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<b>B</b>	<b>Design-related Issues</b>	
B.1	Hydraulics Studies	The designs which have been elaborated, take into account the requirements of the term regarding the ensuring of the smooth flow of the surface waters across the project's zone of influence. For the remaining section the designs are under elaboration.
B.2	Special Technical Implementation Study	For the said period, worksites have not been licensed and the already licensed ones are used.
B.3	<b>Landscaping – Forest Technical Design</b>	The relevant landscaping designs relate to the central island, the reconstruction of worksites, configuration of the surrounding area and planting the road slopes as well as the final irrigation designs.
B.4	Special Technical Implementation Study - Noise Suppression	<p>The Special Acoustics Study – Structural Design of Noise Barriers for the section of PATHE: METAMORFOSI /IC – MALIAKOS (SKARFIA) &amp; CONNECTING BRANCH SCHIMATARI – CHALKIDA has already been submitted to the Special Environmental Service of the Ministry for the Environment, Physical Planning and Public Works (ref. no. 143730/10-11-2009).</p> <p>In the context of the said STIS that is related to the PATHE Motorway from Metamorfossi to Agios Konstantinos noise measurements to determine the accurate position of the barriers have taken place.</p>
<b>C.</b>	<b>Construction issues</b>	



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C.1	Retention of existing traffic lanes and interchanges	<p>The Traffic Management Studies during the construction of the widening and also during the optimization of the road surfacing material are being prepared and are submitted to the Independent Engineer for approval.</p> <p>Moreover, any interventions have been approved by the respective National Road Traffic Services.</p>
C.2	Water flow	<p>The content of par. B.1 of this chapter is also applied for the smooth flow of the surface waters with maintenance of the existing hydraulic works and implementation of new ones.</p>
C.3	Temporary disposal sites	<p>It shall be ensured that temporary deposits of excavations are located only within the occupation zone.</p>
<b>D.</b>	<b>Work-site Management Issues</b>	
D.1	Dust control	<p>An overall Action Plan for monitoring the Environmental Terms of the PATHE Project has been drawn up and is currently being implemented. This Plan includes protection measures for all foreseen situations in the environmental provisions.</p> <p>Inspections are conducted in the areas where construction works are executed and the respective check list is completed. Pursuant to the checks in case of non respect of the provisions, instructions are given (corrective actions) for the conformance method. The performance of corrective actions is checked via new inspections based on the check list.</p> <p>In particular for the dust, to date, based on the works already began, the following are foreseen and implemented:</p> <ul style="list-style-type: none"> <li>• Piles of construction materials are developed only within the enclosed worksites.</li> </ul>



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		<ul style="list-style-type: none"> <li>• It should be noted that all construction activities have ceased.</li> </ul> <p>In addition, special care has been taken into account for at least one sprinkling truck in every worksite, where dust might be released.</p> <p>Inspections are conducted in the areas where construction works are executed and the respective check list is completed. Pursuant to the checks in case of non respect of the provisions, instructions are given (corrective actions) for the conformance method. The performance of corrective actions is checked via new inspections based on the check list.</p> <p>It should be noted that all construction activities have ceased.</p>
D.2	Materials Combustion	<p>The Environmental Terms Compliance Check List which explicitly refers that the combustion of materials in the worksite is prohibited was presented for information and implementation to the supervisory engineers of the Joint Venture. Furthermore, regular inspections are carried out to ensure compliance with the said E.T. No materials are combusted pursuant to the checks.</p>
D.3	Pollution due to accident	<p>The Intervention Plan for Emergency Situations has been drawn up by the Concessionaire and constitutes an Annex of the Policing &amp; Fire Fighting Agreement signed with the Ministry of Interior. This plan 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> <p>There is a possibility of accidental fuel leakage from construction machinery, etc. which may result to a direct contamination of water, soil, etc. especially when the quantity is large. In this case, adsorption materials such as sand, chippings or a special geotextile will be used immediately after run out. Such materials exist in the central worksite for immediate use. Their disposal, in emergency situation, will be carried out in accordance</p>





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		<p>with the instructions for disposing toxic waste.</p> <p>It should be noted that, so far, no such accident has occurred and that the construction works have stopped.</p>
D.4	Liquid waste	<p>A general Environmental Management Plan, which includes procedure ENV-P-01 for handling hazardous liquid waste in compliance with the respective environmental terms and the applicable legislation has been drawn up, submitted and is being implemented. A relevant file with agreements and orders for waste collection, of waste management licensed businesses has been created.</p> <p>Inspections are conducted in the areas where construction works are executed and the respective check list is completed. Pursuant to the checks in case of non respect of the provisions, instructions are given (corrective actions) for the conformance method. The performance of corrective actions is checked via new inspections based on the check list.</p> <p>Toxic and hazardous waste derive in small quantities only from the operation of the environmentally licensed laboratory in the worksite at Thiva. These wastes are collected in appropriate containers and are removed by licensed companies that handle such materials.</p> <p>Also, it has to be noted that the construction works have ceased.</p>
D.5	Noise	<p>After noise measurements performed in specific positions, the limits were not exceeded. It is noted that the execution area of works is defined by the absence of sensitive receivers while the main background noise is due to the vehicles motion on the National Road.</p> <p>It should be noted also that the construction works have stopped.</p>
<b>E.</b>	<b>General Issues</b>	
E.1		<p>During the construction an overall Action plan is elaborated and performed for the monitoring of environmental Terms for the entire project of PATHE, which includes protective measures for the foreseen environmental</p>



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		<p>terms.</p> <p>More specifically, the inspection process , which is being applied using the relevant Check List in all worksite areas of the PATHE motorway has been foreseen.According to this checklist, regular inspections are carried out in order to ensure compliance with the environmental terms from which corrective or preventive measures arise.</p>
E.2		<p>Based on the groups of similar construction works as modified and the expenses calculated for each group separately, the required amount for the total budget of the design/construction has already been ensured by priority for all works that are required to fully comply with the Environmental Terms and restrictions of this Joint Ministerial Decision. Reference to the expenses for the protection of the environment in relation to the total budget of the project is made in the annual progress report for the implementation of environmental terms.</p>
E.3		<p>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. The J/V's organization chart includes the specialty of an Environment Manager, as foreseen by the SCP.</p> <p>The program of environmental observation and check has been submitted to EYPE by the Concessionaire with NEA ODOS S.A. Protocol No. IC.P.CC.4371 dated 21-01-09.</p>
E.4		<p>In the Joint Ministerial Decision with Protocol No. 101200/25.5.2001 on the Approval of Environmental Terms for the project: "Construction and operation of Kymi Avenue, section B: from the National Road No. 1 to the Olympic Village" apart from the environmental terms that generally apply in any case, there is a comprehensive reference to the protection of Kifissos river, its riparian vegetation and the natural texture of the area, etc.All these terms shall be taken into account during the works in Kalyftaki I/C, which have not yet begun.</p>
E.5		<p>According to this Presidential Decree "Protection Zones of Kifissos" (OGG 632D/94, OGG 796D/94 and OGG 499D/98). The layout planning of any type of worksite installation, storage installation or other installation</p>



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		<p>related to the construction of the project within the boundaries of Kifissos river Protection Zone and its surrounding streams as well as any type of water contamination or environment pollution is strictly prohibited.</p> <p>This requirement has been taken into account and no worksite area within this zone has been planned.</p>
E.6		<p>The annual and semi-annual periodic reports for compliance with the environmental terms are notified to the Concessionaire and are published on its website. At the same time, the person responsible on behalf of the Joint Venture facilitates any inspections to ensure compliance with these terms.</p>
E.7		<p>The measures for preventing environmental implications that are proposed in the EIA and that do not contravene the AET of the said section, are taken into account.</p>
E.8		<p>In accordance with article 13 of the Joint Ministerial Decision 11017/703/Φ104/14.03.2003, a Folder has been elaborated, submitted and approved by EYPE for the construction and operation of foreseen toll stations in this section of the motorway (J/V Protocol No. 12938/24.7.09). With respect to this section, the above environmental permit concerns the following toll stations: Afidnes and Thiva (frontal), as well as Malakasa, Kapandriti and Thiva (lateral).</p>
E.9		<p>If the environmental terms of this Joint Ministerial Decisions are amended based on new scientific and technical data in the field of environment protection or for any other reason, the Joint Venture shall lawfully comply with the new terms.</p>
E10		<p>The Environmental Terms of the said section continue to be effective.</p>



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**YLIKI – KASTRO**

**(JMD 36118/94/10.07.1995, JMD 101617/22.09.2006 &  
JMD 140792/12.06.2009)**



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S/N	SUBJECT	PROGRESS DESCRIPTION – PROBLEMS
<b>A.</b>	<b>Permits / Approvals</b>	
A.1	Approvals - permits for any activity or installation is required for the construction	<p>All foreseen by the legislation permits and approvals, including the environmental permit possibly required, are obtained, when needed.</p> <p>In particular, the worksite at Yliki has received a permit for an area which is on an incline of the motorway at CH.97+200, (Approval No. 103047/10.06.08).For this location, the installation of a Stone-grinding site has been approved.</p> <p>The site offices as well as the respective laboratory (as described in the relevant STIS) have received a permit and have been installed in the worksite of Thiva at the 85<sup>th</sup> km.</p>
A.2	Forest areas	<p>The EuroIonia Joint Venture with its letters with protocol. No. 26235/2.7.2010 and 32195/7.12.2010 to Thiva Forest Service requested to obtain a permit for timber felling at the haunch in ch. 77+300, 92+136, 91+735, 104+559, 107+514.</p>
A.3	Worksite layout planning	<p>All worksite areas that will be used by the Joint Venture have been defined and are as follows:</p> <ul style="list-style-type: none"> <li>• Worksite area at Martino (CH.117+000), outside expropriation zone, leased site with environmental permit by EYPE for the installation of the asphalt mix production plant (Approval No. Joint Ministerial Decision 139132/30.04.09).</li> </ul>
A.4	Archaeological Services	<p>The 9<sup>th</sup> Department of Prehistoric and Classical Antiquities, with document no. 421/21-02-2008, was notified of the commencement of works for the purposes of establishing two bypasses in the area of Yliki. The Department assigned a supervisor and set the terms for the supervisory procedure, with document no. 977/27-2-2008.In continuation with protocol no 4448/11-03-09 the 23<sup>rd</sup> Byzantine Antiquities Service was notified of the commencement of the works.</p>



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S/N	SUBJECT	PROGRESS DESCRIPTION – PROBLEMS
A.5	Borrow pits – Quarries	<p>The installation of tone processing plant was submitted to EYPE with protocol no. 103047/09.04.08 and approved (no. approval 103047/10.06.08).</p> <p>The excavation material resulted by the excavation works is appropriate for aggregates, while the products through the stone crushing plant are rated and implemented in the project. Therefore, it is not required to take material from pits and quarries, so that a new ETME designing not to be needed for these sites, for the project in Yliki area.</p> <p>For any aggregates used in bituminous mixtures are supplied by operating quarries in the region.</p> <p>In the event there is such a need in the future, the lawful procedure for obtaining the relevant permit will be followed.</p>
<b>B. Design-related Issues</b>		
B.1	Hydraulics design for drainage tanks	<p>The relevant final hydraulics designs for the closed drainage – sewerage system, which refer to the two bypasses in the area of Yliki, have been approved by the Independent Engineer, while the design of tanks has been submitted to him on 16.10.2008 with J/V protocol no 534, corrections have been requested, which have been submitted on 22.3.2010 with J/V protocol no 21795 and its approval is expected. (It should be noted that the location of the tanks has been approved by the hydraulics designs).</p> <p>Furthermore, the Athens Water Supply and Sewerage Company must be advised accordingly, which will take place once the Independent Engineer approves of the designs.</p> <p>Moreover, the hydraulics designs for CH. 89+334 – CH. 91+967 and CH. 96+000 – CH. 99+224 have been assigned, prepared and approved by the Independent Engineer.</p>
B.2	Hydraulics Studies	<p>As regards the smooth flow of the surface waters, all reference made in the Environmental Terms d.5 also apply here (Joint Ministerial Decision 33838/94/10.07.1995).</p>



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S/N	SUBJECT	PROGRESS DESCRIPTION – PROBLEMS
B.3	Architectural plans	Before the construction of the parking areas, MSS etc. the approval of the architectural plans on behalf of the Independent Engineer shall be preceded.
B.4	Landscaping plan	The final landscaping plans and the final irrigation plans have been assigned, drafted and submitted to the Independent Engineer for approval. These concern the bypass section: a) CH. 89+344,15 – CH. 91+967,39 and b) CH. 94+517,70 – CH. 97+647,43 with ref. No. IC-C-EN-P135Y-MO-0200.000-PLN-PLG-FL-002.01.01.0 and IC-C-EN-P135Y-MO-0200.000-PLN-PLG-FL-003.01.01.0 on 10/7/2008 respectively. The plan is currently under the restructuring/completion phase following the remarks of the Independent Engineer and its re-submission is expected.
<b>C.</b>	<b>Construction issues</b>	
C.1	Widening	The term for the widening of the road in the area of Yliki lake concerns the old project and has been observed.
C.2	Water flow	The term for the structures mentioned in the Environmental Impact Study concerns the old project and has been observed.
C.3	Disposal pits	<p>Based on the cut &amp; fill tables of the final project design, no excess materials for disposal are foreseen, which means there is no need, for the time being, for a disposal site.</p> <p>The excavation material resulted by the excavation works is appropriate for aggregates while the products through the stone processing plant are rated and implemented in the project. Therefore, it is not required to extract material from pits and quarries, so that a new STIS designing for such sites not to be needed, for the project in Yliki area.</p> <p>For any aggregates used in bituminous mixtures are supplied by operating quarries in the region.</p> <p>In the event there is such a need in the future, the lawful procedure for obtaining the relevant permit will be followed.</p>



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S/N	SUBJECT	PROGRESS DESCRIPTION – PROBLEMS
C.4	Excavations – explosives	<p>The term for the reduction of the excavation volume to an absolutely necessary one concerns mainly the old project but is still respected in the bypasses of Yliki.</p> <p>In particular, due to the use of explosives in the bypasses, the following design has been approved by the Independent Engineer: Elements - Methodology for Explosion Planning in the rocky ditches at Yliki area" (ref. no. 2958/09-04-2008).</p> <p>Furthermore:</p> <ul style="list-style-type: none"> <li>• Land occupancy zone and access roads have been determined and delimited with the appropriate signs. Site clearance is performed within this zone but not throughout the expropriated zone, in accordance with the relevant instructions that have been given to the subcontractors by the employee responsible for the compliance with the Environmental Terms.</li> <li>• Construction machinery is scheduled to move within certain boundaries of intervention or on the access roads and are not uncontrollable in forest or agricultural areas.</li> <li>• New cuts have been primarily avoided and the existing agricultural or forest roads are mainly used.</li> </ul> <p>The term for the use of excess excavated materials concerns the old construction of PATHE. In this phase of works, should there be redundancy of materials for use in other sections of the road, and there is such need and it is also possible to transfer them, then they will be used by priority. They will be transferred and used by priority.</p>
C.5	Concrete and asphalt mix production plants	<p>Special attention is given to the restriction of installing and operating concrete and asphalt mix production plants within the drainage area for 91<sup>st</sup> and 97<sup>th</sup> Km., with the layout planning of such activities in a distance smaller than 5km from the highest level of the lake. The layout of the asphalt mix production plant has been compiled and has received permit for the worksite in Schimatari (CH.63+300, away from Yliki), while the concrete production is performed by using ready-made concrete supplied by lawful installations of the subcontractor. It should be noted that the asphalt mix unit has been removed and that no construction works are performed.</p>





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S/N	SUBJECT	PROGRESS DESCRIPTION – PROBLEMS
C.6	Safety barrier	It has been taken into account in the respective road construction designs for 91 <sup>st</sup> and 97 <sup>th</sup> km, throughout these sections with height, tolerance and technical specifications, which, in case of accident, will not allow vehicles to head towards the lake avoiding bouncing or breakage and holding all hazardous substances and materials within the limits of the motorway.
C.7	Drainage – sewage system, rain water – holding / filtration tanks etc.	<p>All reference made in the Environmental Terms d.5 also apply here (JMD 33838/94/10.07.1995).</p> <p>The improvement of the safety barrier has been foreseen in the respective road work design, while at the Yliki 2 section the appropriate hydraulic works are being constructed in order to comply with the said environmental term.</p> <p>The relevant hydraulic designs (closed drainage-sewage system and rain water holding tanks) concerning the two bypasses in Yliki area have been drawn up, elaborated and submitted to the Independent Engineer. The final Hydraulic design has been approved by the Independent Engineer since 22/4/2008. The design for the rain water holding tanks has been submitted to the Independent Engineer on 16.10.08 with J/V protocol no. 5344, restructure was requested, submitted on 22.3.2010 with J/V protocol no. 21795 and its approval is expected. (It should be stressed that the locations of the tanks have been approved by the hydraulic design). In addition, EYDAP (water supply company) is yet to be informed. This will be conducted after the completion of the approval of designs by the Independent Engineer.</p>
C.8	Configuration CH.91+500	The configuration of the slope in compliance with the relevant requirements submitted to EYDE/OPA with ref. no. ΟΑΠ/Α.1/Φ4.1/οικ.13686/21.2.2006 at CH.91+500 has been taken into account in the respective road-work designs.
C.9	Rehabilitations	The relevant final landscaping design and the final irrigation design that concerns the previous worksite are currently under revision. A detailed topographical illustration of the area is drawn up to meet the requirements.
<b>D.</b>	<b>Work-site Management Issues</b>	



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D.1	Water flow protection	The terms and restrictions set by the said Joint Ministerial Decision on the protection of Yliki are taken into account, as described in various parts of this report.
D.2	Dust control	<p>The air protection methods related to the operation of the stone processing plant have been foreseen in the relevant STIS, which received approval (see description of progress in E.T. d8 (Joint Ministerial Decision 33838/94/10.07.1995)).</p> <p>No ready-made concrete and asphalt mix production plans have been determined for this PATHE section (see description of progress in E.T. d.29.1 (Joint Ministerial Decision 33838/94/10.07.1995)). The corresponding materials are supplied by relevant suppliers.</p>
		<p>No construction works performed during the reference period.</p>
		<p>For the re-commencement of the works:</p> <ul style="list-style-type: none"> <li>• All worksite roads shall be regularly sprayed with water and regular inspections shall be carried out to ensure compliance with the said E.T. especially during dry periods.</li> <li>• Furthermore, every possible effort shall be made to directly layer the sections with asphalt where the other works have been completed so as the dust shall not be dispersed while trucks are moved in the worksite.</li> </ul> <p>In addition, barriers have been installed between the motorway and the worksite road in order to restrict the dust disperse and reduce the possibility of accident on the motorway from the circulation of worksite vehicles on the worksite road, heading parallel, from the western side of the existing motorway.</p>



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D.3	Noise- Movable noise barriers	<p>It is noted that the execution area of works is defined by the absence of receivers.</p> <p>However, measurements are taken under the relevant monitoring program, recorded in the relevant tables in order to display the measurement points. There are no exceedances resulted by the measurements.</p> <p>In any case, the Joint Venture will ensure compliance with the Joint Ministerial Decision 37393/2028/29.3.2003.</p> <p>It should be noted that during the reference period no construction works are performed.</p> <hr/> <p>The area of Yliki, where works for the bypass take place is located away from residential areas thus the areas are not affected by the noise.</p> <p>In any case the level of noise is controlled in order to respect the levels stipulated by the Legislation.</p>
D.4	Liquid waste	<p>A general Environmental Management Plan, which includes the procedure for handling liquid waste in compliance with the respective environmental terms and the applicable legislation, has been drawn up.</p> <p>It has to be noted that during the reference period no construction works are performed.</p> <hr/> <p>The Joint Ministerial Decision 71560/3053/ Official Government Gazette 665/B/85 has been replaced by Joint Ministerial Decision 98012/2001/96 (Official Gazette 40B).</p> <p>In any case, regular checks are performed for the respect of the restriction and correct management of oils pursuant to the legislation, via inspections and questionnaire filling. The management of oils is conducted via licensed bodies, while the relevant file of acceptance documents and agreements is kept.</p> <hr/> <p>Regular checks are conducted in order not to store fuels, lubricants or other dangerous substances in the area of Yliki or feed, change of lubricants, use of any other dangerous substance nor conduct any other</p>



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		activity that may cause the pollution of Yliki.
D.5		<p>Through regular inspections and check lists recommendations are carried out when the rational and correct procedures for handling solid waste are not met. The immediate compliance with the stipulations of the Plan of Environmental Management is checked for the correct practice in waste management.</p> <p>It should be noted that during the reference period no construction works are performed in the section.</p>
D.6	Worksite installations	As proposed in the relevant approved STIS for Yliki's worksite, all worksite installations shall be removed after the completion of the project and the area will be rehabilitated based on the relevant landscaping design, regardless of the proprietary state.
D.7	Fire prevention	Both in vehicles and project's machines as well as worksite itself, it has been ensured that the relevant fire fighting means are in good condition and available in emergency situations.
D.8	Avoiding accidents at Yliki	The term for the prevention of trucks diversion involves the existing motorway and has been taken into consideration. With respect to the design of the new bypass project, the arresting wall has also been taken into account in the road-work design.
<b>E.</b>	<b>General Issues</b>	
E.1		<p>An overall Action Plan for the monitoring of the Environmental Terms of the entire PATHE Project has been drawn up and is currently being implemented. This Plan includes protection measures for all foreseen situations in the environmental provisions.</p> <p>More specifically, there is a Check List which is included in the general Action Plan and is applied in all worksites of PATHE project. According to this list, regular inspections are carried out in order to ensure compliance with the environmental terms.</p>



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E.2		A folder with the small modifications of alignment in 91 <sup>st</sup> and 97 <sup>th</sup> km was submitted to EYPE according to article 13 of the JMD No. 11014/703/F104/ 14.3.2003. The E.T. of the project has been modified pursuant to YPEXODE/EYPE document referenced 140792/12-06-2009.
E.3		If the Environmental Terms of the present JMD are amended based on new scientific and technical data in the field of environmental protection or for any other reason, the Joint Venture shall lawfully comply with the new terms pursuant the law.
E.4		The term for the EIA is applied to the Joint Venture's offices, while a series of the approved designs EIA and STIS that concern the project along with the respective approvals has been sent to the site offices in Thiva.
E.5		Based on the groups of similar construction works as arranged and the expenses estimated separately for each group, the required percentage of the total budget of the design/construction for works that are necessary for the full compliance with the Environmental Terms and restrictions of the present JMD, has been ensured by priority.



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**KASTRO - TRAGANA**

**(JMD 33838/94/10.07.1995, JMD 103909/12.05.2006  
and JMD 139132/30.04.2009)**



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S/N	SUBJECT	PROGRESS DESCRIPTION – PROBLEMS
<b>A.</b>	<b>Permits / Approvals</b>	
A.1	Approvals - permits for any activity or installation is required for the construction	<p>The procedures to obtain an environmental permit and other approvals are being followed.</p> <p>Pursuant to JMD with P.N. 139132/30/4/2009 and the existing environmental legislation, the environmental approvals are granted upon the submission &amp; approval of the relevant STIS by EYPE/YPEXODE.</p> <p>In this section of PATHE, where only optimizations of the pavement are foreseen, STIS for the permit of asphalt layering unit in Martino, in K.P. 117+000 (P.N. 4412/04-08-08) has been submitted to EYPE. The approval of this study has been performed as mentioned in EYPE document referenced 139132/30.4.2009. The approval was included in the relevant amendment of E.T. of this section.</p>
A.2	Archaeological Services	The term on the notification to the archaeological service concerns the old project, since in the present phase of works no excavation or other works requiring the supervision of archaeological services, will be performed.
A.3	Worksite layout planning	In this PATHE section, where only optimizations of the pavement are foreseen, a STIS has been submitted to EYPE to obtain permit for the spatial planning of the asphalt layering unit in Martino, in CH. 117+000 (ref. no. 4412/04-08-08). The approval of this design has been implemented as mentioned in EYPE document referenced 139132/30.4.2009.
A.4	Interventions in infrastructure works	The term on the cooperation with the competent authorities concerns the old project. If intervention or amendment of the existing infrastructure works is required during the present phase of works, it will be performed in cooperation with the competent authorities.
<b>B.</b>	<b>Design-related Issues</b>	
B.1	Hydraulics Studies	The term on insuring the smooth flow of the surface waters concerns the old project and has been followed. Regarding the referenced period no hydraulic designs have been submitted for this subsection.
B.2	Landscaping Studies	The relevant landscaping designs as well as the final irrigation designs have been assigned and are currently being drawn up. Regarding the landscaping and irrigation designs for the said period of the



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S/N	SUBJECT	PROGRESS DESCRIPTION – PROBLEMS
		report, the following have not been submitted for this section.
<b>C.</b>	<b>Construction Issues</b>	
C.1	MSS - Parking spaces	Once the locations of the Motorists Service Stations and parking areas are finalized, those provided in the relevant environmental area will be implemented.
C.2	Borrow pits – Quarries	The term for the additional materials concerns the old project, since in the present phase no excavations will be performed in this section.
C.3	Disposal pits	The term of disposal of inappropriate excavation products concerns the old project, since in the present phase no excavations will be performed in this section. As far as the construction of tolls, no excess materials, which a disposal pit will be necessary for, are expected. In case of redundancy of materials from the constructional activity, care will be taken in order to receive the required permits.
C.4	Use of excess extraction materials	The term for the use of excess excavated materials concerns the old project, since in the present phase no excavations will be performed in this section.
<b>D.</b>	<b>Work-site Management Issues</b>	
D.1	Dust control	<p>Upon receipt of the corresponding environmental permit and in case the proposed worksite of Martinos shall be used for installation of the asphalt complex, it will also be ensured for r the terms and conditions of the said environmental permit to be met.</p> <p>The term regarding the use of mechanical equipment for the retention of dust, concerns the old project.</p> <p>The term for the systematic water spraying of worksite roads, material, etc. concerns the old project and has been met. All the terms and preconditions of this environmental permit will be met in order to avoid increased levels of dust from the construction of tolls and the operation of the bitumen unit.</p> <p>Once the works begin, a general Action Plan for the monitoring of Environmental Terms, which includes protective measures according to the environmental terms, will be implemented.</p> <p>In particular, as far as the dust the following are provided:</p>





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S/N	SUBJECT	PROGRESS DESCRIPTION – PROBLEMS
		<ul style="list-style-type: none"> <li>• Piles of construction materials should be developed only within the enclosed worksites.</li> <li>• Worksite roads should be regularly sprang with water.</li> <li>• The trucks that transfer materials should not be overloaded and all trucks transferring loose materials must be covered.</li> <li>• The section currently operating must be regularly cleaned as trucks that carry materials will use it.</li> </ul>
D.2	Excavations – explosives	At this phase of the works, no excavations or use of explosive materials are foreseen and consequently the relevant Environmental Term of restriction of excavations and use of explosive materials concerns the previous project.
D.3	Solid waste	Through regular inspections and check lists of the Action Plan for monitoring of the E. T., recommendations are carried out when the rational and correct procedures for handling solid waste are not met. After the completion of works, the subcontractor is obliged to deliver the area of works free of waste.
D.4	Materials Combustion	The Environmental Terms Compliance Check List explicitly stipulates that the combustion of materials in the worksite is prohibited. Furthermore, regular inspections are carried out to ensure compliance with the relevant E.T. on materials combustion.
D.5	Liquid waste	<p>JMD 71560/3053/ Official Government Gazette 665/B/85 has been replaced by JMD 98012/2001/96 (Official Government Gazette 40B).</p> <p>A general Environmental Management Plan, which includes the procedure for handling liquid waste in compliance with the respective environmental terms and the applicable legislation, has been drawn up.</p> <p>A record of acceptance documents and the relevant contracts are maintained for this project.</p>
D.6	Worksite installations	After completing the works, in case the proposed worksite at Martino is used for the installation of an asphalt layering unit, the worksite will be fully rehabilitated.
D.7	Noise - Movable noise barriers	<p>The Check List, which is foreseen in the general Action Plan and is implemented in all the worksite areas of PATHE, is implemented including checks and protective measures according to the environmental terms.</p> <p>It is noted that, for the reference period, no construction works are performed in this section.</p>



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		The term on the monitoring of the traffic density regards the operation.
D.8	Fire prevention	Fire protection measures will be taken, as proposed in the relevant STIS submitted to EYPE for Martino worksite.
<b>E.</b>	<b>General Issues</b>	
E.1		The Construction Joint Venture has taken all necessary measures to ensure compliance with the Environmental Terms and to be able to resolve and restore any unfavourable environmental situations.
E.2		Based on the groups of similar construction works as modified and the expenses calculated for each group separately, the required amount for the total budget of the design/construction has already been ensured by priority for all works required to fully comply with the Environmental Terms and restrictions of this JMD. The total expenses for the works of environmental protection are mentioned in the annual progress report of E.T. implementation.
E.3		In this section of the road, no installation of Exploitation & Maintenance Centres (EMC) is foreseen, while these needs will be served by other sections of the motorway where EMC are planned (Kapandriti, Thiva, Atalanti).
E.4		A semi-annual and an annual progress report with the possible problems arising in relation to the environment are submitted to the Ministry. In this section of the road, only maintenance and optimization works will be performed. Therefore, the clarifications of the reports content mainly concern the old project.
E.5		All measures for preventing environmental implications that are proposed in the EIA and that do not contravene this AET, are taken into account.
E.6		
E.7		If the Environmental Terms of this JMD are amended due to developments in the field of the environmental science or any other reason, the Joint Venture shall lawfully comply with the new terms.
E.8		The term for the presence of the EIA is applied to the Joint Venture's offices where the JMD of renewal of AET's effectiveness is also located (P.N. 103909/12-05-2006).



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**TRAGANA - ARKITSA**

**(JMD 36795/94/10.07.1995 & JMD 103910/12.05.2006)**



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S/N	SUBJECT	PROGRESS DESCRIPTION – PROBLEMS
<b>A.</b>	<b>Permits / Approvals</b>	
A.1	Approvals - permits for any activity or installation is required for the construction	The procedures of environmental licensing and other permits and approvals are respected. According to the JMD with Protocol No. 126119/08-02-2007 (total setting of PATHE ancillary works) and the existing environmental legislation, the environmental approvals are given upon submission & approval of the relevant STIS by EYPE/YPEXODE. For all the potential permits that may be required relevant STISs will be elaborated. A folder has been elaborated and approved by EYPE (protocol No. 146696/18-11-2009) for the construction and operation of the foreseen Fire brigade and Police Stations in Atalanti junction.
A.2	Forest areas	The areas where the Fire Fighting Centres and the O&M Centres in Atalanti (CH. 139+150) will be installed, as well as the site offices there (CH.140+400) are located within the expropriated zone, are not categorized as forest areas or areas to be re-forested and currently do not affect trees. Therefore, there is no need for the Forest Service to issue an intervention permit for the said works. If such a need arises, the procedure referred to in the particular environmental term will be followed.
A.3	Archaeological Services	No information to the archaeological service was required for the reference time period.  The layout of the worksite area in Atalanti (CH.140+400) has been planned within the existing expropriation zone in the area of the previous worksite at the Atalanti I/C, which is not located within an archaeological area or in distance less than 200m from it.
A.4	Borrow pits – Quarries	In this section of PATHE, only road improvements are foreseen and no location of worksite facilities is provided, except offices, while the E&M construction has been implemented. The bituminous mixtures and concrete required or needed for the construction - maintenance of asphalt and the E&M construction are provided by an external supplier of an appropriate unit.
A.5	Worksite - Disposal Sites	An area in Atalanti I/C has been chosen as worksite location and is within the expropriation boundaries. The relevant STIS was elaborated and submitted to EYPE with Protocol No. 100432/17.01.08 and the installation of



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S/N	SUBJECT	PROGRESS DESCRIPTION – PROBLEMS
		worksite office has been approved (No. of approval 100432/07.02.08). So far, there is no need to create disposal sites (temporary or permanent) in this section therefore there is no need to plan and approve such sites.
A.6	Interventions in infrastructure works	If in the present phase of works is required to intervene or modify the existing infrastructure works, it will only be conducted in cooperation with the competent authorities.
<b>B</b>	<b>Design-related Issues</b>	
B.1	Hydraulics Studies	The reference to viaduct concerns the old project and has been followed. As far as the Fire fighting, Maintenance and Control Centers of Atalanti (in K.P. 139+150) but also the Worksite Offices of Atalanti (around K.P. 140+400) all the necessary hydraulic works to ensure the smooth flow of waters have been provided in the respective hydraulic designs.
B.2	Landscaping Studies	The final landscaping and irrigation designs have been assigned and are currently being prepared. Regarding the landscape and irrigation designs for the reference time period of the report, no new design has been submitted.
<b>C.</b>	<b>Construction issues</b>	
C.1	Widening	The term for the non-change of the coastline concerns the old project. In the present phase of works no kind of intervention or widening is foreseen in this section.
C.2	Disposal of waste in the sea	Care will be given so that any solid waste is disposed based on the applicable legislation and in any case to avoid temporary or permanent disposal in the sea.
C.3	Conversion of existing passages	At this phase of the works, no interventions in passages are foreseen and consequently the term for the prohibition on the reduction of the road pass dimensions concerns the old project.



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S/N	SUBJECT	PROGRESS DESCRIPTION – PROBLEMS
C.4	MSS - Parking areas	Once the location of the Motorists Service Stations and parking areas are finalized, the Environmental Terms provided will also be ensured.
C.5	Disposal pits	So far, no disposal of materials has been performed in this section. In the event there is such a need, all restrictions set by the Environmental Terms and the applicable legislation will be met.
C.6	Communication between residential areas	The term on the uninterrupted communication between residential areas refers to the old project. When works will begin at this section, traffic management studies will be carried out to ensure uninterrupted operation between the residential areas where the roads pass.
<b>D.</b>	<b>Work-site Management Issues</b>	
D.1	Dust control	In this section of the PATHE Motorway, only improvements to the road surface have been foreseen and no provision has been made for the layout planning of worksite installations. The asphalt mixes required are provided by an external supplier.
		The term for dust control during drilling refers to the old project.
		For the reference period, no construction works have been performed.
D.3	Solid waste	<p>A general Action Plan for the monitoring of Environmental Terms for the entire project of PATHE has been elaborated and is implemented. This Action Plan includes protective measures for all the stipulations of the environmental terms.</p> <p>In particular, the Check List that is foreseen in the general Action Plan and is implemented in all the worksite areas of PATHE project, is applied. In the EMC construction areas urban waste is disposed in bins provided by the local Municipality. Also, for the reference period, no construction works are performed.</p>



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S/N	SUBJECT	PROGRESS DESCRIPTION – PROBLEMS
D.4	Materials Combustion	Regular checks are conducted in order to assure the respect of the said E.T.; no violation of the term is noticed.
D.5	Liquid waste	<p>The JMD 71560/3053/ Official Government Gazette 665/B/85 has been replaced by JMD 98012/2001/96 (Official Government Gazette 40B).</p> <p>A general Environmental Management Plan has been drawn up, which includes the procedure for handling liquid waste in compliance with the respective environmental terms and the applicable legislation.</p> <p>The construction site managers and subcontractors are informed on the progress once the works begin and regular inspections are performed to ensure compliance. In case of failure or partial failure to comply with a term, recommendations for corrective measures are given.</p> <p>Regarding the management of the oils, relevant records with contracts and delivery notes on behalf of licensed bodies are maintained.</p> <p>It should be noted that for the reference period no construction works in the motorway section are performed.</p>
D.6	Worksite installations	<p>After the completion of the works, the worksite installations in Atalanti will be removed and full restoration of the area will be carried out.</p> <p>It has to be noted that, for the reference period, no construction works in the motorway section are performed.</p>
D.7	Noise - Movable noise barriers	<p>Care will be taken in relation to the respect of worksite noise according to the legislation, including the noise deriving from the project's machines, through noise measurement in order to respect the Legislation's levels.</p> <p>The STIS that concerns the sound protection measures of the Special Acoustics Design – Barrier Dimensions for the section of PATHE: METAMORFOSI I/C – MALIAKOS (SKARFIA) &amp; CONNECTING BRANCH SCHIMATARI – CHALKIDA was submitted to EYPE / YPEXODE (Protocol No. 107730/05-09-2008), while it has been approved</p>



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S/N	SUBJECT	PROGRESS DESCRIPTION – PROBLEMS
		<p>with Protocol No. 143730/10-11-2009.</p> <p>In the context of the said STIS that is related to the PATHE Motorway from Metamorfossi to Agios Konstantinos noise measurements to determine the accurate position of the barriers have taken place.</p>
D.8	Fire prevention	Both in vehicles and worksites it has been ensured that the relevant fire fighting means are in good condition and available in emergency situations.
<b>E.</b>	<b>General Issues</b>	
E.1		The Constructing Joint Venture has taken all necessary measures to ensure compliance with the Environmental Terms and to be able to resolve and restore any unfavourable environmental situations. In addition, the J/V checks their implementation in regular periods of time.
E.2		Based on the groups of similar construction works as modified and the expenses calculated for each group separately, the required amount for the total budget of the design/construction has already been ensured by priority for all works that are required to fully comply with the Environmental Terms and restrictions of this Joint Ministerial Decision. A detailed analysis regarding the expenses that are provided for the realization of protection works of the environment is included in the annual progress report on the compliance with the environmental terms.
E.3		The term on systematic monitoring of the Road Traffic Noise concerns the operation.
E.4		At this section of the road, the installation of E&M Centres is foreseen in Atalanti in K.P.139+150. They will serve the needs mentioned in the said environmental term. Furthermore, during the operation, the relevant infrastructure shall be installed there.





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<b>S/N</b>	<b>SUBJECT</b>	<b>PROGRESS DESCRIPTION – PROBLEMS</b>
E.5		The term on the installation of atmospheric pollution stations concerns the operation of the project.
E.6		A semi-annual progress report with the possible problems arising in relation to the environment is submitted to YPEHODE. At this section of the road, however, only maintenance and optimization works will be performed. Therefore the clarifications of the said reports of the specific term mainly concern the old project.
E.7		All measures for preventing environmental implications proposed in the EIA and do not contravene this AET, are taken into account.
E.8		If the environmental terms of this Joint Ministerial Decisions are amended due to developments in the field of the environmental science, the Joint Venture shall lawfully comply with the new terms.
E.9		The term for the protection of the EIA is applied in the J/V's worksite offices where the JMD for the renewal of the validity of AET is located (Protocol No. 103910/12-05-2006).



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**ARKITSA – AG. KONSTANTINOS**

**(JMD 39516/94/10.07.1995 & JMD 103908/12.05.2006)**



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S/N	SUBJECT	PROGRESS DESCRIPTION – PROBLEMS
<b>A.</b>	<b>Permits / Approvals</b>	
A.1	Approvals - permits for any activity or installation is required for the construction	<p>In this section of PATHE Motorway, only improvements to the road surface have been foreseen and no provision has been made for the layout planning of worksite installations. A file has been elaborated and approved by EYPE (Protocol No. 146696/18-11-2009) for the construction and operation of the foreseen toll stations of the section of the motorway, that is the construction of frontal toll stations in Arkitsa, K.P. 150+545 and lateral toll stations in Loggos, K.P. 159+900 and in Arkitsa I/C.</p> <p>During the reference time period, a Folder with J/V. protocol no.</p>
A.2	Forests - Re-forested Areas	<p>The areas where the frontal and lateral toll station of Arkitsa (CH.148+330 and K.P. 150+545 respectively) will be installed, as well as the lateral toll station of Loggos are located within the expropriated zone, are not categorized as forest areas or areas to be re-forested and currently do not affect trees. Lastly, the administration building of the toll stations in Arkitsa (CH.150+547) will be placed in an area that has been additionally expropriated, not characterised as a forest or area for re-forestation. Therefore, there is no need for the Forest Service to issue an intervention permit for the said works. If such a need arises, the procedure referred to in the particular environmental term will be followed.</p> <p>So far there is no need for forestation clearance.</p>
A.3	Archaeological Services	<p>The responsible archaeological services will be timely notified of the commencement of works of the lateral and frontal toll stations in Arkitsa, the administrative building of frontal toll station of Arkitsa and the lateral toll station in Loggos.</p>
A.4	Borrow pits – Quarries	<p>In case there is need for additional materials, the relevant lawful procedure will be followed.</p>



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S/N	SUBJECT	PROGRESS DESCRIPTION – PROBLEMS
A.5	Worksite – Disposal Sites	In this section of PATHE Motorway, where improvements only to the road surface and the installation of toll stations have been foreseen, no provision has been made for the planning of a worksite area. It must be noted that the construction of toll stations may be performed without requiring the creation of fixed site infrastructure.
A.6	Interventions in infrastructure works	The term for the modification of the existing infrastructure works concerns the old project. If in this phase of the works, an intervention or modification is needed in the existing infrastructure works, this will be carried out in cooperation with the responsible authorities.
<b>B</b>	<b>Design-related Issues</b>	
B.1	Hydraulics Studies	The term for the uninterrupted flow of waters concerns the old project. As far as the construction of new toll stations, the respective designs have been elaborated and the uninterrupted flow of waters is not affected.
B.2	Landscaping Studies	The final landscaping and irrigation designs have been assigned and are currently being prepared.
<b>C.</b>	<b>Construction issues</b>	
C.1	Widening	The term on the restriction of any widening refers to the old project.



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S/N	SUBJECT	PROGRESS DESCRIPTION – PROBLEMS
C.2	MSS - Parking areas	Once the location of the Motorists Service Stations and parking areas are finalized, the corresponding environmental term will be implemented.
C.3	Disposal pits	So far, there is no need to create disposal sites (temporary or permanent) in this section of the road therefore there is no need to plan and approve such sites.
C.4	Communication between residential areas	The term on the ensuring of the uninterrupted communication between residential areas refers to the old project. When works will begin at this section, traffic management studies will be carried out to ensure uninterrupted operation between the residential areas where the roads passes.
<b>D.</b>	<b>Work-site Management Issues</b>	
D.1	Dust control	<p>The term for the use of mechanical equipment for the retain of the duct control concerns the old project. Also, it should be noted that currently no construction work is performed in the section.</p> <p>In any case, a general Action Plan for the monitoring of the Environmental Terms of the PATHE Project has been drawn up and has been implemented. This Plan includes protection measures for all foreseen situations in the environmental provisions.</p> <p>In particular, regarding the dust control, the following are provided –where necessary - during the construction of the toll stations:</p> <ul style="list-style-type: none"> <li>• Piles of construction materials to be developed only within the enclosed worksites.</li> <li>• Worksite roads should be regularly sprang with water.</li> <li>• The trucks that transfer materials should not be overloaded and all trucks transferring loose materials should be covered.</li> <li>• The section currently operating to be regularly cleaned if trucks that carry materials use it.</li> </ul>



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S/N	SUBJECT	PROGRESS DESCRIPTION – PROBLEMS
D.2	Solid waste	In this section recommendations will be made via the regular checks and check lists in case the procedures of correct and rational management of solid waste are not followed. Also, currently no construction works are performed.
D.3	Materials Combustion	Before the beginning of works in this section, the Environmental Terms Compliance Check List, which explicitly mentions that the combustion of materials in the worksite is prohibited, will be presented to the supervisory engineers of the Joint Venture and also to the subcontractors, who offer their services to it. Furthermore, regular inspections will be carried out to ensure compliance with the said E.T., among others.
D.4	Liquid waste	<p>JMD 71560/3053/OGG 665/B/85 has been replaced by the JMD 98012/2001/96 (OGG 40B).</p> <p>A general Environmental Management Plan has been drawn up, which includes the procedure for handling liquid waste in compliance with the respective environmental terms and the applicable legislation.</p> <p>After the commencement of the works, regular inspections are performed to ensure compliance. In case of failure or partial failure to comply with a term, recommendations for corrective measures are given.</p>
D.5	Worksite installations	No installation of worksite area is foreseen in this section of the road. In case it is required special care will be taken for the final recovery of the area.
D.6	Noise - Movable noise barriers	Care will be taken in order to follow the limits of worksite noise according to the legislation, including the noise deriving from the project's machines.
D.7	Fire prevention	Both in vehicles and worksite it has been ensured that the relevant fire fighting means are in good condition and available in emergency situations.
<b>E.</b>	<b>General Issues</b>	



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S/N	SUBJECT	PROGRESS DESCRIPTION – PROBLEMS
E.1		Based on the groups of similar construction works as modified and the expenses calculated for each group separately, the required amount for the total budget of the design/construction has already been ensured by priority for all works that are required to fully comply with the Environmental Terms and restrictions of this Joint Ministerial Decision. Reference will be made in the annual progress reports of E.T. compliance.
E.2		The term for the monitoring of the microfauna evolution refers to the operation of the project.
E.3		The term for the annual conduct of noise level refers to the operation of the project.
E.4		The term for the snow clearing, cleaning etc. refers to the operation of the Motorway.
E.5		A semi-annual and annual progress report with the data concerning the environment is submitted to YPEXODE.
E.6		All measures for preventing environmental implications that are proposed in the EIA and that do not contravene this AET, are taken into account.
E.7		A relevant file according to article 13 of JMD 11014/703/Φ104/14.3.2003 for the construction and operation of the foreseen toll stations of this section of the motorway, i.e. the construction of frontal toll station in Arkitsa, in K.P. 150+545 and lateral toll station in Loggos in K.P. 159+900 and in Arkitsa I/C, was submitted and approved by EYPE with Protocol No. 146696/18-11-2009.



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S/N	SUBJECT	PROGRESS DESCRIPTION – PROBLEMS
E.8		If the environmental terms of this Joint Ministerial Decisions are amended due to developments in the field of the environmental science, the Joint Venture shall lawfully comply with the new terms.
E.9		The term on the presence of the Environmental Impact Studies in the offices is implemented in the J/V's offices, where the JMD of renewal of AET (Protocol No. 103908/12-05-2006) is also located.





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OPERATION AND MAINTENANCE PHASE**

**PROJECT: "DESIGN – CONSTRUCTION – FINANCING – OPERATION – MAINTENANCE AND USE OF THE PROJECT  
"IONIA ODOS MOTORWAY FROM ANTIRRIO TO IOANNINA, PATHE ATHENS (METAMORFOSSI I/C) – MALIAKOS  
(SKARFIA) AND CONNECTING BRANCH OF PATHE SCHIMATARI – CHALKIDA"**

**A' SEMESTER 2011**



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**METAMORFOSSI – YLIKI**  
**(JMD 126119/08.02.2007)**



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SECTION:  
METAMORFOSSI – YLIKI

**TABLE FOR THE IMPLEMENTATION OF THE ENVIRONMENTAL TERMS DURING THE OPERATION PHASE**

AET: Prot. No. 126119/08-02-2007

MONTH/YEAR: 07/2011

S/N	ENVIRONMENTAL TERM	ENVIRONMENTAL TERMS : WAYS – METHODS OF ASSESSMENT
<b>A.</b>	<b>Issues of Permits/Approvals</b>	
A.1	Installation permits for any activity or installation required for the operation of the Motorway.	<p>The foreseen - by the current legislation - installation permits for any activity or installation necessary for the operation of the motorway, as well as approvals - including the environmental permit required -, are obtained when needed.</p> <p>The relevant environmental permit shall be obtained by EYPE/YPEXODE for the implementation of any partial additional activity or expansion that is not described in the Environmental Impact Assessment (EIA) and consequently not covered by the Approval of Environmental Terms (AET).</p>
A.2	Ancillary works	<p>The requests for granting environmental permit of the ancillary works are carried out to EYPE/YPEXODE regardless the category they fall, in accordance with the Joint Ministerial Decision No. 16393/2332/5.8.2002.</p> <p>EYPE has licensed, with prot. no. 195827/31-01-2011, six (6) proposed parking areas between Km. 24 and 27 of the said section of PATHE.</p>
A.3	Archaeological Services	<p>The works performed during the reference period in the said section focused on operations of improvement, rehabilitation and widening within the existing expropriation area (there is a positive opinion of the Archaeological Service). Nevertheless, a contact will be held by the competent Departments of Antiquities, where necessary, as happened in previous reference periods.</p> <p>The term regarding the Archaeological services refers to the construction and has been complied with.</p>



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S/N	ENVIRONMENTAL TERM	ENVIRONMENTAL TERMS : WAYS – METHODS OF ASSESSMENT
		<p>The proposed by EIA location for the Motorists Service Stations in Afidnes finally was renounced. The final locations of the Motorists Service Stations for the section 'Metamorfossi - Yliki' are located in Kapandriti I/C and Thiva I/C, while the Management building is planned in Varibobi. Therefore, the ecclesiastic monument is not affected and no measures are required for its protection.</p>
<b>B</b>	<b>Design-related Issues</b>	
B.1	Environmental Impact Studies EIA	<p>Pursuant to the environmental terms and the legislation in force, in case of minor changes or modifications of the project, as described in the Environmental Terms and the EIA, a file should be elaborated pursuant to those set in Article 13 of the JMD 11014/703/F104/14.3.2003.</p>
B.2	Noise Barriers Special Study	<p>The specificity of the noise prevention measures has been specifically studied in accordance with the Technical Specifications (No. Pr. 57728/27-09-2001 Directorate EARTH (Air Pollution and Noise Control) -YPEHODE), approved by EYPE/YPEHODE with the relevant 143730/10-11-2009.</p> <p>This study determines, by using appropriate models and methodologies (according to JMD <b>13586/724 (03.28.2006 OGG 384)</b> and <b>European Directive 2002/49/EC</b>), the type and efficiency of the anti-noise measures (noise barriers), the technical characteristics and their adaptation to the topological characteristics of the region. Their implementation is already in the final stage.</p> <p>Detailed data on the individual noise barriers along PATHE were presented in the Annual Report 2010 of O.K.TH. (Road Traffic Noise) whereby they were determined and the representative positions of the Road Traffic Noise measurements, necessary to monitor the Road Traffic Noise temporal fluctuation.</p> <p>The Special Acoustics Study – Dimensional Barriers has already been submitted and approved by EYPE/YPEHODE (protocol no. 143730/10-11-2009) for the section of PATHE: METAMORFOSSI I/C – MALIAKOS (SKARFIA) &amp; CONNCETING BRANCH SCHIMATARI – CHALKIDA</p> <p>In the context of the said STIS that is related to the PATHE Motorway from Metamorfossi to Agios Konstantinos, noise measurements determining the accurate position of the barriers have taken place.</p>



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S/N	ENVIRONMENTAL TERM	ENVIRONMENTAL TERMS : WAYS – METHODS OF ASSESSMENT
B.3	Technical Report for the Air Pollution Stations	See B.2 for the term regarding the technical report on the air pollution stations
B.4	Special Technical Implementation Study – MSS and Exploitation & Maintenance Centres (EMC)	<p>The responsibility for construction and operation of the MSS will be assigned by the Concessionaire to Contractors. The Environmental Terms of the project shall constitute an integral part of their contractual obligations. On completion of the assignment, the Contractor of each MSS will provide the necessary STIS to fulfilling the condition regarding the Special Technical Implementation Study MSS - EMC.</p> <p>For the EMC of Kapandriti and Thiva the corresponding STIS has been prepared and officially approved by EYPE (with its letter with protocol no.: 144265/22-9-09)</p> <p>The STIS of the General Administration Building of Varibobi has been approved by EYPE with its letter with protocol no.: 196674/25-02-2011</p>
<b>C.</b>	<b>Operation issues</b>	
C.1	Visual Disturbance caused by signs	As defined by the condition regarding the visual disturbance caused by signs, all the promotional posters (billboards) and signs have been removed from the entire length of the Concession Project.
C.2	Special Care for the protection of Antiquities - operation of EMC	Concerning the term on Special Care for the Protection of Antiquities from the operation of the EMC, the location proposed by EIA for EMC in the area of Afidnes was renounced. The locations of the EMC for “Metamorphossi – Yliki” are finalized in Kapandriti I/C and Thiva I/C and the Management building is planned in Varibobi. Therefore, the ecclesiastical monument is not affected and it is not necessary to take measures for its protection.



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S/N	ENVIRONMENTAL TERM	ENVIRONMENTAL TERMS : WAYS – METHODS OF ASSESSMENT
C.3	Pollution due to accident	<p>The Intervention Plan for Emergency Situations has been drawn up by the Concessionaire and constitutes an Annex of the Policing &amp; Fire Fighting Agreement signed with the Ministry of Interior. This plan 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> <p>There is a possibility of accidental fuel leakage from construction machinery, etc. which may result to a direct contamination of water, soil, etc. especially when the quantity is large. In this case, adsorption materials such as sand, chippings or a special geotextile will be used immediately after spillage. Such materials exist in the central worksite for immediate use. Their disposal, in emergency situation, will be carried out in accordance with the instructions for disposing toxic waste.</p>
C.4	Control of air pollution during the operation	<p>The technical report of layout planning &amp; technical specifications of the air pollution and meteorological data stations for PATHE motorway, has been submitted for approval to EYPE (with NEA ODOS S.A. 19155/01-12-2010letter)</p> <p>EYPE/YPEKA agreed with the proposed positions and Technical Specifications of the Stations (with the protocol no.: 195241/12-01-2011 letter).</p> <p>EARTH/YPEKA approved positions and Technical Specifications (with the protocol no.: 185799/8-03-2011)</p> <p>Air Pollution stations will be installed immediately (the selection of the equipment has already been completed in accordance with relevant EU directives and its supply is upon completion), the start-up procedure will be completed and their normal operation will begin by the end of 2011.</p>



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S/N	ENVIRONMENTAL TERM	ENVIRONMENTAL TERMS : WAYS – METHODS OF ASSESSMENT
C.5	Noise during the operation	<p>The monitoring program OKTH OF PATHE Motorway (Metamorphossi - Skarfia) for 2010 has been submitted to the Directorate of EARTH/YPEKA with prot. No. 20448/7-2-2011. The Directorate of EARTH/YPEKA approved the Monitoring Program of Environmental OKTH 2010, with the 186058/31-3-2011 letter.</p> <p>Under this program, the relevant specifications and the locations of the Road Traffic Noise (OKTH) for the recording of the acoustic conditions before and after implementation of the noise barriers at locations inside and outside city plans and at sensitive receivers have been determined. The relevant Inventories of environmental road noise measurements are mentioned in the annual report. Also, processing of noise measurements data are shown in the reports. For the quantitative and qualitative assessment of compliance with the limits - under MD 1725291 – of the maximum allowable noise level of index L10 (18 hours) at the façades of the nearest – to PATHE - residents, extensive acoustic measurements with special mobile measuring stations of statistical analysis noise are conducted. More analytically, the measurements are made in accordance with the approved noise monitoring program, by mobile measuring stations, at a minimum of 2 m. from the facade of the nearest residence. Usually, in order to capture the unfavourable conditions, the measurement is being held closer to the source and to the facade the most exposed one. The program provides full examination on the effectiveness of the implemented noise barriers as well as evaluation of the need to apply additional measures.</p> <p>For the implementation of the above OKTH program, the current MD 17252/91 and the European Directive 2002/49/EC are kept, both in full calculation and evaluation of the new European indicators, Lden &amp; Lnight.</p> <p>The 2011 program is in full progress and its completion is expected within this year; then it will be submitted to the Directorate of EARTH/YPEKA for approval.</p>
C.6	MSS and EMC	<p>The responsibility for the construction and operation of the MSS will be assigned by the Concessionaire to the Contractors. The Environmental Terms of the project shall constitute an integral part of their contractual obligations.</p>



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S/N	ENVIRONMENTAL TERM	ENVIRONMENTAL TERMS : WAYS – METHODS OF ASSESSMENT
C.7	Maintenance of Vegetation	The term which refers to the maintenance of vegetation, is met. The Concessionaire has contracted for the maintenance and management of the vegetation and the plantings with the company SPACON General Engineering Ltd. (day of signature 09.11.2009).
<b>D.</b>	<b>Construction &amp; Maintenance Issues</b>	
D.2	Water flow	The content of paragraph B.2 of the report on the compliance with the Environmental Terms during the Construction Phase is valid for the term regarding the water flow.
D.3	Temporary disposal sites	The temporary disposal sites were selected in rented land, or within limits of expropriation. These are sites where material excavation, aggregate or topsoil storage is carried out. STIS has been submitted for those areas. No temporary disposal is carried out near streams. In any case, during the suspension of the works, there is a systematic monitoring of temporary disposal sites in order to ensure compliance with the Environmental Terms.
D.4	Dust control	<p>An overall Action Plan for monitoring the Environmental Terms of the PATHE Project has been drawn up and is currently being implemented. This Plan includes protection measures for all foreseen situations in the environmental provisions.</p> <p>Inspections are conducted in the areas where construction works are executed and the respective check list is completed. Pursuant to the checks, in case of non respect of the provisions, instructions are given (corrective actions) on the conformance method. The performance of the corrective actions is checked via new inspections based on the check list.</p> <p>In particular for the dust, to date, based on the works which have already started, the following are foreseen and implemented:</p>





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S/N	ENVIRONMENTAL TERM	ENVIRONMENTAL TERMS : WAYS – METHODS OF ASSESSMENT
		<ul style="list-style-type: none"> <li>• Piles of construction materials are developed only within the enclosed worksites.</li> </ul> <p>In addition, special care has been taken into account for at least one sprinkling truck in every worksite, where dust might be released.</p> <p>The trucks that transfer materials should not be overloaded and all trucks transferring loose materials should be covered.</p>
D.6	Materials Combustion	The term which refers to the Materials Combustion is met. The subcontractor of NEA ODOS S.A. (Chr. Keridis S.A.) has a licensed waste collection and the materials are transferred for combustion or use in appropriately licensed premises.
D.7	Liquid waste	<p>A general Environmental Management Plan, which includes procedure ENV-P-01 for handling hazardous liquid waste in compliance with the respective environmental terms and the applicable legislation, has been drawn up, submitted and is being implemented. A relevant file with agreements and orders for waste collection of waste management licensed businesses has been created.</p> <p>Inspections are conducted in the areas where construction works are executed and the respective check list is completed. Pursuant to the checks, in case of non respect of the provisions, instructions are given (corrective actions) for the conformance method. The performance of corrective actions is checked via new inspections based on the check list.</p>
D.8	Noise	For the condition relating to noise, See C5
<b>E.</b>	<b>General Issues</b>	
E.1	Obligation to comply with the Environmental Terms	The Environmental Terms of the project are met by all the competent bodies (Construction J/V, Independent Engineer / Concession, etc.)



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S/N	ENVIRONMENTAL TERM	ENVIRONMENTAL TERMS : WAYS – METHODS OF ASSESSMENT
E.2	Check on compliance with the Environmental Terms and monitoring possibility	<p>In the study phase the corresponding environmental protection reports are elaborated where discussed how the requirements of the environmental terms and legislation are incorporated and reflected in the proposed technical solution.</p> <p>In the construction phase a general Action Plan for the monitoring of Environmental Terms for the entire project of PATHE has been elaborated and is implemented. This Action Plan includes protective measures for all the stipulations of the environmental terms.</p> <p>During the operation of the Motorway, the inspection process, which is applied using the relevant Check List in all worksite areas of the PATHE motorway, has been foreseen. According to this checklist, regular inspections are carried out in order to ensure compliance with the environmental terms from which corrective or preventive measures arise.</p>
E.3	Construction and Operation Expenses for the protection of the environment	<p>The required percentage of the total budget of the operation/maintenance works that are necessary for the full compliance with the Environmental Terms and restrictions of the present JMD, has been ensured by priority.</p> <p>A detailed analysis regarding the expenses that are provided for the realization of protection works of the environment is included in the annual progress report on the compliance with the environmental terms.</p>
E.4	Concessionaire's Service for Environment	<p>The Concessionaire has created a special department for Environment, which is responsible for the control and the compliance with the Environmental Terms along the Motorway from Metamorfossi I/C to Skarfia. Also, the department collaborates with a special advisor in order to form a group of scientists, which shall cover the whole range of environment, consisted by: Civil Engineer, Biologist, Forester, Environmentalist, Topographer and Geologist, in order to fully cover the supervision needs of the Environmental Terms of the entire project. See Attached Organization Chart of the Environmental Department – Sector Operation &amp; Maintenance</p>
E.5	Manual for the specifications on the	<p>Under the relevant environmental term, a manual on compliance specifications is required, which is under</p>



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S/N	ENVIRONMENTAL TERM	ENVIRONMENTAL TERMS : WAYS – METHODS OF ASSESSMENT
	Environmental Terms compliance	elaboration as an overall action plan.
E.6	Compliance with the Presidential Decree “Kifissos river Protection Zone”	<p>According to this Presidential Decree, the layout planning of any type of worksite installation, storage installation or other installation related to the construction of the project within the boundaries of Kifissos river Protection Zone and its surrounding streams as well as any type of water contamination or environment pollution is strictly prohibited.</p> <p>This requirement has been taken into account and no worksite area within this zone has been planned.</p> <p>It has to be noted that:</p> <p>Pursuant to Article 4, Paragraph 5 of Law 3555 (ratified law of the CA), the P.D. on the protection of Kifissos River (OGG 632D/27-6-94) cannot be implemented for the creation of the MSS, Toll Stations and EMC facilities.</p>
E.7	Submission of annual report to EYPE	The term pursuant to which the Submission of the Annual Report to EYPE is required, is met. The annual report for 2010 has been submitted to EYPE with NEA ODOS S.A. letter no. 21568/24-3-2011
E.8	Reports Transmission to the competent bodies	The term regarding the transmission of reports to the competent bodies is met. The report is posted on the website of NEA ODOS S.A., <a href="http://www.neaodos.gr">www.neaodos.gr</a>
E.9	E.T. controllability by the competent authorities	<p>The annual and semi-annual periodic reports on compliance with the environmental terms are notified to the competent authorities for possible inspections, as set by the relevant term, and are published on the Concessionaire’s website. At the same time, the person responsible on behalf of the Concessionaire facilitates any inspections to ensure compliance with these terms.</p> <p>The EIAs are in the Concessionaire’s Headquarters</p>
E.10	Project Environmental Terms Validity	If the environmental terms of this Joint Ministerial Decisions are amended based on new scientific and technical data in the field of environment protection or for any other reason, the Joint Venture shall lawfully comply with



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		the new terms. The Environmental Terms are in force.
E.11	Measures for preventing environmental implications of the EIA and AET	The measures for preventing environmental implications that are proposed in the EIA and that do not contravene this AET, are taken into account.



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**YLIKI – KASTRO**

**(JMD 36118/94/10.07.1995, JMD 101617/22.09.2006 &  
JMD 140792/12.06.2009)**



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SECTION:  
YLIKI - KASTRO

**TABLE FOR THE IMPLEMENTATION OF THE ENVIRONMENTAL TERMS DURING THE  
OPERATION PHASE**

AET:  
Prot. No. 140792/12-07-2009  
Prot. No. 101617/22-09-2006  
& Prot. No. 36118/94/10-07-1995

MONTH/YEAR: 07/2011



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S/N	ENVIRONMENTAL TERM	ENVIRONMENTAL TERMS : WAYS – METHODS OF ASSESSMENT
<b>A.</b>	<b>Permits/Approvals</b>	
A.1	Installation permits for any activity or installation required for the operation of the Motorway.	The foreseen - by the current legislation - installation permits for any activity or installation necessary for the operation of the motorway, as well as approvals - including the environmental permit required -, are obtained when needed.
A.2	Forest areas	No need for issuance of permit regarding the term on the Forest Areas during the operation phase. If needed in the future, it shall be met.
<b>B.</b>	<b>Design-related Issues</b>	
B.1	Exploitation & Maintenance Centres (EMC) Studies	No EMC construction in Kastro I/C is foreseen.
<b>C.</b>	<b>Construction and Operation Issues</b>	
C.1	Infrastructure worksite	Nine (9) total stations of snow removal are environmentally licensed (with the protocol no. 122399/1-4-2010 of EYPE) along the Motorway. The installed and operating stations are located in the areas of Malakassa, Schimatari, Akrefnio, Martinos and Tragana.  The Concessionaire has signed a contract with the company "Chr. Keridis S.A." for the motorway cleaning and waste harvesting.
C.2	Traffic Noise	The monitoring program OKTH OF PATHE Motorway (Metamorphossi - Skarfia) for 2010 has been submitted to the Directorate of EARTH/YPEKA with prot. No. 20448/7-2-2011. The Directorate of EARTH/YPEKA approved via the 186058/31-3-2011 letter the Monitoring Program of Environmental OKTH 2010. Under this program, the relevant specifications and the locations of the Road Traffic Noise (OKTH) for the recording of the acoustic conditions before and after implementation of the noise barriers at locations inside



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S/N	ENVIRONMENTAL TERM	ENVIRONMENTAL TERMS : WAYS – METHODS OF ASSESSMENT
		<p>and outside city plans and at sensitive receivers have been determined. The relevant Inventories of environmental road noise measurements are mentioned in the annual report. Also, processing of noise measurements data are shown in the reports. For the quantitative and qualitative assessment of compliance with the limits - under MD 1725291 – of the maximum allowable noise level of index L10 (18 hours) at the façades of the nearest – to PATHE - residents, extensive acoustic measurements with special mobile measuring stations of statistical analysis noise are conducted. More analytically the measurements are made in accordance with the approved noise monitoring program, by mobile measuring stations, at a minimum of 2 m. from the facade of the nearest residence. Usually, in order to capture the unfavourable conditions, the measurement is being made closer to the source and to the most exposed facade. The program provides full examination on the effectiveness of the implemented noise barriers as well as evaluation of the need to apply additional measures.</p> <p>In order for the above OKTH program to be implemented, both the current MD 17252/91 and the European Directive 2002/49/EC are kept in full calculation and evaluation of the new European indicators, Lden &amp; Ln1ght. The 2011 program is in full development and its completion is expected within the current year and will then be submitted to EARTH/YPEKA for approval.</p>
<b>D.</b>	<b>Work-site Management and Maintenance Issues</b>	
D.1	Water flow protection	<p>The terms and restrictions set by the said Joint Ministerial Decision on the protection of the waters used for the irrigation of the capital area from contamination and infection are taken into account, as described in various parts of this report.</p>
D.2	Liquid waste	<p>A general Environmental Management Plan, which includes the procedure for handling liquid waste in compliance with the respective environmental terms and the applicable legislation, has been drawn up.</p> <p>The Joint Ministerial Decision 71560/3053/ Official Government Gazette 665/B/85 has been replaced by Joint Ministerial Decision 98012/2001/96 (Official Gazette 40B).</p> <p>In any case, regular checks are performed for the respect of the restriction and correct management of oils pursuant to the legislation, via inspections and questionnaire filling. The management of oils is conducted via licensed bodies, while the relevant file of acceptance documents and agreements is kept.</p>





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S/N	ENVIRONMENTAL TERM	ENVIRONMENTAL TERMS : WAYS – METHODS OF ASSESSMENT
D.3	Solid waste	Recommendations, through regular inspections and check lists, are made when the rational and correct procedures for handling solid waste are not met. The immediate compliance with the stipulations of the Environmental Management Plan for the correct practice in waste management is checked. The subcontractor of Nea Odos S.A. (Chr. Keridis S.A.) disposes a permit on the collection of waste and the materials are transferred in appropriate licensed areas for combustion or for other use.
D.4	Fire prevention	It has been ensured that, both for vehicles and project machines as well as in the worksite, the relevant fire fighting means are in good condition and available for use in emergency situations.
<b>E.</b>	<b>General Issues</b>	
E.1	Obligation to comply with the Environmental Terms	The Environmental Terms of the project are obligatorily met by all the competent bodies (Construction J/V, Independent Engineer/Concession, etc.) as set by the term on the Compliance of the Environmental Terms.
E.2	Check on compliance with the Environmental Terms and monitoring possibility	<p>A general Action Plan for the monitoring of Environmental Terms for the entire project of PATHE has been elaborated and is implemented. This Action Plan includes protective measures for all the stipulations of the environmental terms.</p> <p>More specifically, a Check List, which is provided in the Action Plan and is applied in all worksite areas of the PATHE motorway, has been completed. According to this checklist, regular inspections are carried out in order to ensure compliance with the environmental terms from which corrective or preventive measures arise.</p>
E.3	Construction and Operation Expenses for the protection of the environment	<p>The required percentage of the total budget of the motorway operation/maintenance which is necessary for the full compliance with the Environmental Terms and restrictions of the present JMD, has been ensured by priority.</p> <p>A detailed analysis regarding the expenses is included in the annual progress report on the compliance with the environmental terms.</p>



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<b>S/N</b>	<b>ENVIRONMENTAL TERM</b>	<b>ENVIRONMENTAL TERMS : WAYS – METHODS OF ASSESSMENT</b>
E.4	Reports Transmission to the competent bodies	The term regarding the transmission of reports to the competent bodies is met. The annual report for 2010 has been submitted to EYPE with NEA ODOS S.A. letter with Protocol No. 21568/24-3-2011.
E.5	Project Environmental Terms Validity	<p>The Environmental Terms are in force.</p> <p>If the environmental terms of this Joint Ministerial Decisions are amended due to the new scientific and technical data in the field of environment protection or due to any other reason, the Joint Venture shall lawfully comply with the new terms.</p> <p>The EIAs and the Environmental Terms Decisions are kept at the Concessionaire's offices.</p>



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**KASTRO - TRAGANA**

**(JMD 33838/94/10.07.1995, JMD 103909/12.05.2006  
and JMD 139132/30.04.2009)**



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SECTION:  
KASTRO - TRAGANA

**TABLE FOR THE IMPLEMENTATION OF THE ENVIRONMENTAL TERMS DURING THE  
OPERATION PHASE**

AET:  
TIME EXTENSION WITH  
Prot. No. 103909/12-05-2006  
AND AMENDMENT  
Prot. No. 139132/30-04-2009

MONTH/YEAR: 07/2011



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S/N	ENVIRONMENTAL TERM	ENVIRONMENTAL TERMS : WAYS – METHODS OF ASSESSMENT
<b>A.</b>	<b>Permits/Approvals</b>	
A.1	Installation permits for any activity or installation required for the operation of the Motorway	The procedures regarding the environmental permit and other permits or approvals are being followed.
<b>B.</b>	<b>Operation Issues</b>	
B.1	MSS - Parking areas	Once the locations of the Motorists Service Stations and parking areas are finalized, the corresponding environmental term will be implemented.
B.2	Traffic Volume	The term for the additional excavator materials concerns the old project, since in the present phase no excavations will be performed in this section.
B.3	Infrastructure Worksite	<p>Nine (9) total stations of snow removal environmentally licensed (with the protocol no. 122399/1-4-2010 of EYPE) along the Motorway. The installed and operating stations are located in the areas of Malakassa, Schimatari, Akrefnio, Martinos and Tragana.</p> <p>The Concessionaire has signed a contract with the company "Chr. Keridis S.A." for motorway cleaning and waste harvesting.</p>
B.4	Traffic Noise	<p>The monitoring program OKTH of PATHE Motorway (Metamorphossi - Skarfia) for 2010 has been submitted to the Directorate of EARTH/YPEKA with prot. No. 20448/7-2-2011. The Directorate of EARTH/YPEKA approved the Monitoring Program of Environmental OKTH 2010, with the 186058/31-3-2011 letter.</p> <p>Under this program, the relevant specifications and the locations of the Road Traffic Noise (OKTH) for the recording of the acoustic conditions before and after implementation of the noise barriers at locations inside and outside city plans and at sensitive receivers have been determined. The relevant Inventories of environmental road noise measurements are mentioned in the annual report. Also, processing of noise measurements data are shown in the reports. For the quantitative and qualitative assessment of compliance with the limits - under MD 1725291 – of the maximum allowable noise level of index L10 (18 hours) at the façades of the nearest – to PATHE - residents, extensive acoustic measurements with special mobile measuring stations of statistical analysis noise are conducted. More analytically the measurements are made in accordance with the approved noise monitoring program, by mobile measuring stations, at a minimum of 2 m. from the facade of the nearest residence. Usually, in order to capture the unfavourable conditions, the</p>



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		<p>measurement is being made closer to the source and the facade the most exposed one. The program provides full examination on the effectiveness of the implemented noise barriers as well as evaluation of the need to apply additional measures.</p> <p>In order for the above OKTH program to be implemented, both the current MD 17252/91 and the European Directive 2002/49/EC are kept in full calculation and evaluation of the new European indicators, Lden &amp; Lnight.</p> <p>The 2011 program is in full development and its completion is expected within the current year and will then be submitted to EARTH/YPEKA for approval.</p>
B.5	Air pollution during the operation	<p>The technical report on the layout planning location and technical specifications of the air pollution and meteorological monitoring stations for PATHE motorway was submitted for approval to EYPE (with a Ref 19155/01-12-2010 document of NEA ODOS S.A.).</p> <p>EYPE/YPEKA agreed with the proposed positions and the Technical Specifications of the Stations (with the protocol no.: 195241/12-01-2011 letter).</p> <p>EARTH/YPEKA directorate approved the positions and the Technical Specifications (with the protocol no.: 185799/8-03-2011</p> <p>It is provided for the Air Pollution stations a) to be installed immediately (the selection of the equipment has been already completed in accordance with the relevant EU directives and its supply is upon completion), b) the start-up procedure to be completed and c) their normal operation to start by the end of 2011.</p>
B.6	Liquid Waste generated by the operation	<p>A general Environmental Management Plan, which includes procedure ENV-P-01 for handling hazardous liquid waste in compliance with the respective environmental terms and the applicable legislation, has been drawn up, submitted and is being implemented. A relevant file with agreements and orders for waste collection of waste management licensed businesses has been created.</p> <p>Inspections are conducted in the areas where construction works are executed and the respective check list is completed. Pursuant to the checks, in case of non respect of the provisions, instructions are given (corrective actions) for the conformance method. The performance of corrective actions is checked via new inspections based on the check list.</p>



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S/N	ENVIRONMENTAL TERM	ENVIRONMENTAL TERMS : WAYS – METHODS OF ASSESSMENT
<b>D.</b>	<b>Construction and Maintenance Issues</b>	
D.1	Waste Management	Recommendations, through regular inspections and check lists, are made when the rational and correct procedures for handling solid waste are not met. After the completion of works, the subcontractor is obliged to deliver the area of works free of waste. The subcontractor of Nea Odos S.A. (Chr. Keridis S.A.) disposes a permit on the collection of waste and the materials are transferred in appropriate licensed areas for combustion or for other use.
D.2	Materials Combustion	The Environmental Terms Compliance Check List, which explicitly reports that the combustion of materials in the worksite is prohibited. Furthermore, regular inspections are carried out in order to ensure compliance with the said E.T. The subcontractor of NEA ODOS S.A. (Chr. Keridis S.A.) disposes a license on waste collection and the materials are transferred for combustion or for other use in appropriately licensed spaces.
D.3	Waters and soil protection from the maintenance	The JMD 71560/3053/OGG 665/B/85 has been replaced with the JMD 98012/2001/96 (OGG 40B). An overall Environmental Management Plan has been prepared, where the procedure on the waste management pursuant to the environmental terms and the current legislation is included. Receipt documents of that kind of waste and the relevant agreements are filed.
<b>E.</b>	<b>General Issues</b>	
E.1	Obligation to comply with the Environmental Terms	The Environmental Terms of the project are met by all the competent bodies (Construction J/V, Independent Engineer/Concession, etc.)
E.2	Check on compliance with the Environmental Terms and monitoring possibility	The Concessionaire has taken all necessary measures to ensure compliance with the Environmental Terms and to be able to resolve and restore any unfavourable environmental situations.
E.3	Construction and Operation Expenses for the protection of the environment	The required percentage of the total budget of the motorway operation & maintenance works for the full compliance with the Environmental Terms and restrictions of the present JMD, has been ensured by priority. A detailed analysis regarding the expenses that are provided for the realization of protection works of the



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		environment is included in the annual progress report on the compliance with the environmental terms.
E.4	Submission of annual report to EYPE	An annual or semi-annual report on progress works and on possible problems raised in regard to the environment is submitted to YPEHODE. Only maintenance and improvement works shall be executed on the said section of the road, thus the partial explanations on the content of the said reports of the specific term refer mainly to the old project.
E.5	Measures for preventing implications of EIA and AET	All measures for preventing environmental implications that are proposed in the EIA and that do not contravene this AET, are taken into account.
E.6	Modification of the Environmental Terms to change the project Basic Characteristics	A File pursuant to Article 13 of the JMD 11014/703/F104/14.3.2003 on the renewal of the Project's E.T. has been submitted, for further construction of the Parking Areas along the Motorway with J/V protocol no. 30648/29-10-2010.
E.8	Modification of the current infrastructure projects	In case it is necessary, the relevant procedures relating to the condition for Modification of the current projects shall initiate.
E.9	Project Environmental Terms Validity	The terms are in force.
E.10	Modification of the Environmental Terms	If, because of evolutions on the environmental sector or for any other reason, the Environmental Terms of the present JMD are amended, the Joint Venture shall comply with the new terms under the Law.
E.11	E.T. controllability by the competent authorities	The term is met.





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**TRAGANA - ARKITSA**

**(JMD 36795/94/10.07.1995 & JMD 103910/12.05.2006)**



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SECTION:

TRAGANA - ARKITSA

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AET:

Protocol No. 36759/94/10-7-1995

& TIME EXTENSION WITH

Prot. No. 103910/12-05-2006

MONTH/YEAR: 07/2011

S/N	ENVIRONMENTAL TERM	ENVIRONMENTAL TERMS : WAYS – METHODS OF ASSESSMENT
<b>A.</b>	<b>Permits / Approvals</b>	
A.1	Installation permits for any activity or installation required for the operation of the Motorway	The procedures regarding the environmental permit and other permits or approvals are being followed.
<b>B</b>	<b>Operation-related Issues</b>	
B.1	MSS – Parking Spaces	Once the location of the Motorists Service Stations and parking areas are finalized, the corresponding environmental term will be implemented.
B.2	Traffic volume	A daily monitoring of traffic volumes at crossings from Tragana toll station. Appropriate facilities (loops) shall be placed in five points of this section.
B.3	Infrastructure Worksite	Pursuant to the term on the infrastructure worksite, the construction of MSS has been realized in an expropriated area in Atalanti I/C which, in conjunction with the MSS of Thiva and Kapandriti, serves the entire Motorway from Metamorfossi to Agios Konstantinos.
B.4	Traffic Noise	<p>The specificity of the noise prevention measures has been specifically studied in accordance with the Technical Specifications (No. Pr. 57728/27-09-2001 Directorate EARTH (Air Pollution and Noise Control) -YPEHODE), approved by EYPE/YPEHODE with the relevant 143730/10-11-2009.</p> <p>This study determines, by using appropriate models and methodologies (according to JMD <b>13586/724 (28.03.2006 OGG 384)</b> and <b>European Directive 2002/49/EC</b>), the type and efficiency of the anti-noise measures (noise barriers), the technical characteristics and their adaptation to the topological characteristics of the region. Their implementation is already in the final stage.</p>



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		<p>Details on the individual noise barriers along PATHE were presented in the Annual Report 2010 of O.K.TH. (Road Traffic Noise) whereby the representative positions of the Road Traffic Noise measurements, necessary to monitor the Road Traffic Noise temporal fluctuation, were also determined.</p> <p>The OKTH monitoring program of PATHE Motorway (Metamorfossi - Skarfia) for 2010 has been submitted to EYPE/YPEHODE with protocol no. 20448/7-2-2011. EARTH/YPEKA approved the Monitoring Program of environmental OKTH 2010, with its letter with protocol no. 186058/31-3-2011.</p> <p>In the context of the said program, the relevant specifications and the Road Traffic Noise (OKTH) for the recording of the acoustic conditions before and after the implementation of the noise barriers at locations inside and outside the city plans and in sensitive receivers have been determined. The related measuring environmental road noise Reports are mentioned in the annual report. Also, processed data from the noise measurements are shown in the reports. For the quantitative and qualitative assessment of compliance with the - under MD 1725291 -maximum allowable noise level of the index L10 (18 hours) façade - closest to the PATHE - houses, extensive acoustic measurements with special mobile measuring stations of noise statistical analysis are made. In detail, the measurements are made, in accordance with the approved noise monitoring program, with mobile measuring stations a minimum 2 feet from the facade of the nearest residence. Usually, in order to ensure adverse conditions, the measurement is made closer to the source and to the most exposed facade. The program provides full investigation of the effectiveness of the implemented noise barriers and evaluation of the need to apply additional measures.</p> <p>For the implementation of the above OKTH program, both the current RM 17252/91 and the European Directive 2002/49/EC are kept in full calculation and evaluation of the new European indicators, Lden &amp; Lnight.</p> <p>The 2011 program is in full evolution and is expected to be completed within this year and will then be submitted to the directorate of EARTH/YPEKA for approval.</p>
B.5	Air Pollution during the operation	<p>The technical report of layout planning &amp; technical specifications of the air pollution and meteorological data stations for PATHE motorway, has been submitted for approval to EYPE (with NEA ODOS S.A. 19155/01-12-2010letter)</p> <p>EYPE/YPEKA agreed with the proposed positions and Technical Specifications of the Stations (with the protocol</p>



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		<p>no.: 195241/12-01-2011 letter).</p> <p>EARTH/YPEKA approved positions and Technical Specifications (with the protocol no.: 185799/8-03-2011)</p> <p>Air Pollution stations will be installed immediately (the selection of the equipment has already been completed in accordance with relevant EU directives and its supply is upon completion), the start-up procedure will be completed and their normal operation will begin by the end of 2011.</p>
B.6	Liquid Waste generated by the operation	<p>A general Environmental Management Plan, which includes procedure ENV-P-01 for handling hazardous liquid waste in compliance with the respective environmental terms and the applicable legislation, has been drawn up, submitted and is being implemented. A relevant file with agreements and orders for waste collection of waste management licensed businesses has been created.</p> <p>Inspections are conducted in the areas where construction works are executed and the respective check list is completed. Pursuant to the checks, in case of non respect of the provisions, instructions are given (corrective actions) for the conformance method. The performance of corrective actions is checked via new inspections based on the check list.</p>
<b>C.</b>	<b>Construction and Maintenance issues</b>	
C.1	Coastal Environment Protection	Care will be taken so that any solid waste to be disposed under the current legislation and in case of non temporary or permanent disposal at the sea.
C.2	Waste management generated by the maintenance	<p>An overall Action Plan for monitoring the Environmental Terms of the PATHE Project has been drawn up and is currently being implemented. This Plan includes protection measures for all foreseen situations in the environmental provisions.</p> <p>More specifically, the Check List, which is foreseen in the Action Plan and implemented along PATHE, is being applied. The subcontractor of Nea Odos S.A. (Chr. Keridis S.A.) disposes a permit on the collection of waste and the materials are transferred for combustion or for other use in appropriate licensed areas.</p>



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C.3	Materials Combustion	Regular controls are conducted in order to assure the compliance with the E.T.; no violation of the term is noticed.
C.4	Waters and soil protection from the construction and maintenance	<p>An overall Environmental Management Plan has been prepared, where the procedure on the waste management pursuant to the environmental terms and the current legislation is included.</p> <p>Receipt documents of that kind of waste and the relevant agreements are filed.</p> <p>On the commencement of the works, the heads of the worksite and the subcontractor are informed; regular checks on the compliance, among others, are held. In cases of non or partial compliance with the term, recommendations for corrective actions are made.</p> <p>A relevant file with contracts and delivery notes of licensed operators for oil management is kept.</p>
C.5	Disposal pits	So far, no disposal of materials has been performed in this section. In the event there is such a need, all restrictions set by the Environmental Terms and the applicable legislation will be met.
C.6	Fire Prevention	The term regarding the fire safety for the MSS construction in Atalanti I/C has been taken into account; it will also be implemented for the construction of the toll stations.
<b>D.</b>	<b>General Issues</b>	
D.1	Obligation to comply with the Environmental Terms	The Environmental Terms of the project are met by all the competent bodies (Construction J/V, Independent Engineer/Concession, etc.)
D.2	Check on compliance with the Environmental Terms and monitoring possibility	The Concessionaire has taken all necessary measures to ensure compliance with the Environmental Terms and to be able to resolve and restore any unfavourable environmental situations.



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S/N	ENVIRONMENTAL TERM	ENVIRONMENTAL TERMS : WAYS – METHODS OF ASSESSMENT
D.3	Operation Expenses for the protection of the environment	The expenses for the protection and operation of the project are ensured by priority for the environmental protection projects, under the contractual obligations of the Concessionaire and the Construction J/V.
D.4	Submission of annual report to EYPE	A semi-annual and an annual progress report with the possible problems arising in relation to the environment are submitted to the Ministry. In this section of the road, only maintenance and optimization works will be performed. Therefore, the clarifications on the content of the reports mainly concern the old project.
D.5	Compliance with the environmental terms and the EIA proposed ones that do not contravene the AET	All measures for preventing environmental implications proposed in the EIA and not contravening this AET, are taken into account.
D.6	Environmental Terms Amendment for change of the Project's Basic Characteristics	Pursuant to Article 13 of the JMD 11014/703/F104/14.3.2003, no file elaboration or new decision of environmental terms approval is required
D.7	Specially protected zones - areas	All appropriate protection measures set out by the Environmental Term for the specially protected zones – areas are taken.
D.8	Project Environmental Terms Validity	The Environmental Terms are in force.
D.9	Amendment of the Environmental Terms	If the Environmental Terms of this JMD are amended due to developments in the field of the environmental science or for any other reason, the Joint Venture shall lawfully comply with the new terms.
D.10	E.T. controllability by the competent authorities	The Term is met.



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## **ARKITSA – AG. KONSTANTINOS**

**(JMD 39516/94/10.07.1995 & JMD 103908/12.05.2006)**

SECTION:

ARKITSA – AG. KONSTANTINOS

**TABLE FOR THE IMPLEMENTATION OF THE ENVIRONMENTAL TERMS DURING THE  
OPERATION PHASE**

AET:

Protocol No. 39516/94/10-7-1995

& TIME EXTENSION WITH

Prot. No. 103908/12-05-2006

MONTH/YEAR: 07/2011



S/N	ENVIRONMENTAL TERM	ENVIRONMENTAL TERMS : WAYS – METHODS OF ASSESSMENT
<b>A.</b>	<b>Permits / Approvals</b>	
A.1	Installation permits for any activity or installation required for the operation of the Motorway	The procedures regarding the environmental permit and other permits or approvals are being followed.
<b>B</b>	<b>Design-related Issues</b>	
B.1	Parking Spaces	Once the location of the Motorists Service Stations and parking areas are finalized, the corresponding environmental term will be implemented.
B.2	Traffic volume	The technical specifications are under completion in order for the “pilot” program to be implemented.
B.3	Traffic Noise	<p>The OKTH monitoring program of PATHE Motorway (Metamorfossi - Skarfia) for 2010 has been submitted to EYPE/YPEHODE with protocol no. 20448/7-2-2011. EARTH/YPEKA approved the Monitoring Program of environmental OKTH 2010, with its letter with protocol no. 186058/31-3-2011.</p> <p>In the context of the said program, the relevant specifications and the Road Traffic Noise (OKTH) for the recording of the acoustic conditions before and after the implementation of the noise barriers at locations inside and outside the city plans and in sensitive receivers have been determined. The related measuring environmental road noise Reports are mentioned in the annual report. Also, processed data from the noise measurements are shown in the reports. For the quantitative and qualitative assessment of compliance with the - under MD 1725291 - maximum allowable noise level of the index L10 (18 hours) façade - closest to the PATHE - houses, extensive acoustic measurements with special mobile measuring stations of noise statistical analysis are made. In detail, the measurements are made, in accordance with the approved noise monitoring program, with mobile measuring stations at a minimum of 2 m. from the facade of the nearest residence. Usually, in order to ensure adverse conditions, the measurement is made closer to the source and to the most exposed facade. The program provides full investigation of the effectiveness of the implemented noise barriers and</p>

S/N	ENVIRONMENTAL TERM	ENVIRONMENTAL TERMS : WAYS – METHODS OF ASSESSMENT
		<p>evaluation of the need to apply additional measures.</p> <p>For the implementation of the above OKTH program, both the current RM 17252/91 and the European Directive 2002/49/EC are kept in full calculation and evaluation of the new European indicators, Lden &amp; Lnight.</p> <p>The 2011 program is in full evolution and is expected to be completed within this year and will then be submitted to the directorate of EARTH/YPEKA for approval.</p>
B.4	Infrastructure Worksite	<p>Nine (9) total stations of snow removal have been environmentally licensed (with the protocol no. 122399/1-4-2010 of EYPE) along the Motorway. The installed and operating stations located in the areas of Malakassa, Schimatari, Akrefnio, Martinos and Tragana.</p> <p>The Concessionaire has signed a contract with the company "Chr. Keridis S.A." for the motorway cleaning and harvesting waste.</p>
B.5	Air Pollution during the operation	<p>The technical report of layout planning &amp; technical specifications of the air pollution and meteorological stations for PATHE motorway, has been submitted for approval to EYPE (with NEA ODOS S.A. 19155/01-12-2010 letter)</p> <p>EYPE/YPEKA agreed with the proposed positions and Technical Specifications of the Stations (with the protocol no.: 195241/12-01-2011 letter).</p> <p>EARTH/YPEKA approved positions and Technical Specifications (with the protocol no.: 185799/8-03-2011)</p> <p>Air Pollution stations will be installed immediately (the selection of the equipment has already been completed in accordance with relevant EU directives and its supply is upon completion), the start-up procedure will be completed and their normal operation will begin by the end of 2011.</p>
B.6	Liquid Waste generated by the operation	<p>A general Environmental Management Plan, which includes procedure ENV-P-01 for handling hazardous liquid waste in compliance with the respective environmental terms and the applicable legislation, has been drawn up, submitted and is being implemented. A relevant file with agreements and orders for waste collection of waste management licensed businesses has been created.</p> <p>Inspections are conducted in the areas where construction works are executed and the respective check list is completed. Pursuant to the checks, in case of non respect of the provisions, instructions are given (corrective actions) for the conformance method. The performance of</p>

S/N	ENVIRONMENTAL TERM	ENVIRONMENTAL TERMS : WAYS – METHODS OF ASSESSMENT
		corrective actions is checked via new inspections based on the check list.
<b>C.</b>	<b>Construction and Maintenance Issues</b>	
C.1	Waste management caused by the maintenance	The Check List is being implemented; The Check List is foreseen in the Action Plan and is implemented along PATHE, including protection measures for all the corresponding Environmental Terms. The term is met. The Concessionaire has signed a contract with the company "Chr. Keridis S.A." for the motorway cleaning and waste harvesting.
C.2	Materials Combustion	The Check List is being implemented; The Check List is foreseen in the Action Plan and is implemented in all the worksites of PATHE, including protection measures for all the corresponding Environmental Terms and those concerning the Materials Combustion. The subcontractor of NEA ODOS S.A. (Chr. Keridis S.A.) disposes a license on waste collection and the materials are transferred for combustion or other use into appropriate licensed areas.
C.3	Waters and soil protection from the maintenance	An overall Environmental Management Plan has been prepared, where the procedure on the waste management pursuant to the environmental terms and the current legislation is included.
C.4	Disposal pits	No disposal (temporary or permanent) of materials has been performed in the said section because so far there is no need for layout planning and licensing of such sites.
C.5	Fire prevention	It is ensured that both vehicles and worksite are equipped with the relevant fire fighting means, in good condition and available for use.
<b>D.</b>	<b>General Issues</b>	
D.1	Obligation to comply with the Environmental Terms	The Environmental Terms of the project are met by all the competent bodies (Construction J/V, Independent Engineer/Concession, etc.)
D.2	Check on compliance with the Environmental Terms and monitoring possibility	<p>The Concessionaire has taken all necessary measures in order to ensure compliance with the Environmental Terms and to be able to resolve and restore any unfavorable environmental situations.</p> <p>A general Action Plan for the monitoring of Environmental Terms for the entire project of PATHE has been elaborated and is implemented. This Action Plan includes protective measures for all the stipulations of the environmental terms.</p> <p>More specifically, a Check List, which is provided in the Action Plan and</p>

S/N	ENVIRONMENTAL TERM	ENVIRONMENTAL TERMS : WAYS – METHODS OF ASSESSMENT
		is applied in all worksite areas of the PATHE motorway, has been completed. According to this checklist, regular inspections are carried out in order to ensure compliance with the environmental
D.3	Operation Expenses for the protection of the environment	The required percentage of the total budget of the operation and maintenance needed for the total compliance of the environmental terms and restrictions of the present JMD is ensured by priority.
D.4	Submission of annual report to EYPE	A semi-annual and an annual progress report, with the possible problems arising in relation to the environment, are submitted to the Ministry. In this section of the road, only maintenance and optimization works will be performed. Therefore, the clarifications of the reports content mainly concern the old project.
D.5	Compliance with the environmental terms and the EIA proposed ones that do not contravene the AET	All the measures for preventing environmental implications that are proposed in the EIA and that do not contravene this AET, are taken into account.
D.6	Modification of the Environmental Terms to change the Project's Basic Characteristics	A relevant file, pursuant to Article 13 of the JMD 11014/703/F104/14.3.2003, has been elaborated for the constructions and operation of the foreseen service stations of the motorway section, i.e. the construction of frontal toll stations in Arkitsa on CH. 150+545 and lateral toll stations in Loggos on CH. 159+900 and Arkitsa I/C, has been submitted and approved by EYPE with protocol no. 146696/18-11-2009.
D.7	Project Environmental Terms Validity	The Environmental Terms are in force.
D.8	Modification of the Environmental Terms	If the Environmental Terms of this JMD are amended due to developments in the field of the environmental science or any other reason, the Joint Venture shall lawfully comply with the new terms.
D.9	E.T. controllability by the competent authorities	The EIA is kept at the Concessionaire's offices where there is also the JMD for the renewal of the validity of AET (Protocol No. 103910/12-05-2006).



**SEMI-ANNUAL PROGRESS REPORT FOR THE  
IMPLEMENTATION OF ENVIRONMENTAL TERMS  
DURING OPERATION & MAINTENANCE PHASE**

Edition: 1.0  
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Date: 29.07.2011

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**AG. KONSTANTINOS – K. VOURLA**

**(JMD 85676/30.07.2002)**

SECTION:

AG. KONSTANTINOS – K. VOURLA

**TABLE FOR THE IMPLEMENTATION OF THE ENVIRONMENTAL TERMS DURING THE  
OPERATION PHASE**

AET:

Protocol No. 85676/94/30-7-2002

MONTH/YEAR: 07/2011

S/N	ENVIRONMENTAL TERM	PROGRESS DESCRIPTION – PROBLEMS
<b>A.</b>	<b>Permits / Approvals</b>	
A.1	Installation permits for any activity or installation required for the operation of the Motorway	No need for licensing up to now. The corresponding environmental terms will be implemented.
<b>B</b>	<b>Design-related Issues</b>	
B.1	Landscaping – Forest Technical Design	The term referred to the Landscaping – Forest Technical Design is met. The Concessionaire has contracted for the maintenance and the managing of the vegetation and the plantings with SPACON Geniki Techniki S.A. (date of signature 9-11-2009)
B.2	Special Study on Noise Protection	The Concessionaire requested by the competent service the Noise Protection Study, since it constitutes a document of the project and it should be delivered to it during the delivery of the section by the State. Pursuant to EYDE/LSPE response (protocol no. 12417/26-5-2011), the said study foresees the noise barriers construction between the positions 13+880 – 14+940 and 15+040 – 15+140. It has to be noted that the noise barriers had not been constructed before the receipt of the section by the Concessionaire, who expects the relevant order of supplementary letters for their implementation. Also, it has to be noted that the said STIS, which contains the entire technical description of the noise barriers, has not been delivered yet to the Concessionaire.
B.3	Management of emergency needs within the tunnels	The plan referring to the management of the emergency needs within the tunnel has been elaborated, before the commencement of the project's operation, elaborated by PRISMA TECHNICAL ADVISORS S.A., as regards the programs of traffic settlements implemented, in combination with the Manuals on Tunnels Operation. The management programs are in accordance with article ODO – 6 of the Approved Rule on Designs & Services Fees of Law 3316/2005 and they are in accordance with the German Regulation for the equipment and operation of the toll stations RABT-2003.
B.4	STIS for ensuring air quality in tunnels	There is a functional ventilation system in each tunnels branch, under the Construction Design. Axial fans, in pairs, of constant speed and power 55KW each, with capability of automatic operation via the Fire Detection System or the increased concentration of pollutants and smoke, but also manually via the SCADA.

S/N	ENVIRONMENTAL TERM	PROGRESS DESCRIPTION – PROBLEMS
B.5	Tunnels Fire Protection	<p>The cooperation with the Fire Service is kept. There have been two readiness exercises with conditions suitable to "Maximum Scale". The equipment of tunnels fire extinguishing is operational, with F 6" piping network, under constant pressure of 7 Atm at every 50m for tunnels over 500m, with two faucets, and 25m hose, following the Construction Study</p>
C.	<b>Operation Issues</b>	
C.1	Pollution due to accident	<p>The construction of the basins concerns the subcontracting of the State New Section construction and it has been implemented.</p> <p>The basins are operated and maintained properly. So far no accident has occurred in the tunnels.</p> <p>The Intervention Plan for Emergency Situations has been drawn up by the Concessionaire and constitutes an Annex of the Policing &amp; Fire Fighting Agreement signed with the Ministry of Interior. This plan 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.</p> <p>There is a possibility of accidental fuel leakage from construction machinery, etc. which may result to a direct contamination of water, soil, etc. especially when the quantity is large. In this case, adsorption materials such as sand, chippings or a special geotextile will be used immediately after run out. Such materials exist in the central worksite for immediate use. Their disposal, in emergency situation, will be carried out in accordance with the instructions for disposing toxic waste.</p>
C.2	Control of air pollution during the operation	<ul style="list-style-type: none"> <li>• There are CO, NOx, and visibility sensors installed, according to the Construction Study, of continuous operation, with sufficient sensitivity.</li> <li>• The traffic in the tunnels is stopped by applying the appropriate programs of traffic regulations. They include procedures to be used by the personnel of MSS, connection with special equipment and signage (solid and electronic). No need to assess NOx measurements.</li> <li>• There is a functional auditory system of instructions provision through 6 radio frequency (FM) which, in accordance with the Construction Study, emit within the tunnels, and an optical system through electronic signs (LCS, VSLs), and the personnel operating MSS.</li> </ul>

S/N	ENVIRONMENTAL TERM	PROGRESS DESCRIPTION – PROBLEMS
C.3	Noise during the operation	<p>The monitoring program OKTH OF PATHE Motorway (Metamorphossi - Skarfia) for 2010 has been submitted to the Directorate of EARTH/YPEKA with prot. No. 20448/7-2-2011. The Directorate of EARTH/YPEKA approved the Monitoring Program of Environmental OKTH 2010, with the 186058/31-3-2011 letter.</p> <p>Under this program, the relevant specifications and the locations of the Road Traffic Noise (OKTH) recording, for the capture of the acoustic conditions before and after implementation of the noise barriers at locations inside and outside city plans and at sensitive receivers, have been determined. The relevant Inventories of environmental road noise measurements are mentioned in the annual report. Also, processing of noise measurements data are shown in the reports. For the quantitative and qualitative assessment of compliance with the limits - under MD 1725291 – of the maximum allowable noise level of index L10 (18 hours) at the façades of the nearest – to PATHE - residents, extensive acoustic measurements with special mobile measuring stations are conducted. More analytically the measurements are made in accordance with the approved noise monitoring program, by mobile measuring stations at a minimum of 2 m. from the facade of the nearest residence. Usually, in order to capture the unfavourable conditions, the measurement is being made closer to the source and the facade the most exposed one. The program provides full examination on the effectiveness of the implemented noise barriers as well as evaluation of the need to apply additional measures.</p> <p>For the implementation of the above OKTH program, the current MD 17252/91 and the European Directive 2002/49/EC are kept, both in full calculation and evaluation of the new European indicators, Lden &amp; Lnight.</p> <p>The 2011 program is in full progress and its completion is expected within this year; then it will be submitted to the Directorate of EARTH/YPEKA for approval.</p>
C.4	Waste Management	<p>The Concessionaire has contracted with the Company “Chr. Keridis S.A.” for the motorway cleaning and waste harvesting.</p>
C.5	Emergency communications system of tunnels	<p>There is an adequate emergency communications system, operating in the tunnels, through the “SOS” phones, at every 150m, of 3 buttons with visible illuminated signs in accordance with the Construction Study. The emergency call is answered directly by the personnel of MSS.</p>
C.6	Ensure rescue - escape from tunnels	<p>There are connecting tunnels, between the tunnel branches of over than 500m length, pedestrian escape of around 350m, design that meets the requirements of paragraph 2.3 of Annex I) 2004/54/EC (500m) and paragraph 5.4.3 of the OMOE -Tunnel - projects (350m).</p>
C.7	Tunnels electronic signage	<p>At appropriate points before the entrances of each branch, according to Construction Design, there is a special electronic warning signage, which is controlled and maintained, including:</p>



S/N	ENVIRONMENTAL TERM	PROGRESS DESCRIPTION – PROBLEMS
		<ul style="list-style-type: none"> <li>• LCS: Signs determining the traffic lanes</li> <li>• VSLs: Setting speed limit signs</li> <li>• VWS: Risk Signs</li> <li>• VMS: Variable Message signs (there are at the entrance of each tunnels array per branch)</li> </ul>
<b>D.</b>	<b>Maintenance Issues</b>	
D.1	Materials Combustion	The term regarding the prohibition of the materials combustion is met. The subcontractor of Nea Odos S.A. (Chr. Keridis S.A.) disposes a collection of waste permit and the materials are transferred for combustion into appropriate licensed sites.
D.2	Waste materials Management	The Concessionaire has contracted with the company “Chr. Keridis S.A.” for the motorway cleaning and the waste harvesting, as mentioned in term for the Directorate of waste materials.
<b>E.</b>	<b>General Issues</b>	
E.1	Obligation to comply with the Environmental Terms	The Environmental Terms of the project are met by all the competent bodies
E.2	Construction and Operation Expenses for the protection of the environment	The required percentage of the total budget of the operation and maintenance needed for the total compliance of the environmental terms and restrictions of the present JMD is ensured by priority. The expenses for the environmental protection projects are given on the annual progress reports regarding the compliance with the Environmental Terms.
E.3	Change of the Project’s Basic Characteristics	During the operation of the project, there are no differentiations resulted and the new decision on environmental terms approval has not been required.
E.4	Submission of annual report to EYPE	The term is met. The annual report for 2010 has been submitted to EYPE with Nea Odos S.A. letter with protocol no. 21568/24-3-2011
E.5	E.T. controllability by the competent authorities	It is kept into the Concessionaire’s headquarters.

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S/N	ENVIRONMENTAL TERM	PROGRESS DESCRIPTION – PROBLEMS
E.6	Project Environmental Terms Validity	The Environmental Terms are in force. No need for new Environmental Terms
E.7	Measures for preventing environmental implications	All the measures for preventing environmental implications that are proposed in the EIA and that do not contravene this AET, are taken into account.