


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

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

**SECTIONS:**

- i. PATHE Motorway, of an approximate length of 172,5 km, from Metamorfossi I/C to Skarfia.
- ii. PATHE Connecting Branch from Schimatari to Chalkida.

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**B' SEMESTER 2015**



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

**PATHE MOTORWAY FROM METAMORDOSSI TO SKARFIA  
PATHE CONNECTING BRANCH FROM SCHIMATARI TO CHALKIDA**

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

## 1. GENERAL INFORMATION

This semiannual progress report on the implementation of the Environmental Terms during the construction phase includes briefly some general information about the project and a table showing the biannual progress report for the **B' Semester of 2015**. The table has been supplemented by observations and inspections that took place during the construction works that have been implemented, and procedures as outlined in the Environmental Monitoring Control Program of the project.

### 1.1 DESCRIPTION OF THE PROJECT

The scope of the whole project is the design, financing, construction, operation and maintenance in accordance with the Concession Agreement, which was ratified by Law 3555/2007:

"DESIGN - CONSTRUCTION - FINANCING - OPERATION - MAINTENANCE AND EXPLOITATIO OF THE PROJECT IONIA ODOS MOTORWAY FROM ANTIRIO TO IOANINA, PATHE ATHENS (METAMORFOSSI I/C) - MALIAKOS (SKARFIA) AND CONNECTING BRANCH PATHE SCHIMATARI – CHALKIDA."

It should be noted that, under the Law 4219/2013 (OGG 269A/11-12-2013) the Amendment Agreements of the concession agreements of the major road projects, including the IONIA ODOS project, have been ratified.

More specifically, pursuant to Article 3 "***Ratification of the Amendment Agreement of the Concession Agreement Provisions of the Project on the Design, Construction, Financing, Operation, Maintenance of Ionia Odos motorway from Antirio to Ioanina, Athens PATHE (Metamorfossi I/C) – Maliakos (Skarfia) and Connecting Branch of PATHE Schimatari – Chalkida***", the Agreement dated 28.11.2013 amending the Concession Agreement Provisions, apart from its annexes, in accordance with Articles 37.1 and 37.2 of the Concession Agreement dated December 19, 2006, as ratified by Article (1) of Law 3555/2007, has been ratified and enacted as Law. The text of the Amendment Agreement is annexed as Appendix C of Law 4219/2013 and constitutes an integral part of Article (3) of that Law.

This annual progress report on the implementation of the environmental terms during the construction phase refers to a part of the concession agreement and includes specific sections of the "IONIA ODOS" Motorway, PATHE (Metamorfossi – Skarfia) and PATHE Connecting Branch of PATHE Schimatari – Chalkida:

PATHE (Metamorfossi – Skarfia)

1. Metamorfossi – Yliki
2. Yliki – Kastro
3. Kastro – Tragana
4. Tragana – Arkitsa
5. ARKITSA – Ag. Konstantinos
6. Agios Konstantinos – Kamena Vourla
7. Kamena Vourla – Mendenitsa

PATHE Connecting Branch Schimatari – Chalkida:

1. Schimatari - Chalkida

The construction works and the operation of the said sections of the project are governed by the environmental terms described in the following Joint Ministerial Decisions (JMD):

**ΠΑΘΕ (Μεταμόρφωση – Σκάρφεια)**

Metamorfossi - Yliki

- JMD 126119/08.02.2007 "Environmental Terms Approval for the operation and the improvement and maintenance works of Metamorfossi – Yliki section of PATHE motorway."
- Amendment of the environmental terms of Metamorfossi – Yliki section of PATHE Motorway, which were approved by the JMD no. 126119/08.02.2007, as regards the completion of the lateral road network. (Decision 200817/23.07.2012).

#### Yliki - Kastro

- JMD 36118/94/10.07.1995 "Environmental Terms Approval for the construction and operation of Athens – Thessaloniki New National Road, Yliki – Kastro section."
- JMD 101617/22.09.2006 "Amendment of the Joint Ministerial Decision no. 36118/94/10.07.1995, with which the environmental terms for the construction and operation of Yliki - Kastro section of PATHE Motorway were adopted."
- JMD 140792/12.06.2009 "Amendment of the Joint Ministerial Decision no. 36118/94/10.7.1995, with which the environmental terms for the construction and operation of Yliki – Kastro of PATHE Motorway were adopted, as amended by JMD with prot. no. 101617/22.9.2006."

#### Kastro - Tragana

- JMD 33838/94/10.07.1995 "Approval of environmental terms for Athens - Thessaloniki New National Road (Patra – Athens – Thessaloniki – Evzoni Motorway (PATHE)) KASTRO – TRAGANA."
- JMD 103909/12.05.2006 "Amendment – Extension of the period of validity of the JMD no. 33838/94/10.07.1995, Environmental Terms Approval for Athens - Thessaloniki New National Road (Patra – Athens – Thessaloniki – Evzoni Motorway (PATHE)) KASTRO – TRAGANA."
- JMD 139132/30.04.2009 "Amendment of JMD no. 33838/94/10.7.1995, with which the environmental terms for the construction and operation of Kastro – Tragana section of PATHE Motorway were adopted, as amended by JMD with prot. no. 103909/12.5.2006."

#### Tragana – Arkitsa

- JMD 36759/94/10.07.1995 "Environmental Terms Approval for Athens – Thessaloniki New National Road (Patra – Athens – Thessaloniki – Evzoni Motorway (PATHE)) TRAGANA – ARKITSA."
- JMD 103910/12.05.2006 "Amendment – Extension of the period of validity of the Joint Ministerial Decision (JMD) no. 36759/94/10.07.1995, Environmental Terms Approval for Athens – Thessaloniki New National Road (Patra – Athens – Thessaloniki – Evzoni Motorway (PATHE)) TRAGANA – ARKITSA".

#### Arkitsa – Ag. Konstantinos

- JMD 39516/94/10.07.1995 "Environmental Terms Approval for Athens – Thessaloniki New National Road (Patra – Athens – Thessaloniki – Evzoni Motorway (PATHE)) ARKITSA – AG. KONSTANTINOS"
- JMD 103908/12.05.2006 "Renewal of the period of validity of the Joint Ministerial Decision (JMD) no. 39516/94/10.07.1995, Environmental Terms Approval for Athens – Thessaloniki New National Road (Patra – Athens – Thessaloniki – Evzoni Motorway (PATHE)) ARKITSA – AG. KONSTANTINOS".

#### Ag. Konstantinos – Kamena Vourla

- JMD 85676/30.07.2002 Environmental Terms Approval for the project "Improvement of Athens – Thessaloniki National Road, Agios Konstantinos – Kamena Vourla section"

#### Kamena Vourla – Mendenitsa

- JMD 67031/19.10.1998 Environmental Terms Approval for the project "Athens – Thessaloniki N.R., Kamena Vourla Section – subsection Mendenitsa CH. 0+000 to 4+100»

#### **PATHE Connecting Branch Schimatari – Chalkida:**

- JMD 106530/15.03.2000 "Road Improvement Design of Schimatari – Chalkida "
- JMD 171818/01.04.2014 "Environmental Terms Approval for Schimatari – Chalkida road axle, including the station and the administration building of the frontal toll stations."

## **1.2 TECHNICAL SCOPE**

The Design, Construction, Operation and Maintenance of the above Motorways are subject to the Agreement, as follows:

- (a) C.P. New Sections and Technical Works which will be designed and constructed by the Concessionaire
- (b) Existing C.P. Motorway Sections constructed and operated by and at the expense of the Greek State and the contribution of the European Union and are going to be studied and executed in accordance with the agreement
- (c) Motorway New Sections constructed by and at the expense of the Greek State and the contribution of the European Union, for which they can be informed by the services executing these works as follows:

The project is divided into Geographical Units of the Special Conditions of Contract as follows:

- a) Concessionaire New Sections (C.P. and L.P.).
- b) Existing Sections of the Concession Project (C.P.)
- c) State New Sections (C.P.) constructed and operated by and at the expense of the Greek State which will grant to the Concessionaire the exclusive right of Operation, Maintenance and Exploitation, as regulated by the Concession Agreement.

The Concessionaire's obligations include any temporary connection to the existing network, depending on the time schedule for the completion of the individual sections and the existing conditions.

### **1.2.1 Project New Sections and technical requirements**

The scope of the Project is the "Design – Construction – Financing – Operation – Exploitation and Maintenance of Ionia Odos Motorway from Antirio to Ioannina, PATHE Athens (Metamorfossi I/C) – Maliakos (Skarfia) and Connecting Branch of PATHE Schimatari – Chalkida for thirty (30) years in accordance with its Concession Agreement:

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<sup>1</sup> This is an agreement between the Greek State and the Concessionaire. The said units are set out in the Concession Agreement.

- i. "Ionia Odos" motorway, of an approximate length of 196 km from Antirio to Egnatia I/C,
- ii. PATHE motorway, of an approximate length of 172,5 km from Metamorfossi I/C to Skarfia
- iii. PATHE connecting branch Schimatari – Chalkida

The Project is part of the Trans – European Network (TEN).

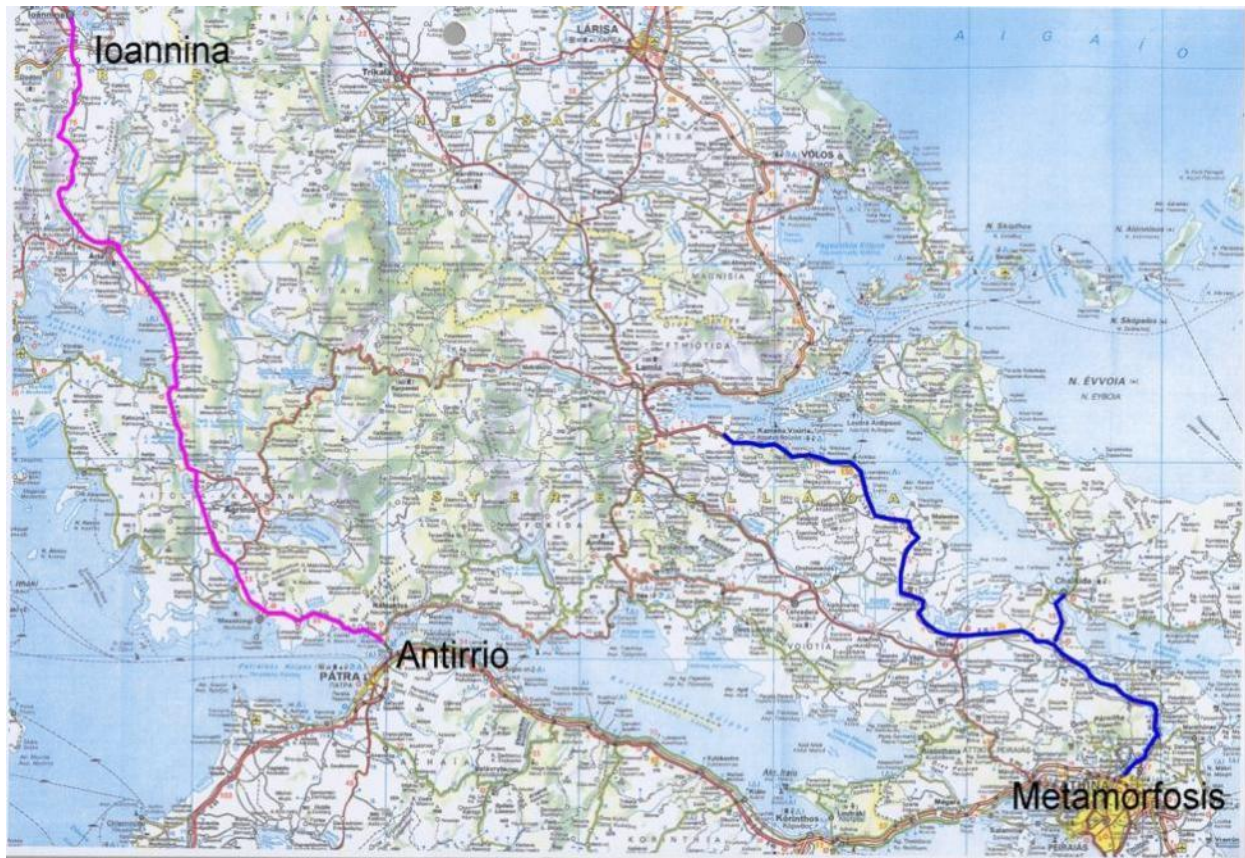
It serves the national traffic gates of Patra, Igoumenitsa, Kakkavia and the interregional traffic.

The sections of the Concession Project are divided into forty three (43) Geographical Units (GU), five (5) of which are State's New Sections. Those sections, after their completion, shall be delivered by the State to the Concessionaire, as defined in the C.A., in order to proceed with the additional works concerning the operation and maintenance of the motorway. Up to now, 4 of them have been delivered as shown in the table below.

GU	SECTION (CH.)	LENGTH (km.)	DELIVERY BY THE STATE
14 N/S	Agrinio Bypass IONIA CH. 55+600 -76+272 /	20,672	Delivered
19 N/S	Arta Bypass IONIA CH. 129+053 -135+200 /	6,147	Delivered
41 N/S	Loggos – Ag. Konstantinos PATHE CH. 160+393 -171+693 /	11,300	Delivered
42 N/S	Ag. Konstantinos – Kamena Vourla PATHE CH. 171+693 - 181+480 /	9,787	Delivered
43 N/S	Schimatari – Chalkida PATHE/	11,000	Pending

The table below gives the approved optimizations with previous Ministerial Decisions which differentiate the technical scope of the project for the sections relating to the present report:

Optimization	Optimization Category	Section	Environmental Licensing	Ministerial Decision - Optimization Approval
<b>PATHE (Metamorfossi - Skarfia)</b>				
Kaliftaki I/C	modification	15+286	Pending	A/1/00/01/01/20097/28.11.2013
Varimpompi I/C	modification	18+392	Pending	



*Ionia Odos from Antirrio to Ioannina (with purple color on the above map)  
PATHE with Schimatari – Chalkida BRANCH (with blue color on the above map)*

The following tables set out the terms of the Ministerial Decision Approval of Environmental Terms relating to construction for each part separately, and by environmental condition. It should be noted that, due to non-existence of works at Schimatari – Chalkida branch, the following tables do not include the said section of the project.

For each term listed in the table, there is a commentary on course compliance or potential problems encountered or observed in relation to compliance.



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## **2. TABLES FOR MONITORING ENVIRONMENTAL CONDITIONS**



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**2.1 METAMORFOSSI – YLIKI  
(JMD 126119/08.02.2007, JMD ETA 200817/23-7-2012)**

S/N	ENVIRONMENTAL TERM	JMD PROVISIONS	ENVIRONMENTAL TERMS: WAYS – METHODS OF ASSESSMENT
<b>A.</b>	<b>Issues of Permits/Approvals</b>		
A.1	Permits – approvals for any activity or installation required for the operation of the motorway	<p>For any activity or facility necessary for the construction – operation of the project, all permits and approvals provided by law should previously have been granted, including the approval of the environmental conditions required for specific activities or facilities</p> <p>No permit, authorization or approval from any authority or the Independent Engineer for the implementation of any individual project, activity or extension that is not described in the EIS, and therefore not covered by this decision, for which environmental authorization is required in accordance with the applicable law, without previously being environmentally approved by EYPE/YPEHODE.</p>	<p>The permits and approvals foreseen by the legislation, 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> <p>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.</p> <p>A file amending the environmental terms of Athens PATHE (Metamorfossi I/C) – Maliakos (Skarfia) for the environmental licensing of 10 parking areas and 2 location areas of the Motorist Service Stations (MSS) was submitted by EYPE with prot. no. 173067/5-6-2014.</p> <p>The amendment file has been approved by DIPA with prot. No. 145495/21.01.2015 as regards the parking areas and the formation of MSS surfaces. EIS submission is required for the MSS construction.</p>
A.2	Ancillary works	Individual projects and activities relating to the construction and operation of the project are ancillary works of the main project and their environmental licensing can be made by EYPE service of YPEHODE, regardless of the category they fall, in accordance with the JMD 16393/2332/5.8.2002. The same goes for any other project or activity carried out within the limits of the Concession Agreement, and in respect of renewals or modifications of the existing environmental permits, regardless of their issuing.	<p>The Construction J/V, with prot. no. 52163/26.10.2015, submitted the Technical Environmental Study for the licensing to relocate the police building from Kapandriti MSS position (CH. 29+000) to the area of Afidnes (CH. 26+200).</p>

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A.3	Archaeological Services	<p>At least one month before the commencement of the construction of the improvement works which provide for excavation works, the contractor must inform in writing the relevant Archaeological Services (B' EPKA, I' EPKA, 1<sup>st</sup> EBA and 23<sup>rd</sup> EBA) to define their agents, who will supervise the excavation works of the project.</p> <p>If deemed appropriate by the competent Archaeological Services, prior to the excavation works of the project, pilot test trenches (cuts) or other type of will be carried out by qualified staff that will be appointed and coordinated by the above services. Upon localization of antiquities, the works will be stopped and an investigation will follow, the results of which will determine the further course of the project, upon advice of the competent bodies of the Ministry of Culture. The cost of supervision, research, possibly required excavations, promotion and publication of the findings will be covered as referred to in Article 37 of Law 3028/2002.</p> <p>Measures should be taken in order for the remains of probably ecclesiastical monument not to be affected by the operation of the proposed facility of Exploitation &amp; Maintenance Centres (EMC) which are located at a distance of 100 m from the EMC, in Afidnes toll station, very close to the National Road in the direction towards Lamia.</p>	<p>The term regarding the Archaeological services refers to the construction and has been complied with. During the reference period the Construction J/V, in order to start the earth construction works of the parking area at "Metamorfossi – Yliki", informed on time all the competent archaeological services.</p> <p>The works performed during previous reference periods 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 Services). However before starting any construction work there was always the information and update of the competent Antiquities. Nevertheless, a contact will be held by the competent Department of Antiquities, where necessary, as happened in previous reference periods. The Construction J/V was informed with letter no. 48800/27.03.2015 by the Ephorate of Antiquities in Athens on the localization of antiquities at the construction area of the administration building in Varimpompi and the commencement of the excavations.</p> <p>The Athens Ephorate of Antiquities informed, with letter no. 52308/29.10.2015, on the completion of the works, and with letter no. 52504/09.11.2015 approved the methodology of κατάχωσης.</p> <p>The location for the Motorists Service Stations in Afidnes proposed by EIA was hand over. 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	<p>For any kind of work or facilities within the forest areas, the required have been granted. Intervention approval decision should be previously issued approval by the competent Forest Service, according to the terms, conditions and procedure provided by the forest legislation.</p>	<p>The Construction J/V shall ensure the required opinions by the Forestries at site and before the commencement of the works.</p>



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S/N	ENVIRONMENTAL TERM	JMD PROVISIONS	ENVIRONMENTAL TERMS: WAYS – METHODS OF ASSESSMENT
		Where provided for interventions in reforestation area, before receiving the approval permit, the process of adoption of the reforestation lifting decision should have been completed.	
<b>B.</b>	<b>Design-related Issues</b>		
B.1	Environmental Impact Studies EIA	The project refers to the operation and the improvement and maintenance works at section from Metamorfossi I/C to 5,7 km after Thiva I/C of PATHE motorway, as described in the EIS, with the terms and restrictions imposed herein. The kilometric positions (CH) of the beginning and end of section, with a measuring point in the center of Athens, are the 10+624 and 90+500 accordingly.	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 6 of Law 4014/2011 (OGG 24A/2011) or/and EIS in accordance with Articles 2 and 3 of the same Law.
B.2	Hydraulic Studies	To ensure the uninterrupted flow of the surface water by constructing all required structures and considering a return period of at least 50 years, excluding any stream filling with debris etc., to avoid phenomena of stagnant water and flooding.	The studies already elaborated take into account the requirements of the term. As for the remaining section, the studies are under elaboration.



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B.3	Special Technical Implementation Study	<p>Before the commencement of the implementation of any improvement or maintenance project, the measures for minimizing the impacts from the traffic arrangements, the compliance program with the terms hereof, the locations and the configuration of the worksite spaces, the exact locations of materials temporary deposition and other essential parameters will be adopted as referred to in paragraph A.2 and those specified in the applicable regulations, after submitting a Special Technical Implementation Study.</p>	<p>All determined worksite areas are the following:</p> <ul style="list-style-type: none"> <li>• Storage area of plastic pipes in 7 acres of land on the (CH.) 33+400, in connection with the motorway (approval no. 100432/07.02.2008).</li> <li>• Inofyta worksite area, within the project occupation zone and within the expropriation limits (approval no. 136137/27.08.2009). The worksite area has not been used.</li> <li>• Schimatari worksite area (CH 63+300), leased area, environmentally licensed by EYPE for installation of asphalt production unit and corresponding laboratory (approval no. 110101/18.12.08). The area has been restored and delivered to the proprietaries.</li> <li>• Thiva I/C worksite area (CH 84+940), within the occupation zone of the project and within the expropriation limit, environmentally licensed by EYPE for temporary installation of an asphalt testing laboratory and offices (approval no. 106364/29.10.08). The site is no longer in use and its restoration is pending.</li> </ul>
B.4	Landscaping – Forest Technical Design	<p>All surfaces within the zone reserved for the project, which are not used for operational purposes (i.e. embankments, former worksites, free zones on either side of the motorway, surfaces between interchanges nodes etc.), they should be planted based on findings of specific phytotechnical – forest study, which should be developed in order to optimize the integration of the project in the landscape and the balance or improving the green equilibrium. The planting works should begin immediately at any section of the project where the earthworks have been completed and the final surfaces have been set up and should be performed preferably with native species or compatible with the plant community, and the particular characteristics of the project transit area should be completed. All planting works should be done while ensuring irrigation for fast development and maintenance of vegetation.</p>	<p>The relevant landscaping studies refer to central islet plantings, worksite areas restoration, nodes landscaping and slope plantings of the road as well as the final irrigation studies.</p>



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B.5	Noise Barriers Special Study	<p>Should routinely recorded exceedances of the applicable limit for the road traffic noise, the construction and operation body of the project must take immediate appropriate measures to remove excesses. These measures will be the subject of a special study, which will be submitted for approval to EYPE/YPEHODE.</p> <p>These measures may be either fixed (i.e. noise barriers, dense plantings, embankments, dampening bituminous, combination of those entire mentioned above, etc.) or functional (i.e. local reductions in speed limit). The specificity of these measures will constitute a specific study, which will be submitted for approval to EYPE/YPEHODE. This study should identify at least the type and performance of the measures, the technical characteristics and their adaptation to topological features of the area.</p>	<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) and 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 2011 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>
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S/N	ENVIRONMENTAL TERM	JMD PROVISIONS	ENVIRONMENTAL TERMS: WAYS – METHODS OF ASSESSMENT
		<p>The noise barriers proposed in the EIS should be implemented immediately after preparing a specific technical implementation study (STIS) which will be submitted for approval to EYPE/YPEHODE. This study will analyze in detail:</p> <ul style="list-style-type: none"> <li>• the geometry of the barriers, with an emphasis on exploring non-planar forms which may provide better sound insulation,</li> <li>• the combinations of measures (i.e. use of sound absorbing panels in lateral surfaces, measures for detailed control of the speed limits, etc.) that maximize the noise protection result with the minimal aesthetic impact.</li> <li>• the characteristics and the precise positions and heights of the barriers or the combined measures in order to minimize visual impact.</li> </ul>	<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> <p>A Special Acoustic Design (EAMYE) elaborated and submitted via Nea Odos letter with prot. no. 28085/22-10-12 and approved by EARTH with prot. no. 213863/30-11-2012.</p>
B.6	Technical Report for the Air Pollution Stations	The exact points of installation of the air pollution stations will be determined after the approval of EYPE/YPEHODE, which requires the submission of a technical report where the locations of these areas will be identified. These areas, because of ground elevation, microclimate and proximity to emission sources, shall ensure the representativeness of the measurements. For this reason, the points of installation of the stations may be located outside the concession area. The minimum capacity of each station should include:	Air pollution measuring stations have been installed and operate in the area of Varimpompi and Schimatari (Prot. No. 185799/8-3-2011 EARTH).



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S/N	ENVIRONMENTAL TERM	JMD PROVISIONS	ENVIRONMENTAL TERMS: WAYS – METHODS OF ASSESSMENT
		<p>- Measurements of temperature, humidity, wind speed and direction, in three altitudes between 10m and 1.000m, of rainfall and sunshine parameters</p> <p>- Measurements of concentrations of CO, NOx, SO2, BTX measurements (benzene - toluene and xylene), TSP, PM10 and O3.</p>	<p>The stations operate in a 24-hour basis and the prices of the below pollutants and parameters are recorded:</p> <ol style="list-style-type: none"><li>1) The pollutants CO, CO<sub>2</sub>, NO, NO<sub>2</sub>, SO<sub>2</sub>, O<sub>3</sub>, TSP, PM<sub>10</sub>, PM<sub>2,5</sub>, C<sub>6</sub>H<sub>6</sub>, C<sub>7</sub>H<sub>8</sub> and xylene</li><li>2) The meteorological conditions of each installation area</li></ol> <p>The Concessionaire submitted a Technical Report on location and technical specifications for the installation of additional meteorological monitoring stations, beyond those conventionally required, for environmental permitting.</p>

B.7	Special Technical Implementation Study – MSS and Exploitation & Maintenance Centres (EMC)	<p>The specificity of the environmental protection measures of the facilities and activities within the MSS and the EMC, will be specified after developing a special technical implementation study, which will be submitted for approval to EYPE/YPEHODE. In that study at least the following issues will be covered in detail:</p> <ol style="list-style-type: none"> <li>1. Description of the facilities and activities within the MSS and EMC, and quantitative estimates of the sizes that are related to the environmental impact.</li> <li>2. Equipment, ways and methods that will be used for the compliance with the conditions and limitations of this report applied to the MSS and EMC. Special analysis should be carried out for: <ul style="list-style-type: none"> <li>• The methods of procurement, storage, use or disposal of toxic substances such as detergents, lubricants etc. and measures to prevent pollution from these substances</li> <li>• The quantity and composition of waste and the way of their disposal</li> <li>• The procedures and equipment that will monitor and document compliance of discharges with the current restrictions.</li> </ul> </li> <li>3. Details of the supply, storage and distribution of fuel circuit, if so provided, and measures for: <ul style="list-style-type: none"> <li>• Ensuring compliance with the provisions concerning the limitation of emissions from the fuel system,</li> <li>• Further reduce of these emissions.</li> </ul> </li> <li>4. Environmental effects are not adequately addressed by applying the terms and limitations of the present and proposed measures to be taken to eliminate or significantly reduce these environmental impacts.</li> </ol>	<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. For the EMC of Kapandriti and Thiva the corresponding STIS has been prepared and appropriately approved by EYPE (with its letter with protocol no.: 144265/22-9-09)</p>
<b>C.</b>	<b>Operation-related issues</b>		
C.1	Visual Disturbance caused by signs	Placing billboards and signs within the concession limit is not permitted, except those relating to the operation the project	It refers to the operation phase of the project.



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C.2	Special Care for the protection of Antiquities - operation of EMC	Measures should be taken so as for the remains of a probable ecclesiastical monument which are located at a distance of 100m from the RNC, in Afidnes toll station, very close to the highway in the direction towards Lamia, not to be affected by the operation of the proposed facility of the Maintenance Operations Center (RNC).	The location proposed by EIA for EMC in the area of Afidnes was renounced. The final locations of the EMC for "Metamorphossi – Yliki" are finalized in Kapandriti I/C, at the snow-removal center of Malakassa and at Thiva I/C, while 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.
C.3	Pollution due to accident	The Concessionaire must prepare an intervention plan for accidental pollution during the construction phase and the operational phase and keep on hand all the necessary means to proceed to immediate preventing dispersion, collection and proper disposal of polluting substances. This obligation also applies in cases where pollution due to accident in the motorway occurs in zones outside the concession.	It refers to the operation phase of the project.
C.4	Control of air pollution during the operation phase	<p>At least two automatic stations measuring air pollution and meteorological conditions should be installed. The locations of these stations are determined, as for the first one, in the area between Nea Eritrea and Kryoneri and for the second one in the region of Inofyta.</p> <p>The responsibility for the operation of the stations belongs to the Environmental Service of paragraph E.3, which must cooperate with the Air Pollution and Noise Directorate (EARTH) so as for the way of measuring (calibration, sampling frequencies, sensitivity, etc.) to meet the requirements of the National Air Pollution Monitoring Network. The primary outcome measures of the stations are transmitted monthly in electronic form, to EARTH, while the processed results are included in the report mentioned in paragraph E.6.</p>	<p>It refers to the operation phase of the project.</p> <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.</p> <p>EYPE/YPEKA agreed with the proposed positions and Technical Specifications of the Stations (with letter No. 195241/12-01-2011).</p> <p>The Directorate of EARTH/YPEKA approved the positions and the Technical Specifications (with prot. no. 185799/8-03-2011).</p>



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C.5	Noise during the operation phase	Upon the launch of the environmental monitoring program, as provided in paragraph 3, quarterly sample sound measurements of indicators L10 (18h) and Leg (08:00-20:00) will be carried out, as defined by the MD 17252/20.9.92 (as referred to in section (c) hereof), and the indicator Lden, as defined in the "Directive 2002/49/EC of the European Parliament and of the Council of 25 June 2002 on the assessment and management of environmental noise" (Official Newspaper EU L 189/12, 18.7.2002). The traffic volume should also be monitored. The results of sound measurements and the congestion recordings, along with the point, the date and time of measurement, the prevailing meteorological conditions, details and date of last calibration of sound level meter and the name of the controller measurement will be recorded in a reporting format.	It refers to the operation phase of the project.
		The maximum limit of traffic noise is set out in the Ministerial Decision 17252/20.9.91 (OGG 395 B') "Defining indicators and maximum allowable noise limits generated by traffic on road transportation projects."	



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C.6	MSS and EMC	<p>For the MSS and the EMC, in addition to the above mentioned, the following conditions should be met:</p> <ol style="list-style-type: none"> <li>1. In the management of used oils, which will be conducted in accordance with section c', including procurement, storage and distribution of lubricants and fuels, all necessary measures should be planned and taken to preclude leakage of hazardous substances into the soil and outputs of the plants. These measures and the implementation procedures will be included in the manual of paragraph E.4</li> <li>2. The management of solid waste must comply with the applicable provisions and include separation of the polymers, aluminum, glass and paper at their source and disposal to recycling.</li> <li>3. Liquid waste from the operation of the facilities of the MSS, after oil separation where required, shall be subject to biological treatment either on an onsite unit or with the collection and transportation to the nearest existing facility.</li> <li>4. The energy requirements of the MSS operation should be covered at the maximum possible proportion by renewable energy sources (i.e. solar water heating, bioclimatic interventions on the design of buildings and surroundings, etc.)</li> </ol>	It refers to the operation phase of the project.
C.7	Maintenance of Vegetation	The operator is responsible for all maintenance - management work of vegetation throughout the operation session. In positions that have already been planted, the operator assumes the responsibility for maintenance - management of vegetation and its densification at the maximum possible extent.	It refers to the operation phase of the project.
<b>D.</b>	<b>Construction &amp; Maintenance Issues</b>		



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D.1	Keeping the existing traffic lanes and junctions.	The construction works of the interventions for the improvement and maintenance of the motorway will be achieved by methods and at times to ensure the smooth operation of a service level similar to the current one. At least the EIS proposals are respected for maintaining an equal number of lanes to the existing ones and ensuring full operation of the existing nodes throughout the course of the improvement works.	The traffic interventions that have been carried out for improvement works are conducted after obtaining the assent of the traffic police.
		Regarding the Kaliftaki I/C, the provisions of the present shall prevail over those with prot. no. 101200/25.5.2001 JMD approving environmental terms for the project "Construction and operation of Kimi Avenue, section B: by NR No. 1 to the Olympic Village."	
D.2	Water flow	To ensure the uninterrupted flow of the surface water across the zone of influence of the project, with the proper maintenance of the existing hydraulic structures and the implementation of the new ones, where they are needed, after compliance with the provisions of the term d.5 of the present" (§ A.2.).	During the construction works, care should be taken in order for the water flow to be uninterrupted.  The content of paragraph E.2 of the report on the compliance with the Environmental Terms during the Construction Phase is valid.
D.3	Temporary disposal sites	In cases of temporary disposal of piles of loose materials (i.e. aggregates, excavation products, etc.) care should be taken to prevent their erosion by the wind and the consequent transfer of dust.	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. No temporary disposal is carried out near streams.  A STIS (EYPE 136137/27-8-2009) has been approved for a concrete and asphalt production worksite at Inofyta I/C, where a temporary disposal pit of aggregate materials is also foreseen.



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D.4	Dust control	<p>During motorway improvement and maintenance works, a package of measures should be designed and implemented aiming to minimize the dust emissions, particulate or odorous substances. This package of measures should focus on emission sources and must at least include the requirements of paragraphs below as well as any other measure that helps to reduce dust emission.</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, based on the works concerning an older reference period, 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> <li>• In addition, special care has been taken into account for at least one sprinkling truck in every worksite, where dust might be released.</li> <li>• The trucks that transfer materials should not be overloaded and all trucks transferring loose materials should be covered.</li> </ul> <p>It should be noted that the asphalt production worksite unit in Schimatari does not operate anymore and the site has been restored and delivered to its proprietaries. Furthermore, the materials required for the construction of the projects are taken from environmentally licensed units.</p>
		<p>In every construction activity where dust emissions, particulate or odorous substances are likely to arise, procedures and equipment ensuring a drastic reduction of these emissions should be adopted and the times of these processes must be minimized.</p> <p>The transits of the concessionaire's heavy vehicles on dirt roads during the dry periods of the year should be carried out under wet or other equivalent means to limit dust emission.</p> <p>In the case of loose materials transportation (i.e. sand, gravel, earth, etc.) the overfilling of vehicles is prohibited and the materials must be covered in such a manner as to prevent the congregation of dust or particles from the transported materials.</p>	
D.5	Materials Combustion	Any kind of materials combustion in the worksite area shall be prohibited.	Regular inspections to ensure compliance of the said ET are conducted and there is no breach of the term.



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D.6	Liquid waste	<p>For liquid waste the current Prefectural Decisions shall apply.</p> <p>For the management of used oils the PD 82/25.02.2004 (Official Gazette 64A), which replaced the JMD 98012/2001/1996 "Establishment of measures and procedures for the management of waste oils" (OGG 40B) and defined the measures, terms and program for the alternative management of waste lubricating oils, shall apply.</p>	<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.</p>
			<p>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.7	Noise	<p>As for the noise emitted from the construction equipment, the provisions of JMD 37393/2028/01.10.2003 "Measures and terms for the noise emissions to the environment by equipment for outdoor use" (OGG 1418B) shall apply.</p>	<p>The construction works of the PATHE motorway improvement projects are carried out in a non-urban environment, away from sensitive receivers, while the construction noise is overshadowed by the road traffic noise.</p>
<b>E.</b>	<b>General Issues</b>		



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E.1	Obligation to comply with the Environmental Terms	<p>The above terms, which have to be respected, relate to:</p> <ul style="list-style-type: none"> <li>• The owner of the project</li> <li>• To anyone that is going to undertake the whole or part of the construction or operation of the project (i.e. concessionaire, contractors, etc.)</li> <li>• The independent engineer if appointed,</li> <li>• The companies, services and bodies responsible for the construction and operation of the project</li> <li>• The heads or legal representatives of these services, companies or bodies, who must ensure their implementation and ensure that they are fully respected</li> </ul> <p>To everyone who, due to his/her position and powers, shall be responsible for the design, approval, tendering, awarding, monitoring certification, delivery and other procedures relating to the construction and operation of the project</p>	<p>The environmental terms of the project are met by all the competent bodies (Construction J/V, Independent Engineer/Concession, etc.)</p>
E.2	Environmental Terms compliance monitoring	<p>During procedures regarding tendering, supervision, receipt, all necessary actions should be done and all necessary measures should be taken to ensure:</p> <ul style="list-style-type: none"> <li>- compliance with environmental terms by designers and contractors, as part of that concern</li> <li>- the ability to cope and rehabilitate unpleasant environmental conditions due to actions or omissions of the Contractor in breach of the environmental conditions.</li> </ul>	<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>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>



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E.3	Construction and Operation Expenses for the protection of the environment	The funds for the construction and operation of the road should ensure the expenditures required for the environment protection works which are necessary for the full compliance with the restrictions of this decision	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. 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.4	Concessionaire's Service for Environment	Immediately after signing the contract, the concessionaire must create an Environment Service, providing the necessary staffing and logistics, as well as the necessary powers and resources to fulfill the obligations of the next term; unless, within the scope of another decision of environmental terms, an Environment Service has already been established, then the possibility of entrusting the obligations of the next term to this service is provided, following an appropriate expansion of duties and update of the relevant departments of the Public Administration.	The Construction J/V 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 construction J/V collaborates with a special advisor in order to form a group of scientists, which shall cover the whole range of environment.
		The above Environmental Service will be the link between the concessionaire and the competent Departments of the Public Administration and will be responsible for the compliance with the environmental conditions, the implementation of the impact monitoring programs, the submission of the required periodic reports and petitions and for the design, development and implementation of a program of environmental monitoring and control. Within a period not exceeding one year from the signing of the concession the content of the environmental monitoring and control program should be submitted for approval to EYPE/YPEHODE, as well as the staffing and sub-structure of the above the Environmental Service.	
E.5	Manual for the specifications on the Environmental Terms compliance	Operating, maintenance and monitoring procedures, related to the full and ongoing compliance with the terms of this decision, should be specified in detail in the appropriate manual. This manual will be approved by the owner of the project and its implementation will constitute a continuing obligation of the project operator.	It refers to the operation phase of the project.



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E.6	Compliance with the Presidential Decree "Kifissos river Protection Zone"	All operations and activities in the project must comply with the PD "Kifissos Protection Zone" (OGG 632D/94, OGG and OGG 796D/94 499D/98), as mentioned in no. 19 letter.	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.
			This requirement has been taken into account and no worksite area within this zone has been planned. It has to be noted that: 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.
E.7	Submission of annual report to EYPE	<p>By January 31 of each year the body of the construction or operation of the project shall submit a statement to EYPE/YPEHODE setting out:</p> <ul style="list-style-type: none"> <li>- Summary of results concerning the noise monitoring, the measurements of air pollution and the monitoring program of water quality.</li> <li>- The course of the construction of the projects, accompanied by detailed documentation of compliance with the environmental conditions.</li> <li>- Permits or authorizations granted in accordance with the terms of the present.</li> <li>- Studies awarded, qualitative, quantitative and economic data on environmental protection projects and the percentage that the costs for these projects represent, in relation to the total expenditures for the construction of the project.</li> <li>- Anti-pollution and environmental protection works to be made for the next year.</li> <li>- Problems encountered, contingencies and any information or suggestions that could be useful to mitigate any adverse environmental impacts caused by the construction or operation of the project.</li> </ul>	The term is met. The semiannual and annual report has been submitted.



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E.8	Reports Transmission to the competent bodies	The report mentioned in paragraph E.6 will also be provided to the relevant Provincial Environmental Services and will be publicly available on a web page that the operator must maintain for this purpose.	The term 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 contractual obligations of the contractor will also include the provision to EYPE/YPEHODE of the means necessary to make possible the control and monitoring of the implementation of the terms hereof pursuant to Article 2 of Decree 221/2.7.98 (Government Gazette 174A), as amended by Presidential Decree 269/7.8.2001 (Official Gazette 192A). Similarly, the contractor shall provide every facility to the bodies responsible for checking compliance with the terms hereof while performing their duties (i.e. free access to all areas and installations of the project, information, etc.).</p> <p>This decision and the accompanying EIS should always be - in case of control - in the headquarters and field offices of the contractor responsible for the construction or operation of the project, and demonstrated in each jurisdiction, in accordance with the current legislation.</p>	<p>The annual and semi-annual periodic reports on compliance with the environmental terms are notified to the competent authorities 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	<p>The environmental conditions compliance proposed in the EIS (Chapter 8), which accompanies the present, shall apply if the said conditions are not consistent with those mentioned above and the remedies proposed.</p> <p>The above mentioned environmental conditions are valid for ten years from the date hereof and on the condition that they will be met accurately. After this date, Article 4 of Law 1650/86 will be met, as replaced by Article 2 of Law 3010/2002 and Article 13 of the JMD 11014/703/F104/14.3.2003.11014/703/Φ104/14.3.2003.</p>	<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. The Environmental Terms are in force.</p>
		<p>For the modernization, improvement, expansion or modification of the project, as described in the EIS with the terms and limitations of this decision, the procedure - laid down in Article 13 of the JMD 11014/703/F104/14.3.2003 - is required to be met.</p>	



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		Each term of this Decision may be amended in accordance with Article 2 of Law 1650/86 as replaced by Article 2 of Law 3010/2002. By the same reasoning can be put new environmental conditions, if it results from a new data science and technology in the field of protection and management of the environment.	
E.11	Measures for preventing environmental implications of the EIA and AET	The environmental conditions compliance proposed in the EIS (Chapter 8), which accompanies the present, shall apply if the said conditions are not consistent with those mentioned above and the remedies proposed.	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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**2.2 YLIKI – KASTRO**

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

S/N	ENVIRONMENTAL TERM	JMD PROVISIONS	ENVIRONMENTAL TERMS: WAYS – METHODS OF ASSESSMENT
<b>A.</b>	<b>Permit/Approval Issues</b>		
A.1	Installation permits for any activity or installation required for the operation of the Motorway.	<p>For any activity or facility necessary for the construction or operation of the project, all permits and approvals provided under the current legislation should firstly be granted, including individual and any required environmental licensing (quarries, borrow pits, particle size separation facilities).</p> <p>More specifically for concrete production units and sand production units the environmental approval is required by the Prefecture of South Viotia regardless of the horsepower of these facilities even if they are removable. These conditions will always include the terms set out above and are binding on the contractor.</p>	<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>A file no. EYPE 173067/5-6-2014 amending the environmental terms of Athens PATHE section (Metamorfossi I/C) – Maliakos (Skarfia) has been submitted for the environmental licensing of 10 parking spaces and 2 location areas for the Motorist Service Stations (MSS).</p> <p>The amendment file was approved by DIPA with prot. no. 145495/21.01.2015 as regards the parking positions and the location and planning of the MSS surfaces. The EIS submission was requested for the construction of the MSS.</p>
A.2	Forest areas	For any kind of work or facilities within the forest areas, the required by Law 998/79 approval must previously have been granted.	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.
A.3	Archaeology	Before the commencement of the project construction, the archaeological service shall be informed in writing. In areas of archaeological interest, the works on the construction of the project will be supervised by the competent archaeological service and in accordance with the instructions. The expense for the required excavation works will bear the project budget.	In any event, before the commencement of any kind of construction works, the competent archaeological services are informed.
<b>B.</b>	<b>Design – related Issues</b>		



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<p>B.1</p>	<p>Exploitation &amp; Maintenance Centres (EMC) Studies</p>	<p>For each installation or activity within the EMC in Kastro I/C the relevant approval of the STIS submitted by the project operator is required from EYPE/Public Works. Upon the approval of the STIS, environmental measures may be imposed, along with those applicable herein, including the non - implementation of facilities and activities associated with irreversible impacts. In that STIS the following issues should be at least covered in detail:</p> <p>Detailed description of the facilities and activities within the EMC, and quantitative estimates of sizes that are related to the environmental impact.</p> <p>Equipment, ways and methods that will be used to the conditions and limitations of this decision which are related to the environmental impact.</p> <p>The methods of procurement, storage, use or disposal of toxic substances such as lubricants, detergents etc. and measures to prevent pollution from these substances. The quantity, composition, possible need for treatment and the way of wastewater disposal.</p> <p>Environmental effects that are not sufficiently smoothed by applying the terms and restrictions of this report and proposals for measures to be taken to eliminate or significantly reduce these environmental impacts.</p>	<p>No EMC construction in Kastro I/C is foreseen.</p>
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<b>S/N</b>	<b>ENVIRONMENTAL TERM</b>	<b>JMD PROVISIONS</b>	<b>ENVIRONMENTAL TERMS: WAYS – METHODS OF ASSESSMENT</b>
B.2	Runoff Retention Tanks Hydraulic Study	<p>To install a closed drainage – sewerage circuit along the said section that directly affects hydraulically the Yliki Lake and to construct runoff holding tanks at suitable positions without an expansion of trenches and embankments for the construction of these tanks. The relative hydraulic study should benefit from the acceptance of the competent body, responsible for the management of the Athens water supply and then inform the YPEHODE Ministry of Environment Services.</p> <p>To ensure the uninterrupted flow of the surface water by constructing all required structures and considering a return period of at least 50 years, excluding any stream filling with debris etc., to avoid phenomena of stagnant water and flooding.</p>	<p>The relevant hydraulic studies for the closed drainage – sanitation system concerning the two bypasses of Yliki as well as the studies for the runoff retention tanks have been approved by the Independent Engineer (prot. no. 36193/26.05.2011 &amp; 36194/26.05.2011).</p> <p>As regards the construction of the optimization works, the corresponding hydraulic studies have been elaborated and in any event the smooth water flow is not affected.</p>
B.3	Architectural Studies	For technical projects and outdoor configurations (Parking areas, MSS etc.) complete architectural projects will be developed.	The relevant Architectural Studies have been elaborated and submitted to the Independent Engineer

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B.4	Landscaping Study	<p>Planting after carrying out specific landscaping studies of all surfaces susceptible to vegetation (worksite spaces, disposal areas, ditches, embankments, node islets etc.). Emphasis should be given to planting trees and ensuring appropriate conditions for their satisfactory growth (minimum topsoil of .depth of 1 m). The planting works should begin immediately to any section of the project in which earthworks are completed and the final surfaces are set up.</p> <p>Anticorrosion projects should follow the earthworks where required, which will prevent the loss of valuable soil and the creation of grooved erosion before sufficient vegetation is developed.</p> <p>All plantings should be done while ensuring irrigation for fast development and maintenance of vegetation.</p> <p>Topsoil that is in the execution area of the project will be collected and preserved for use during the restoration works. In case of excess topsoil in an area, quantities should be transferred from a region or part of the project to another one, regardless of the subcontractors that will be installed following instructions of the supervising agency.</p>	<p>The relevant final landscaping and irrigation studies referring to the bypass sections are assigned, elaborated and submitted to the Independent Engineer, namely: a) CH. 89+344,15 – CH.91+967,39 and b) CH. 94+517,70 – CH. 97+647,43 with prot. 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 dated 10/7/2008 respectively. The design is under restructuring/completion pursuant to the IE's suggestions and their resubmission is pending.</p>
<b>C.</b>	<b>Construction and Operation related</b>		
C.1	Worksite infrastructure for the Motorway operation	Worksite infrastructure to be established serving the project's needs during its operation (de-icing, etc.)	<p>It refers to the operation phase of the project and has been met.</p> <p>Nine (9) snow removal stations have been environmentally licensed (with prot. no. 122399/1-4-2010 of EYPE) along PATHE. The stations installed and in-operation are located in Varimpompi, Malakassa, Schimatari, Thiva Akrefnio, Martino, Tragana and Agios Konstantinos.</p>
C.2	Traffic Noise	Maximum permissible noise limit as mentioned in Ministerial Decision no. 17252/20.9.92 (OGG 395B) "Defining indicators and maximum allowable noise limits generated by traffic on road and transportation projects."	It refers to the operation phase of the project
C.3	Road-widening	The widening of the road to the area of Yliki Lake from CH. 3+000 to CH. 4+200 and from CH. 5+500 to the CH. 6+800 kilometre of the EIS to be done on the side upstream of Yliki to avoid embankments in the slopes thereof.	It refers to the old project and has been met



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C.4	Water flow	To construct all structures mentioned in the EIA including the viaduct at CH. 8+768.	It refers to the old project and has been met
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S/N	ENVIRONMENTAL TERM	JMD PROVISIONS	ENVIRONMENTAL TERMS: WAYS – METHODS OF ASSESSMENT
C.5	Borrow pits - Quarries	<p>If further extracted materials are required during the project construction, they can be provided by legally operating quarries in the area, which should be followed by the necessary decision approving environmental conditions, or by quarries - borrow pits that can be created, in accordance with the provisions of Law 1428/84, 2115/93 and Law 998/79, the terms hereof and after preparation of the required environmental Impact Studies, the corresponding environmental permits and the submission of letters of guarantee for rehabilitation projects.</p> <p>Installation of mining activities is prohibited in the areas defined in par. 4 of Article 8 of the Joint Ministerial Decision A5 / 2280 / 28.11.1983 (OGG 720V / 12.13.1983), also in locations visible from the NR throughout its length.</p>	<p>The installation of a stone processing plant was approved and submitted to EYPE (approval no. 103047/10.06.08). The stone processing plants failed to operate at the reference time. The materials required for the construction of the optimization works are taken from environmentally licensed units.</p>
C.6	Disposal Pits	<p>The disposal of the inappropriate excavation materials to be carried out in positions that shall not affect the flow of the surface waters, shall not be wooded areas and shall be placed at least 250 meters from the boundaries of settlements, archaeological sites, cemeteries, etc.</p> <p>Their disposal for restoring inactive quarries of the area or creating new quarries – borrow pits in accordance with the foregoing for the project construction, is allowed. Their deposition to restore inactive quarries in the area or new quarries - borrow pits to be created under those aforementioned to the project construction.</p> <p>In any case, care shall be taken to avoid entrainment of deposited materials from rain. Throwing even temporarily gravel and other aggregates in the beds of streams and rivers is prohibited.</p>	<p>From the earthwork tables of the project's final study, no excess material is foreseen for disposal, so there is currently no need for disposal pit. The materials resulting from the improvement works are used for the construction of the embankments in other motorway sections.</p> <p>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.</p> <p>At the present work phase, in the event of excess materials appropriate for use, those will be used at other road sections as a priority.</p>

S/N	ENVIRONMENTAL TERM	JMD PROVISIONS	ENVIRONMENTAL TERMS: WAYS – METHODS OF ASSESSMENT
C.7	Excavations – Explosives	<p>The excavations to be carried out should be limited to what is strictly necessary, in order to construct the project in accordance with this decision, the regulations in force and the geotechnical characteristics of the region crossing the road.</p> <p>The border line to be determined according to those aforementioned and to be the limit of any kind of excavations, should be implemented on the ground with permanent landmarks before carrying out mining operations.</p> <p>The use of explosives where necessary, special care should be taken to minimize the adverse effects of vibration, creation of hyper excavations etc. It is possible to impose the use of mechanical means, the use of special inhibitory materials or the implementation of specific mining methods or other suitable methods, if deemed necessary for reasons of environmental protection from the Directorate of the Ministry of Environmental Planning. The Contractor in this case is required to apply the above methods that will be indicated to the latter.</p> <p>It is possible to use an excess of quarried materials of the said section as long as there are in other road sections and vice versa, subject to the terms and conditions set out above, prohibiting any extension of excavations, in order to find additional materials.</p>	<p>No explosions were carried out at the reference period, and the excavation works were limited to the absolutely necessary ones for the construction of the parking areas.</p>
C.8	Installations of concrete and asphalt production unit	<p>In constructing new variants on the 91<sup>st</sup> and 97<sup>th</sup> km, the installation and operation of concrete and asphalt production worksite units is prohibited within the catchment area that includes each section, and less than 5 km from the highest level of Yliki lake.</p>	<p>No concrete and asphalt production worksite installations are operational at this section during the reference period and the required materials are taken from environmentally licensed units.</p>

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C.9	Safety barrier and Configuration at the 91 <sup>th</sup> and 97 <sup>th</sup> km,	In constructing new variants on the 91 <sup>st</sup> and 97 <sup>th</sup> km, along the entire length of these sections, a lateral safety barrier should be constructed having those technical characteristics that, in case of an accident, to prevent the reverse of any vehicle into the lake, excluding any breakout or breakage incidents and to contain hazardous substances and materials within the motorway.	The construction of the safety barrier is taken into account into the respective road studies at 91 km and 97 km along the said sections, with height, strength and technical characteristics which, in the event of an accident, to prevent the reverse of vehicles into the lake, excluding the possibility of mounting or breakage and to retain dangerous substances and materials within the motorway.
		In constructing new variants on the 91 <sup>st</sup> and 97 <sup>th</sup> km, at the foot of the reinforced earth wall around the 91.5 kilometre, the area should be set according to the file submitted to the OAP/A.1/ F4.1/oik. 13686/21.2. 2006 EYDE-OAP letter, so even in the event of vehicle reverse, its load to be retained without creating a risk of contamination of Yliki waters.	The respective road designs took into account the configuration of the slope, according to the requirements of the file submitted by EYDE-OAP letter no. OAP/A.1/Φ4.1/oik.13686/21.2. 2006.
C.10	Sanitation — Drainage System, runoff retention tanks — filtering rainwater runoff etc.	In constructing new variants on the 91 <sup>st</sup> and 97 <sup>th</sup> km, in the framework of constructions of these sections, the following requirements should also be included: <ul style="list-style-type: none"> <li>• control and immediate restoration, where necessary, of the single closed sanitary - drainage system, so that pavement drainage to be channelled into recipients that do not affect the water quality of Yliki,</li> <li>• construction of retention - infiltration reservoirs of runoff stormwater, at least prior to each distribution point,</li> <li>• landscaping of the area under and around the viaduct of the adductor canal, so that the run-off from the deck and through the joints to be diverted from any entrance to the canal, which will be covered over a length of - 120 m at the section near the bridge.</li> </ul>	The relevant hydraulic studies concerning the two bypasses at Yliki have been approved by the Independent Engineer (sanitation – drainage closed system and the runoff retention tanks).

S/N	ENVIRONMENTAL TERM	JMD PROVISIONS	ENVIRONMENTAL TERMS: WAYS – METHODS OF ASSESSMENT
		<ul style="list-style-type: none"> <li>Improvement of the security barrier on the above viaduct and on either side thereof, to prevent the hazardous substances drop-off highway in the event of vehicle collision, overturning or overriding.</li> </ul>	
C.11	Restorations	The old worksite at the 96.5 km kilometre as well as the abandoned motorway sections will be restored by configuration of the surface layer and dense plantings, excluding any other installation or construction of immovable property.	The relevant final landscaping design and the final irrigation study on the old construction site has been assigned and prepared. It is submitted for approval to the Independent engineer and returned to the designer for corrections and additions. To meet the requirements a detailed topographic mapping of the area has been drawn up.
<b>D.</b>	<b>Worksite Management and Maintenance related Issues</b>		
D.1	Water flow protection	All kind of facilities, works etc. for the construction and operation of the project will comply with the provisions of JMD A5 2280/OGG 720/B/13.12.83 "Protection of water used for irrigation in the region Capital from pollution and contamination"	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.
D.2	Dust Control	Concrete production units and sand production units and (including conveyor belts) should be covered either moving or not.	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. More specifically, the Check List, which is foreseen in the overall Action Plan and implemented along PATHE worksites, is being applied. According to this checklist, regular inspections are carried out in order to ensure compliance with the environmental terms.



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	<p>In any case anti-pollution systems should be implemented (i.e. bag filters in crushers, sieves, falls between conveyors) and aggregate wetting pipes (sand).</p> <p>For worksite character industries of ready mixed concrete and asphalt, antipollution technology should also be implemented and bag filters on cement silos and weighbridges should definitely be used and water to wet piles of aggregates, with permanently installed recycled water piping system to wash heavy vehicles carrying ready-mixed concrete which will originate from the precipitation tank of analogs waste. Vehicles will be washed on cemented inclined floor by draining the settling tank.</p> <p>Also, fabric filters or equivalent performance system, on a rotary kiln for only-drying aggregates, sieves, and hoists as well as aggregate materials from the wetted aggregate piles mentioned above, with the lowest possible moisture content to limit fuel consumption for drying should be used.</p> <p>When drilling, mechanical equipment should be used ensuring the retention of dust (dust collectors).</p> <p>Regular wetting of worksite materials etc. should be done, in order to limit the dust during the execution of earthworks.</p> <p>Those sections of the roads, where the other works have been completed, to be covered with concrete as soon as possible, so as for dust not to be emitted from vehicles traveling on them.</p> <p>Specifically, as for the lateral roads, large sections should be completed on priority in order to serve as worksite roads.</p>	<p>The Check List was presented for information and implementation to the J/V supervising civil engineers and to the subcontractors that provide total services to the J/V.</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. Taking or not these corrective actions is confirmed by the following controls.</p> <p>More specifically:</p> <ul style="list-style-type: none"> <li>• No material combustion is carried out at the project site.</li> <li>• The worksite roads and the work execution sites are regularly wetted.</li> <li>• The trucks that transfer materials should not be overloaded and all trucks transferring loose materials should be covered.</li> </ul> <p>It has to be noted that the materials required for the construction of the works are taken by environmentally licensed units.</p>
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D.3	Noise – Mobile noise barriers	<p>As for the noise emitted from the construction equipment, the provisions of JMD 37393/2028/01.10.2003 "Measures and terms for the noise emissions to the environment by equipment for outdoor use" (OGG 1418B) shall apply.</p> <p>Machinery remaining and used on the construction site is not allowed without the approval certificate of noise, EOK type, as defined in paragraph c of the present.</p> <p>The Supervising Service should ensure compliance with those aforementioned.</p> <p>Wherever the available technology does not ensure the acceptable noise levels, temporary sound barriers should be placed in the challenge areas.</p> <p>Average energy noise level during operation of worksites is set to be the 65 dB (A).</p>	<p>The construction works of the motorway parking areas are executed in a non-urban area, away from sensitive receivers, and the construction noise is overshadowed directly by the road traffic noise.</p> <p>The machines and the vehicles used for the construction of the project have all the licenses and certificated foreseen by Law, including the European Community noise approval certificate.</p>
D.4	Liquid Waste	<p>For liquid waste, the JMD A5/2280/OGG720/V/13.12.83 as amended with JMD 131835/5.12.2005 (OGG 1744B) and the current ministerial decisions –only if those impose more stringent requirements than those of the above JMD- shall apply.</p>	<p>An overall Environmental Management Plan, where the procedure of liquid management is included, has been elaborated according to the environmental terms and the current legislation.</p>
		<p>Pollution of surface and ground waters from any kind of oils, fuels, etc. is prohibited.</p> <p>Disposal of old oil on the ground is similarly prohibited.</p> <p>The management of waste oils should be done as prescribed in Ministerial Decision 71560/3053/OGG 665/V/85.</p>	<p>JMD 71560/3053/ OGG 665/B/85 has been replaced by JMD 98012/2001/96 (OGG 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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D.5	The storage of fuel, lubricants or other dangerous substances is prohibited at 91 <sup>st</sup> and 97 <sup>th</sup> km	During the construction of new variants on the 91st and 97th km, the storage of fuel, lubricants or other hazardous substances (i.e. concrete admixtures, solvents, paints, etc.) in locations where construction works are carried out, is prohibited. Moreover, the supply of fuel, the change of lubricants, the use of any hazardous substances and any other activity that may contribute to the contamination of Yliki, should be made outside the above positions and distances to ensure the prevention of water pollution potential. After the end of each construction phase of (i.e. earthworks, concreting works, etc.) and in any event prior to the start of the next phase all the excess or waste materials, all parts of the equipment and all elements of the site not used in the next phase of works will be removed immediately.	The term is met. Also, in the framework of the overall Action Plan for the monitoring of the Environmental Terms of the whole PATHE project, which includes protection measures for all those provided for in the environmental terms, regular compliance controls are conducted pursuant to those referred to in the environmental terms. Relevant references are made for conformity in the event of derogations from those set out by the E.T.
D.6	Solid Waste	Any kind of rubbish, waste materials, old parts and machinery, oil, all kinds of grouting agents, etc., and materials combustion (tires, oil, etc.) in the work area should be collected and removed; their disposal should be done in accordance with the current provisions. Any kind of material combustion (wires, oils, etc.) is prohibited in the said area.	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.
<b>S/N</b>	<b>ENVIRONMENTAL TERM</b>	<b>JMD PROVISIONS</b>	<b>ENVIRONMENTAL TERMS: WAYS – METHODS OF ASSESSMENT</b>
		During the construction of new variations on the 91st and 97th km, after the end of each phase of construction (i.e. earthworks, concreting works, etc.) and in any event prior to the start of the next phase all the excess or waste materials, all parts of the equipment and all elements of the site not used in the next phase of works will be removed immediately.	
D.7	Worksite Installations	All worksite installations (offices, garages, warehouses, etc.) should be removed after the end of the contracting and the area should be restored irrespectively of the ownership regime of each worksite area.	No worksite infrastructure did operate at the area of Yliki at the reference time.



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D.8	Fire Protection	Care for fire protection should be taken during the construction, to deal with any fire generated from the operation of the machinery. The way in which the fire protection shall be controlled and approved by the supervisory agencies before the commencement of the works.	Care is taken that, both for vehicles and project machines as well as in the worksite field, the relevant firefighting means are in good condition and available for use in emergency situations.
D.9	Construction of New Jersey near the lake of Yliki	Near the area of Yliki Lake, a New Jersey should be placed or an equivalent system and measures proposed in the EIS should be taken to prevent the diversion of trucks etc. vehicles carrying toxic or dangerous goods.	It refers to the E.T of the existing project and it has been taken into account at the existing motorway. As regards the new project of bypasses design, the containment wall has already been taken into account in the road study, which has been approved by the Independent Engineer.
<b>E.</b>	<b>General Issues</b>		
E.1	Obligation to comply with the Environmental Terms	The above terms are mandatory and relate to: - the owner of the project - the Services and Agencies responsible for the construction and operation of the Project - the heads of the above, who must ensure their implementation and monitor strict compliance. - to everyone who, due to his position and powers, shall be responsible for planning, commissioning, supervision, delivery and other procedures relating to the construction and operation of the project	The Environmental Terms of the project are obligatorily adhered by all the competent bodies (Construction J/V, Independent Engineer/Concession, etc.)



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E.2	Environmental Terms Compliance monitoring	The owner of the project and the relevant services should take all necessary measures to ensure compliance with the environmental conditions on behalf of the contractor, as part of its concern, and the possibility to tackle and rehabilitate unpleasant environmental conditions due to actions or omissions on behalf of the contractor in violation of the environmental conditions.	<p>The Construction J/V has taken all necessary measures to ensure compliance with the Environmental Terms and to be able to resolve and restore any unfavourable environmental situations.</p> <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, 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.</p> <p>Also, the Construction J/V collaborates with a special advisor in order to form a group of scientists, which shall cover the whole environmental range.</p>
E.3	Construction and Operation Expenses for the protection of the environment	Credits for the construction and operation of the project ensuring, by priority, the required expenditure on environmental protection projects (planting projects, etc.).	<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>

S/N	ENVIRONMENTAL TERM	JMD PROVISIONS	ENVIRONMENTAL TERMS: WAYS – METHODS OF ASSESSMENT
E.4	Reports Transmission to the competent bodies	<p>By January 31 of each year the body of the construction or operation of the project shall submit a statement to EYPE/YPEHODE setting out:</p> <p>The course of the construction of the project, parts of the project that have been received or delivered for operation, permits or authorizations granted in accordance with the terms of the present, studies awarded, qualitative, quantitative and economic data on environmental protection projects and the percentage that the costs for these projects represent, in relation to the total expenditures for the construction of the project, rehabilitation and anti-pollution works to be done for the next year, comparing these with the provisions of the National and Community legislation and XXX, problems encountered, contingencies and any information or suggestions that could be useful to mitigate any adverse environmental impacts caused by the construction or operation of the project.</p>	<p>The term is met. The semiannual and annual report has been submitted.</p>
E.5	Project Environmental Terms Validity	<p>The aforementioned environmental terms shall be in force till 31.12.2016 and provided they are kept accurately. After that date it is required to comply with Article 4 of Law 1650/86, as replaced by Article 2 of Law 3010/2002 and Article 13 of the JMD 11014/703/Φ104/2003 (OGG 332/B/2003).</p> <p>Each term of this Decision may be amended in accordance with Article 2 of Law 1650/86 as replaced by Article 2 of Law 3010/2002. By the same reasoning can be put new environmental conditions, if it results from a new data science and technology in the field of protection and management of the environment.</p>	<p>The Environmental Terms are in force. 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>



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<b>S/N</b>	<b>ENVIRONMENTAL TERM</b>	<b>JMD PROVISIONS</b>	<b>ENVIRONMENTAL TERMS: WAYS – METHODS OF ASSESSMENT</b>
		<p>This report and the EIA of the project, together with the documentation submitted with the OAP/A.1/F4.1/OIK.13686/21.2.2006 letter of EYDE-OAP, attached thereto, should in every control to be kept into the offices of the Constructor or the Operator of the project and into the offices of EYDE/OAP of YPEHODE and to be demonstrated in the competent bodies, in accordance with the current legislation.</p>	<p>It is applicable to the Construction J/V offices.</p>



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**2.3 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	ENVIRONMENTAL TERM	JMD PROVISIONS	ENVIRONMENTAL TERMS: WAYS – METHODS OF ASSESSMENT
<b>A.</b>	<b>Permit/Approval Issues</b>		
A.1	Installation permits for any activity or installation required for the operation of the Motorway	<p>For any activity or facility necessary for the construction – operation of the project, all permits and approvals provided by law should previously have been granted, including the approval of the environmental conditions required for specific activities or facilities (production unit of aggregates, ready mixed concrete and asphalt). More specifically: as for concrete production units, sand production units, ready mixed concrete and asphalt plants, the approval of Special Technical Implementation by EYPE/YPEHODE is required.</p> <p>STIS should analyze the following:</p> <ul style="list-style-type: none"> <li>- The planning of the adjacent project, in which the components related to the intensity, extent and nature of the environmental effects should be detailed as an implementation study,</li> <li>- The manner, methods and measures by which the compliance of the adjacent project with the established environmental legislation and the environmental conditions of this Decision is being implemented,</li> <li>- The installation operation and removal schedule, of the adjacent project as well as the one of the restoration of the area occupied</li> <li>- The method and the final results of restoration, with details corresponding to the application design level.</li> </ul>	<p>The procedures regarding the environmental permit and other permits or approvals are being followed.</p> <p>A file amending the environmental terms of Athens PATHE (Metamorfossi I/C) – Maliakos (Skarfia) for the environmental licensing of 10 parking areas and 2 location areas of the Motorist Service Stations (MSS) was submitted by EYPE with prot. no. 173067/5-6-2014.</p> <p>The amendment file was approved by DIPA with prot. no. 145495/21.01.2015 as regards the parking areas and the location and planning of the MSS surfaces.</p> <p>The EIS submission was requested for the construction of the MSS.</p> <p>The additional environmental assessment study has been submitted with letter no 39579/26.05.2015 (Concessionaire).</p>

S/N	ENVIRONMENTAL TERM	JMD PROVISIONS	ENVIRONMENTAL TERMS: WAYS – METHODS OF ASSESSMENT
		<p>Specifically, asphalt production and laboratory tests will be done at a worksite in fallow an area that had previously been used as a construction site and was not restored at the height of the 117 kilometer of the motorway.</p> <p>To meet the asphalt needs is possible from this worksite and the adjacent sections of PATHE motorway.</p> <p>The conditions, measures and restrictions on the operation and restoration of the said worksite, are reported in the study submitted by the IC-C-CO-P137Y- PRO5649/EM/em/4.11.2008 document of «EURO-IONIA» Consortium and the terms of this Decision.</p>	
A.2	Providing information to Archaeological Services	<p>Before beginning the construction of each section of the project, the archaeological service should be notified in writing. In archaeological sites the works on the construction of the project will be supervised by the competent archaeological service and in accordance with its instructions. The cost for the required excavation works will bear the project budget. In particular in the region of Korseia and Tragana toll station, the widening of the road will be done as shown by the competent Archaeological Service.</p>	<p>In any event the competent archaeological services are informed before the commencement of the construction works. The protocols of correspondence with the respective Archaeological Services.</p>
A.3	Works within forest areas	<p>For any kind of work or facilities within areas of forest character the intervention approval, required by Law 998/79, must previously be granted.</p>	<p>The Construction J/V shall ensure the required opinions by the Forestries at site and before the commencement of the works.</p>
<b>B.</b>	<b>Design-related issued</b>		
B.1	To ensure the uninterrupted flow of the surface waters	<p>To ensure the uninterrupted flow of the surface water by constructing all required structures and considering a return period of at least 50 years, excluding any stream filling with debris etc., to avoid phenomena of stagnant water and flooding.</p>	<p>It refers to the old project and has been met. As regards the construction of the optimization projects, the respective studies have been elaborated and the uninterrupted flow of the surface waters is not affected.</p>



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B.2	Landscaping studies	<p>Planting after carrying out specific landscaping studies of all surfaces susceptible to vegetation (worksite spaces, disposal areas, ditches, embankments, node islets etc.). Emphasis should be given to planting trees and ensuring appropriate conditions for their satisfactory growth (minimum topsoil of .depth of 1 m). The planting works should begin immediately to any section of the project in which earthworks are completed and the final surfaces are set up.</p> <p>Anticorrosion projects should follow the earthworks where required, which will prevent the loss of valuable soil and the creation of grooved erosion before sufficient vegetation is developed.</p> <p>All plantings should be done while ensuring irrigation for fast development and maintenance of vegetation.</p> <p>Topsoil that is in the execution area of the project will be collected and preserved for use during the restoration works. In case of excess topsoil in an area, quantities should be transferred from a region or part of the project to another one, regardless of the subcontractors that will be installed following instructions of the supervising agency.</p>	<p>The respective final landscaping studies and the final corresponding irrigation studies have been assigned and elaborated.</p>
<b>C.</b>	<b>Operation-related issues</b>		
C.1	MSS and parking	<p>The MSS will be two-sided. About 10 km. from the nearest MSS Station at least 1 parking place - rest room will be created, per traffic branch, where WC with sealed absorbing pits will be built.; also there will be telephone, drinking water and water for cleaning.</p> <p>At CH. 114, just after the Kastro, at the location suggested in the EIS, and MSS of C type is going to be built, which will include at least a service station, bar and the necessary auxiliary spaces and toilets. These sites will be identified by TEO and DMEO of GGDE and under the terms and restrictions hereof.</p>	<p>As for the MSS in the suggested location of the EIS, an amendment file has been submitted.</p> <p>EYPE/YPEKA agreed with the suggested locations of Stations (EYPE 173067/5-6-2014 See paragraph A.1).</p> <p>The amendment file has been approved by DIPA with prot. no. 145495/21.01.2015 as regards the landscaping of MSS surfaces.</p> <p>The additional environmental impact study submitted with prot. No. 39579/26.05.2015 (Concessionaire).</p>

S/N	ENVIRONMENTAL TERM	JMD PROVISIONS	ENVIRONMENTAL TERMS: WAYS – METHODS OF ASSESSMENT
		<p>In all parking areas there will be stylish trash cans. MSS installation is prohibited in archaeological sites. During the operational phase, the developer of the project must ensure the uninterrupted operation of service facilities, the removal of waste and keeping premises clean.</p> <p>Also the developer of the project must arrange the removal of garbage generated from the road users, by special personnel, at regular intervals. Moreover, the triangular kennels, where they exist, as well as combustible materials (paper, dry vegetation, etc.) elsewhere gathered should be cleaned, especially during the summer months given the increased risk of burning cigarettes of road users.</p>	<p>Construction works of the parking lots work are almost completed on the positions and with the requirements imposed by the approved environmental conditions.</p>
C.2	Traffic Volume	<p>Upon operation, the traffic volume should be monitored at least once per year, in April or October, and one more time, in July or August.</p>	<p>It refers to the operation of the project.</p>
c.3	Worksite infrastructure	<p>Worksite infrastructure to be established serving the project's needs during its operation (de-icing, etc.)</p>	<p>Nine (9) snow removal stations have been environmentally licensed (with prot. no. 122399/1-4-2010 of EYPE) along PATHE. The stations installed and in-operation are located in Varimpompi, Malakassa, Schimatari, Thiva Akrefnio, Martino, Tragana and Agios Konstantinos.</p>
C.4	Traffic Noise	<p>Maximum permissible noise limit as stated in the Ministry. Re. 17252/20.9.92/Official Gazette 395/B/6.19.92.</p>	<p>It refers to the operation of the project.</p>
C.5	Air pollution by the operation	<p>For gaseous, the allowable concentrations of pollutants are listed in RWBs 99 /10.7.87 (OGG 135/A/28.07.87 and RWBs 25/18.3.88 (OGG 52 /A/03.22.88)</p>	<p>The technical landscaping and technical specifications report of the air pollution &amp; meteorological data stations for PATHE motorway, was submitted for approval by EYPE.</p>



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			<p>EYPE/YPEKA agreed with the proposed locations and the technical Specifications of the Stations (letter no. 195241/12-01-2011).</p> <p>The EARTH/YPEKA directorate approved the locations and the Technical Specifications (prot. no. 185799/8-03-2011)</p>
C.6	Liquid waste by the operation	For liquid waste, the applicable prefectural decisions and the JMD A5/2280/OGG 720/B/13.12.83 shall apply.	<p>An overall Environmental Management Plan has been drawn up and submitted, where the procedure for the management of the liquid waste is included pursuant to the environmental terms and the current legislation. Moreover, a relevant file with agreements and orders for waste collection of oil management licensed businesses is kept.</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>
<b>D.</b>	<b>Construction and Maintenance Issues</b>		
D.1	Waste Management	Any kind of rubbish, waste materials, old parts and machinery, oil, all kinds of grouting agents, etc., and materials combustion (tires, oil, etc.) in the work area should be collected and removed; their disposal should be done in accordance with the current provisions.	Recommendations, through regular inspections and check lists, are made when the rational and correct procedures for handling solid waste are not met. At the end of the works, the subcontractor is obliged to deliver the work area free of waste. The term is met.
D.2	Materials Combustion	Materials combustion (tires, oil, etc.) is prohibited in the worksite area.	Regular inspections are carried out in order to ensure compliance with the said E.T.



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D.3	Water and soil protection	<p>Pollution of surface and ground waters from any kind of oils, fuels, etc. is prohibited. Also, the disposal of old oil on the ground is prohibited.</p> <p>The management of used oils should be in accordance with the provisions of the JMD 71560/3053/JMD 665/B/85.</p> <p>For liquid waste the applicable prefectural decisions and the JMD A5/2280/ΦΕΚ 720/B/13.12.83 shall apply.</p>	<p>JMD 71560/3053/ ΦΕΚ 665/B/85 has been replaced by JMD 98012/2001/96 (OGG 40B).</p> <p>A general Environmental Management Plan, which includes procedure for handling liquid waste in compliance with the respective environmental terms and the applicable legislation, has been drawn up.</p> <p>Hand-over documents of that kind of waste as well as the relevant agreements are filed.</p>
D.4	Concrete, asphalt, stone processing and sand production units.	<p>Concrete production units and sand production units and (including conveyor belts) should be covered either moving or not. In any case anti-pollution systems should be implemented (i.e. bag filters in crushers, sieves, falls between conveyors) and aggregate wetting pipes (sand).</p> <p>For worksite character industries of ready mixed concrete and asphalt, antipollution technology should also be implemented and the following should be used:</p> <p><u>Ready-mix concrete industries</u></p> <ul style="list-style-type: none"> <li>- bag filters on cement silos and weighbridges</li> <li>- water to wet piles of aggregates, with permanently installed recycled water piping system to wash heavy vehicles carrying ready-mixed concrete which will originate from the precipitation tank of analogs waste.</li> </ul> <p>Vehicles will be washed on cemented inclined floor by draining the settling tank.</p>	<p>The materials needed for the optimization works of the said section, are provided by subcontractors disposing environmentally licensed units with the appropriate technology.</p>

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		<p><u>Asphalt industries</u></p> <ul style="list-style-type: none"> <li>- Sand-filters or an equal performance system on a rotary kiln for only-drying aggregates, sieves, and hoists</li> <li>- Aggregate materials from the wetted aggregate piles mentioned above, with the lowest possible moisture content to limit fuel consumption for drying</li> </ul>	
D.5	Materials for the construction of the project	<p>If further extracted materials are required during the project construction, they can be provided by legally operating quarries in the area, which should be followed by the necessary decision approving environmental conditions, or by quarries - borrow pits that can be created, in accordance with the provisions of Law 1428/84, 2115/93 and Law 998/79, the terms hereof and after preparation of the required environmental Impact Studies, the corresponding environmental permits and the submission of letters of guarantee for rehabilitation projects.</p> <p>Installation of mining activities is prohibited in locations visible from the NR throughout its length.</p> <p>Those aforementioned shall apply for the areas suggested in the EIS</p>	<p>The excavation materials by the optimization works are used in the project for the construction of the embankments, and if excess materials are needed, they will be ensured by environmentally licensed installations.</p>
D.6	Disposal Pits	<p>The disposal of the inappropriate excavation materials to be carried out in positions that shall not affect the flow of the surface waters, shall not be wooded areas and shall be placed at least 250 meters from the boundaries of settlements, archaeological sites, cemeteries, etc.</p> <p>Their disposal to restore inactive quarries in the area, or new quarries - borrow pits to be created if is permitted following those mentioned above for the project construction.</p> <p>In any case, care shall be taken to avoid entrainment of deposited materials from rain.</p>	<p>The term is met and the excavation materials are temporarily disposed within the works execution zones and are used for the construction of embankments.</p>

S/N	ENVIRONMENTAL TERM	JMD PROVISIONS	ENVIRONMENTAL TERMS: WAYS – METHODS OF ASSESSMENT
		<p>The excavations to be carried out should be limited to what is strictly necessary, in order to construct the project in accordance with this decision, the regulations in force and the geotechnical characteristics of the region crossing the road.</p> <p>The border line to be determined according to those aforementioned and to be the limit of any kind of excavations, should be implemented on the ground with permanent landmarks before carrying out mining operations.</p> <p>The use of explosives where necessary, special care should be taken to minimize the adverse effects of vibration, creation of hyper excavations etc. It is possible to impose the use of mechanical means, the use of special inhibitory materials or the implementation of specific mining methods or other suitable methods, if deemed necessary for reasons of environmental protection from the Directorate of the Ministry of Environmental Planning. The Contractor in this case is required to apply the above methods that will be indicated to the latter.</p> <p>It is possible to use an excess of quarried materials of the said section as long as there are in other road sections and vice versa, subject to the terms and conditions set out above, prohibiting any extension of excavations, in order to find additional materials.</p>	
D.8	Dust Control	<p>Regular wetting of worksite materials etc. should be done, in order to limit the dust during the execution of earthworks.</p> <p>Those sections of the roads, where the other works have been completed, to be covered with concrete as soon as possible, so as for dust not to be emitted from vehicles traveling on them.</p> <p>Specifically, as for the lateral roads, large sections should be completed on priority in order to serve as worksite roads.</p>	<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 overall Action Plan and implemented along PATHE worksites, is being applied. According to this checklist, regular inspections are carried out in order to ensure compliance with the environmental terms.</p>

S/N	ENVIRONMENTAL TERM	JMD PROVISIONS	ENVIRONMENTAL TERMS: WAYS – METHODS OF ASSESSMENT
		<p>During the perforation, mechanical equipment to be used in order to contain the dust.</p>	<p>The Check List was presented for information and implementation to the J/V supervising civil engineers and to the subcontractors that provide total services to the J/V.</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. Taking or not these corrective actions is confirmed by the following controls.</p> <p>More specifically:</p> <ul style="list-style-type: none"> <li>• No material combustion is carried out at the project site.</li> <li>• The worksite roads and the work execution sites are regularly wetted.</li> <li>• The trucks that transfer materials should not be overloaded and all trucks transferring loose materials should be covered.</li> </ul> <p>It has to be noted that the materials required for the construction of the works are taken by environmentally licensed units.</p>
D.9	Noise emissions by the construction	<p>Machinery remaining and used on the construction site is not allowed without the approval certificate of noise, EOK type, as defined in paragraph c of the present.</p> <p>The Supervising Service should ensure compliance with those aforementioned.</p> <p>Average energy noise level during operation of worksites is set to be the 65 dB (A).</p>	<p>The machines and the vehicles used for the construction of the project have all the licenses and certificated foreseen by Law, including the European Community noise approval certificate.</p> <p>The construction noise is overshadowed directly by the road traffic noise</p>



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S/N	ENVIRONMENTAL TERM	JMD PROVISIONS	ENVIRONMENTAL TERMS: WAYS – METHODS OF ASSESSMENT
D.10	Fire Protection	Care for fire protection should be taken during the construction, to deal with any fire generated from the operation of the machinery. The way in which the fire protection shall be controlled and approved by the supervisory agencies before the commencement of the works.	The term is met. Care should be taken both for the vehicles and the work field in order for the fire-fighting vehicles to be kept in good condition and available for use.
<b>E.</b>	<b>General Issues</b>		
E.1	Obligation to comply with the Environmental Terms	<p>Terms relating to the structures and measures to address environmental degradation (paragraph d) are mandatory and relate to:</p> <ul style="list-style-type: none"> <li>- the project owner</li> <li>- the Services and Agencies responsible for the construction and operation of the Project</li> <li>- the Independent Engineer, who is required to ensure their implementation and their effective monitoring of full compliance</li> <li>- the heads of these agencies and bodies, who must ensure their implementation and their effective monitoring of compliance</li> <li>- to everyone who, because of their position and powers, shall be responsible for the design, approval, tendering, awarding, monitoring, certification, delivery and other procedures relating to the construction and operation of the project</li> <li>- the Contractor's project</li> </ul>	The environmental terms of the project are met by all the competent bodies (Construction J/V, Independent Engineer/Concession, etc.)



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E.2	Environmental Terms Compliance monitoring	<p>The project owner and all competent services should take all necessary measures to ensure:</p> <ul style="list-style-type: none"> <li>- compliance with the environmental conditions of the Contractor</li> <li>- ability to cope and rehabilitate unpleasant environmental conditions due to actions or omissions of the Contractor in breach of the environmental conditions.</li> </ul>	<p>The Construction J/V has taken all necessary measures to ensure compliance with the Environmental Terms and to be able to resolve and restore any unfavourable environmental situations.</p> <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, 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.</p>
E.3	Construction and Operation Expenses for the protection of the environment	Credits for the construction and operation of the project ensuring, by priority, the required expenditure on environmental protection projects (planting projects, etc.).	<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>



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E.4	Annual Report Submission to EYPE	<p>By January 31 of each year the body of the construction or operation of the project shall submit a statement to EYPE/YPEHODE setting out:</p> <ul style="list-style-type: none"> <li>- The course of the construction of the projects, accompanied by detailed documentation of compliance with the environmental conditions.</li> <li>- Parts of the project that have been received or delivered for operation.</li> <li>- Permits or authorizations granted in accordance with the terms of the present.</li> <li>- Studies awarded, qualitative, quantitative and economic data on environmental protection projects and the percentage that the costs for these projects represent, in relation to the total expenditures for the construction of the project.</li> <li>- Anti-pollution and environmental protection works to be made for the next year.</li> <li>- Summary of results concerning the noise monitoring, the measurements of air pollution and the monitoring program of water quality.</li> <li>- Problems encountered, contingencies and any information or suggestions that could be useful to mitigate any adverse environmental impacts caused by the construction or operation of the project.</li> </ul>	<p>An annual and semiannual reference of the works progress and of the possible environmental problems raised is submitted to YPEHODE</p>
E.5	Measures for preventing environmental implications of the EIA and AET	The E.T. suggested in the EIS and the supplementary Technical Report, accompanying the present, do not contradict those above mentioned.	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.T. amendment to change the project Basic Characteristics	<p>Change of the project's basic characteristics as described in the EIS, with the terms and restrictions of the present, is possible only if there are substantive differences as regards the impact on the environment and only after approval by the Division of Regional Planning of the Ministry.</p> <p>In all other cases a new decision approving the environmental terms is required.</p>	<p>A file no. EYPE 173067/5-6-2014 amending the environmental terms of the Athens PATHE section (Metamorfossi I/C) – Maliakos (Skarfia) has been submitted for the environmental licensing of 10 parking areas and 2 location areas of the MSSs. The amendment file was approved by DIPA with prot. no. 145495/21.01.2015 as regards the parking areas and the location and planning of the MSS surfaces. The EIS submission was requested for the construction of the MSS. The additional environmental impact study for Martino MSS has been submitted with prot. no. 39579/26.05.2015 (Concessionaire).</p>
E.7	Modification of the current infrastructure projects	Intervention or modification of the existing infrastructure works in collaboration with the relevant agencies should be done in order to ensure their satisfactory operation.	In case it is necessary, the relevant procedures shall initiate.



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E.8	Project Environmental Terms Validity	<p>Period for which the environmental conditions approval is valid - Pre-conditions for revision:          The above mentioned environmental conditions are valid until 31.12.2005 and on the condition that they will be kept accurately. Extension of the duration of validity with JMD prot. no. 33838/94 /10.07.1995 Approval of Environmental Terms of the New NR project of Athens – Thessaloniki/ Kastro - Tragana section until 31.12.2016.</p>	The terms are in force.
E.9	Environmental Terms Amendment	<p>Each term of this Decision may be amended if, during the construction or operation of the Project, the environment is not adequately protected. It may also be modified or new environmental conditions may be set if necessary, given the developments in the environmental research field (i.e. limits change) because of the large operational horizon of the project and the progress of the antipollution technology</p>	<p>If, because of evolutions on the environmental sector or for any other reason, the Environmental Terms of the present JMD are amended, the company shall comply with the new terms under the Law.</p>
E.10	E.T. controllability by the competent authorities	<p>This report and the EIA of the project, together with the documentation submitted with the JMD 69269/5387/90, should in every control to be kept into the offices of the project and into the and to be demonstrated in the competent bodies, in accordance with the current legislation.</p>	<p>It is applied for the Concessionaire's and the construction J/V's offices where there is also the JMD for the renewal of the validity of AET (Protocol No. 103910/12-05-2006).</p>



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**2.4 TRAGANA – ARKITSA  
(JMD 36795/94/10.07.1995 & JMD 103910/12.05.2006)**

S/N	ENVIRONMENTAL TERM	JMD PROVISIONS	ENVIRONMENTAL TERMS: WAYS – METHODS OF ASSESSMENT
<b>A.</b>	<b>Permit/Approval Issues</b>		
A.1	Installation permits for any activity or installation required for the operation of the Motorway	For any activity or facility necessary for the construction or operation of the project, all permits and approvals provided under the current legislation should firstly be granted, including individual and any required environmental licensing (quarries, borrow pits, particle size separation facilities). More specifically for concrete production units and sand production units the environmental approval is required by the Prefecture of South Viotia regardless of the horsepower of these facilities even if they are removable. These conditions will always include the terms set out above and are binding on the contractor. For the technical projects and the outdoor configurations (parking, MSS, etc.) complete architectural studies will be elaborated.	<p>The procedures regarding the environmental permit and other permits or approvals are being followed.</p> <p>A file amending the environmental terms of Athens PATHE (Metamorfossi I/C) – Maliakos (Skarfia) for the environmental licensing of 10 parking areas and 2 location areas of the Motorist Service Stations (MSS) was submitted by EYPE with prot. no. 173067/5-6-2014.</p> <p>The amendment file was approved by DIPA with prot. no. 145495/21.01.2015 as regards the parking areas and the location and planning of the MSS surfaces. The EIS submission was requested for the construction of the MSS.</p> <p>The EIS has been submitted with prot. No. 39707/22.06.2015 (Concessionaire) for the construction and operation of toll stations at Atalanti I/C and Livanates I/C.</p>
A.2	Works within forest areas	For any kind of work or facilities within the forest areas, the required by Law 998/79 approval must previously have been granted.	The Construction J/V shall ensure the required opinions by the Forestries at site and before the commencement of the works.
A.3	Providing information to Archaeological Services	Before the commencement of the project construction, the archaeological service shall be informed in writing. In areas of archaeological interest, the works on the construction of the project will be supervised by the competent archaeological service and in accordance with the instructions. The expense for the required excavation works will bear the project budget.	In any event the competent archaeological services are informed before the commencement of the construction works. The protocols of correspondence with the respective Archaeological Services.
<b>B</b>	<b>Design-related issued</b>		
B.1	To ensure the uninterrupted flow of the surface waters	To ensure the uninterrupted flow of the surface water by constructing all required structures and considering a return period of at least 50 years, excluding any stream filling with debris etc, to avoid phenomena of stagnant water and flooding.	It refers to the old project and has been met. As regards the construction of the optimization projects, the respective studies have been elaborated and the uninterrupted flow of the surface waters is not affected.



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<b>S/N</b>	<b>ENVIRONMENTAL TERM</b>	<b>JMD PROVISIONS</b>	<b>ENVIRONMENTAL TERMS: WAYS – METHODS OF ASSESSMENT</b>
		To construct all structures referred to in the EIS including the viaduct at CH. 8 + 768.	
B.2	Landscaping studies	<p>Planting after carrying out specific landscaping studies of all surfaces susceptible to vegetation (slopes, worksite spaces, disposal areas, etc.). The planting works should begin immediately to any part of the project in which the earthworks have been completed</p> <p>Anticorrosion projects should follow the earthworks where required, which will prevent the loss of valuable soil and the creation of grooved erosion before sufficient vegetation is developed.</p> <p>All plantings should be done while ensuring irrigation for fast development and maintenance of vegetation. Topsoil that is in the execution area of the project will be collected and preserved for use during the restoration works. In case of excess topsoil in an area, quantities should be transferred from a region or part of the project to another one, regardless of the subcontractors that will be installed following instructions of the supervising agency.</p>	The respective final landscaping studies and the final corresponding irrigation studies have been assigned and elaborated.
<b>C.</b>	<b>Operation-related issues</b>		



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C.1	MSS and parking	<p>In CH. 138 of the existing mileage, a MSS of B type will be constructed, containing at least a gas station, bar and the necessary auxiliary rooms and toilet facilities.</p> <p>The MSS is two-sided.</p> <p>In 10 km approximately from the nearest MSS, at least one parking - rest area position will be created, per traffic branch, where WC with occlusive absorbent pits will be installed, there will be a telephone, drinking water and water for cleaning. These sites will be identified by the TEO and DMEO/d of S.G. Public Works and in accordance with the terms and restrictions of the present.</p> <p>In all parking areas there will be stylish trash cans.</p> <p>The installation of MSS or parking spaces in archaeological sites is prohibited.</p> <p>The owner of the Project shall provide for the operation of the facilities, the removal of garbage and shall maintain these areas clean.</p> <p>Also, the owner of the project must arrange the removal of garbage generated from the road users, by special personnel, at regular intervals. Moreover, the triangular kennels, where they exist, as well as combustible materials (paper, dry vegetation, etc.) elsewhere gathered should be cleaned, especially during the summer months given the increased risk of burning cigarettes of road users.</p>	<p>Once the locations of the Motorists Service Stations and parking areas are finalized, the corresponding environmental term will be implemented.</p>
C.2	Traffic volume	<p>The monitoring of the traffic volume and composition will be carried out either through tolls or through any other suitable means twice a year, of which one will be in July or August.</p>	<p>It refers to the operation phase of the project.</p>
c.3	Worksite installation	<p>Worksite infrastructure to be established to serve the needs of the road (snow clearing, cleaning, etc.).</p>	<p>The construction of MSS has been realized in an expropriated area in Atalanti I/C which, in conjunction with the MSS of Thiva, serves the entire Motorway from Metamorfossi to Agios Konstantinos.</p>



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C.4	Traffic noise	<p>Where the road passes near residential areas (city plans, settlements, holiday home), care should be taken in the design and construction in order for the installation of the noise barriers to be possible when it is needed.</p> <p>Upon completion of the project, a systematic monitoring of the traffic noise will be held. The owner of the project, through those responsible for the operation of the project services, should submit for approval to the Directorate of EARTH/YPEHODE, by January 31 of each year, a monitoring program of traffic noise where the points necessary to make traffic measurements, the time that they should be made as well as the equipment and methodology to be applied, will be indicated in a reasoned manner and based on the above traffic data.</p> <p>The Directorate of EARTH/YPEHODE, upon approval, may amend the proposed program both as regards the positions and timing of measurements and as to the methodology. The results and conclusions of this control will be sent to the Directorates of Regional Planning and to the EARTH of the Ministry.</p> <p>If the results of the above program show a traffic noise level of L10 index (18h) greater than 70 dB (A), in the residential areas this happens (town plans, settlements, regions of vacation home), noise barriers should immediately be placed.</p> <p>The exact positions, height, type of material and type of noise barriers will be determined after elaboration of a special acoustic design which has to be prepared by the owner of the project and approved by the Environment Service of YPEHODE.</p> <p>Maximum permissible noise limit, as referred to in Ministerial Decision no. 17252/20.9.92/OGG 395/B/19.6.92.</p>	It refers to the operation phase of the project.
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C.5	Air pollution by the operation	<p>Installation of the air pollution measurement station, if necessary, based on the traffic data of the Directorate of EARTH/YPEHODE, which will also indicate its accuracy.</p> <p>For gaseous, the allowable concentrations of pollutants are listed in the Act of CM 99/10.7.87 (OGG 135/A/28.7.87 and Act of CM 25/18.3.88 (OGG 52/A/22.3.88)</p>	<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.</p> <p>EYPE/YPEKA agreed with the suggested locations of Stations (with its letter No. 195241/12-01-2011). EARTH/YPEKA approved the locations and the TP (with prot. No. 185799/8-03-2011).</p> <p>The stations operate in a 24-hour basis and the prices of the below pollutants and parameters are recorded:</p> <ol style="list-style-type: none"> <li>1) The pollutants CO, CO<sub>2</sub>, NO, NO<sub>2</sub>, SO<sub>2</sub>, O<sub>3</sub>, TSP, PM<sub>10</sub>, PM<sub>2,5</sub>, C<sub>6</sub>H<sub>6</sub>, C<sub>7</sub>H<sub>8</sub> and xylene</li> <li>2) The meteorological conditions of each installation area</li> </ol> <p>The Concessionaire submitted a Technical Report on location and technical specifications for the installation of additional meteorological monitoring stations, beyond those conventionally required, for environmental permitting.</p>
C.6	Liquid waste by the operation	For liquid waste the applicable prefectural decisions and the JMD A5/2280/OGG 720/B/13.12.83 shall apply.	It refers to the operation of the project.
<b>D. Construction and Maintenance Issues</b>			
D.1	Coastal Environment Protection	Any temporary or permanent deposition of materials, etc. near the sea.	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.
D.2	Waste management	Any kind of rubbish, waste materials, old parts and machinery, oil, all kinds of grout, etc., and their allocation shall be made in accordance with applicable regulations.	<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.</p>
D.3	Materials Combustion	Materials combustion (tires, oil, etc.) in the worksite area is prohibited.	Regular controls are conducted in order to assure the compliance with the E.T.; no violation of the term is noticed.



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D.4	Waters and soil protection from the construction and maintenance	<p>The pollution of surface and groundwater due to any kind of oil, fuel, etc. is prohibited.</p> <p>Similarly the disposal of old oil on the ground is prohibited.</p> <p>The management of used oil should be carried out based on those provided in the JMD 71560/3053/ ΦΕΚ 665/B/85.</p> <p>For liquid waste, the current applicable Prefectural Decisions and the JMD A5/2280/ΦΕΚ 720/B/13.12.83 shall be in force.</p> <p>JMD 71560/3053/ OGG 665/B/85 has been replaced by JMD 98012/2001/96 (OGG 40B).</p>	<p>A general Environmental Management Plan, which includes procedure for handling hazardous liquid waste in compliance with the respective environmental terms and the applicable legislation, has been elaborated and submitted. A relevant file with agreements and orders for waste collection of waste management licensed businesses has been created for the subcontractors.</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.5	Noise by the construction	<p>Machinery remaining and used on the construction site is not allowed without the approval certificate of noise, EOK type, as defined in paragraph c of the present.</p> <p>The Supervising Service should ensure compliance with those aforementioned.</p> <p>Average energy noise level during operation of worksites is set to be the 65 dB (A).</p>	<p>The construction noise of the optimization works is overshadowed directly by the road traffic noise.</p> <p>The machines and the vehicles used for the construction of the project have all the licenses and certificated foreseen by Law, including the European Community noise approval certificate.</p>
D.6	Disposal pits	<p>The disposal of the inappropriate excavation materials to be carried out in positions that shall not affect the flow of the surface waters, shall not be wooded areas and shall be placed at least 250 meters from the boundaries of settlements, archaeological sites, cemeteries, etc.</p> <p>Their disposal should be allowed in order to restore inactive quarries in the area or new quarries - borrow pits that are going to be created in accordance with those aforementioned concerning the construction of the project.</p> <p>In any case, care is taken in order to avoid entrainment of the deposited material from the rains.</p>	<p>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.</p>



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D.7	Concrete, asphalt, stone processing and sand production units.	<p>Concrete production units and sand production units and (including conveyor belts) should be covered either moving or not.</p> <p>In any case anti-pollution systems should be implemented (i.e. bag filters in crushers, sieves, falls between conveyors) and aggregate wetting pipes (sand). For worksite character of ready-mix concrete and asphalt industries antipollution technology can also be implemented and is absolutely necessary to use:</p> <p><u>Ready-mix concrete industries</u></p> <p>bag filters on cement silos and weighbridges should definitely be used and water to wet piles of aggregates, with permanently installed recycled water piping system to wash heavy vehicles carrying ready-mixed concrete which will originate from the precipitation tank of analogs waste.</p> <p>Vehicles will be washed on cemented inclined floor by draining the settling tank.</p> <p><u>Asphalt industries</u></p> <p>Sand-filters or an equal performance system on a rotary kiln for only-drying aggregates, sieves, and hoists as well as aggregate materials from the wetted aggregate piles mentioned above, with the lowest possible moisture content to limit fuel consumption for drying.</p>	<p>The materials required for the construction of the optimization works are provided by subcontractors disposing environmentally licensed units.</p>
D.8	Materials required for the construction of the project	<p>Materials required for the construction of the project can be obtained from legally operating quarries in the area which should be equipped with the necessary decision approving the environmental terms and on the condition that they are strictly observed either by quarries - borrow pits which may be created in accordance with the provisions of Law 1428/84, 2115/93 and Law 998/79, the terms of the present and after elaboration of the required EIS, the corresponding environmental approval and filing of letters of guarantee for the repair works.</p> <p>It is prohibited to install mining activities visible from the NR locations throughout its length. Those mentioned above shall apply to the proposed in the EIS areas.</p>	<p>The materials required for the construction of the optimization works are provided by subcontractors disposing environmentally licensed units.</p>
D.9	Use of excess excavated materials	<p>It is possible to use an excess of quarried materials of the said section as long as there are in other road sections and vice versa.</p>	<p>The term is met.</p>



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D.10	Unfavorable alterations to existing structures	Under no circumstances may unfavourably convert existing penetrations of the road (structures - culverts) by reducing their dimensions, filling with earth etc.	The construction works carried out on the said section aim to improve the level of the motorway service.
D.11	Archaeological sites protection by the operation of the worksite installations.	Any worksite installation within archaeological sites or in a distance less than 200 m. from them is prohibited.	It refers to the old project and has been met.  No worksite installation is provided to operate within or near the archaeological sites.
D.12	Fire Protection	Care for fire protection should be taken during the construction, to deal with any fire generated from the operation of the machinery. The way in which the fire protection shall be controlled and approved by the supervisory agencies before the commencement of the works.	The term is met. Care is taken that, both for vehicles and project machines as well as in the worksite field, the relevant firefighting means are in good condition and available for use in emergency situations.
D.13	Worksite Installations	The worksite positions, the exact locations of material temporary disposal or the permanent surplus landfills - unsuitable excavated material and the way of formulating these sites will be approved by the Environmental Planning Directorate of YPEHODE and DMEO of YDE, following a technical report to be submitted by the Contractor of the project up until 31.8.95.  Any type of worksite facility (offices, garages, warehouses, etc.) to be removed after each building work and the site to be restored, regardless of the ownership status of each worksite, in accordance with the terms hereof.	No worksite location is provided for this section.
D.14	To ensure smooth connection between residential areas	During the project construction, smooth connection between residential areas where the road passes through, should be ensured.	The traffic interventions carried out to perform optimization works are conducted upon consent of the traffic police, while care is taken for the smooth connection between the residential areas.
D.15	Dust Control	When drilling, mechanical equipment should be used ensuring the retention of dust (dust collectors).	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



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<p>Regular wetting of worksite materials etc. should be done, in order to limit the dust during the execution of earthworks.</p> <p>Those sections of the roads, where the other works have been completed, to be covered with concrete as soon as possible, so as for dust not to be emitted from vehicles traveling on them.</p> <p>Specifically, as for the lateral roads, large sections should be completed on priority in order to serve as worksite roads.</p>	<p>situations in the environmental provisions.</p> <p>More specifically, the Check List, which is foreseen in the overall Action Plan and implemented along PATHE worksites, is being applied. According to this checklist, regular inspections are carried out in order to ensure compliance with the environmental terms.</p> <p>The Check List was presented for information and implementation to the J/V supervising civil engineers and to the subcontractors that provide total services to the J/V.</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. Taking or not these corrective actions is confirmed by the following controls.</p>
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S/N	ENVIRONMENTAL TERM	JMD PROVISIONS	ENVIRONMENTAL TERMS: WAYS – METHODS OF ASSESSMENT
			<p>More specifically:</p> <ul style="list-style-type: none"> <li>• No material combustion is carried out at the project site.</li> <li>• The worksite roads and the work execution sites are regularly wetted.</li> <li>• The trucks that transfer materials should not be overloaded and all trucks transferring loose materials should be covered.</li> </ul>
<b>E.</b>	<b>General Issues</b>		
E.1	Obligation to comply with the Environmental Terms–	<p>The above terms are mandatory and relate to:</p> <ul style="list-style-type: none"> <li>– the owner of the project</li> <li>– the Services and Agencies responsible for the construction and operation of the Project</li> <li>– the heads of the above services, who must ensure their implementation and monitor for their strict compliance.</li> <li>– to everyone who, due to its position and powers, shall be responsible for planning, commissioning, supervision, delivery and other procedures relating to the construction and operation of the project</li> <li>– the contractor of the project, as part of its concern</li> </ul>	The environmental terms of the project are met by all the involved parties (construction J/V, Independent Engineer / Concession, etc.)



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<b>S/N</b>	<b>ENVIRONMENTAL TERM</b>	<b>JMD PROVISIONS</b>	<b>ENVIRONMENTAL TERMS: WAYS – METHODS OF ASSESSMENT</b>
E.2	Check on compliance with the Environmental Terms and monitoring possibility		<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, 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.</p> <p>Also, the Construction J/V collaborates with a special advisor in order to form a group of scientists, which shall cover the whole environmental range.</p>
E.3	Intervention or modification of the existing infrastructure projects.	Any kind of intervention or modification of the existing Infrastructure works should be done in cooperation with relevant bodies to ensure their satisfactory operation.	The term is met.
E.4	Construction and Operation Expenses for the protection of the environment	Credits for the construction and operation of the project ensuring, by priority, the required expenditure on environmental protection projects (planting projects, etc.).	The expenses for the protection and operation of the project are ensured by priority for the environmental protection projects, under the contractual obligations.



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E.5	Annual Report Submission to EYPE	<p>By January 31 of each year the body of the construction or operation of the project shall submit a statement to EYPE/YPEHODE setting out:</p> <p>The course of the construction of the project, parts of the project that have been received or delivered for operation, permits or authorizations granted in accordance with the terms of the present, studies awarded, qualitative, quantitative and economic data on environmental protection projects and the percentage that the costs for these projects represent, in relation to the total expenditures for the construction of the project, rehabilitation and anti-pollution works to be done for the next year, comparing these with the provisions of the National and Community legislation and POY, problems encountered, contingencies and any information or suggestions that could be useful to mitigate any adverse environmental impacts caused by the construction or operation of the project.</p>	<p>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.</p>
E.6	Compliance with the environmental terms and the EIA proposed ones that do not contravene the AET	<p>The E.T. suggested in the EIS and accompanying the present, do not contradict those above mentioned.</p>	<p>All measures for preventing environmental implications that are proposed in the EIA and that do not contravene this AET, are taken into account.</p>
E.7	Environmental Terms Amendment to change the Project's Basic Characteristics	<p>Change of the project's basic characteristics as described in the EIS, with the terms and restrictions of the present, is possible only if there are substantive differences as regards the impact on the environment and only after approval by the Division of Regional Planning of the Ministry.</p> <p>In all other cases a new decision approving the environmental terms is required.</p>	<p>A file no. EYPE 173067/5-6-2014 amending the environmental terms of Athens PATHE section (Metamorfossi I/C) – Maliakos (Skarfia) has been submitted for the environmental licensing of 10 parking spaces and 2 location areas for the Motorist Service Stations (MSS).</p> <p>The amendment file was approved by DIPA with prot. no. 145495/21.01.2015 as regards the parking areas and the location and planning of the MSS surfaces. The EIS submission was requested for the construction of the MSS.</p>



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E.8	Specially protected zones – areas	<p>Local environment - Sensitive elements - Specially Protected Areas</p> <p>The settlements, areas of summer houses and archaeological sites mentioned in the EIS, the marshy and shallow sea area in the first 5 km of this section.</p> <p>The proposed road section passes into the region 'wetlands and islands in the Atalanti bay' with GR 2440001 code, included in the national list of the areas proposed for membership in the European ecological network of Natura 2000 (Directive 92/43/EEC).</p>	All necessary protection measures are taken.
S/N	ENVIRONMENTAL TERM	JMD PROVISIONS	ENVIRONMENTAL TERMS: WAYS – METHODS OF ASSESSMENT
E.9	Project Environmental Terms Validity	<p>Period to which the given environmental approval is in force - Conditions for its review.</p> <p>The above mentioned environmental conditions shall be valid until 31.12.2005 with the condition that they shall be kept accurately. After this date, the owner of the project must be equipped with a new decision approving the terms in accordance with the applicable provisions.</p> <p>Time extension of the validity of the Project Environmental Terms Approval (JMD prot. no. 33838/94/10.07.1995) for the New National Road of Athens – Thessaloniki, Kastro-Tragana section till 31.12.2016.</p>	The environmental terms are in force
E.10	E.T. Amendment	Each term of the JMD 120756/96/3.6.1997 as amended by the JMD 132550/31.7.2003, may be amended in the sole interest the best protection of the environment, in accordance with paragraph 8 of Article 2 of Law 3010/2002. It is for the same reasons that new environmental conditions may be put, if this results from the developments in the field of the environmental research. (i.e. limit change), due to the long-lasting operation period of the project and the progress of the anti-pollution control.	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.
E.11	E.T. controllability by the competent authorities	The JMD as well as the submitted EIS and the environmental impact report of the project, will be located in the offices of the Supervising Service and should be displayed in any competent body, pursuant to the applicable legislation.	The term for the presence of the EIA isg 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).

## **2.5 ARKITSA – AG. KONSTANTINOS (JMD 39516/94/10.07.1995 & JMD 103908/12.05.2006)**

For the reporting period (**B' Semester 2015**) the EURO IONIA J/V did not carry out any construction works at "**ARKITSA – AGIOS KONSTANTINOS**" of PATHE.

## **2.6 AG. KONSTANTINOS – K. VOURLA (JMD 85676/30-07-2002 & JMD 126386/4-06-2004)**

For the reporting period (**B' Semester 2015**) the EURO IONIA J/V did not carry out any construction works at "**AGIOS KONSTANTINOS – KAMENA VOURLA**" of PATHE.

## **2.7 K. VOURLA – MENDENITSA (JMD 67031/19-10-1998)**

For the reporting period (**B' Semester 2015**) the EURO IONIA J/V did not carry out any construction works at "**KAMENA VOURLA – MENDENITSA**" of PATHE.