


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

**PROJECT: "DESIGN – CONSTRUCTION – FINANCING – OPERATION – MAINTENANCE AND
EXPLOITATION OF THE PROJECT "AFTOKINITODROMOS KENTRIKIS ELLADOS (E65)"**

Date	31.01.2016
Prepared	

SKARFIA - THERMOPYLES

JMD 146113/12.07.2005

SECTION:

SKARFIA - THERMOPYLES

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

ETA: Prot. No. 146113/12-07-2005

MONTH / YEAR:

01/2016

S/N	ENVIRONMENTAL TERM	ENVIRONMENTAL TERMS : WAYS – METHODS OF ASSESSMENT
A.	Issues of Permits/Approvals	
A.1	Permits for any activity or installation required for the operation of the motorway	<p>The foreseen by the legislation permits and approvals, including the environmental permit possibly required, are obtained, when needed.</p> <p>For the implementation of any partial additional activity or expansion that is not described in the Environmental Impact Assessment (EIA) and consequently not covered by the Approval of Environmental Terms (AET), a relevant environmental permit shall be obtained by DIP/YPEN. The requests for granting environmental permit to the ancillary works are carried out by DIP/YPEN.</p> <p>The following ancillary works have been licensed via the following environmental decisions EYPE: Frontal toll station of Agia Triada and lateral toll station of Molos (EYPE Decision: 122881/8-3-2010)</p>
B.	Design-related Issues	
B.1	Noise Barriers Special Study	<p>The monitoring program OKTH (Road Traffic Noise) of PATHE (SKARFIA - RACHES) motorway for 2015 has been submitted to the Directorate of KAPA/YPEN via Concessionaire's document with prot. no. 18407/13-8-2015. The directorate of KAPA/YPEN approved the Environmental Monitoring Program OKTH 2015 with its 35538/31-08-2015 letter.</p> <p>As for the 9 noise measurement positions of Skarfia-Raches of this program, no excess of the permitted levels has been recorded. Therefore, no special study on anti-noise protection is required.</p> <p>For 2016, a similar program which is expected to be completed later this year, is being implemented (24hour measurements registration in selected locations) and it will be submitted to the directorate of KAPA for approval. If OKTH shows that the produced noise exceeds the statutory noise limits, the Concessionaire shall prepare and submit for approval a Special Acoustic Design for Noise Protection to the Noise, Vibrations and Radiations Control department of KAPA Directorate.</p>

SECTION:

SKARFIA - THERMOPYLES

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

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S/N	ENVIRONMENTAL TERM	ENVIRONMENTAL TERMS : WAYS – METHODS OF ASSESSMENT
C.	Operation Issues	
C.1	Traffic Noise	<p>The monitoring program OKTH OF PATHE Motorway (Skarfia - Raches) for 2015 has been submitted to the Directorate of KAPA/YPEN via the Concessionaire's letter with prot. no. 18407/13-8-2015. The Directorate of KAPA/YPEN approved the Monitoring Program of Environmental OKTH 2015, with its 35538/31-08-2015 letter.</p> <p>This study determines, by using appropriate models and methodologies (according to JMD 211773/2012 (OGG 1367/B/27.04.2012, JMD 13586/724) (28.03.2006 OGG 384) and European Directive 2002/49/EC), the type and efficiency of the anti-noise measures (noise barriers), the technical characteristics and their adaptation to the topological characteristics of the region.</p> <p>Under this program, the relevant specifications and the locations of the Road Traffic Noise (OKTH) for the recording of the acoustic conditions before and after implementation of the noise barriers at locations inside and outside city plans and at sensitive receivers have been determined. The relevant Inventories of environmental road noise measurements are mentioned in the annual report. Also, processing of noise measurements data are shown in the reports. For the quantitative and qualitative assessment of compliance with the limits - under MD 1725291 – of the maximum allowable noise level of index L10 (18 hours) at the façades of the nearest – to PATHE - residents, extensive acoustic measurements with special auto-propelled units of statistical analysis noise are conducted. More analytically, the measurements are made in accordance with the approved noise monitoring program, by auto-propelled units, at a minimum of 2 m. from the facade of the nearest residence. Usually, in order to capture the unfavorable conditions, the measurement is being held closer to the source and to the facade the most exposed one. The program provides full examination on the effectiveness of the implemented noise barriers as well as evaluation of the need to apply additional measures.</p> <p>For the implementation of the above OKTH program, the current MD 17252/91 and the European Directive 2002/49/EC are kept, both in full calculation and evaluation of the new European indicators, Lden & Lnight.</p> <p>As for the 9 noise measurement positions of Skarfia – Raches section of this program, no excess of the permitted levels has been recorded.</p>

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S/N	ENVIRONMENTAL TERM	ENVIRONMENTAL TERMS : WAYS – METHODS OF ASSESSMENT
		<p>If OKTH shows that the produced noise exceeds the statutory noise limits, an appropriate study of noise barriers implementation will be submitted to the Vibration and Radiation department of KAPA Directorate of YPEN.</p> <p>A similar program for 2016 is being implemented and is expected to be completed within this year (24hour measurements registration in selected locations) and it will be submitted to the department of Noise, Vibrations and Radiations control of the Directorate of KAPA/YPEN for approval.</p>
C.2	Pollution due to accident	Because of the State incomplete contracting works in sections of PATHE Motorway (E65), the retention reservoirs (tanks) for the pollutants, as required by the EIS JMD 146113/12-07-2005 "Approval of environmental terms for the construction and operation of the Skarfia - Thermopiles subsection in Skarfia - Lamia of PATHE motorway" have not been completed yet. Therefore, when they will be completed and delivered by the State, the Concessionaire will implement a plan to address pollution which will involve the use of such tanks, pursuant to the E.T. and its contractual obligations. Meanwhile, the Concessionaire has entered into force and implements some Action plans that anticipate the appropriate actions in the event of accidental pollution and include all measures/required equipment etc. that should be taken in case of accident and leakage of non-biodegradable substances. There is also a possibility of accidental fuel leakage from maintenance and operation machinery, etc. which may result to a direct contamination of water, soil, etc. especially when the quantity is large. In this case, adsorption materials such as sand, chippings or a special geotextile will be used immediately after run out. Such materials exist in the central worksite for immediate use. Their disposal, in the event of any such occurrence, shall be in accordance with the instructions for the disposal of toxic waste.
C.3	Vegetation	This term is met. The Concessionaire has contracted with the Subcontractor for the maintenance and the managing of the vegetation and plantings.
C.4	Waste management	The Concessionaire has contracted with the Subcontractor for the motorway cleaning and waste harvesting, transferring them into appropriate licensed areas.
D.	Maintenance Issues	

SECTION:**SKARFIA - THERMOPYLES****TABLE FOR THE IMPLEMENTATION OF THE ENVIRONMENTAL TERMS****DURING THE OPERATION PHASE****ETA: Prot. No. 146113/12-07-2005****MONTH / YEAR:****01/2016**

S/N	ENVIRONMENTAL TERM	ENVIRONMENTAL TERMS : WAYS – METHODS OF ASSESSMENT
D.1	Materials Combustion	<p>The term is adhered. The subcontractor of Kentriki ODOS S.A. collects the waste generated by the motorway operation and maintenance, and transfers them into appropriate licensed sites or into special waste collection sites of the approved alternative management systems.</p> <p>Also, the Concession Company prepares an annual report of waste producer pursuant to Article 11 (4) (c) of JMD no. 13588/725/06, and in accordance with Law 2939/2001 and 3854/2010. A table of waste producer for 2014 was prepared and submitted to the competent service (prot. no.: 39251/11-3-2015) and a similar table is going to be prepared and expected to be submitted for 2015.</p>
D.2	Waste materials Management	<p>The Concessionaire has contracted with the company the Subcontractor for the motorway cleaning and the waste harvesting.</p> <p>Also, the Concession Company prepares an annual report of waste producer pursuant to Article 11 (4) (c) of JMD no. 13588/725/06, and in accordance with Law 2939/2001 and 3854/2010. A table of waste producer for 2014 was prepared and submitted to the competent Service (prot. no.: 39251/11-3-2015), and a similar table is going to be prepared and expected to be submitted for 2015.</p>
D.3	Liquid Waste	<p>A general Environmental Management Plan, which includes procedure ENV-P-01 for handling hazardous liquid waste in compliance with the respective environmental terms and the applicable legislation has been drawn up, submitted and is being implemented. A relevant file with agreements and orders for waste collection of waste management licensed businesses has been created.</p> <p>Inspections are conducted in the areas where construction works are executed and the respective check list is completed. Pursuant to the checks, in case of non-respect of the provisions, instructions are given (corrective actions) for the conformance method. The performance</p>

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S/N	ENVIRONMENTAL TERM	ENVIRONMENTAL TERMS : WAYS – METHODS OF ASSESSMENT
		of corrective actions is checked via new inspections based on the check list. Furthermore, the Concession Company prepares an annual report for waste producer under JMD no. 13588/725/06, Article 11(4) (c), and pursuant to Law 2939/2001 and 3854/2010. A table of waste producer for 2014 was prepared and submitted to the competent service (prot. no.: 39251/1-3-2015), and a similar table is going to be prepared and expected to be submitted for 2015.
E.	General Issues	
E.1	Obligation to comply with the Environmental Terms	The Environmental Terms of the project are met by the Construction J/V, the Independent Engineer, the Concessionaire, the Subcontractors and their Advisors.
E.2	Construction and Operation Expenses for the protection of the environment	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.3	Change of the Project's Basic Characteristics	During the operation of the project, no differences have arisen and the new decision approving the environmental terms has not been required. It will be met if such a need arises.
E.4	Submission of annual report to EYPE	The term is adhered. The annual and 2nd semiannual report is being submitted. The annual and 2nd semiannual report for 2014 have been submitted with Kentriki Odos S.A. letter no. 17922/16-03-2015, while the 1st semiannual report for 2015 has been submitted with KENTRIKI ODOS S.A. letter no. 18380/06-08-2015.
E.5	E.T. controllability by the competent authorities	A report of the environmental licensing and the environmental studies is kept at the Concessionaire's Headquarters.

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S/N	ENVIRONMENTAL TERM	ENVIRONMENTAL TERMS : WAYS – METHODS OF ASSESSMENT
E.6	Project Environmental Terms Validity	The Environmental Terms are in renewal process. EYDE/PATHE (prot. No. KA/ΦM02ΛM00/ME6/οικ.96665/05-06-2014 has timeously submitted the Environmental Terms (AEPO) renewal file.
E.7	Measures for preventing implications of EIS and AET	All measures for preventing environmental implications that are proposed in the EIS and do not contravene this AET, are taken into account in conjunction with the provisions of JMD EIS of this section.

THERMOPYLES I/C – SPERCHIOS NEW RIVERBED

JMD ETA 131550/04.03.2003

Decision 146836/05.03.2015

SECTION:**THERMOPYLES I/C –
SPERCHIOS NEW RIVERBED****TABLE FOR THE IMPLEMENTATION OF THE ENVIRONMENTAL TERMS
DURING THE OPERATION PHASE****ETA: Prot. No. 131550/04-03-2003****Decision: 146836/05.03.2015****MONTH / YEAR:****07/2015**

S/N	ENVIRONMENTAL TERM	ENVIRONMENTAL TERMS: WAYS – METHODS OF ASSESSEMENT
A.	Issues of Permits/Approvals	
A.1	Permits for any activity or installation required for the operation of the motorway	<p>The foreseen by the legislation permits and approvals, including the environmental permit possibly required, are obtained, when needed.</p> <p>For the implementation of any partial additional activity or expansion that is not described in the Environmental Impact Assessment (EIA) and consequently not covered by the Approval of Environmental Terms (AET) a relevant environmental permit shall be obtained by DIPA/YPEN. The requests for granting environmental permit to the ancillary works are carried out by DIPA/YPEN.</p> <p>The following ancillary works have been licensed via the following environmental decisions EYPE: Frontal toll station of Agia Triada and lateral toll station of Molos (EYPE Decision: 122881/8-3-2010).</p> <p>The file renewing – amending the E.T. of the section is being approved by DIPA/YPEN letter no. 146836/05.03.2015.</p>
B.	Operation Issues	

SECTION:**TABLE FOR THE IMPLEMENTATION OF THE ENVIRONMENTAL TERMS
DURING THE OPERATION PHASE****THERMOPYLES I/C –
SPERCHIOS NEW RIVERBED****ETA: Prot. No. 131550/04-03-2003****Decision: 146836/05.03.2015****MONTH / YEAR:****07/2015**

S/N	ENVIRONMENTAL TERM	ENVIRONMENTAL TERMS: WAYS – METHODS OF ASSESMENT
B.1	Traffic volume/ Traffic noise	<p>The term is adhered. The traffic volumes are measured on a monthly basis and are much lower than those predicted in the EIS (prediction 2025 ADT 48.700). For 2015, traffic volumes were 8.698 for Skarfia – Raches section, i.e. 11.945.</p>
B.2	Pollution due to accident	<p>The Intervention Plan for Emergency Situations has been drawn up by the Concessionaire and constitutes an Annex of the Policing & Fire Fighting Agreement signed with the Ministry of Interior. This plan specifies measures to timely collect and remove hazardous substances while preventing pollution of the water/soil resources, etc.</p> <p>This Intervention Plan includes all measures/required equipment etc. that will be needed in case of accident and leakage of non-biodegradable substances.</p> <p>There is a possibility of accidental fuel leakage from maintenance and operation machinery, etc. which may result to a direct contamination of water, soil, etc. especially when the quantity is large. In this case, adsorption materials such as sand, chippings or a special geotextile will be used immediately after run out. Such materials exist in the central worksite for immediate use. Their disposal, in case this happens, shall be held in accordance with the disposal for the toxic waste disposal. Furthermore, a comprehensive action plan for the operation of the highway has also been drafted and implemented.</p>
B.3	Vegetation	<p>This term is met. The Concessionaire has contracted with the Subcontractor for the maintenance and the managing of the vegetation and plantings.</p>

SECTION:**THERMOPYLES I/C –
SPERCHIOS NEW RIVERBED****TABLE FOR THE IMPLEMENTATION OF THE ENVIRONMENTAL TERMS
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S/N	ENVIRONMENTAL TERM	ENVIRONMENTAL TERMS: WAYS – METHODS OF ASSESMENT
B.4	Waste Management	The Concessionaire has contracted with the Subcontractor for the motorway cleaning and waste harvesting, transferring them into appropriate licensed areas.
C.	Maintenance Issues	
C.1	Materials Combustion	<p>The term is adhered. The subcontractor of KENTRIKI ODOS S.A. collects the waste generated by the motorway operation and maintenance, and transfers them into appropriate licensed sites or into special waste collection sites of the approved alternative management systems.</p> <p>Also, the Concession Company prepares an annual report of waste producer pursuant to Article 11 (4) (c) of JMD no. 13588/725/06, and in accordance with Law 2939/2001 and 3854/2010. A table of waste producer was prepared and submitted to the competent service for 2014 (prot. no.: 39251/11-3-2015), and a similar table has been prepared and is expected to be submitted for 2015.</p>
C.2	Waste materials Management	<p>The Concessionaire has contracted with the Subcontractor for the motorway cleaning and the waste harvesting.</p> <p>Also, the Concession Company prepares an annual report of waste producer pursuant to Article 11 (4) (c) of JMD no. 13588/725/06, and in accordance with Law 2939/2001 and 3854/2010. A table of waste producer was prepared and submitted to the competent service for 2014 (prot. no.: 39251/11-03-2015), and a similar table has been drawn up and is expected to be submitted for 2015.</p>
C.3	Liquid waste	<p>A general Environmental Management Plan, which includes procedure ENV-P-01 for handling hazardous liquid waste in compliance with the respective environmental terms and the applicable legislation has been drawn up, submitted and is being implemented. A relevant file with agreements and orders for waste collection of waste management licensed businesses has been created.</p> <p>Inspections are conducted in the areas where construction works are executed and the respective check list is completed. Pursuant to the checks, in case of non-respect of the provisions, instructions are given (corrective actions) for the conformance method. The</p>

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DURING THE OPERATION PHASE****THERMOPYLES I/C –
SPERCHIOS NEW RIVERBED****ETA: Prot. No. 131550/04-03-2003****Decision: 146836/05.03.2015****MONTH / YEAR:****07/2015**

S/N	ENVIRONMENTAL TERM	ENVIRONMENTAL TERMS: WAYS – METHODS OF ASSESMENT
		<p>performance of corrective actions is checked via new inspections based on the check list.</p> <p>Also, the Concession Company prepares an annual report for waste producer under JMD no. 13588/725/06, Article 11(4) (c), and pursuant to Law 2939/2001 and 3854/2010.</p> <p>A table of waste producer was prepared and submitted to the competent service for 2014 (prot. no.: 39251/11-3-2015), and a similar table is going to be prepared and expected to be submitted for 2015.</p>
C.4	Motorway Fence	During the administrative receipt for use of part of the said section on behalf of the Concessionaire, some deficiencies in fencing the Motorway have been observed, which are recorded in the official correspondence between the Concessionaire and the State. The course of recovery of these deficiencies is underway.
D.	General Issues	
D.1	Obligation to comply with the Environmental Terms	The Environmental Terms of the project are met by the Construction J/V, the Independent Engineer, the Concessionaire, the Subcontractors and their Consultants.
D.2	Construction and Operation Expenses for the protection of the environment	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.
D.3	Submission of annual report to EYPE	The term is adhered. The annual and semiannual report is being submitted. The annual and 2 nd semiannual report for 2014 are submitted with Kentriki Odos SA letter no. 17922/16-03-2015, while the 1 st semiannual report for 2015 is submitted with Kentriki

SECTION:**THERMOPYLES I/C –
SPERCHIOS NEW RIVERBED****TABLE FOR THE IMPLEMENTATION OF THE ENVIRONMENTAL TERMS
DURING THE OPERATION PHASE****ETA: Prot. No. 131550/04-03-2003****Decision: 146836/05.03.2015****MONTH / YEAR:****07/2015**

S/N	ENVIRONMENTAL TERM	ENVIRONMENTAL TERMS: WAYS – METHODS OF ASSESSEMENT
		Odos SA letter no. 18380/06-08-2015.
D.4	E.T. controllability by the competent authorities	A report of the environmental licensing and the environmental studies is kept at the Concessionaire's Headquarters.
D.5	Project Environmental Terms Validity	The Decision approving the Environmental Terms (AEPO) of this section is in force until 31/12/2025.
D.6	Measures for preventing implications of EIS and AET	All measures for preventing environmental implications that are proposed in the EIS and that do not contravene this AET, are taken into account in conjunction with the provisions of JMD EIS of this section.
D.7	Need for E.T. amendment	In the event of environmental degradation or impacts on the environment upon regular or extraordinary environmental inspections not foreseen in the EIS, then the concession company will implement those provided for in Law 4014/2011.

LAMIA – RACHES

(Subsection: CH. 3+500 to CH. 12+000)

ETA: 130665/02-05-2003

ETA: 195214/11.01.2011

SECTION:**LAMIA – RACHES****TABLE FOR THE IMPLEMENTATION OF THE ENVIRONMENTAL TERMS****(subsection: CH. 3+500 to CH.
12+000)****DURING THE OPERATION PHASE****ETA: Prot. no. 130665/02-05-2003****ETA: 195214/11.01.2011****MONTH / YEAR:****01/2016**

S/N	ENVIRONMENTAL TERM	ENVIRONMENTAL TERMS: WAYS – METHODS OF ASSESMENT
A.	Issues of Permits/Approvals	
A.1	Permits for any activity or installation required for the operation of the motorway	<p>The foreseen by the legislation permits and approvals, including the environmental permit possibly required, are obtained, when needed.</p> <p>For the implementation of any partial additional activity or expansion that is not described in the Environmental Impact Assessment (EIA) and consequently not covered by the Approval of Environmental Terms (AET) a relevant environmental permit shall be obtained by DIP/YPEN. The requests for granting environmental permit to the ancillary works are carried out by DIP/YPEN.</p> <p>The following ancillary works have been licensed via the following environmental decisions EYPE: Frontal toll station of Mavromantila and lateral toll station of Agia Paraskevi (JMD ETA Decision: 195214/11-01-2011).</p>
B.	Operation Issues	
B.1	Pollution due to accident	<p>The Intervention Plan for Emergency Situations has been drawn up by the Concessionaire and constitutes an Annex of the Policing & Fire Fighting Agreement signed with the Ministry of Interior. This plan specifies measures to timely collect and remove hazardous substances while preventing pollution of the water/soil resources, etc.</p> <p>The said Intervention Plan includes all measures required equipment etc. that are going to be taken/used in the event of accident or leakage of non-biodegradable substances.</p> <p>Also, there is a possibility of accidental fuel leakage from maintenance and operation machinery, etc. which may result to a direct contamination of water, soil, etc. especially when the quantity is large. In this case, adsorption materials such as sand, chippings or a special geotextile will be used immediately after run out. Such materials exist in the central worksite for immediate use. Their disposal, in</p>

SECTION:**LAMIA – RACHES****(subsection: CH. 3+500 to CH.
12+000)****ETA: Prot. no. 130665/02-05-2003****ETA: 195214/11.01.2011****TABLE FOR THE IMPLEMENTATION OF THE ENVIRONMENTAL TERMS****DURING THE OPERATION PHASE****MONTH / YEAR:****01/2016**

S/N	ENVIRONMENTAL TERM	ENVIRONMENTAL TERMS: WAYS – METHODS OF ASSESMENT
		case this happens, shall be held in accordance with the disposal for the toxic waste disposal. Furthermore, a comprehensive action plan for the operation of the highway has also been drafted and implemented.
B.2	Vegetation	This term is met. The Concessionaire has contracted with the Subcontractor for the maintenance and the managing of the vegetation and the plantings of PATHE motorway.
B.3	Waste Management	The Concessionaire has contracted with the Subcontractor for the motorway cleaning and waste harvesting, transferring them into appropriate licensed areas.
C.	Maintenance Issues	
C.1	Materials Combustion	<p>The term is adhered. The subcontractor of KENTRIKI ODOS S.A. collects the waste generated by the motorway operation and maintenance, and transfers them into appropriate licensed sites or into special waste collection sites of the approved alternative management systems.</p> <p>Also, the concession company prepares an annual report of waste producer pursuant to Article 11 (4) (c) of JMD no. 13588/725/06, and in accordance with Law 2939/2001 and 3854/2010. Since the said section was delivered to the Concessionaire by the State on March 2015 (with State New Section Delivery – Acceptance Protocol dated 16/3/2015) the relevant report has been prepared and is expected to be submitted for 2015.</p>
C.2	Waste materials Management	<p>The Concessionaire has contracted with the Subcontractor for the motorway cleaning and the waste harvesting.</p> <p>Also, the Concession Company prepares an annual report of waste producer pursuant to Article 11 (4) (c) of JMD no. 13588/725/06, and</p>

SECTION:**LAMIA – RACHES****TABLE FOR THE IMPLEMENTATION OF THE ENVIRONMENTAL TERMS**(subsection: CH. 3+500 to CH.
12+000)**DURING THE OPERATION PHASE****ETA: Prot. no. 130665/02-05-2003****ETA: 195214/11.01.2011****MONTH / YEAR:****01/2016**

S/N	ENVIRONMENTAL TERM	ENVIRONMENTAL TERMS: WAYS – METHODS OF ASSESMENT
		in accordance with Law 2939/2001 and 3854/2010. Since the said section was delivered to the Concessionaire by the State on March 2015 (with State New Section Delivery – Acceptance Protocol dated 16/3/2015) the relevant report is going to be submitted at the beginning of the next year.
C.3	Liquid Waste	<p>A general Environmental Management Plan, which includes procedure ENV -P-01 for handling hazardous liquid waste in compliance with the respective environmental terms and the applicable legislation, has been drawn up and is being implemented. Guidelines of sound management are required by the subcontractors. A relevant file with agreements and orders for waste collection of mineral oil 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. Also, the Concession Company prepares an annual report for waste producer under JMD no. 13588/725/06, Article 11(4)(c), and pursuant to Law 2939/2001 and 3854/2010. Since the said section was delivered to the Concessionaire by the State on March 2015 (with State New Section Delivery – Acceptance Protocol dated 16/3/2015) the relevant report is going to be submitted at the beginning of the next year.</p>
C.4	Fauna crossings	It refers to the construction. The Concessionaire, as regards the cleaning of the drains, has contracted with the Subcontractor for the cleaning and collection of solid waste from the motorway, transferring them into appropriate licensed areas.
D.	General Issues	
D.1	Obligation to comply	The Environmental Terms of the project are met by the Construction J/V, the Independent Engineer, the Concessionaire, the

SECTION:**LAMIA – RACHES****(subsection: CH. 3+500 to CH.
12+000)****ETA: Prot. no. 130665/02-05-2003****ETA: 195214/11.01.2011****TABLE FOR THE IMPLEMENTATION OF THE ENVIRONMENTAL TERMS****DURING THE OPERATION PHASE****MONTH / YEAR:****01/2016**

S/N	ENVIRONMENTAL TERM	ENVIRONMENTAL TERMS: WAYS – METHODS OF ASSESSEMENT
	with the Environmental Terms	Subcontractors and their Consultants.
D.2	Construction and Operation Expenses for the protection of the environment	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. The expenses that are provided for the realization of protection works of the environment are included in the annual progress report on the compliance with the environmental terms.
D.3	Submission of annual report to EYPE	The said section was delivered to the Concessionaire by the State on March 2015 (with State New Section Delivery – Acceptance Protocol dated 16/3/2015). The 1 st semiannual report for 2015 was submitted with KENTRIKI ODOS S.A. letter no. 18380/06-08-2015.
D.4	E.T. controllability by the competent authorities	A report of the environmental licensing and the environmental studies is kept at the Concessionaire's Headquarters.
D.5	Project Environmental Terms Validity	A file with prot. no. KA/ΦΚΛ07.00/ME6/93574/8-11-2013 renewing – amending the ETA was submitted by EYDE/PATHE. The decision is pending.
D.6	Measures for preventing implications of EIS and AET	All measures for preventing environmental implications that are proposed in the EIS and do not contravene this AET, are taken into account in conjunction with the provisions of JMD EIS of this section.

SECTION:**LAMIA – RACHES****TABLE FOR THE IMPLEMENTATION OF THE ENVIRONMENTAL TERMS****(subsection: CH. 3+500 to CH.
12+000)****DURING THE OPERATION PHASE****ETA: Prot. no. 130665/02-05-2003****ETA: 195214/11.01.2011****MONTH / YEAR:****01/2016**

S/N	ENVIRONMENTAL TERM	ENVIRONMENTAL TERMS: WAYS – METHODS OF ASSESSENT
D.7	Need for E.T. amendment	During the operation of the project, no differences have arisen and the new decision approving the environmental terms has not been required. It will be met if such a need arises.

LAMIA – RACHES

Total Bypass of Stylida - Karavomilos

ETA: Prot. No. 100198/30-05-2006

ETA: 172866/23.05.2014

SECTION: LAMIA - RACHES

**Total Bypass Stylida -
Karavomilos**

FOR THE IMPLEMENTATION OF THE ENVIRONMENTAL TERMS

DURING THE OPERATION PHASE

ETA: Prot. No. 100198/30-05-2006

ETA: 172866/23.05.2014

MONTH / YEAR:

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A.	Issues of Permits/Approvals	
A.1	Permits for any activity or installation required for the operation of the motorway	<p>The foreseen by the legislation permits and approvals, including the environmental permit possibly required, are obtained, when needed.</p> <p>For the implementation of any partial additional activity or expansion that is not described in the Environmental Impact Assessment (EIA) and consequently not covered by the Approval of Environmental Terms (AET), a relevant environmental permit shall be obtained by DIPA/YPAPE. The requests for granting environmental permit to the ancillary works are carried out by DIPA/YPAPE.</p> <p>The following ancillary works have been licensed via the following environmental decisions EYPE: Lateral toll station of Agia Marina and lateral toll station of Stylida (EYPE Decision: 121667/8-2-2010).</p> <p>For the operation and maintenance needs of the motorway, the concession company submitted a TEPEM for the environmental licensing of the snow removal station at Agia Marina junction (CH. 223+300) (prot. No. 18754/26-11-2015). The snow removal centre is spaced over an area of 1.591,25 m2 at the open space created between the southern branch of the junction (entrance to Ag. Marina), of the Larissa - Lamia NR within the expropriation zone, and providing for the laundry operation of snow removal machines and trucks and the construction of an underground laundry sewage tank (sedimentation basin – oil collector – sludge collector).</p>
B.	Operation Issues	
B.1	Traffic volume/ Traffic Noise	<p>The monitoring program of OKTH of PATHE Motorway (Skarfia – Raches) for the year 2015 will be completed within August 2015 and is going to be submitted to the Directorate of EARTH/YPEKA.</p> <p>Under this program, the relevant specifications and the locations of the Road Traffic Noise (OKTH) for the recording of the acoustic conditions before and after implementation of the noise barriers at locations inside and outside city plans and at sensitive receivers have been</p>

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		<p>determined. The relevant Inventories of environmental road noise measurements are mentioned in the annual report. Also, processing of noise measurements data are shown in the reports.</p> <p>For the quantitative and qualitative assessment of compliance with the limits - under MD 1725291 – of the maximum allowable noise level of index L10 (18 hours) at the façades of the nearest – to PATHE - residents, extensive acoustic measurements with special auto-propelled units of statistical analysis noise are conducted. More analytically, the measurements are made in accordance with the approved noise monitoring program, by auto-propelled units, at a minimum of 2 m. from the facade of the nearest residence. Usually, in order to capture the unfavorable conditions, the measurement is being held closer to the source and to the facade the most exposed one. The program provides full examination on the effectiveness of the implemented noise barriers as well as evaluation of the need to apply additional measures.</p> <p>For the implementation of the above OKTH program, the current MD 17252/91 and the European Directive 2002/49/EC are kept, both in full calculation and evaluation of the new European indicators, Lden & Lnight.</p> <p>The monitoring program OKTH (Road Traffic Noise) of PATHE (SKARFIA – RACHES) motorway for 2015 has been submitted to the Directorate of KAPA/YPEN via Concessionaire's document with prot. no. 18407/13-08-2015. The directorate of KAPA/YPEN approved the Environmental Monitoring Program OKTH 2015 with its letter.</p> <p>This study determines, by using appropriate models and methodologies (according to JMD 211773/2012 (OGG 1367/B/27.04.2012, JMD 13586/724) (28.03.2006 OGG 384) and European Directive 2002/49/EC), the type and efficiency of the anti-noise measures (noise barriers), the technical characteristics and their adaptation to the topological characteristics of the region.</p> <p>Under this program, the relevant specifications and the locations of the Road Traffic Noise (OKTH) for the recording of the acoustic conditions before and after implementation of the noise barriers at locations inside and outside city plans and at sensitive receivers have been determined. The relevant Inventories of environmental road noise measurements are mentioned in the annual report. Also, processing of noise measurements data are shown in the reports. For the quantitative and qualitative assessment of compliance with the limits - under MD 1725291 – of the maximum allowable noise level of index L10 (18 hours) at the façades of the nearest – to PATHE - residents, extensive acoustic measurements with special auto-propelled units of statistical analysis noise are conducted. More analytically, the measurements are</p>

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		<p>made in accordance with the approved noise monitoring program, by auto-propelled units, at a minimum of 2 m. from the facade of the nearest residence. Usually, in order to capture the unfavorable conditions, the measurement is being held closer to the source and to the facade the most exposed one. The program provides full examination on the effectiveness of the implemented noise barriers as well as evaluation of the need to apply additional measures.</p> <p>For the implementation of the above OKTH program, the current MD 17252/91 and the European Directive 2002/49/EC are kept, both in full calculation and evaluation of the new European indicators, Lden & Lnight.</p> <p>As for the 9 noise measurement positions of Skarfia - Raches of the OKTH program, no excess of the permitted levels has been recorded.</p> <p>Where future monitoring programs OKTH are exceeded, the proper study on noise barrier implementation will be elaborated and submitted for approval to the department of Noise, Vibrations and Radiations of the KAPA/YPEN directorate.</p> <p>A similar program for 2016 is going to be implemented and is expected to be completed within this year (24hour measurements registration in selected locations) and it will be submitted to the department of Noise, Vibrations and Radiations of the directorate of KAPA/YPEN for approval.</p>
B.2	Pollution due to accident	<p>The Intervention Plan for Emergency Situations has been drawn up by the Concessionaire and constitutes an Annex of the Policing & Fire Fighting Agreement signed with the Ministry of Interior. This plan specifies measures to timely collect and remove hazardous substances while preventing pollution of the water/soil resources, etc.</p> <p>The said Intervention Plan includes all measures/required materials etc. that will be needed in case of accident and leakage of non-biodegradable substances.</p> <p>There is a possibility of accidental fuel leakage from maintenance and operation machinery, etc. which may result to a direct contamination of water, soil, etc. especially when the quantity is large. In this case, adsorption materials such as sand, chippings or a special geotextile will be used immediately after run out. Such materials exist in the central worksite for immediate use. Their disposal, in case this happens, shall be held in accordance with the disposal for the toxic waste disposal.</p> <p>Furthermore, a comprehensive action plan for the operation of the highway has also been drafted and implemented.</p>

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B.3	Waste management	<p>The Concessionaire has contracted with the Subcontractor for the motorway cleaning and waste harvesting, transferring them into appropriate licensed areas.</p> <p>Also, the Concession Company prepares an annual report of waste producer pursuant to Article 11 (4) (c) of JMD no. 13588/725/06, and in accordance with Law 2939/2001 and 3854/2010. A table of waste producer for March 2015 was prepared and submitted to the competent service (prot. no.: 33054/10-02-2014) and a similar table has been drawn up and is expected to be submitted for 2015.</p> <p>Since the said section has been delivered to the Concessionaire by the State, on March 2015 (with the State New Section Delivery – Acceptance Protocol dated 16/3/2015) the relevant report for 2015 has been prepared and is expected to be submitted.</p>
B.4	Tunnels safety systems	<p>It refers to the construction of the project and has been adhered to.</p> <p>The safety systems shall be monitored and maintained for their proper operation by the Concessionaire.</p>
C.	Maintenance Issues	
C.1	Materials Combustion	<p>The term is adhered. The subcontractor of Kentriki Odos S.A. collects the waste generated by the motorway operation and maintenance, and transfers them into appropriate licensed sites or into special waste collection sites of the approved alternative management systems.</p> <p>Furthermore, the Concession Company prepares a waste producer annual report pursuant to par. 4 (c) of Article 11 of JMD no. 13588/725/06, and in accordance with Law 2939/2001 and 3854/2010. Since the said section was delivered to the Concessionaire by the State on March 2015 (with 16/3/2015 State New Section Delivery – Acceptance Protocol), the relevant report has been prepared and is expected to be submitted for 2015.</p>

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C.2	Liquid Waste	<p>A general Environmental Management Plan, which includes procedure ENV-P-01 for handling hazardous liquid waste in compliance with the respective environmental terms and the applicable legislation has been drawn up, submitted and is being implemented. A relevant file with agreements and orders for waste collection of mineral oils management licensed businesses has been created.</p> <p>Inspections are conducted in the areas where construction works are executed and the respective check list is completed. Pursuant to the checks, in case of non-respect of the provisions, instructions are given (corrective actions) for the conformance method. The performance of corrective actions is checked via new inspections based on the check list.</p> <p>Also, the Concession Company prepares an annual report for waste producer under JMD no. 13588/725/06, Article 11(4)(c), and pursuant to Law 2939/2001 and 3854/2010. Since the said section was delivered to the Concessionaire by the State on March 2015 (State New Section Delivery – Acceptance Protocol dated 16/3/2015) the relevant report has been prepared and is going to be submitted for 2015.</p>
C.3	Care for the abduction of rainwater	As regards the cleaning of the gutters, culverts and manholes, the Concessionaire has contracted with the subcontractor for the cleaning and the collection of solid waste from the motorway, transferring them into appropriate licensed areas.
D.	General Issues	
D.1	Obligation to comply with the Environmental Terms	The Environmental Terms of the project are met by the Construction J/V, the Independent Engineer, the Concessionaire, the Subcontractors and their Advisors.
D.2	Construction and Operation Expenses for the protection of the environment	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.
D.3	Submission of annual	The said section was delivered to the Concessionaire from the State on March 2015 (with the State New Section Delivery – Acceptance Protocol

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	report to EYPE	dated 16/3/2015) the 1 st semiannual report for 2015 was submitted with KENTRIKI ODOS S.A. letter no. 18380/06-08-2015.
D.4	E.T. controllability by the competent authorities	A report of the environmental licensing and the environmental studies is kept at the Concessionaire's Headquarters.
D.5	Project Environmental Terms Validity	The Decision approving the Environmental Terms shall be in force until 31/12/2023
D.6	Measures for preventing implications of EIS and AET	All measures for preventing environmental implications that are proposed in the EIS and that do not contravene this AET, are taken into account in conjunction with the provisions of JMD EIS of this section.
D.7	Need for E.T. amendment	In the event of environmental degradation or impacts on the environment upon regular or extraordinary environmental inspections not foreseen in the EIS, then the concession company will implement those provided for in Law 4014/2011.