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



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**SECTION: IONIA ODOS**

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

Issue No.	1.0	<b>PREVIOUS Issues</b>	
Date	31.01.2013	Number	Date
Prepared	EURO IONIA J/V		
Reviewed	Health, Safety and Environment Department Stavros Karapanos		
Approved	General Director of EuroIonia J/V Kiriakos Vavarapis		



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**B' SEMESTER 2012**

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**IONIA ODOS MOTORWAY  
FROM ANTIRRIO TO IOANNINA**

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

**JANUARY 2013**



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### 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 2012**. 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 ANTIRRIO TO IOANNINA, PATHE ATHENS (METAMORFOSSI I/C) - MALIAKOS (SKARFIA) AND CONNECTING BRANCH PATHE SCHIMATARI – CHALKIDA.”



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This biannual 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:

1. Agrinio – Southern End of Agrinio Bypass (Kefalovryso)
2. Agrinio Bypass
3. Northern End of Agrinio Bypass (Kouvaras) - Southern End of Arta Bypass (Kompoti) and Northern end of Arta Bypass (Filippiada) - Ioannina (Eleousa)
4. Arta Bypass

For each one of these sections, the below mentioned environmental terms have been issued:

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):

Antirrio - Southern end of Agrinio bypass (Kefalovryso)

- JMD 142128/25.07.2005 Environmental Terms Approval of the Ionia Odos project: Antirrio Kefalovryso (Southern End of Agrinio Bypass).

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Agrinio Bypass

- JMD 84982/96/11.04.1997 Environmental Terms Approval for the construction and operation of the project: “Motorway of Western Greece (Ionia Odos)” in the “Agrinio Bypass from CH. 0+000 to CH. 34+401 or CH. 34+811” in the prefecture of Aitoloakarnania.”
- JMD 105886/03.07.2008 Extension of No. 84982/96/11.04.1997 JMD on environmental terms approval of the project “Motorway of Western Greece (Ionia Odos)” in the “Agrinio Bypass” from CH. 0+000 to CH. 34+401 or CH. 34+811” in the Prefecture of Aitoloakarnania.”
- JMD 144713/23.09.2009 Amendment of No. 84982/96/11.04.1997 JMD on environmental terms approval, as amended by No. oik.105886/03.07.2008 JMD, EPO, the project “Western Greece Motorway. (Ionia Odos) in the “Agrinio Bypass” from CH. 0+000 to CH 34+401 or CH. 34+811 in the prefecture of Aitoloakarnania”

Northern End of Agrinio Bypass (Kouvaras) – Southern End of Arta Bypass (Kompoti) and Northern End of Arta Bypass (Filippiada) - Ioannina (Eleousa)

- JMD 141564/25.07.2005 Environmental Terms Approval for the “Ionia Odos” project Northern End of Agrinio Bypass (Kouvaras) – Southern End of Arta Bypass (Kompoti) and Northern end of Arta Bypass (Filippiada) - Ioannina (Eleousa).

Arta Bypass

- JMD 120756/96/03.06.1997 Environmental Terms Approval for the construction and operation of the project ‘Ioannina - Antirrio National Road, Section of Filippiada - Arta Bypass, from CH. 60+000 to CH. 82+000 starting from Ioannina, at the Prefectures of Preveza and Arta, including section of almost 1 km of the connect road with the city of Arta.

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- JMD 132550/31.07.2003 Modify the Common Ministerial Decision Approval of Environmental Terms for the construction and operation of the project "National Road Ioannina - Antirrio, Section of Filippiada – Arta Bypass, from CH. 60+000 to CH 82+000 starting from Ioannina, at the Prefectures of Preveza and Arta, including section of almost 1 km of the connect road with the city of Arta.
- JMD 137938/31.12.2003 Joint Ministerial Decision Amendment of the Environmental Terms Approval for the construction and operation of the project "Ioannina - Antirrio National Road, Section of Filippiada – Arta Bypass, from CH. 60+000 to CH. 82+000 starting from Ioannina, at the Prefectures of Preveza and Arta, including section of almost 1 km of the connect road with the city of Arta.

### **1.1.1 Construction Works**

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:

- (i) Ionia Odos/Antirrio - Agrinio Southern end of Agrinio bypass 42.9 km (GU 1N to 13N) and completion of Agrinio bypass incomplete section of an approximate length of 13.0 km. In the area of Makynia the solution applied is by tunnel under the alignment contained in the EIS as L - A solution.
- (ii) Ionia Odos/Northern end of Agrinio Bypass (Kouvaras) - Arta Bypass Beginning (Kompoti) 53.0 km (GU 15N to 18N).
- (iii) Ionia Odos/Arta Bypass End - Egnatia Odos 50.0 km (GU 21N to 23N) with A' phase construction works in Egnatia I/C.

(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:

- (i) Ionia Odos/Arta Bypass section 10.5 km (GU 20Y)

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(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:

- (i) Ionia Odos/Agrinio Bypass 20.6 km (GU 14N/W)
- (ii) Ionia Odos/Arta Bypass 6.15 km (GU 19N/W)

The project is divided into Geographical Units of the Special Conditions of Contract<sup>1</sup> 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.

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

The New Section of Ionia Odos Concessionaire under the Agreement, the SCC and the other annexes will apply the Basic Design as defined in the Agreement and will shape the project, elevation and plan view, subject to the following restrictions and in accordance with:

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<sup>1</sup> Agreement between EYDE/YPEHODE and the Concessionaire. The said sections are specified in Table 1-I of the Agreement.



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- (a) The Contractual Technical Requirements.
- (b) The Approved Environmental Terms.
- (c) The Set Expropriation Zone
- (d) The studies of Annex B' of the SCC with the chosen solution until the incorporation with the existing network and the requirements of the Agreement.

Design and Construction must meet the following requirements:

- (a) As regards the implementation of the contractual requirements (regulations, standards, etc.) the following are defined:
  - (i) Antirrio - Amvrakia I/C Section. Category A with a design speed of 110km/hr in open sections and 100km/hr in the underground sections and the area of Klokova Bridge.
  - (ii) Amvrakia I/C – Egnatia Section. Category A with a design speed of 100 km/hr.
  - (iii) In the secondary road network of the CP and the TWs the design speeds will be implemented according to the categories defined in the CPU based on the expected traffic volume and the required proper operation of it until the incorporation with the existing road network.
- (b) A four lane cross-section of the separated carriageway with two traffic lanes and an Emergency Lane in each direction of the open Motorway sections and middle island with new jersey will be applied as follows:
  - (i) A width of 24.5m with planting in the middle island in Antirrio – Amvrakia I/C Section including the incomplete section of Kefalovryssos - Aggelokastro.
  - (ii) A width of 22.0m with a double new jersey in the middle island in Amvrakia I/C - Egnatia Section.

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The side configurations will be determined in accordance with the present by applying the SPC (Standard Project Construction) and other technical requirements (regulations, standards, etc.).

(C) A cross-section will be applied in the tunnels as defined in Article 19 of the SCC under implementation of the Basic Design.

(D) In Kefalovryssos – Aggelokastro, the unfinished section of Ionia Odos, the following tasks will be executed but need not be limited to:

- (i) Completion of a four lane cross-section on CH. 1+450 to 1+950 of the study with a width of 24.5m
- (ii) Completion of Chaliki junction
- (iii) Completion of Agios Elias I/C and Aggelokastro I/C
- (iv) Rehabilitation of railway line in the area of Aggelokastro I/C
- (v) Completion of side roads (SR)
- (vi) Stability of works for slopes, trenches and embankments
- (vii) Planting - irrigation etc.
- (viii) Safety Equipment
- (ix) E/M etc.

The Project New Sections will be drawn up the The relevant registration of the works (Arts, pavements, Electromechanical safety equipment etc.) in line with contractual requirements and will be used for the preparation of inspection manuals and maintenance of the Project Concession and Local Projects. Studies Project at all stages will be checked by experts on road safety.



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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

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

## 2. TABLES FOR MONITORING ENVIRONMENTAL CONDITIONS



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**2.1 ANTIRIO – SOUTHERN END OF AGRINIO BYPASS (KEFALOVRYSSO)**  
**(JMD 142128/25.07.2005)**

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A/A Decision	Environmental Terms - Description	Description of Progress - Problems
b.	Specific limit values of pollutant loads and concentrations emission according to the applicable provisions	<p>All foreseen by the legislation limits are taken into consideration.</p> <p>Hazardous waste is managed under contract by appropriately licensed companies.</p>
c.	Specific limit values of noise level and vibrations according to the applicable provisions	<p>The control, during the construction phase, is conducted in accordance with the current legislation and the limit values specified in this are met.</p> <p>With respect to the noise during the construction of the project, pursuant to the Program for Environmental Management and in terms of Environmental Monitoring Control Program noise measurements are conducted parametrically of the worksite and the construction faces and the results were within the allowable limits. The said measurements are reflected in maps depicting the extent of the construction of the project and the location the measurements were made. The said maps as well as the measurement, which are repeated at regular intervals (monthly), are included in the noise measurement issue, which is submitted with the annual report. For the current time period, no noise measurements were carried out due to suspension of construction works.</p>
d.1	Responsibilities regarding the implementation of Environmental Terms	<p>The Environmental Terms and the other contractual obligations regarding the construction phase, have been analyzed in the Environmental Monitoring &amp; Control Program submitted in May 2009 (protocol no. IC-X-CO-S0000-PRO9251/ACH/KIa).</p> <p>The Program has been presented to the joint venture's supervising engineers, as well as to any subcontractors that will provide the joint venture with their services.</p>

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A/A Decision	Environmental Terms - Description	Description of Progress - Problems
d1.1		<p>The Environmental Terms and the other contractual obligations regarding the construction phase, have been analyzed in the Environmental Monitoring &amp; Control Program submitted in May 2009 (protocol no. IC-X-CO-S0000-PRO9251/ACH/KIa).</p> <p>The Program has been presented to the joint venture's supervising engineers, as well as to any subcontractors that will provide the joint venture with their services.</p> <p>There are responsible persons for the implementation of the Environmental Management System and the monitoring of compliance with the E.T.</p>
d1.2	Required expenditure on environmental protection projects	All required costs are taken into account when tendering for the construction of this project. To date expenditures for environmental protection have been submitted in the annual environmental reports of the previous years.
d2	Permits and approvals	The procedure for obtaining all necessary permits and approvals in progress, as specified below.
d2.1		<p>The relevant STIS for all required sites (quarries, borrow pits, disposal sites and worksites) have been submitted to EYPE. The submissions of the studies as well as the progress of the approval procedure are as follows:</p> <p><b>Quarries:</b></p> <ul style="list-style-type: none"> <li>•QP08 "Kremasti", Municipality of Mesologgi (the 27885/10-08-10 environmental licencing process has been completed. Intervention permits approval for 29,3 acres). Solicitation for 12,8 acres intervention permit (11-2010) and resolicitation (05-2010) have been submitted. The signing of the contract with the General Secretary of the Region and the submission of guarantee by the consortium is still pending.</li> </ul> <p><b>Borrow Pits:</b></p>

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A/A Decision	Environmental Terms - Description	Description of Progress - Problems
		<ul style="list-style-type: none"> <li>•BP08 location "Skinos", Municipality of Mesologgi (STIS has been returned by EYPE requesting for reforestation removal. Solicitation for 177,73 acres reforestation removal (05-2010) and resolicitation (06-2012) have been submitted. A meeting was held at the Forest Service (November 2012) to inform the new Head and promote the reforestation removal.</li> <li>•BP03 location "Karanolaggada", Stamna, Municipality of Aitolikos: solicitation for 16,64 acres reforestation removal (10-2008 &amp; 05-2010). Also, a request for update on the reforestation removal (06-2012) was made. STIS has been returned by EYPE due to lapse of time)</li> <li>•BPA1 location "Machaira", Galatas, Municipality of Chalkia: ownership is unclear. The area is claimed by the State. Non approval of the STIS due to location (within zone ΠΦ3 of Mesologgi-Aitoliko National Park)</li> <li>•BPA2 location "Rena", Evinochori, Municipality of Mesologgi: there is no consensus on behalf of the owner. STIS has been returned by EYPE (02-2012) due to lack of Characterization Act by the Forest Service. At the request of the J/V towards the Forest Service, the latter responded that it could not proceed with the process because no evidence of ownership has been produced so far.</li> <li>•BPA3 location "Agios Ioannis", Aitoliko, Municipality of Aitoliko: ownership is unclear. The area is claimed by the State. During this semester, a meeting was held at the Forest Service of Mesolongi (November 2012), to identify public land in the region. Since then the necessary investigation to expand the DI is held in cooperation with the Forest Service.</li> <li>•BPA4 location "Rema Ragou", Aitoliko, Municipality of Aitoliko: negative opinion by the department of Physical Environment of YPEKA and the Management Body of Mesologgi – Aitoliko National Park. Thus, STIS non-approved by EYPE.</li> <li>•BPA5 location "Palaiomylos", Galatas, Municipality of Chalkia: there is no consensus on behalf of the owner. STIS has been returned by EYPE (02-2012)</li> </ul>

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A/A Decision	Environmental Terms - Description	Description of Progress - Problems
		<ul style="list-style-type: none"> <li>• BPA6 location "Theotokos", Aitoliko, Municipality of Aitoliko: the ownership is unclear. Reforestation removal for 51,75 acres request (10-2010) and second request (06-2012).</li> </ul> <p>A meeting was held at the Forest Service (November 2012) to inform the new Head and promote the reforestation removal.</p> <ul style="list-style-type: none"> <li>• BP7 "Prapoeri" location, Municipality of Antirrio, with decision no. 141904/17-11-09 the EYPE returned the STIS since reforestation removal of the area is required. With decision no. 31739/11.25.10 the J/V requested us to remove reforestation. The Forest Service of Nafpaktos requested us for additional data (08/2011).</li> <li>• 3 Borrow pits (15A, 15B and 15C) in Ano Vassiliki, Nafpaktos (CH. 15+000), awaiting approval of the submitted STIS (03/2011).</li> </ul> <p><b><u>Disposal Sites:</u></b></p> <ul style="list-style-type: none"> <li>• Temporary deposits (6 sites) of Kalydona tunnel excavation materials, aggregates and topsoil (STIS under preparation).</li> <li>• 4 D/P (E1, E2, E3, E4) Municipality of Chalkia. Environmental licensing for E1 (02/2008). It remains the lease of the area (private one) remains.</li> </ul> <p><b><u>Worksites:</u></b></p> <ul style="list-style-type: none"> <li>• Headquarters: "Kourtouga" location – premises of former 3E bottling plant. No environmental permit is needed. <ul style="list-style-type: none"> <li>• S1.3 Aitoliko Worksite (environmental permit completed 36016/13-05-11).</li> <li>• S1.4 A worksite for Kalydona exit tunnel (environmental permit completed 36015/13-</li> </ul> </li> </ul>



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A/A Decision	Environmental Terms - Description	Description of Progress - Problems
		<p align="center">05-11)</p> <ul style="list-style-type: none"> <li>S 1.2 Agios Georgios, Mesologgi: STIS approval by EYPE (prot. No. 41505/23/09/09).</li> </ul> <p><b>Gravel extractions:</b></p> <ul style="list-style-type: none"> <li>Gravel excavation RB01 in Kalfa and Paradission positions in Evinos River (J/V approval with protocol no. A/1/08/09/01/5293/09-11-09 EYDE EPA&amp;IO). Those positions are used by the three companies. Under decision of Western Greece Region, the licensed concession for gravel excavation from 'Kalfa' position has been postponed for 7 months (prot. no. 28370/24-08-10). A request for preparing a protocol delivery to the General Directorate of Aitolokarnania has been submitted (31855/29-11-10).</li> <li>EYEP report for fine imposition for Kalfa position (03-2012), and J/V response to YPEKA (05-2012).</li> <li>Decision on fine imposition by EYEP (38813/25-06-2012).</li> <li>Rejection of a complaint by JV (39057/21-09-2012).</li> </ul> <p>For the current time period, gravel excavations are not executed because of construction works interruption.</p> <p>For the environmental licensing of the ancillary works, the procedures provided for in Law 4014/2011 (Government Gazette 209A/2011) shall be followed.</p>
d2.2		<p>Pursuant to the Environmental Term d2.1, the environmental approvals are given by EYPE after submission of the relevant STIS. The necessary STIS have been elaborated for the relevant authorizations, for which detailed reference is made above.</p> <p>The environmental permitting shall be issued in accordance with Law 4014/2011 (OGG 209A/2011)</p>
d2.3	Work or facilities within areas of forest character	

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A/A Decision	Environmental Terms - Description	Description of Progress - Problems
		<p>Maintenance works were carried out within the project occupation zone on this semester.</p> <p>Therefore, for the works executed on the said period no permit was necessary by the competent Forest Service because the existing forest areas were located within the occupation zone of the project and in that case Law 2445/96 is in force.</p> <p>For the main project neither the process of intervention permit nor reforestation removal are required. (Law 355/2007 art. 4, par. 4 (a) (OGG 81A/16.04.2007) Law 2445/1996 (OGG 274A), in paragraph 1 of Article (2)).</p> <p>During the reporting period no ancillary works were made.</p>
d2.4	Concrete and asphalt production worksite units	<p>It has been ensured that the layout planning of these plants abide by the afore-mentioned restrictions, as specified in the Environmental Term. This issue is reviewed in the submitted STIS and the implementation of the stipulated protective measures is checked. In particular, as far as the concrete production unit that is installed in Evinos worksite, in Agios Georgios, Mesologgi all the aforementioned restrictions were followed. The installation is around 1000m away from Agios Georgios area and in order to protect Evinos river, two water collection tanks have been constructed.</p> <p>In STIS of Aitoliko, Kalavrouza and Gavrolimni worksites, the term has been taken into consideration.</p>
d2.5	Deforestation	<p>Land reclamations and site clearing were carried out before the suspension of works in motorway sections areas bounded by piles.</p> <p>The term is taken into consideration and controlled by the responsible of the consortium Environmental department and the "appointed subcontractors" as described in the Monitoring &amp; Control Environmental Program submitted in May 2009 (protocol no. IC-X-CO-S0000-PRO9251/ACH/Kla/12-05-2009</p>

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A/A Decision	Environmental Terms - Description	Description of Progress - Problems
		During the period mentioned by this report, site clearing was not required. STIS provide the restoration of the intervention sites
d2.6	Materials use and disposal	For all new sites where materials have been delivered, the required STISs have been submitted and approved, as referred to in term d2.1, and the relevant opinion of the responsible Archaeological Services is required.
d2.7	Disposal of the inappropriate excavation materials	<p>So far, no permanent disposal is required in this area. The sites of top soil temporary disposals and piles of aggregates or useful excavation materials were selected in leased land, or within limits of expropriation. Due to the suspension of the works and since the absorption of the materials in the road body would be delayed, STIS have been drawn up for most of the sites. No temporary disposal near streams. In any case, during the suspension of the works, the sites of temporary disposal are systematically monitored in order for the protection of streams to be ensured.</p> <p>The implementation of the E.T. with respect to the protection of water recipients from the disposed soil material is controlled via the Environmental Monitoring &amp; Control Program.</p> <p>The term on the disposal of inappropriate excavation products is a criteria used during searching locations for possible disposal sites and is taken into account during the preparation of the respective STIS that are submitted to the EYPE.</p> <p>For the environmental licensing of the disposal sites, the procedures of Law 4014/2011 (OGG 209A/2011) are followed.</p>
d2.8	Redundant excavation materials	No cases related to excavation materials, which usually include waste or dangerous sewage, have been presented. In the event that during the construction phase, excavation locations containing waste or other solid waste are found, these will be separated from the excavation materials and will be appropriately

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		disposed. Also, it has been ensured that excavation materials, which are free of foreign substances, are kept free of waste or free substances in specific deposition chambers or integrated per priority in the body of the Project. During the preparation period of the present report there were no excavation materials, since the project is under suspension.
d3	Archeological Services & findings	Due to the nature of the works completed (maintenance works, equipment removal) the Archeological Service was not updated during the report period.
d3.1		<p>Pursuant to the submitted Final Road Designs and as checked in the Reports of Environmental Assessment of Final Design στις Εκθέσεις of the subsections 101 (IC-C-CO-S108N-CW-0200-000-ENV-EPR-RP.000-01-01-0/18-06-2009 – protocol no. 2300/19-06-2009 and Technical Report to the ΛΣΤ' Archeological Service protocol no. 11174/07-06-2010 FA), 108 (IC-C-CO-S108N-CW-0200-000-ENV-EPR-RP.000-01-01-A/05-03-2009 –protocol no. 0208/05-03-2009 FA and IC-C-CO-S109N-CW-0200-000-ENV-EPR-RP.000-01-01-A/18-05-2010 –protocol no. 10942/19-05-2010 FA) and 102 (IC-C-CO-S111N-CW-0200-000-ENV-EPR-RP.000-01-01-0/18-05-2010 – protocol no. 10941/19-05-2010 FA) the adjacent of the alignment with the archeological sites is the following:</p> <p>√ <u>Alikyrna archaeological site</u> from CH. 28+800 – CH. 30+000. From these, only in 200 m. (CH. 29+320 – CH. 29+540) they are in embankment. The Final Road Design foresees the raise of the red line in the area of the archeological site so as for the C-C construction not to be appropriate anymore, while the lateral road is located to the entry step of the embankment in order for the noise to be the minimum one. Regarding the location of "Borbora" hill, the Final Road Design foresees the improvement of the slopes and the reduction of the breadth of the excavation. In both positions a landscape restoration of the trenches is suggested. The above proposals have been submitted to the</p>

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		<p>ΛΣΤ' Archeological Service (25928/24-06-10), which recommends in its letter to Ministry of Culture (27956/11-8-10) the approval of the proposal. A positive opinion has been received by the Ministry of Culture (31712/25-11-10). Finally, it is mentioned that in "Borbora" position CH. 30+450 the 22<sup>nd</sup> Ephory of Byzantine Antiquities (30223/15-10-10) executes from 04-10-10 saving excavation survey.</p> <p>√ <u>Plevrona archeological site</u> proximity from CH. 34+500 – CH. 39+800 (within archeological site from CH. 35+580 to CH. 38+833). The Independent Engineer moves in embankment, except 730m. (CH. 38+153 – CH. 38+293, CH. 38+526 – CH. 38+843 and CH. 38+894 – CH. 39+167) where moving at a low cut. In the Final Road Design and more specifically in the area from CH. 35+578 – CH. 36+360 with the foreseen lowering of the centre line, it is not necessary to construct a wall or reinforced embankments (lowering of the bandwidth occupancy and avoidance of visual disturbance).</p> <p>√ As regards the <u>area of antiquities "Tris Eklissies"</u>, after the ΛΣΤ' Archeological Service letter with protocol no. Φ666/ΣΤ/ΛΣΤ/1501-26.02.2010, the J/V letter with protocol no. 21359/11-03-1020 (forwarding final alignment layout from CH. 38+000 to CH. 39+000) and joint visit/autopsy in the area, (protocol No. 23080/23-04-2010) an extract layout and cross-sections where the ancient wall is reflected, from which it appears that there is no intervention in the southwestern part of the antiquities as agreed with the competent ΛΣΤ' Archeological Service in earlier meetings, have been submitted, according to the Ministerial Decision ΥΠΠΟ/ΓΔΑΠΚ/ΑΡΧ/Α1/Φ40/115556/5294-28.11.2008 and the Center of Analysis and Study Act no. 29/23-9-2008. The written consent of ΛΣΤ' Archeological Service (protocol No. 2731/28-04-2010 ΛΣΤ' Archeological Service and 23901/11-05-2010 JV EUROIONIA) has been received.</p> <p>√ <u>Mesologgi I/C: Ancient graves</u> have been found in the region and saving excavations have been conducted. Relocation of the I/C (with protocol no. 21560/16-03-10, 1392/12-03-10 LST EPCA) has</p>

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		<p>been proposed by the archeology. The service launched the solution of Overpass construction in the same position. Detailed designs and a relevant document addressed to the Service for approval and to the Archeology for the written consent have been submitted. The assent of the competent Ephory of Antiquities (27956/11-08-10 J/V) has been notified and the change of the Center of Analysis and Study has been approved (31712/25-11-10 J/V, YPPOT/GDAPK/ARX/F40/70558/3348/08-11-10 Ministry of Culture).</p> <p>Also, during the current period, the Center of Analysis and Study decided the:</p> <ul style="list-style-type: none"> <li>• the preservation of the ancient building complex found at CH. 13+000 in Gavrolimni, Municipal District of Chalkia, Municipality of Nafpaktia, in Aitolokarnania, under the construction of Ionia Odos, and the small displacement of the lateral motorway road, in order not to affect the ancient building and to maintain it visible (04.09 .2012).</li> <li>• the deconstruction of ancient building residues in Section 1: Antirrio - Kefalovryso (CH. 13+520), in the position of "Gavrolimni", M. of Chalkia, Aitolokarnania, Region of Western Greece. (prot. no. 39052_IC-X-OR-GE000_20.09.12).</li> </ul> <p>The General Directorate of Antiquities and Cultural Heritage sent approval on a) conservation and b) degradation of ancient remains discovered at the entrance to the Tunnel of Kalydona CH.23 +550 - CH. 23 +630 (Service letter with protocol. No.: 37105/1622, 12.04.11). Also, the 22nd Ephory of Byzantine Antiquities has sent a document on partial destruction and intervention in the immediate area of antiquities on the CH. 19+050 (Service letter with prot. No.: 1078, 11.04.11).</p> <p>The 22nd EBA sent to EYDE EPA &amp; IO the debriefing report for the archaeological excavations carried out in Section 1: Section B - Position "Byzantine Church - St. George" of Evinochori, M. of Mesologgi (CH. 23+670) and Position "Rachi Vovora" of Mesologgi, M. of Mesologgi (CH. 30+450), M. of Aetoloakarnania. The report covers the period 01.05.2012 - 30.06.2012. (prot. no. 39042_IC-L-OR-S1000_18.09.12).</p>
d3.2		With respect to the coverage of the expenses incurred during the archaeological surveys, article 1, par. 13.2 of

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		Law 3555/2007 shall apply.
d4	Worksite infrastructure to be established serving the project's needs during its operation (de-icing, etc.)	The issue concerns the operation of the project.
d5	Stone processing and concrete production	The E.T. are followed in the stone processing and concrete production plant that operates in Agios Georgios Mesologgi worksite. The said time period, the concrete production installation has been dismantled, and the other facilities are not operating due to suspension of the works.
d5.1	Bitumen production plant.	<p>In the worksite area of Aitoliko as well as in the areas of Kalavrouza and Gavrolimni, such installations are provided, while the protection measures of the term refer to the relevant STIS. Their implementation after the installation according to the EMCP (Environmental Monitoring &amp; Control Program) will be checked.</p> <p>The supply of aggregates and concrete, held in the past by legally operating facilities subcontractors - Suppliers, has been stopped due to suspension of works.</p> <p>Bitumen production plants do not exist and when required, either they will be supplied by outside environmentally licensed partner or they will be installed on the licensed worksite areas.</p>
d6	Wastes	
d6.1	Toxic wastes	With respect to the collection of urban waste, four waste bins of the Municipality of Mesologgi have been placed in the worksite of Ag. Georgios and there is a relevant agreement with the respective Municipality for emptying the bins and transferring the waste to HYTA (landfill site) 4 <sup>th</sup> Geographical Unit of the Prefecture of Aitoloakarnania (there is the relevant document).
d6.2	Pollution of surface and ground waters	As regards the waste management during the construction of the project, an Environmental Monitoring & Control Program in terms of the overall Plan for Environmental Management, which includes control procedures in compliance with the environmental terms, has been drawn up. The Program has been



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		<p>presented to the joint venture's supervising engineers, as well as to any subcontractors that will provide the joint venture with their services.</p> <p>With regard to waste generated by office and warehouses area that has been developed on the premises of 3E factory (Kourtouga), those are collected in bins to split it into recyclable and non-recyclable ones, and are also transported from the Municipal Authority of Mesologgi to HYTA.</p> <p>With respect to the management of used oils, batteries, tires, etc. relevant agreements with licensed management companies have been signed and depending on the constructional procedure and the payment of the temporary containers, they are delivered for further management. While, where appropriate, relevant proof of compliance from suppliers and sub contractors are required. The dangerous waste is temporarily stored in special areas within the worksites, while in some cases the relevant conformance documents are requested by the suppliers and the separate subcontractors.</p> <p>A record of contracts and evidence for the appointed subcontractors is kept in each worksite. During the preparation of this report, no dangerous waste and oils were generated at any worksite because the works were suspended. Before suspending operations, the temporarily stored quantities had been delivered to the administrators, from all worksite areas.</p> <p>The maintenance and washing of vehicles and machines were realized either in licensed worksites with appropriate infrastructure (settling tanks, tank assembly, etc.) or in a licensed external garage or laundry area.</p> <p>As regards the urban waste at the worksite of Ag. Georgios, a sewerage system and a watertight septic tank</p>



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		<p>have been constructed; an agreement on its evacuation and transportation of the waste to biological treatment of the municipality has been concluded with the Municipality of Mesologgi.</p> <p>There is a watertight septic tank at the offices in Kourtouga.</p> <p>A sewage treatment plant was operating in the worksite of Kalydona exit tunnel.</p>
d7	Uninterrupted flow of the surface water	The compliance with this condition is ensured through the development - approval of hydraulic studies, which take into account the E.T.
d8	Contingency plan	<p>The Risk Assessment Study has been elaborated and submitted to the I.E. for the area of Evinos river, J/V letter with protocol no. 27580/ 5-8-10.</p> <p>An Environmental Monitoring &amp; Control Program in terms of the overall Plan for Environmental Management, which includes control procedures for all works referred to in the environmental terms, has been drawn up.</p> <p>The Program has been presented to the joint venture's supervising engineers, as well as to any subcontractors that will provide the joint venture with their services.</p>
d9	Modification or intervention to an existing infrastructure project	A contact with all involved Public Utility Organizations has been made (in accordance with par. 7 of the Special Conditions of Contract) in order to identify the areas for networks relocation. The necessary actions will be carried out to rehabilitate the irrigation networks and passages from other irrigation channels to the area with respect to the positive opinion about the hydraulic design from the respective Service of Aetoloakarnania (protocol no. 6206/30-10-2009 for the section from CH. 25+640 to CH. 32+000 and 6207/30-10-2009 for section CH.32+000 to CH. 42+000).

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		<p>In the past, particular documentation for the remaining PUOs has been sent to:</p> <p>a) Greek Telecom for information of network operator in the area of Gavrolimni and Ano Vassiliki Administrative Division of the Municipality of Chalkia, within Ionia Odos alignment (document with J/V Protocol No. 28157, 13.08.10).</p> <p>b) Chalkia Municipality, Chania of Gavrolimni for information network operation in Gavrolimni and Ano Vassiliki Administrative Division of Chalkia Municipality within Ionia Odos alignment (document with J/V Protocol No. 28158, 13.08.10).</p> <p>c) PPC of Agrinio for the relocation of network from CH. 14+300 – CH. 18+000 (document with J/V Protocol No. 31199, 12.11.10).</p> <p>d) PPC of Mesologgi for the relocation of network located from CH. 17+250 CH. 17+980 and CH. 18+200 - 18+400 (document with J/V Protocol No. 35383, 13.04.11).</p> <p>Also, a document was sent to the PPC of Agrinio for the relocation of network in Ano Vassiliki CH. 17+250, CH. 17+980 and CH. 18+200, CH. 18+400 (PPC letter with protocol no.: 1271, 12.05.11).</p> <p>e) As regards the passing of PPC network from the areas of Ag. Thomas and Aitoliko, the actions have been interrupted due to suspension of works.</p> <p>During the reporting period no actions were taken due to suspension of works.</p>
d10	Klokova	The construction works in Klokova section have not started yet.
d10.1		
d10.2		At the current time, due to suspension of works, only maintenance works were executed locally. Therefore, the circulation of the existing ET was not impeded.
d10.3		

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d10.4	Makynia	The term is implemented
d11	Worksite signage	<p>An Environmental Monitoring &amp; Control Program in terms of the overall Plan for Environmental Management, which includes protection measures for all works referred to in the environmental terms, has been drawn up. The Program has been presented to the joint venture's supervising engineers, as well as to any subcontractors that will provide the joint venture with their services.</p> <p>The Design for temporary traffic arrangements for the construction of UP44 underpass (CH. 23+331.35 – Right Branch and CH. 23+348.51 - Left Branch (Approval ICo0255, 17.05.10) has been submitted and approved by the Independent Engineer (Approval ICo195, 23.03.10).</p> <p>Warning signs and light signals have been placed, where appropriate, during the night. At the current period, because of the suspension of works, maintenance works have been mostly performed locally. Therefore the traffic of the existing National Road was not obstructed.</p> <p>During the drilling for the formation of the faces of Kalydona and Makynia tunnel, incorporated dust containment equipment has been used. As regards the temporary disposals (6 positions) within or outside the expropriation limits, those mentioned in E.T. d2.1 and d.2.7 shall be applicable.</p> <p>During the reference period, due to suspension of works, there was no materials transportation.</p>
d12	Perforation	
d13	Earthworks	
d13.1	dust	
d13.2	Materials transportation	
d13.3	Washing the wheels of trucks	
d14	Planting	<p>The relevant landscaping designs have been elaborated and submitted for approval to the Independent Engineer (CH. 17-24, J/V protocol no. EI: 35450/15-04-2011).</p> <p>The relevant landscaping designs are elaborated for the subsections from 11+300 – 14-360, 24+400 – 30+900 (101), 30+900 -36+940 (108) and 36+940 - 43+525 (102).</p> <p>The rehabilitation works and their budget constitute an integral part of each STIS submitted (disposal sites,</p>
d14.1	Collection and preservation of top soil	
d14.2		

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		<p>borrow pits, worksites, etc.).</p> <p>As regards the topsoil of the construction works, care is taken in order to stockpile it and use it in plantings - restorations.</p>
d15	Fire-protection	<p>The term is taken into consideration through the implementation of the Environmental Monitoring &amp; Control Program in terms of the overall Plan for Environmental Management, which includes control procedures for all works referred to in the environmental terms, has been drawn up. In any event, after the commencement of works, the fire measures in the project's machines and the scope of works are controlled and the provided H&amp;S Plan should be adhered to.</p> <p>Special attention should be given to areas that are near forests and fields during the summer months. Emphasis is given in order for the machines located at the project area to be equipped with the provided firefighting equipment. Regarding the premises of the site (offices, workshop, laboratory and concrete preparatory) the adequate firefighting equipment like fire extinguishers, sand and water supply to be provided.</p> <p>For the worksites (Ag. Georgios, Kalydona) the opinions of the responsible Archeological Services are positive.</p>
d16	Noise	<p>With respect to the noise during the construction of the project, an Environmental Monitoring &amp; Control Program in terms of the overall Plan for Environmental Management, which includes control procedures in order to resolve noise problems in accordance with the environmental terms, has been drawn up. Noise measurements were conducted in specific control points using the appropriate equipment in order to monitor the respect of the worksite noise levels more frequently. The measurements were shown in measuring tables with measurement points' graphics and were analytically presented to the Annex of Measurements of the Annual Environmental Terms Report. No excess of the permitted levels has been</p>
d16.1		
d16.2		
d16.3		
d16.4		

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		<p>recorded.</p> <p>During the current semester, noise measurements are not conducted due to suspension of works.</p> <p>Regarding the provision for implementation of noise barriers, concerning the operation phase of the project, with the finalization of road designs, a Special Acoustic Design for Noise Protection (ETME), submitted for approval to EYPE/YPEHODE, will be assigned and produced.</p>
d17	Direct tunnel entrance in ancient Kalydona	<p>The layout planning designs of the fronts of Kalydona tunnel have been approved by the I.E. via the document IC0035 DAC 5/03/09 and 5216/22-10-08). Based on these designs, no surface excavations will be performed at &gt;5m, except for the temporary ones. The layout planning of the fronts will be carried out via excavation and re-embankment. A landscaping design will follow.</p>
d18	Vibrations	<p>During the current semester, no vibration measurements were conducted due to the suspension of construction works.</p> <p>No adverse impact on residents and generally on any anthropogenic structure and archeological sites were generated from the works not previously executed, because of the construction of the road. Also, the settlements nearby to work fronts is Perithori (about 2.5 km) and Agios Georgios (about 2 km).</p>
d19	rescue – escape of people entrapped	<p>The term has been taken into account based on the risk analysis study. According to the “Risk Assessment” submitted for Kalydona Tunnel, two (2) transverse arcades, connecting the two branches per around 410m, are foreseen. The ILF Tunnel Risk assessment Final Report has been submitted to the I.E. via letter IC-C-CO-S1000-PRO 7293/MC/js 23/2/09, has been approved by the I.E. via the letter no. IC0035 DAC 5/03/09.</p>
d20	Access to settlements	<p>The issue is controlled through the monitoring of the Environmental Conditions. During the preparation of</p>

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d21	Passage of wildlife	this report, no need for structures that block access has arisen. It is taken into consideration in the designs already elaborated. This matter is also under examination in the Environmental Assessment Reports of the corresponding definitive road designs which are approved by the IE.
d22	Protection from corrosion of the natural slopes	It is taken into consideration in the hydraulic studies submitted for approval to the Independent Engineer. Especially for Evinos river, the design with J/V protocol no. 13774/18-8-09 with IC.C.EN.S107.MO. 0200.110.HYD.XXX.FL.01.01-A is taken into consideration.
d23	Waste from the road users	It concerns the operation phase.
d24	Noise monitoring	It concerns the operation phase.
d25	Air pollution station	With respect to the installation of the measurement station, a relevant study will be submitted upon restarting the works, in order to determine any possible locations and submit them for approval to EYPE/YPEHODE. The operation of the station is related to the operation of the project.
d.26	Environmental Service	The Eurolonia Joint Venture has a department of Environment, Health and Safety staffed with the required personnel and external partners. The responsibilities and obligations of the department's staff are described in the Quality Management System of the Joint Venture.
d.26.1		
d.27	Annual Reports	The annual relevant report for 2011 has been submitted to the Concessionaire (38318/5.02.12), EYDE (38446/12.03.12) and EYPE/YPEKA, shared by the whole consortium.
d.28	Relocation of the S/W alignment	The relocation of the S/W alignment is not feasible because of the dispersed settlement. The Final Road Design foresees the raise of the red line in the area of the archeological site so as for the C-C construction not to be appropriate anymore, while the lateral road is located to the entry step of the embankment in order for the noise to be the minimum one. Regarding the location of "Borbora" hill, the Final Road Design

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		<p>foresees the improvement of the slopes and the reduction of the breadth of the excavation. In both positions a landscape restoration of the trenches is suggested. The above proposals have been submitted to the ΛΣΤ' Archeological Service (25928/24-06-10), which recommends in its letter to Ministry of Culture (27956/11-8-10) the approval of the proposal. A positive opinion has been received by the Ministry of Culture (31712/25-11-10).</p> <p>After the relevant opinions by the Ministry of Culture, and for the amendment of the term, the procedure provided by article 13 of the JMD 11014/703/Φ104/14.3.2003 is adhered to. It has been included in the relevant design submitted to EYPE/YPEKA.</p> <p>Also, three designs of the study file 13 have been re-submitted/replaced because of little changes in the area of Mesokampos I/C resulting on demand of the Archeological Service.</p>
d.29	The environmental conditions compliance	They are taken into consideration.

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e1	Local environment - Sensitive elements – Specially Protected Areas	Sensitive environmental elements (settlements, protected areas and sites) were taken into account during the investigation of borrow sites positions, etc. and the elaboration of the STIS and TIS. The Department of Environment has elaborated a map with the environmental commitments, and pursuant to EIS subsequent documentation, which constitutes a tool for exploring of additional spaces and other works as well as assistance for all persons involved to the construction.
e2		-
f	Period for which the given environmental approval is valid - Conditions for its review	For the renewal of the environmental conditions the procedures provided for in Law 4014/2011 (Government Gazette 209A/2011) will follow.
g	Modernization, improvement, expansion or modification of the project	The additional EIS on the improvement of the alignment in Evinos River (CH. 19+200 – CH. 22+090), in the area of Vassiliki (CH. 14+300 – CH. 18+000, Antirrio I/C, for which there is the assent on behalf of





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		<p>YPOMEDI, under the M.D. with protocol no. A/1/00/01/01/8583/21-09-2010, has been submitted by the J/V to EYDE EPA &amp; IO (prot. No. 27883/ 10-8-10) and by EYDE EPA &amp; IO to EYPE (protocol no. A/1/00a/08/24/8989/26-10-10).</p> <p>Also, a File of article 13 (JMD 11014/03) has been submitted from the J/V to EYDE EPA &amp; IO (protocol no. 30628/27-10-10 &amp; 38511/03-04-2012) and from EYDE EPA &amp; IO to EYPE (protocol no. A/1/00a/08/24/9497/21-10-10), for small changes of section S1, which resulted by the elaboration of the final designs.</p> <p>The approvals of those aforementioned are expected.</p> <p>For the modernization, improvement, expansion or modification of the project, the provisions of Law 4014/2011 (Government Gazette 209A/2011) are required to be met.</p>
h	The amendment of the terms	The amendment of the terms is governed by the provisions of Law 4014/2011 (OGG 209a/2011)
i	Presence of ETs and EIA	The term is taken into consideration.
j	Non-compliance with the E.T.	-



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**2.2 AGRINIO BYPASS**

**(JMD 84982/96/11.04.1997, JMD 105886/03.07.2008  
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b	Specific limit values of pollutant loads and concentrations emission according to the applicable provisions.	All limits are taken into consideration pursuant to the current legislation.
c	Specific limit values of noise level and vibrations according to the applicable provisions.	As regards the noise during the construction phase of the project, pursuant to the Environmental Management Plan and in the framework of the Environmental Monitoring and Control Program, noise level measurements have been realized by an external partner (A.L.A PLANNING PARTNERSHIP (ENVIRONMENT) Ltd.) and no excess of the permitted levels has been recorded. The measurements have been submitted in the annual report of the previous years. As regards the vibrations, no explosions have been realized on the said section of the road.
d1.a	Environmental Terms implementation responsibilities	A general Environmental Management Plan in terms of the Environmental Monitoring and Control Program, which includes control procedures for all works referred to in the lateral environmental terms, has been drawn up. The Plan has been presented to the joint venture's supervising engineers, as well as to any subcontractors that provide the joint venture with their services.
d1.b		A general Environmental Management Plan in terms of the Environmental Monitoring and Control Program, which includes control procedures for all works referred to in the lateral environmental terms, has been drawn up. The Plan has been presented to the joint venture's supervising engineers, as well as to any subcontractors that provide the joint venture with their services.
d1.c	Required expenditures	It is taken into consideration
d1.d	Program of process monitoring	A general Environmental Management Plan in terms of the Environmental Monitoring and Control Program, which includes control procedures for all works referred to in the lateral environmental terms, has been drawn

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		up. The Plan has been presented to the joint venture's supervising engineers, as well as to any subcontractors that provide the joint venture with their services. There are people responsible for implementing the Environmental Management Plan and the compliance with the E.T.
d2.a	Permits and approvals	<p>No new additional sites are required for the said department. When required, the concrete production units and sand production units of Terna – Michaniki J/V, which are coated and environmentally licensed (letter with EYPE protocol number:132637/04.10.07), were used. During the period concerned, no materials from concrete production and sand production units were used. Also, during the works, there is cooperation with companies producing concrete and asphalt, and their procurement is done by the latter. (Ergobeton of Agrinio S.A. and Hefaistos S.A. Their environmental permits exist. The cooperation with the above companies is supported by vouchers and invoices which are in the accounting department.</p> <p>A general Environmental Management Plan in terms of the Environmental Monitoring and Control Program for all activities and facilities including control procedures on those referred to the adjacent environmental conditions has been drawn up.</p> <p>During the said time period, all the construction works have been suspended.</p>
d2.b	Materials required for the construction of the project	-
d2.c	Use of material	During the said time period, all construction works have been suspended. All products deriving from the foreseen and approved excavation designs were used to manufacture embankments or any other road works, only after they were proved to be appropriate for this purpose (after several laboratory tests).
d2.d	Disposal of inappropriate excavation materials	<p>During the said time period, all construction works have been suspended.</p> <p>The disposals were temporary and within the occupation zone. Furthermore, as regards the disposal of non-appropriate excavation materials, E1 disposal site has been approved for this part of the project (Protocol No. 101105/07.02.08/EYPE).</p>

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d2.e	Licensing of worksites	The licensed worksites of the old contract in the Southern section of Agrinio Bypass and Evinos constitute worksite area of this section.
d2.f	Worksite installation	The permits granted to worksites ensure the implementation of the E.T., i.e. the exclusion of the spatial planning of the worksites in river beds. Furthermore, an Environmental Monitoring & Control Program in terms of the overall Plan for Environmental Management, which includes control procedures for all works referred to in the environmental terms, has been drawn up.
d2.g	Worksite rehabilitation	
d2.h	Forest areas	<p>During the said time period, the construction works have been suspended.</p> <p>For any work or installation, an intervention permit, which is granted by the competent Forest Service, shall be required.</p> <p>With respect to the projects within the occupation zone, in accordance with Law 3555/2007 (ratification of the Concession Agreement)/ Article 4/ par. 4a and Law 2445/1996/ Article 2/ par.1c, <i>'The occupancy, reclamation or coverage of forests or forest areas that are included in the boundaries specified in the designs of Annex 7 and in accordance with the terms and conditions of the agreement are permitted. This law approves the change of use, revokes the re-forestation and grants intervention permits and permits for felling works to the above sites'</i>.</p>
d3	Archaeological service	During the said time period, all construction works have been suspended. For any additional work or installation, permit and approval shall be required needed and granted by the competent Forest Service.
d4.a	Uninterrupted flow of the surface water	<p>The hydraulic works for the most part of this section are already built. Hydraulic studies are going to be submitted to the Independent Engineer where required (non-completed sections).</p> <p>More specifically, the hydraulic study IC-C-EN-S113N-IJ-0200-203-HYD-FL.00000.00.01-B for Aggelokastro I/C has already been submitted and approved (certificate of approval: IC0003/10-07-2008, Code: IC.U.IE.S113N.MO.0200.000.A). The approved study ensures the implementation of the E.T. Also, most of the</p>
d4.b	Flooding of the adjacent agricultural areas	

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		<p>alignment in the area is on a trench and therefore there is no problem of flooding of the adjacent farmland. <u>Other hydraulic studies approved for the said section are:</u></p> <ul style="list-style-type: none"> <li>✓ The "rainwater drainage study CH. 1+276 – CH. 2+975" with code no. IC.C.EN.S100.CW.0200.901.HYD.FL.00000.00.01-B approved via the Approval certificate. Authorization: IC0051/15-5-09 and wbs code IC.U.IE.S113N.ALI.PAV.HYD.051. (It concerns the study for the central islet only).</li> <li>✓ The "definitive study of sewer drainage of lateral Toll Stations (Chaliki I/C, Agios Elias, Aggelokastro, Rigani, Kouvaras) with codes: IC.C.EN.S113N.IJ.0200.000.HYD.FOL.FL.003.02.01.01-A IC.C.EN.S113N.IJ.0200.000.HYD.FOL.FL.004.02.01.01-A IC.C.EN.S113N.IJ.0200.000.HYD.FOL.FL.005.02.01.01-A IC.C.EN.S114N.IJ.0200.000.HYD.FOL.FL.001.02.01.01-A IC.C.EN.S114N.IJ.0200.000.HYD.FOL.FL.002.02.01.01-A approved via the Approval certificate: IC0266/21-5-10 and code wbs IC.U.IE.S0000.MLD.266.</li> <li>✓ The study "Complementary hydraulic structures of Agrinio-U bypass" with code no. IC.C.EN.S100.CW.0200.901.HYD.FL.901.01.01-A approved via the Approval certificate. Authorization: IC0145/13-11-09 and code wbs IC.U.IE.S1000. HYD.145.</li> <li>✓ Finally, the approval of the final design of Agios Elias I/C hydraulic works, with code no. IC.C.EN.S100.CW.0200.901.HYD.FL.901.01.01.01-B, approved via the Approval certificate, is indicated. Authorization: IC0276/02-06-10 and code wbs IC.U.IE.S113N. HYD.276.</li> </ul>

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		<p>After changing the type of tolls, the hydraulic studies for Aggelokastro I/C (32647/20-12-10. DAC: ICO003C/4-5-2011) have been resubmitted and approved, Agios Elias I/C (32,931/7-1-11, DAC: ICO276B/14-3-2011), Kouvaras I/C (prot. no. 33137/12-1-11, ICO266B/8-2-2011), Chaliki I/C (36426/14 -06-2011).</p> <p>There are no irrigation networks that could be affected by the present alignment.</p>
d4.c	Irrigation networks	There are no irrigation networks in the area that could be affected by the present alignment.
d5.a	Uninterrupted operation of service facilities	<p>It concerns the operation phase. The available personnel, responsible for the construction of the project, are involved in cleaning and maintaining the road and the triangular curbs when needed.</p> <p>Works in the main artery of this section have been completed (the works carried out are for the construction of the junctions) and it has been delivered to circulation. Nea Odos S.A. undertakes the general maintenance and supervision of this section.</p>
d5.b	Waste	In the area of this project there are no worksite installations and the service is conducted by the licensed worksites of the old contract in the Southern section of Agrinio Bypass and Evinos (Ag. Georgios).
d5.c	Pollution of surface and ground waters	<p>Any waste from the regular cleaning of the road are collected and transported in bins of the Municipality of Agrinio. Regarding the management of the environmentally dangerous materials the following agreements have been contracted and are valid with the responsible companies:</p> <p>A) For the management of used oil – ELTEPE S.A.            B) For the management of used oil and petroleum filters, used wad/tow and contaminated material (soil, sorbents) from any possible leaking of oil – INTERGEO ETIE            C) For management of used accumulators (batteries) – SIDESIS S.A.            D) For management of used tires – ECOELASTIKA</p> <p>The separation of the above materials is conducted in a specially designed area on the worksite of Evinos and the temporary storage is done in special buckets and barrels sent from the above management companies.</p> <p>Finally, a special vehicle and machinery laundry has been built at Evinos worksite, with tight tank for the collection of</p>

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		<p>the resulting water. Furthermore, it is stated that there is no water receiver in the immediate area of the project. The nearest water receivers are Acheloos River and the Lagoon of Aitoliko located within 3km and 2km respectively from the project.</p>
D5.d	Intervention or modification of the existing infrastructure works	Special care is taken. The subject is controlled through the monitoring of the E.T.
d5.e	Smooth road traffic in the residential areas	Special care is taken. The subject is controlled through the monitoring of the E.T.
d5.f		The vertical roads and most of the lateral ones are already constructed.
d5.g	Perforations	<p>An Environmental Monitoring &amp; Control Program in terms of the overall Plan for Environmental Management, which includes protection measures for all works referred to in the environmental terms, has been drawn up.</p> <p>More specifically, based on the works provided, the following are implemented:</p> <ul style="list-style-type: none"> <li>• The worksite roads are wetted regularly.</li> <li>• There is no overcharging of tracks for carriage of heavy bulk traffic and all trucks transporting loose materials are covered.</li> <li>• The trucks move on to the existing paved road before leaving the worksite. However, cleansing from debris of the existing worksite road network used is carried out (soil, stones, etc.).</li> </ul>
d5.h	Materials transportation	
d5.i		
d6.j	Excavations	All products deriving from the foreseen and approved excavation designs were used to manufacture



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		<p>embankments or any other road works, only after they were proved to be appropriate for this purpose (after several laboratory tests).</p> <p>Disposal was temporary and within the occupancy zone. Furthermore, for the disposal of non-appropriate excavation materials, E1 disposal site has been approved for this part of the project (Protocol No. 101105/07.02.08/EYPE).</p> <p>All terms have been taken into account in the road works design IC-C-EN-S113N-IJ-0200-000-ALI-000-FL.002.01.01.01-C submitted and approved (Approval Certificate: IC0003/10-07-2008, Code: IC.U.IE.S113N.MO.0200.000.A) for Aggelokastro I/C. In the present alignment in the area of Aggelokastro I/C, the cuts are less than 30m and may be 15m in height max. Therefore, there is in no need for small relocations of the axis or for the construction of a cut &amp; cover. The proposed formation of the embankments arises from the geotechnical study so that safety and stability conditions are ensured.</p> <p>With respect to the large cut at CH. 13+400, during the excavation phase of the previous subcontractor, landslide failures and creeping movements presented. The construction was paused and the excavations were re-embanked to restore the failures and movements. At this phase in order to construct the road, the slopes declination was re-defined so as to discharge the problematic area (by removing materials) and to significantly reduce the creeping movement of the land.</p> <p>The solution of mild slopes offers greater safety in the event of earthquake in the area, where the cuts will be moved causing minor compression failures to the pavement, which can be easily repaired.</p> <p>Any other solution to this problem (e.g. Cut &amp; Cover) would be established at a problematic area of possible failure and the compression movements in the event of earthquake would cause irreversible damage.</p> <p>Following the above, it is clear that the large cut has arisen as a need to manage landslides. Its layout planning in scales with mild declination in combination with the appropriate landscaping measures will lead to its smooth integration into the surrounding area.</p>

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d6.c	Alternative routes	This request has already been met by the constructed technical structures.
d7	Planting	<p>The relevant final landscaping studies have been submitted and approved (DAC IC00165/11-12-2009) by the Independent Engineer.</p> <p>Suggestions for the protection of slope embankments and excavations, which include, among others, anti-corrosion measures (hydroseeding), have been formulated in the geotechnical designs and have been adopted by the landscaping design too.</p>
d8	Fire protection measures	In the area of this project there are no worksite installations and the service is conducted by the licensed worksites of the old contract in the Southern section of Agrinio Bypass and Evinos.
d9.a	Construction site and use machinery	<p>For some of the machines, there are certificates of EC type. For the old machines, which do not have this certificate, emitted noise measurements are being conducted according to JMD 56206/1613/86 and records of the above measurements and machine certificates of EOK type are kept.</p> <p>Finally, all the machines of the project are equipped with the foreseen fire-fighting measures. Also, at Evinos site (offices, workshop, laboratory, concrete laboratory) there are fire-extinguish means, like fire-extinguishers, sand, water.</p>
d9.b		With respect to the noise, pursuant to the Plan for Environmental Management in terms of the Environmental Monitoring & Control Program noise level measurements have been conducted by an external partner (TTE & Environment) and there was no excess of limits. The measurements had been re-submitted in the annual reports of previous years.
d9.c	Noise	
d9.d		
d9.e		
d10		They are taken into consideration

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d11	Change of the project's basic characteristics	A file of article 13 of the JMD 11014/2003 regarding the amelioration proposal of Aggelokastro I/C, in order for the process of the environmental license (J/V protocol no. 5400/20-10-08) to be followed, has been submitted to EYDE/YPEHODE. The certification has been approved under the project's JMD of E.T. amendment with protocol no. 144713/23-09-2009. A file of article 13 of JMD 11014/2003 regarding the proposal for lateral toll stations placing with J/V protocol no. 12938/24-7-09 has been submitted. The file has been submitted to EYPE by EYDE with EYDE protocol no.: A/1/013/06/24/4176/17-12-09. After the change of the toll stations type, the lateral tolls of Aggelokastro, Agios Ilias, Rigani, Chaliki are repealed and thus a new 13 File will be submitted, which shall include the new situation created.
e1	Local environment - Sensitive elements - Specially Protected Areas	Sensitive environmental elements (settlements, protected areas and archeological sites) are taken into consideration in the elaboration of the Designs and the execution of the construction works.
e2	Measures and projects for the conservation of the above elements Described in paragraph d)	
f	Period to which the given environmental approval is in force - Conditions for its review	<p>The following shall apply:</p> <ul style="list-style-type: none"> <li>• JMD 105886/03.07.2008 Extension of No. 84982/96/11.04.1997 JMD on environmental terms approval of the project "Motorway of Western Greece (Ionia Odos)" in the "Agrinio Bypass" from CH. 0+000 to CH. 34+401 or CH. 34+811" in the Prefecture of Aitolokarnania."</li> <li>• JMD 144713/23.09.2009 Amendment of No. 84982/96/11.04.1997 JMD on environmental terms approval, as</li> </ul>



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		<p>amended by No. oik.105886/03.07.2008 JMD, EPO, the project "Western Greece Motorway. (Ionia Odos) in the "Agrinio Bypass" from CH. 0+000 to CH 34+401 or CH. 34+811 in the prefecture of Aitoloakarnania"</p> <p>For further renewal of the environmental conditions, the procedures of Law 4014/2011 (OGG 209A/2011) should be adopted.</p>
g	Amendment of terms	-
h	Presence of ETs and EIA	The term is taken into consideration.
i	Non-compliance with the E.T.	-

**2.3 NORTHERN END OF AGRINIO BYPASS (KOUVARAS) – SOUTHERN END OF  
ARTA BYPASS (KOMPOTI) AND SOUTHERN END OF ARTA BYPASS (FILIPPIADA) –  
IOANNINA (ELEOUSA)  
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**(JMD 141564/25.07.2005)**



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b.	Specific limit values of pollutant loads and concentrations emission according to the applicable provisions.	The control, during the construction phase, is conducted in accordance with the current legislation and the limit values specified in this are met.
c.	Specific limit values of noise level and vibrations according to the applicable provisions	The control, during the construction phase, is conducted in accordance with the current legislation and the limit values specified in this are met.



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	Permissible noise level	<p>With respect to the noise during the construction of the project, according to the Program for Environmental Management and in terms of Environmental Monitoring Control Program, noise measurements are conducted parametrically of the worksite and the construction faces and the results were within the allowable limits. The said measurements are reflected in maps depicting the extent of the construction of the project and the location the measurements were made. The said maps as well as the measurement, which were repeated at regular intervals (monthly), were included in the noise measurement issue, which is submitted with the annual report in the past.</p> <p>During the current period, no noise measurements were carried out due to the suspension of the construction works.</p>
d.1	Technical projects and anti-pollution measures	<p>An Environmental Monitoring &amp; Control Program in terms of the overall Plan for Environmental Management (submitted in May 2009 protocol no. IC-X-CO-S0000-PRO9251/ACH/KIa/12-05-2009), which includes control procedures for all works referred to in the environmental terms, has been drawn up.</p> <p>The Program has been presented to the joint venture's supervising engineers, as well as to any subcontractors that will provide the joint venture with their services. The monitoring of the terms implementation is held as analyzed in the overall Plan for Environmental Management.</p>
d1.1		<p>An Environmental Monitoring &amp; Control Program in terms of the overall Plan for Environmental Management, which includes control procedures for all works referred to in the environmental terms, has been drawn up.</p> <p>The Program has been presented to the joint venture's supervising engineers, as well as to any subcontractors that will provide the joint venture with their services. There are people responsible for implementing the Environmental Management Plan and the compliance with the E.T.</p>
d1.2	Required expenditures	All required costs are taken into consideration when tendering for the construction of this project. To date

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		expenditures for environmental protection have been submitted in the annual environmental reports of the previous years.
d.2	Prefecture of Ioannina:	<ul style="list-style-type: none"> <li>i) The J/V of Terovo in CH. 175+708 has been studied in the OMO of the subsection (Approval protocol no. 23714/07-05-10).</li> <li>ii) The tunnel of Ampelia with an approximate length of 870 - 900m has been included in the Finalized Design. A layout planning design of the tunnel and the exit layout planning design have been prepared and approved by the I.E. (IC-C-CO-S323N-MO-0200-000-TUN-PRX-FL.093.IS.01.01-0 &amp; IC-C-CO-S323N-MO-0200-000-TUN-GTD-FL.193.IS.01.01-0). The A' and B' phase of excavation of Ampelia Tunnel has been completed.</li> <li>iii) The hypsometrical lowering included in the Finalized Design has been prepared and submitted (protocol no. J/V 25989/25-06-10, DAC IC09B/21-06-10). In the area of the overpass at Episkopiko, the embankments have a height of 3m (Motorists Service Station - Episkopiko - height of 4m).</li> </ul>
d.3	Permits and approvals	<p>The procedure for obtaining all necessary permits and approvals is underway, as specified below.</p> <p>There are no subcontractor worksites in operation since the cooperation has been interrupted, due to suspension of the construction works.</p>
d.4		<p>The relevant STIS for all required sites (quarries, borrow pits, disposal sites and worksites) have been submitted to EYPE and their approval is expected. The submissions of the studies as well as the progress of the approval procedure are as follows:</p> <p><b><u>Borrow pits</u></b>  <u>Pinakoulia location:</u> (Submission to EYPE with Protocol No. 102908/02.04.08 and J/V Protocol No. 2853/IM/εq/01.04.08. Approved with EYPE Protocol No. 138434/03-07-2009)</p>



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		<p><u>Paliokoulia location</u>: (Submission to EYPE with EYPE Protocol No. 143393, 10/08/09 and J/V Protocol No. 13478/06.08.09. Approved with EYPE Protocol No. 122353/22.02.2010).</p> <p><u>Makryvouni location</u>: Borrow Pit BP14 (CH. 180+000). The Technical Studies and the STIS. The approved studies have been sent along with the explanatory report and other opinions to the responsible of the Municipality of Dodoni. Furthermore, the study has been presented before the City Council and an additional geological report was given. Following the Council's assent, the Municipality sent letters/request to YPEKA, the Region of Epirus and the Ministry of the Interior about the legal process of renting the area. Following the relevant responses, there is no evolution/progress.</p> <p><b>Quarries</b></p> <p><u>Toubanos location</u> (QN 08): Submission to EYPE with Protocol No. 12215/6.7.09 of the J/V and approval of STIS by EYPE with Protocol No. 141902/3.9.09.</p> <p><u>Aq.Georgios Glykorizo location</u>: Submission to EYPE with EYPE Protocol No. 101995, 06/03/08 and J/V Protocol No. 2525/IK/EΣ/05.03.08. Approved (protocol no. 205553/28.11.11)</p> <p><u>Selitoura location</u> (QN 13): (EYPE Protocol No. 2196, 03/02/09 and J/V Protocol No. 6871/IM/kla/30.01.09). Approved with EYPE Protocol No. 135889/21.7.09.</p> <p><b>Disposal pits</b></p> <p><u>Pouliana location</u>: (EYPE Protocol No. 143101/04.08.09 and J/V Protocol No. 13265/03.08.09). The design has been rejected by EYPE: 195360/18-1-11 (J/V: 34603/3-3-11).</p> <p><b>Worksites</b></p> <ul style="list-style-type: none"> <li><u>Kampi and Gorgomylos site</u>: STIS has been submitted: protocol no. EYPE:107730/05.09.08 and</li> </ul>

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		<p>J/V protocol no. 4759/05.09.08. The STIS have been approved with EYPE protocol no. oik136719/23.02.09.</p> <ul style="list-style-type: none"> <li>• <u>Sikoula location</u>: STIS is drawn up and will be submitted for approval to EYPE with EYPE protocol no. 12763/20-1-10 and J/V protocol no. 19059/18.01.10. The STIS has been approved. (EYPE 202687/24-10-12).</li> <li>• <u>"Gymnotopos" location</u>: (STIS Submission: EYPE protocol no.132846/26.11.10 and J/V protocol no. 31644/23.11.10). The approval is pending.</li> <li>• <u>In "Knauf factory" location</u>, offices have been installed in leased area.</li> <li>• <u>Worksite CH 89+240 – CH 89+540 in the Municipality of Stanos</u>: STIS Submission to EYPE (31776/26-11-2012) and return of the STIS (38369/22-02-2012).</li> <li>• <u>"Agia Triada" S3.4 location</u>: ex Municipality of Ag. Dimitrios, now Municipality of Dodoni (CH. 176+000 in the area of Terovo I/C). STIS has been approved.</li> <li>• <u>Ampelia tunnel exit S3.6</u>, ex Municipality of Bizani, now Municipality of Ioannina (CH. 193+000 at the exit of Ampelia tunnel). STIS has been approved (7611/11-03-09). During the current period, a dossier was submitted to expand the worksite (pending approval).</li> <li>• <u>Ampelia tunnel exit S3.7</u>, ex Municipality of Bizani, now Municipality of Ioannina (CH. 192+000 at the exit of Ampelia tunnel). STIS has been approved (36014/13-05-11).</li> </ul>

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		<p><b><u>Temporary Disposals:</u></b> <i>Within the worksite of Agia Triada (S3.4).</i> STIS submitted (31008/09-11-10); the approval is pending.</p> <p><b><u>Restoration of old quarries:</u></b></p> <p><i>E36 "Mirodafni" location</i>, Mirodafni, ex municipality of Ag. Dimitrios, now Municipality of Dodoni (CH. 178+500). The relevant study (EMAA) has been elaborated and submitted to the Municipality (16496/5-11-09). Following Company's relevant request to forward the study for approval, the Municipality of Dodoni, via a reply letter, gives its consent to leasing the area and more specifically the sub-places of E36B and E36C, given that the study has been duly approved (G.S. of Epirus region - Forest Service) (Municipality's protocol no. 23378/12-12-11). During this semester, the EMAL has been resubmitted for approval by the Forest Service and the Region (39324/10-12-12). Also an opinion on the sub-sites of E36b and E36C has been requested to IB EPCA (39222/08-11-12) and a positive opinion has been received (39360/27-12-12).</p> <p><i>E37 "Makrivouni" location</i>, Perdika, now Municipality of Dodoni (CH. 180+000). The restoration of the area is included in the STIS of ΔΘ BP14.</p> <p><i>E38 "Vasseika" location</i>, Perdika, now Municipality of Dodoni (CH. 181+200). The licensing procedures stopped due to negative opinion by the IB ΕΠΚΑ.</p> <p><i>E39 "Krifovo" location</i>, Krifovo, now Municipality of Dodoni (CH. 182+600). The relevant study (EMAA) has been elaborated and submitted to the Municipality (16496/5-11-09). The restoration is not possible because the disposal of the material has already been carried out.</p> <p><i>E50 "Old quarry of Pedini"</i>, Pedini, ex Municipality of Bizani, now Municipality of Ioannina. The relevant study (EMAA) has been elaborated and submitted to the Municipality (22582/12-04-10). During the current semester the relevant study (EMAA) has been re-submitted for approval to the Forestry and the Region (39323/10-12-12).</p>

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		The process of the environmental licensing of the ancillary projects is now included in Law 4014/2011 OGG 209A/2011).
d.5		Pursuant to the Environmental Term d4, the environmental approvals are given after the elaboration and approval of the relevant STIS by EYPE. For all licensing submitted up to now, the necessary STIS have been elaborated, for which a detailed report is being held above. The environmental licensing is now issued in accordance with Law 4014/2011 (Government Gazette 209A/2011)
d.6	Concrete and asphalt production worksite	It has been ensured that the layout planning of concrete and asphalt mix production units abide by the aforementioned restrictions, as specified in the submitted STISs already approved.
d.7	Deforestation	The observance of the term will be controlled by the Environmental Monitoring & Control Program. The clearings in the section were not held due to the suspension of the works.
d.8	Excavation materials	The need for delivery is mainly covered by the excavation products and any further estimated needs will be ensured by the sites referred to the environmental term in paragraph d4. During the report period, neither constructions works nor earthmoving works were held.
d.9	Disposal of the excavation materials	It has been taken into account in order to find possible sites to dispose materials and has also been taken into account for the preparation of the respective STISs that were submitted to EYPE. The implementation of the E.T. with respect to the protection of water recipients from the disposed soil material is controlled via the Environmental Monitoring & Control Program.  The term was a criteria used during searching locations for possible disposal sites in section S2 and S3

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		<p>conducted in collaboration with the Department of Environment and Construction Division.</p> <p>More specifically, a technical study for E36 (former quarry - sub-sites E36A, E36B and E36C) and E39 old quarries restoration (prot. no. J/V 16496/5-11-09) as well as for the old quarry and E50 of Pedini (prot. no. J/V 22582/12-04-10) was submitted. During the current period, an EMAA has been re-submitted for the sub-sites E36B &amp; E37C at the Forestry of Ioannina with the J/V:39324/10.12.12, as well as for the space E50 (old quarry of Pedini) with the J/V: 39323/10.12.12. The approval of the EMAA is expected.</p> <p>Temporary material deposition was adjacent to the front exit of the Ampelia tunnel. The volume of the deposition, in the output of the Ampelia tunnel, at the left front, has been reduced significantly. Complete removal of materials will be carried out after the restarting of the works. For this space the Technical Environmental Study has been elaborated and submitted for the extension of the S3 worksite (39221/08-11-12), and its approval is expected.</p> <p>Temporary disposal of material is carried out within the worksite of Agia Triada for which a relevant STIS has been submitted to EYPE (31008/09-11-10) and its approval is expected.</p> <p>The approvals for the STIS regarding the space E9 S2 (prot. no. JV: 37643/5-10-11), for the space E6 S2 (prot. no. JV: 37643/5-10-11), E5 S2 (prot. no. JV: 37643/5-10-11), E4 S2 (prot. no. JV: 37643/5-10-11) are expected.</p> <p>As part of the environmental licensing of the disposal pits required, the J/V has submitted the relevant STIS for the sites E8 S2, E3 S2, E2 S2, E1 S2 (JV: 6757/23-1-09) which were withdrawn from the J/V (JV: 34716/10-3-11). These STISs were withdrawn because the J/V application is pending (JV: 23892/11-5-10) for Designation Act adoption by the competent Forestry.</p> <p>The STIS for the area of "Pouliana" E1 S3 has been rejected by EYPE due to forest character in combination with the E.T. D9.</p>

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d.10	Areas of forest character	<p>As regards the works within the of the occupation zone of the project (Motorway, lateral roads etc. as described in the Concession Agreement), pursuant to Law 3555/2007 (Ratification of the Concession Agreement) /Article 4/ Paragraph 4a and Law 2445/1996/ Article 2/ Paragraph 1c, '<i>The occupancy, reclamation or coverage of forests or forest areas that are included in the boundaries specified in the designs of Annex 7 and in accordance with the terms and conditions of the agreement are permitted. This law approves the change of use, revokes the re-forestation and grants intervention permits and permits for felling works to the above sites</i>'.</p> <p>As regards the ancillary works, the required procedure is preceded by the STIS submissions pursuant to 998/79. During the current period, no actions for sites characterization act of ancillary works or approval intervention were requested.</p> <ul style="list-style-type: none"> <li>• A characterization act was requested for the proposed location of borrow pits (restoration of old quarries E36, E37, E38, E39, E42 and E50)</li> <li>• A certificate of characterization act finality was issued for the borrow pit BP14</li> <li>• Requests for a characterization act were sent to Agia Triada sites S3.4 and Ampelia S3.6 exit tunnel (prot. no. 26604/13-07-10 J/V).</li> <li>• A request was sent for the S3.7 worksite of Ampelia tunnel entrance (27590/05-08-10) and a positive opinion was received (31034/09-11-10). Also, the decision for STIS approval was sent.</li> </ul> <p>During the current period no other actions for characterization acts of ancillary works or of intervention approval are required.</p> <p>During this period, an installation protocol for the signed B/P at "Paliokoulia" position BP11 (08.03.2012) is signed.</p>

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d.11	Redundant excavation materials	<p>The excavation materials do not usually contain waste or toxic waste. All redundant excavation materials (after the necessary split) were transported in approved deposition chambers or in rehabilitation positions of borrow pits/old quarries, as provided by STIS and TMA.</p> <p>The top soil is stored, where appropriate, for use in the slopes of the Motorway within the expropriation limits. Temporary disposal of suitable excavated materials is carried out in the approved worksite of Agia Triada (relative STIS has been submitted). There is also disposal in Ampelia exit, on the left side of the front. The removal of the materials will be carried out with the re-start of the works.</p>
d.12	Worksite infrastructure	<p>O&amp;M Control Centres Maintenance Control Centers (TBR) are to be built, which will dispose the necessary worksite infrastructure in order to serve the needs of the project during the operation phase.</p>
d.13	Stone processing and concrete production	<p>Two crushers (a mobile and a stable one) were used within S3 section and a mobile crusher within S2. To minimize dust generation, especially in stable systems, a continuous erosion of piles of aggregate was held - chemical and a wetting system of the material with beck was placed onto the crusher conveyor belt. Also, during the fall of materials tall from the conveyor belt, a material tall cone was left to be created, in order to avoid the dust generation. Finally, the transfer was realized with closed conveyors.</p> <p>There are no facilities of bituminous production and concrete production in the said sections. The supply, when required, is being realized by external, environmentally licensed, partners. In cases of future facilities, the content of terms d13 and d14 will be examined under the Plan for Environmental Management and the Environmental Monitoring &amp; Control Program which includes protection measures for all the aforementioned to the environmental terms. The Program has been presented to the joint venture's supervising engineers, as well as to any subcontractors that will provide the joint venture with their services.</p>
d.14	Bitumen production plants	<p>For future concrete or asphalt production plant, which will be installed in the approved worksite locations, the</p>

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		approved STISs, which provide those aforementioned in the environmental term, will be met.
d.15	Archaeological Services	<p>Before the commencement of works that were executed during this specific period of time, the competent Archaeology Department was notified in all cases. More specifically:</p> <ol style="list-style-type: none"> <li>1) Application for opinion as regards the environmental permit of the quarry in the location of "Ag. Georgios Glykorizo" has been sent to the 18<sup>th</sup> Ephory of Byzantine Antiquities and Service of Contemporary Monuments and Technical Projects (J/V letter with prot. No: 33141, 12.01.11)</li> <li>2) Letter sent by IB' EPKA for suspension of excavation works in CH. 124+800 (Service letter with prot. No: 25, 04.01.11)</li> <li>3) Letter sent by the General Directorate of Antiquities which approves the J/V automatic right of approval, regarding the quarry of aggregates in the location of "Ag. Georgios Glykorizo" (Service letter with prot. No.: 869/118, 04.01.11)</li> <li>4) Letter sent to IB' EPKA for interventions within the occupation zone CH. 168+000 to CH. 169+200 (J/V letter with prot. No.: 33306, 19.01.11)</li> <li>5) Letter sent by IB' EPKA for personnel recruitment in order to monitor the excavation works (Service letter with prot. No.: 326, 24.01.11)</li> <li>6) Letter sent by IB' EPKA for site clearing works from CH. 152+500 to CH. 154+270 (Service letter with protocol no.: 502, 01.02.11)</li> <li>7) Letter sent by IB' EPKA for excavation works from CH. 168+000 to CH. 169+200 (Service letter with protocol no.: 615, 04.02.11)</li> <li>8) Letter sent by IB' EPKA for exploratory and excavating work of works suspension period (Terna letter with protocol no.: 1587, 17.02.11)</li> <li>9) Letter sent by the 18<sup>th</sup> Ephory of Byzantine Antiquities requesting for additional elements, in order to give an opinion on the environmental licensing of the quarry in the location of Ag. Georgios Glykorizo. (Service letter with</li> </ol>



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		<p>protocol no.: 246, 14.02.11)</p> <p>10) Letter sent by TERNA to the J/V aiming to send documentation to the 18<sup>th</sup> Ephory of Byzantine Antiquities, in order to give an opinion on the licensing of the quarry in the location of "Ag. Georgios Glykorizo" (TERNA letter with protocol no.: 99509, 17.03.11).</p> <p>11) 18<sup>th</sup> Ephory of Byzantine Antiquities Positive opinion (protocol no. 492/ 24-3-11).</p> <p>12) Decision approval on automatic right of appeal by the Directorate of Prehistorical and Classical Antiquities (ΥΠΠΟ.Τ./ΓΔΑΠΚ/ΑΡΧ/Α1/Φ40/869/118/4-1-11)</p> <p>13) Memorandum of Understanding on Major Public Projects sent by IB' EPKA (Service letter with protocol no.: 931, 24.02.11)</p> <p>14) The competent Ephory of Antiquities IB' EPKA has been informed about the commencement of the construction, and the works are being controlled with an archeologist's suggestions for the monitoring of digging works form CH. 170+000 – Ch. 196+000 with J/V protocol no. IC-X-CO-S322N-PRO8467/IM/sfa/07-04-2009. The alignment of the project in the area of "Pente Pigadia" follows the approved change without any minor relocation or other change. Consequently and based on the findings of the DEC, the proximity of Frourio and the environment are not affected by the area.</p> <p>During the current time period no works were carried out.</p>
d.16	Operation of facilities	It concerns the operation phase.
d.17	Waste materials	Controls are regularly held by the responsible of environment in the manner described in the Environmental Monitoring and Control Program and it is found that:
d.18		
d.19	Surface and ground waters	<ul style="list-style-type: none"> <li>• There are no operating subcontractors' worksites. The collaboration was interrupted due to the suspension of construction.</li> <li>• Agia Triada worksite: It is not used as a worksite area. There are no trash-parts etc.</li> </ul>

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		<ul style="list-style-type: none"> <li>• Ampelia worksites (S3.6 &amp; S3.7): As part of the suspension of the works, the subcontractor (OSSA) removed its equipment, facilities and any kind of waste. The dangerous waste was received from authorized recycling companies.</li> <li>• The subcontractors, under the suspension of works, evacuated the waste oils from the worksite areas (receipt from ELTEPE). There are no oil changes elsewhere in the project.</li> <li>• An agreement with the Municipality of Filippiada and Ksirovounio has been made on the disposal of urban waste (there is also relevant document), which is collected in special bins of the Municipalities using garbage trucks and is led to HYTA of Vlaherna.</li> </ul> <p>Regarding the management of the environmentally dangerous materials, the following agreements have been contracted and are valid with the responsible companies:</p> <ul style="list-style-type: none"> <li><b>A)</b> For the management of used oil – ELTEPE S.A.</li> <li><b>B)</b> For the management of used oil and petroleum filters, used wad and contaminated material (soil, sorbents) from any possible leaking of oil – INTERGEO ΕΠΕ</li> <li><b>C)</b> For management of used accumulators (batteries) – SIDESIS S.A.</li> <li><b>D)</b> For management of used tires – ECOELASTIKA</li> </ul> <ul style="list-style-type: none"> <li>• The separation of the above materials is conducted in a specially designed area on the worksite of Kampi as well as on the worksite of the entrance-exit of Ampelia and the temporary storage was done in special buckets and barrels sent from the above management companies.</li> <li>• The maintenance of vehicles and machinery are made by a J/V's oil vehicles and in a licensed garage-laundry-lubrication of the area or in the licensed worksites.</li> </ul> <p>For the said time period, there was no waste production because there is neither construction activity nor use of machinery.</p>
d.20	Modification or intervention	All PUOs involved have been contacted (pursuant to paragraph 7 of Special Conditions of Contract) in order to



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		<p>opinion on their networks and the relocation of those. More specifically, letters have been sent to:</p> <p><b>a)</b> PPC and Greek Telecom of Arta for relocation of networks from CH. X0148+100 to CH.148+350 (J/V letter with protocol no.: 26888,20.07.10)</p> <p><b>b)</b> PPC for blockage of High voltage network under Ionia Odos contraction (J/V letter with protocol no.: 29114,15.09.10)</p> <p><b>c)</b> Municipality of Kompoti for blockage of network road lighting under Ionia Odos construction (TERNALIA letter with protocol no.: 1142,07.09.10)</p> <p><b>d)</b> PPC for blockage of High voltage network under Ionia Odos contraction (J/V letter with protocol no.: 28851,09.09.10)</p> <p><b>e)</b> PPC for blockage of High Voltage network under Ionia Odos construction (J/V letter with protocol no.: 29610,28.09.10)</p> <p><b>f)</b> PPC of Arta to connect the complex of Terna SA worksite facilities to Kampi. (TERNALIA letter with protocol no. 1968, 17.05.11).</p> <p><b>g)</b> Letter sent for PPC of Arta for change of network (PPC letter with protocol no.: 0792, 17.03.11)</p> <p><b>h)</b> There is a blockage with the high voltage network of PPC in the section from CH. 175+000 to CH. 185+000. The relevant actions and discussions with the competent service of PPC have been interrupted due to suspension of works.</p> <p>For sections where there will be a blockage with irrigation or sewerage systems the relevant actions shall be held in order for the PUO to be informed.</p>
d.21	Relocation of alignment	The term is taken into account in elaborating the designs and is documented in the Environmental Protection Report which accompanies each road study, when submitted for approval to the IE. This means that the

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		<p>realization of the condition is ensured through the designs approval process held by the Independent Engineer. Pursuant to the submitted Final Road Designs and as checked in the Reports of Environmental Assessment of Final Design στις Εκθέσεις of the subsections 302, 303 and 306, the alignment does not cut approved limits of settlements and passes through in a distance of more than 100m from them. Small residential complexes, located in proximity to the project are the "Pente Pigadia" – Brigka and Krounes. These are non-bound rural settlements, and not newly built ones.</p> <p>As regards the subsection 306, branch 3 of the I/C is near "Pindos" hatchery. In this position, the layout relocation of the branch compared with the relevant one of EIS, is the largest one observed (39m), resulting in the removal from the hatchery. It has to be noted that the proximity of the hatchery was foreseen during the phase of elaboration and during the phase of the EIS publication, where the involved parties are informed and are entitled to protest. Such action of complaint was not reported. In addition, as mentioned the branch has been removed at 20-39m., therefore it is optimized with respect to the EIS.</p>
d.22	Worksite signage	<p>An Environmental Monitoring &amp; Control Program in terms of the overall Plan for Environmental Management which will include protection measures for all works referred to in the environmental terms, has been drawn up. The Program has been presented to the joint venture's supervising engineers, as well as to any subcontractors that will provide the joint venture with their services.</p> <p>The implementation of ET22 is controlled by the persons responsible for safety and health. For the current period the following are mentioned:</p> <ol style="list-style-type: none"> <li>1. The design on temporary traffic regulations for the construction of the underpass TR08 has been approved by the IE, CH. 148+213.46 (Approval ICO0255, 17.05.10).</li> <li>2. Letter sent to the Traffic Service and Municipality of Filippiada in order for them to be updated on the</li> </ol>
d.23	Perforation	
d.24	Earthworks.	
d.25	Dust.	
d.26	Excavation products and aggregates	
d.27	Washing the wheels of trucks	

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		<p>Traffic as regards the needs for the work execution of Gymnopotamos Bridge, on the provincial road of Gymnopotamos – Dryofuto (Terna letter with protocol no.: 1421, 20.01.11)</p> <p>3. Decision – Approval sent by the Directorate of Technical Works – Department of Transportation Projects of Preveza – as regards the “Bypass of Gymnopotamos – Dryofuto, county of Preveza, provincial road”, by the Director of the Police Department of Preveza (Service letter with protocol no: TE 111, 04.02.11).</p> <p>4. As regards the dust, based on the works carried out in the past, the following were implemented:</p> <ul style="list-style-type: none"> <li>▪ The worksite roads were regularly soaked as well as the piles of materials</li> <li>▪ The bulk material trucks were not overcharged and all trucks transporting loose materials were covered.</li> <li>▪ Cleaning debris materials from trucks before leaving the worksite and regular cleaning of the existing road network to be used.</li> </ul> <p>5. The penetrating machines used in Ampelia tunnel, had been certified and they were holding dust filters. The penetrations in the tunnel are completed.</p> <p>6. Regular wetting of the surface with a tanker was held in the pile of material temporary drop at Ag. Triada. Wetting was held in all worksite roads, before the suspension of the works.</p> <p>Due to suspension of works, during this semester, materials were not transported and therefore trucks did not circulate on local road network and on the access roads.</p>
d.28	Large embankments	The term is taken into consideration in the designs and is documented in the respective Environmental



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		Protection Report accompanying the current road design when submitted for approval to the IE. This means that the realization of the condition is ensured through the designs approval process held by the Independent Engineer.
d.29	Planting	<p>No need for reconstruction of any site during the report time period has arisen, but in any case, the term will be observed. The observance of the term will be controlled by the Environmental Monitoring &amp; Control Program.</p> <p>Regarding the relevant designs for the reference period.</p> <p>The design of restoration works and their budget constitute an integral part of every ETME design (disposal pits, borrow pits, worksites, etc.)</p>
d.30	Fire-protection	<p>An Environmental Monitoring &amp; Control Program in terms of the overall Plan for Environmental Management, which includes protection measures for all works referred to in the environmental terms, has been drawn up.</p> <p>In any event, after the commencement of works, the fire measures in the project's machines and the scope of works are controlled and the provided H&amp;S Plan should be adhered to. Special attention should be given to areas that are near forests and fields during the summer months. Emphasis is given in order for the machines located at the project area to be equipped with the provided firefighting equipment. Regarding the premises of the site (offices, workshop, laboratory and concrete preparatory) the adequate firefighting equipment like fire extinguishers, sand and water supply are provided. Finally, fire stations have been installed at critical points in the work fronts.</p> <p>Finally, to those mentioned in P-18 process are met under the Health and Safety Plan.</p>

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d.31	Noise	<p>With respect to the noise during the construction of the project, pursuant to the Program for Environmental Management and in terms of Environmental Monitoring Control Program noise measurements are conducted parametrically of the worksite and the construction faces and the results were within the allowable limits. The said measurements are reflected in maps depicting the extent of the construction of the project and the location the measurements were made. The said maps as well as the measurement, which are repeated at regular intervals (monthly), were included in the noise measurement issue, which was submitted with the annual report, in the past.</p> <p>During the current semester, no noise level measurements were conducted because of the suspension of the construction works.</p> <p>In any case, the legislation applicable on noise is referred to in term c.</p>
d.32		It concerns the operation phase.
d.33		<p>With respect to the provision of placing noise barriers, which concerns the operational phase of the project, with the finalization of the road designs, a Special Acoustics Study for Noise Protection, which shall be submitted for approval to EYPE/YPEXODE, shall be assigned and submitted.</p> <p>The Noise Acoustic Study will examine the areas that are less than 200 m. from the town plan boundary, as well as any existing sensitive uses in areas outside the village limits.</p> <p>Pursuant to the submitted Final Road Designs and as tested in the Final Environmental Assessment Reports of the subsections 302, 303 and 306, the installation of noise barriers may be required in the settlements of Ag. Christoforos (settlement – subsection 302), Episkopiko (subsection 303) and in “Pindos” incubator (subsection 306). In these positions, the cross section of the motorway is such that it allows installing noise barriers in the future, on the shoulder of the road, if this is deemed necessary.</p>
d34	Protection of settlements from noise	The monitoring of the parameters, mentioned in the E.T. through vibration monitoring program, in the areas of entry-exit tunnel of Ampelia and in the areas with construction of trenches, is conducted, Amfilochia, Menidi,

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		<p>Gymnotopos etc. When construction works with vibrations are conducted, with possible cause of vibrations, the parameters referred to in the E.T. will be monitored via vibration monitoring programs and if they exceed the limits, the appropriate measures will be taken.</p> <p>During the preparation period of this report, locations of noise disturbance are not identified. Noisy works are done outside the populated areas and are avoided during quiet hours.</p> <p>In <u>section S2</u>, Marlesi is the settlement closest to the work front, situated about 1,5 km away from where the works are carried out</p> <p>In <u>section S3</u>, the settlements closer to the work front are:</p> <ul style="list-style-type: none"> <li>▪ Ammotopos and Gymnotopos located within 2 km and 1 km around respectively, from where the works are carried out.</li> <li>▪ Ampelia settlement, where the tunnel is constructed. Noise and vibration measurements were carried out and no limits exceedances were noticed.</li> </ul> <p>The last six months there were no other noise measurements due to the suspension of construction works.</p>
d.35		<p>If and when shown by the noise measurements that the produced worksite noise exceeds the statutory noise limits, then the issue will be addressed through the Management Plan by taking appropriate measures, including installation of temporary noise barriers.</p> <p>The worksite of Agia Triada was used as a disposal area and has been temporarily fenced. The subcontractors worksites were fenced, except for the worksites on the body of the road (entrance and exit of Ampelia)</p>
d.36	Lake of Amvrakia	<p>It will be taken into account during the design and the construction of the fences of the motorway in this section and if these sections of the project are identified in a distance less than 300m from the Lake Amvrakia.</p>



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d.37	Machinery	<p>For some of the machines, there are certificates of EC type. For the old machines, which do not have this certificate, emitted noise measurements are being conducted according to JMD 56206/1613/86 and records of the above measurements and machine certificates of EOK type are kept.</p> <p>The last period no construction works were carried out.</p>
d.38	Vibrations	<p>A vibration grapher has been procured, control and vibration measurements are carried out and the results, which are attached to the annual reports, were within the allowable limits.</p> <p>In January, February of last year, explosions were held in the area of Menidi (S2) and in section S3 (trenches). Explosions are done by external partners who have licensed explosives (there is a copy of the license). Also, during the explosions and vibration measurements, the results are recorded. The works done this specific period of time does do not cause any damage to manmade structures and antiquities and cause no nuisance to neighbors and passers-by.</p> <p>In the S2, Marlesi is the closest settlement to the work front, situated at a distance of approximately 1,5 km from the point of the works.</p> <p>In section S3, Ammotopos and Gymnotopos are the settlements closest to the front work, located within 2 km and about 1 km, respectively, from the point of the work done.</p> <p>Measurements were also made in the past, in the entrance and exit of Ampelia, and the nearest receivers. There was no vibration at the nearest receiver (residence in Ampelia and the nearest building - tank).</p> <p>No construction works during the current period; therefore no measurements were carried out.</p>
d.39	Contingency plan	<p>The Intervention Plan, which is a part of the Policing and Fire Fighting Agreement between the Concessionaire and the Ministry of Internal Affairs, has been drawn up.</p> <p>The Intervention Plan for Emergency Situations specifies measures to timely collect and remove hazardous substances while preventing pollution of the water/soil resources, etc.</p>

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		<p>This Intervention Plan includes all measures/required equipment etc. that will be needed in case of accident and leakage of non-biodegradable substances, including the necessity to construct Pollution Control Units or not. A risk analysis study from accidental pollution has been submitted with ref. no. IC-L-CO-S215N-PRO5876/EM/em on 17/11/2008 for the section in Amvrakia.</p>
d40	allow direct tunnel entrance to the tunnel in ancient Kalydona	<p>It is taken into consideration from the tunnel designs. The implementation of the term is ensured through the studies approval process by the Independent Engineer.</p> <p>According to the layout planning design of Ambela tunnel exit (IC-C-CO-S323N-MO-0200-000-TUN-PRX-FL.093.IS.01.01-0 and IC-C-CO-S323N-MO-0200-000-TUN-GTD-FL.193.IS.01.01-0) no surface excavations arise at the front &gt;5m, except for the temporary ones. The layout planning of the front will be carried out via excavation and re-embankment. A report of environmental assessment has been submitted to the Independent Engineer for the Design of layout planning of entrance where cover structures and front support with gabions are foreseen (IC-C-CO-S323N-CW-0200-000-ENV-EPR-RP.000.01.01-0/25-11-2009). The filling material will be rock, resulting from the excavation of the front. The relevant design has been approved.</p>
d41	Rescue – escape of those entrapped in case of emergency in the tunnel of Ampelia	<p>For Ampelia tunnel, a risk analysis study has already been elaborated - risk analysis study (prot. no. 12796/21-07-2009), which provides the opening of two escape cross routes.</p>
d42	Accesses to the settlements	<p>The observance of the term will be controlled by the Environmental Monitoring &amp; Control Program.</p> <p>In the past there was the need to construct structures in passing roads in Menidi Area and Stanos of Amfilochia, where, via bypasses, the access to villages, rural areas etc. special care is given so that the access to neighbouring properties is not blocked.</p>



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A/A Decision	Environmental Terms - Description	Description of Progress - Problems
		Letter was sent to the Traffic Service and the Municipality of Filippiada in order for them to be informed as regards the Traffic Regulation for the needs of the construction works execution on Gymnopotamos Bridge, at the village road of Gymnopotamos – Dryofuto (Terna letter with protocol no.: 1421, 20.01.11)
d43	Uninterrupted flow of the surface water	It is taken into consideration in the hydraulic designs. The implementation of the term is ensured through the studies approval process by the Independent Engineer. Besides, it constitutes the principle of the design which is imposed by the KME
d44	Passage of wildlife	It is taken into consideration in the Final Road and Hydraulic Studies. The implementation of the term is ensured through the studies approval process by the Independent Engineer. Also, as part of the Final Environmental Assessment Reports of subsections designs, the distances of structures of the Final Hydraulic Studies are controlled and compliance with the Term is certified. Finally, during the construction phase, care should be taken upon restart of the works.
d45	Corrosion of the natural slopes	It is taken into consideration in the elaboration of the hydraulic studies. The implementation of the term is ensured by the IE through the studies approval process.
d46	Automatic stations measuring air pollution and wind	A relevant report is going to be submitted for the location of the stations, which will be submitted to EYPE/Ministry for approval. The operation of the station concerns the operation phase of the project.

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A/A Decision	Environmental Terms - Description	Description of Progress - Problems
d47	Environmental Service	Environmental Service with permanent staff and external partners.
d48		
d49	Annual report	The relevant annual report for 2011 has been submitted to the Concessionaire (38318/5.02.12), EYDE (38446/12.03.12) and EYPE/YPEKA, shared by the whole consortium.
d50	Environmental conditions compliance	They are taken into consideration.
e1	Local environment - Sensitive elements – Specially Protective zones	Sensitive environmental elements (settlements, protected areas and sites) were taken into account during the investigation of borrow sites positions, etc. and the elaboration of the STIS and Technical Design TME. The Department of Environment has elaborated a map with the environmental commitments, and pursuant to data under the EIS, which constitutes a tool for exploring of additional spaces and other works, and assistance for all persons involved to the construction.



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A/A Decision	Environmental Terms - Description	Description of Progress - Problems
e2	Measures and projects in order to maintain the above elements No further measures are required in paragraph 5	-
f	Period for which the given environmental approval is valid - Conditions for its review	For the renewal of the environmental conditions the procedures provided for in Law 4014/2011 (Government Gazette 209A/2011) will follow.
g	Modernization, improvement, expansion or modification of the project	In section S3 optimizations of the alignment were proposed and submitted to the Service, (optimization 10) from CH 179+000 – CH. 181+700 and (optimization 11) from CH. 181+900 to 187+000, which include horizontal and longitude variant, and changes in technical works. If the optimizations are promoted, the procedure shall be adhered to as laid down in Article 13 of the JMD 11014/703/F104/14.3.2003 (OGG 332V) and will be submitted to EYPE/YPEHODE File of the Article 13, amending the E.T. Those two optimizations may not be promoted by the company. The service solution has been studied and promoted at a final level.
h	Terms amendment	-
i	Presence of ETs and EIA	The term is met. The EIS and the JMD are kept in the J/V's headquarters, as well as in the subcontractors' and the worksite offices.
j	Non-compliance with the E.T.	-



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## **2.4 ARTA BYPASS**

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



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A/A	SUBJECT	Description of Progress - Problems
b	Specific limit values of pollutant loads and concentrations emission according to the applicable provisions	All measures are taken into consideration pursuant to the current legislation.
c	Specific limit values of noise level and vibrations according to the applicable provisions	<p>With respect to the noise during the construction of the project, an Environmental Monitoring &amp; Control Program in terms of the overall Plan for Environmental Management, which includes control procedures to resolve noise problems in accordance with the environmental terms, has been drawn up. The Program has been presented to the joint venture's supervising engineers, as well as to any subcontractors that will provide the joint venture with their services.</p> <p>During the preparation of this report, there was no location/section causing a nuisance. If this happens, the appropriate measurements will be made and the necessary measures will be taken. It has to be noted, however, that the works carried out in that section (construction of fiber-optic network – improvement of the existing road) do not cause nuisance because they are conducted outside the residential areas.</p>
d1.a		<p>An Environmental Monitoring &amp; Control Program in terms of the overall Plan for Environmental Management, which includes control procedures for all works referred to in the environmental terms, has been drawn up. The Program has been presented to the joint venture's supervising engineers, as well as to any subcontractors that will provide the joint venture with their services. There are people responsible for implementing the Environmental Management Plan and the compliance with the E.T.</p>
d1.b		<p>An Environmental Monitoring &amp; Control Program in terms of the overall Plan for Environmental Management, which includes control procedures for all works referred to in the environmental terms, has been drawn up. The Program has been presented to the joint venture's supervising engineers, as well as to any subcontractors</p>

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A/A	SUBJECT	Description of Progress - Problems
		that will provide the joint venture with their services. There are people responsible for implementing the Environmental Management Plan and the compliance with the E.T.
d1.c	Required expenditure	It is taken into consideration
d2.a	Permits and approvals	<p>During the preparation of this report, there was no need for this kind of facilities, because in the said section the works have been executed. In case such need of material, the supply will be realized by subcontractors licensed facilities in the area. The control and monitoring of environmental terms is carried out in accordance with the Environmental Management Plan under the Environmental Monitoring and Control.</p> <p>There is cooperation with a company producing and supplying cement concrete (Artaiki S.A. There is the environmental permit of the said company). At this time there was no use of concrete. The cooperation with this company is supported by vouchers and invoices which are in the accounting department. The said period no use of concrete was made.</p>
d2.b	Materials for the construction of the project	There were no works or activities during the period covered by this report in order to be a need for such facilities. The works and materials are covered by sub-contractors already licensed premises in the area as provided in the E.T. d2v.
d2.c	Disposal of excavation materials	There were no works or activities during the period covered by this report so as to be a need for new additional areas.
d2.d		In this area there is no worksite. The service is available from the offices of the J/V in Kampi, Arta (EYPE prot. no. 10461/04-08-05). Also, there are two licensed worksites in Kampi and Gorgomylos of Arta with EYPE protocol no. 136719/23.02.09 (within the limit of the road axle). Moreover, an overall Environmental Management Plan has been developed under the Environmental Monitoring and Control Program including control procedures referred to in the next environmental conditions.
d2.e	Rehabilitation of construction sites	
d2.f	Forest areas	For any works or installation the intervention license is needed; this will be requested by the Forest Service.



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A/A	SUBJECT	Description of Progress - Problems
		As regards the works within the occupation zone, pursuant to Law 3555/2007 (ratification of the Concession Agreement)/ Article 4/ Par. 4a και Law 2445/1996/ Article 2/ Par. 1c.
d3	Archaeological service	No works or activities during the period covered by this report and therefore neither information nor authorization were required by the competent Archaeological Service. If required, the term will be met.
d4.a	Uninterrupted flow of the surface water	These specific requirements of the E.T. mainly concern the current project. In addition, E.T. issues related to the design, are controlled at the time of submission of the study by the Independent Engineer and are substantiated by the Environmental Protection Report, which accompanies each submission of Study.
d4.b	Runoff of the rainwater	
d5.a	Uninterrupted operation of service facilities	This section has been completed and put into circulation. Cleaning, maintenance and supervision of this department is undertaken by NEA ODOS S.A.
d5.b	Waste	For the disposal of municipal solid waste there is an agreement with the municipalities and Ksirovounio and Filippiada, now Municipality of and Zyros respectively, Arta (there is a relevant document) to receive waste which is collected in special bins of the municipalities, with a garbage truck and they are driven to the HYTA of Vlaherna. For the management of the environmentally hazardous materials and the following agreements are concluded and are in force with relevant companies:
δ5.c	Pollution of surface and ground waters	

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A/A	SUBJECT	Description of Progress - Problems
		lubrication area (there is a license).
d5.d	Intervention or modification of the existing infrastructure works	No works or activities carried out during the period covered by this report so as for a need for intervention or modification of the existing infrastructure works to be resulted.
d5.e	Ensure smooth road traffic	The subject is controlled through the monitoring of the environmental conditions. In the period covered by this report, no problems are detected as regards the communication/circulation between the residential areas.
d5.f	Dust	The control and compliance relating to adjacent environmental conditions is held in accordance with the Environmental Management Plan under the Environmental Monitoring and Control. No works or activities during the period covered by this report on the said section.
d5.g	Materials transportations	
d5.h		
d6.a	Creating a junction in the broader region of Kampi - Chanopoulos circulation from and to Preveza.	These specific requirements of the E.T. mainly concern the current project. Additional E.T. issues related to the design, are controlled at the time of submission of the study by the Independent Engineer and are

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		substantiated by the Environmental Protection Report, which accompanies each submission of Study.
d6.b	Road passing near the village of Agios Dimitrios	-
d6.c	Road passing through the region of Vlaherna	-
d6.d	Bridging of Arachthos	-
d6.e		-
d6.f	Embankment of Louros Valley	-
d6.g	Saddle behind Amphithea	-
d6.h	Option B	-
d7.a	Configuration of the slopes	-
d7.b	Construction of small scale retaining technical measures	-
d7.c	Alternative routes	-
d8	Planting	The final landscaping designs have been submitted for approval to the IE, and have been approved with D.A.C. – IC0293/29-06-2010.
d9	Fire-protection	No worksite in this area. The service is available at the J/V's headquarters in Kampi, Arta, where there is firefighting equipment (fire extinguishers). Also all vehicles and machinery dispose the adequate firefighting equipment.
d10	Farm units	
d11.a	Machinery	
d11.b	Noise	As for noise during the construction project, it is monitored and controlled according to the Environmental

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A/A	SUBJECT	Description of Progress - Problems
		<p>Management Plan under the Environmental Monitoring and Control Program which includes control procedures to address the noise under all those mentioned in the next environmental conditions. If required, the necessary measurements will be carried out and appropriate action will be taken.</p> <p>For some of the machines, there are certificates of EC type. For the old machines, which do not have this certificate, emitted noise measurements are being conducted according to JMD 56206/1613/86 and records of the above measurements and machine certificates of EOK type are kept.</p> <p>Finally, all the machines of the project are equipped with the foreseen fire-fighting measures. Also, at Evinos site (offices, workshop, laboratory, concrete laboratory) there are fire-extinguish means, like fire-extinguishers, sand, water.</p>
d12		<p>The specific requirements of the E.T. concern mainly the current project. Additional subjects of the E.T. related to the design, are controlled at the time of submission of the Study by the Independent Engineer and are substantiated by the Environmental Protection Report, which accompanies each submission of the Study.</p>
d13	Contradiction of E.T.	
d14	Change of the project's basic characteristics as	<p>In such case, the procedures laid down in Law 4014/2011 (Government Gazette 209A/2011) should be followed.</p>
e1	Local environment - Sensitive elements – Specially Protected Areas	<p>Sensitive environmental elements (settlements, protected areas and sites) were taken into account during elaboration of the Technical Designs.</p>
e2	Measures and projects in order to maintain the above documentation Described in paragraph d.	-
f	Period to which the given environmental approval is in force	<p>For further renewal of the environmental conditions, the procedures of Law 4014/2011 (OGG 209A/2011) should be adopted</p>



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<b>A/A</b>	<b>SUBJECT</b>	<b>Description of Progress - Problems</b>
g	To change the main features of the project	In such case, the procedures laid down in Law 4014/2011 (Government Gazette 209A/2011) should be followed.
h	New environmental conditions	-
i	Presence of ETs and EIA	
j	Failure to comply with the terms	