



## CENTRAL GREECE MOTORWAY (E-65)

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## **CENTRAL GREECE MOTORWAY (E-65)**

### **1. INTRODUCTION**

This Environmental Management Report is the third approach of the Concessionaire's Environmental Management Process and has been drawn up in the context of its contractual obligation deriving from Article 13.3 (c) of the Design - Construction Agreement of the Project (11.2.2 paragraph (iii) of the Concession Agreement, Law 3597/20-07-2007 - OGG 3445A/25-07-2007).

The data of each Semi-annual Environmental Management Report is a part of the Annual Report, which should be submitted to the Special Service for Environment (EYPE) of the Ministry of Environment, Physical Planning and Public Works (YPEXODE) until the 31<sup>st</sup> of January each year and throughout the entire Design - Construction Period, in accordance with the approved environmental terms of the Project.

The first Semi-annual Environmental Management Report was submitted by the Joint Venture on 31/10/2008 and concerned the time period from April 2008 to September 2008 that is the 1<sup>st</sup> semester from the starting date of the Concession Agreement. For functional reasons, the Constructional Joint Venture of the Project has requested to change the deadlines for the submission of the semi-annual reports, so that they are submitted per calendar semester. From the submission of the 1<sup>st</sup> Semi-annual Report up to now, the 1<sup>st</sup> Annual Report was submitted (submission on 31/01/2009). Thus, according to the above, the 2<sup>nd</sup> Annual Report concerns a time period from January 2009 to June 2009 and was submitted to the Concessionaire on 03/08/2009. Since then, on 19/02/2010 the 2<sup>nd</sup> Annual Report was submitted and in addition to the above the Construction J/V submits this 3<sup>rd</sup> Semi-annual Environmental Management Report for the time period from January 2010 to June 2010.

Moreover, it should be noted that this report is a progress/improvement of the structure of the previous report and it is clear that its purpose is to enhance the presentation of the environmental issues. The under preparation Environmental Management Plan of the Project plays an important role to this since it is characterized by its constant enhancement.

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### 1.1 DESCRIPTION OF THE PROJECT

**State:** Hellenic Republic

**Concessionaire:** CENTRAL GREECE MOTORWAY S.A.

**Constructor:** CENTRAL GREECE MOTORWAY (E65) J.V

**Independent Engineer:** SCOTT WILSON- OMEK

THE SCOPE OF THE PROJECT INCLUDES THE DESIGN, FINANCING, CONSTRUCTION, OPERATION AND MAINTENANCE IN ACCORDANCE WITH THE RESPECTIVE CONCESSION AGREEMENT:

- (i) "Central Greece" Motorway with a length of 174 km
- (ii) Skarfia - Rahes section of the PATHE motorway with a total length of 57 km

The project is a part of the Trans-European Networks (TEN).

It serves international traffic portals in Igoumenitsa and Kristallopigi as well as the trans-regional traffic.

The Central Greece Motorway (E65) starts at CH. 203+000 of the PATHE motorway and ends at Egnatia Odos, location of Panagia, crossing the prefectures of Fthiotida, Karditsa and Trikala.

It consists of two lanes per direction as well as of one emergency lane. The width of the motorway at the lowland is 24.5 m with a maximum speed limit at 120 km/hour, while at the mountain areas the width is 21.0 m with a maximum speed limit at 110 km/hour.



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It includes:

- 15** Interchanges
- 7** Toll Stations
- 6** Motorists Service Stations
- 3** Operation & Maintenance Centers
- 7** Tunnels

As well as bridges, over- and under-passes, support walls, drain-pipes, etc.

According to the environmental terms of the project, the Central Greece Motorway (E65) is divided in the following three sections:

Section	From CH.	To CH.	A.E.T. Decision*
1 <sup>st</sup> Section	0+000	85+800	Joint Ministerial Decision 144504/18.11.2005
2 <sup>nd</sup> Section	85+800	137+550	Joint Ministerial Decision 145521/18.11.2005
3 <sup>rd</sup> Section	137+550	175+000	Joint Ministerial Decision 147014/18.11.2005

The sections of the Concession Agreement Project are divided in eleven (11) Geographical Units (GU). For each GU, the physical object is analyzed into Groups of similar operations in the Partial Section Bi Price of Designs - Constructions.



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The New State Sections that are already being constructed by the State and that after their completion will be incorporated into the Concession Project are as follows:

s/W	SECTION	Km.
12 S/W	Skarfia - Thermopiles section	17,320
13 S/W	Thermopiles - Sperhios section (except for the ERGOSE bridge which is under construction)	8,5
	Bridge under construction by ERGOSE at Thermopiles - Sperhios section	
14 S/W	Sperhios - Ag. Paraskevi I/C	3,5
15 S/W	Ag. Paraskevi I/C - Ag. Marina Section	8,5
16 S/W	Ag. Paraskevi Marina - Rahes section	19,200
	Technical works at PATHE - Lianokladi section which is under construction by ERGOSE	



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### 2. GENERAL ISSUES

#### 2.1 BRIEF REPORT

##### 2.1.1 Outstanding Issues

- a. With respect to the Public Utility Networks related to E65, so far relevant applications have been completed until 06/25/1910 (removing mainly electricity networks). The concerned department – DEH (PPC)- has started the works on GE 1N.2, 4N, 5N, 6N, 7N & 9N but the whole process has already been delayed overdue and it should be speeded up since it causes disruption of works (see also 1.1.2 -a & b).
- b. In many cases the received sections are not continuous including non-expropriated parcels and do not allow the occupation of land across the width of the expropriated zone in sufficient length with obvious implications in the construction.

##### 2.1.2 Report Period Overview

- a. At the reporting date of this report (25/6/10) the main issues of the involved with the Public Utility Networks work are the following:

➤ **PPC:**

**GU 1N.1:** In the area where the sections AB1 & AB2 are crossing the Old National Road, PPC organize the relevant relocations. Egnatia S.A. will have to pay the relevant cost.

**GU 1N.2:** The relocation of the PPC facilities in Karpenissi I/C has been completed. The relocation works of High Voltage in Lianokladi MSS have been stopped. The local Service PPC has not responded so far on the relocation of networks along the axis. Finally, the issue of power cut and relocation of drilling should be resolved.



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**GU 5N, 6N.1:** There are delays due to non-timely networks relocation. On 19/01/2010 networks relocation works have started at CH. 67+400 - CH: 76+400 but EOAE has not paid the cost for the relocation of the electricity network from CH: 78+000 - CH: 90+500 (Karditsa I/C is critical). The electricity networks of the requisitioned private wells in the section from CH: 60+000 - CH: 77+000. The power networks of the TOEB wells have not been stopped. One of the problems encountered delays in the relocation of the electricity network is the lack of materials.

**GU 6N.2:** All Public Utilities Networks within the expropriation zone of the project have been localized and all necessary arrangements for their relocation have been made.

**GU 7N.1:** All Public Utilities Networks within the expropriation zone of the project have been localized and all necessary arrangements for their relocation have been made. From CH.106+000 to CH.109+500, Trikala PPC has finally proceeded to the relocation.

**GU 7N.2 & 8N:** The relocation design of PPC network has been drawn up and submitted. The payment of the relocation cost of PPC network from EGNATIA ODOS S.A. is expected.

**GU 9N:** Completion of dismantling and relocation works of CH. 124+000 to CH. 131+000 network on 15/06/2010.

**GU 10N:** Contacts with PPC and additional information and clarifications provision in order for the relevant relocation design of the network to be made.

**GU 11N. 1:** All the necessary actions have been realized for the networks relocation in area from CH. 144+000 to CH. 149+500. Despite its payment PPC has not started the relocation works of its network.

**PATHE:** A letter has been to grant applications for applications of permanent PPC provision for Agia Triada Toll Station, Molos I/C and Thermopylae I/C (5552/18-01-2010, without a further operation). The relocation of PPC Network in Mavromantila Toll Station has not been realized.

#### **➤ Public Gas Corporation (DEPA):**

**GU 1N.1:** The construction of technical structure protection in a tube of the Gas Transmission System Operator (DESFA) in CH. 3+896 is underway.

**GU 6N:** On 10/06/10 the works of the technical structure protection of the natural gas pipeline on the CH. 81+715 have been completed.



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**GU 7N.1:** DEPA continues its works in order to complete the protection of the pipeline in CH. 99+450 and in CH.TH.104+027 the protection has been completed.

➤ **Hellenic Organization of Telecommunications (OTE):**

**GU 1N.1:** OTE organizes the network's relocation in the area where AB1 and AB2 branches cross the old National Road.

**PATHE:** Horizontal alignments of all toll stations have been submitted to all the organizations of telecommunications for their possible underground networks and their relocation. WIND & COSMOTE have been answered negatively so far.

➤ **Local Organization For Land Improvement (TOEB)**

**GU 1N.1:** The works for Anthili irrigation channel and for the associated pumping station still continue.

**GU 6N.1:** The works of irrigation networks rehabilitation from CH. 60+500 – CH. 76+700 have been started (stand pipe construction). The relocation works of TOEB borehole have not started up to now.

**GU 9N:** The preparation of networks relocation and boreholes designs (where necessary) with Theopetra TOEB and Vassiliki TOEB. The auctioning of these two subcontractions is expected by Service for Land Improvement (YEB). No progress regarding Raksas irrigation system's relocation.

➤ **Water supply - Drainage**

**GU 1N.2:** In Lamia, the partial relocation of water supply pipeline near AD TE40 should be resolved

**PATHE:** A letter (CC/X/CO/GE000/PRO05392/CM/nm/7-1-2010) for toll stations water supply has been prepared in the concession, without further action.

b. The designs preparation and submission is under development.

c. The process to obtain permits for quarries, borrow pits, disposal site and equipment is in progress for the project's needs. The requests for the permits have been sent to the relevant services. Many areas have been rejected from the involved Archaeological Services, Forestries and in some cases, licensing bodies decided negatively. Especially for the area of Lamia, only one of the 4 environmentally approved borrow pits is in regular operation and this happens after a long time period. The licensing bodies have issued negative decisions resulting in the embankments constructed with severe delay. The whole issue is critical.





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- d. The implementation of the Environmental Operating System of the Project continues as usual.
- e. The implementation of the Quality Management System of the Project is under development.
- f. The Security Management System of the PROJECT is revised based on the proposal of the J/V and the agreement with the IE.

### **2.1.3 Problems and possible risks**

- Delays in the process of requisition which also lead to delay in the delivery of certain sites and in turn of several parts of the project, as in GU 1N.1 & 1N.2 (CH. 0+000 – CH. 14+500) where the 2nd Exclusive Deadline related to these specific GUs was not achieved. Furthermore, these delays affected GUs 11N.1, 11N.2, 11N.3.
- Delays in the test archaeological cuts due to the fact that the sites are not delivered and also due to the inadequacy of the staff provided by the Archaeological Services to monitor the works at GUs 2N, 4N, 5N, 6N, 9N & 10N. The continued delays regarding the approved schedule (according to which most of the works should have been completed on June 2009) are presented at the schedule of this report.
- Significant disorganization due to the engagement of the sites with archaeological findings along the motorway alignment at GU 5N (64+112-68+623 & 78+210-76+444). On 15.03.2010 the Secretary General of the Ministry of Culture visited the construction sites in order to accelerate the procedures that would deliver the archaeological sites; however, the Archaeological Service keeps delaying even more its actions (see also 1.3). Sites engaged due to archaeological findings also exist at GUs 1N.2 (14+200), 2N.1 (25+954-26+250), 6N.2-7N.1 (95+457-99+371, 105+220), 8N (CH.116+660~CH.117+260 Raxa area)
- Delays due to the delayed relocation of Public Utility Organizations at GU 1N.2, 5N, 6N, 7N and PATHE sections (mainly Public Power Corporation - DEH).
- Delays due to the lack / rejection of the appropriate borrow pits/quarries, as up to now a number of such sites has been rejected by the Archaeological & Forest Services. Delays were also due to the delay of the competent Service



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to reply to our submissions. For example, up to now, only one (Kalamaki Vryssi) of the four (4) borrow pits to be approved in the area of Lamia has received a permit on April 2010 – thirteen (13) months following the relevant request which seriously affected the progress of the embankments at GU 1N. Moreover, the Cadastral Service of Karditsa Prefecture received approval to intervene in the withdrawal of material and arrangement of the Onohonos' riverbed, in accordance with the approved Special Technical Implementation Study (STIS) while during the progress of the works, some residents appeared, who claimed that they own the area of the works without having proprietary titles which led to the disruption of the works.

- Letter from the Prefecture of Karditsa, which asks the modification of the approved studies at E65 Motorway and additional crossings, issues that lead to delays and increase the cost.
- Delay in the demolition and relocation works of the irrigation network at Tavropos which is located at GU 6N1 between CH. 81+000 and CH. 90+500 due to failure to deliver the land, given that the irrigation period has expired since 1/9/2009.
- Delay due to failure to accomplish the revised delivery deadline of the site for sections (12NΔ-13NΔ-14NΔ) on 25/6/2009, 10/9/2009 and 11/9/2009, respectively. Delay in the completion of the toll station at Molos I/C due to the additional expropriation.
- Delay due to the existence of worksite installations by third parties within the range of works occupancy (Molos I/C Toll Stations and Agia Triada) at the section 12NΔ thus creating serious problems for the works until the sites are completely free. The continued delay in relation to the approved schedule is illustrated in the schedule of this report. Furthermore, there is a delay in the construction of the ITS network at Roditsa I/C (14NΔ) due to the incomplete works at PATHE.
- Problems are also occurred by the excessive requirements of the municipalities regarding material withdrawal and worksites installation. In some cases, such as the installation of a worksite in the area of Raxa - Haidemeni, the municipalities contradicted the decision (general confrontation of the E65 project). Furthermore, the Hellenic Public Real Estate Corporation has rejected the application of the Joint Venture to proceed to gravel extraction in the area of Gerakaris, Municipality of Ipati, Prefecture of Lamia by presenting clear grounds based on the remarks of the approved STIS by EYPE/YPEXODE (competent service), following the suggestions of the local



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government and the residents. With respect to the borrow pit at the area Aerodromio, Municipality of Faloria, Prefecture of Trikala, the modification of the approved STIS was requested by the Prefectural Administration (competent body for issuing the operation permit). The modification concerns the budget of the restoration works based on which the relevant letter of guarantee is granted. The amount of the letter of guarantee could be defined (increased) by the Prefectural Administration of Trikala, without modifying the STIS. This modification of the STIS is deemed redundant and leads to the delay of the operation permit. Despite this, the Joint Venture was forced to proceed to this action.

- A possible risk to delay or even cancel the construction of the section from CH. 137+550 to the connecting branch with Egnatia Odos derives from applications submitted requesting from the Council of State suspension of the works and abrogation of the Joint Ministerial Decision with Ref. No. 147014/18.11.2005 that approves the environmental terms of the project "Central Greece Road Axis (E65), Kalambaka - Egnatia Odos section and Agia Paraskevi I/C for the connection with Egnatia Odos" (CH. 137+550 – Egnatia). The application has been submitted by the following bodies:
  - "Grevena Hunters Association"
  - "Equestrian Club of Grevena "Vassilitsa"
  - "Hellenic Mountaineering Club of Deskati"
  - Local Government Organization, Municipality of Deskati, Prefecture of Grevena
  - Local Government Organization, Municipality of Hassia, Prefecture of Trikala

Up to the date of this report, no decision of the Council of State has been issued.

## **2.2 ENVIRONMENTAL REQUIREMENTS**

The design, construction and operation of the project are in full compliance with the Approved Environmental Terms as well as with all the requirements that derive from the Concession Agreement (C.A) and the attached contractual documents (Design & Construction Agreement, Special Conditions of Contract,



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Technical Conditions of Contract, Project Design Regulation) as well as the applicable legislation.

Basic requirement for the construction of the project is the Law No. 3597/20.07.2007 (GG 3445A/25.07.2007), which includes the contractual issues, the current legislation, as detailed in the previous Semi-annual Environmental Management Report, as well as the conditions and restrictions arising from the individual permits and approvals, including Special Technical Implementation Design of the various individual projects, the approvals of amendments of the main road project, etc., for which the contractor of the Project is responsible.

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### **3. ENVIRONMENTAL MANAGEMENT OF THE PROJECT**

#### **3.1 ENVIRONMENTAL MONITORING & CONTROL PROGRAM**

The "Environmental Monitoring & Control Program" is based on the environmental terms of the project and on the Concession Agreement and includes the following:

- Prioritisation of protective actions - measures that should be taken by the Constructional J/V according to the Environmental Terms and other contractual obligations.
- The designs, studies and technical reports that should be drawn up in the framework of construction and operation of the project and that involve several environmental issues.
- The implementation control process of the terms and actions by the competent authorities.

The purpose of the Environmental Monitoring & Control Program is to clearly determine the actions and measures required for the environmental management of the construction phase of the project and that derive from recording and assessing the environmental terms, other obligations or guidelines arising from the contractual documents and the applicable legislation.

The Environmental Monitoring & Control Program is currently at the submission phase to EYPE/YPEXODE.

#### **3.2 ENVIRONMENTAL MANAGEMENT SYSTEM – ENVIRONMENTAL TERMS COMPLIANCE CHECKLISTS**



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The "Environmental Terms Compliance Checklists" are drawn up based on the Environmental Monitoring & Control Program and the Environmental Management System. These checklists include the way and methodology of required actions in order to ensure the implementation of the Environmental Terms with respect to the time schedule as well as their association with the project time schedule. The respective tables are prepared in order to control the compliance program.

The responsible department for the environment in cooperation with the project engineers carry out regular inspections and complete the checklists by applying the "Environmental Monitoring & Control Program" and by observing the time schedule referred to it. Furthermore, they provide the necessary orders or guidelines that are based on the Environmental Monitoring & Control Program for every issue related to the environment.

The Environmental Management System, which is applied by the J/V, has been drawn up under ISO 14001:2004 and consists of the Manual, the Procedures, the Guidelines and the Forms that are related to the environment and the observance of the project's environmental requirements. The manual, the procedures and the guidelines for environmental management is applied uniformly throughout the project and are currently at the first phase of the review. The Environmental Management System is in continuous progress in order to meet the project's needs.

### **3.3 MONTHLY, SEMI-ANNUAL AND ANNUAL PROGRESS REPORT FOR THE IMPLEMENTATION OF ENVIRONMENTAL TERMS**

At the same time, in order to monitor the Program and inform the Environmental Department of the Independent Engineer on a monthly basis, the person responsible draws up monthly and annual progress reports for the implementation of the environmental terms in the form of a table. These monthly reports include:



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- Works or designs carried out regarding the implementation of the Environmental Terms and all possible variations on the Environmental Monitoring & Control Program.
- The relevant actions of the persons responsible (inspections, special reports, etc.).
- The results of the inspections and the conclusion of the monthly checklists
- A full photographic presentation of the environmental issues

At the end of each semester, a semi-annual progress report is being drawn up with respect to the implementation of the Environmental Terms in accordance with article 11.2.2., case (ii) of the Concession Agreement.

In January of each year, an annual progress report is being drawn up, pursuant to article 11.2.2 (iii) of the Concession Agreement, which includes the annual review of all issues described in the periodical reports.



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### **4. ENVIRONMENTAL ISSUES PROGRESS**

The progress of the construction works is submitted by the joint venture Central Greece Motorway E65 to the Concessionaire via monthly reports of progress.

The above paragraphs constitute the documentation for the compliance of the environmental commitments regarding the construction works progress.

#### **4.1 PERMITS - DESIGNS - APPROVALS**

This section presents all requests submitted by the Constructional Joint Venture in order to obtain permits for the implementation of the project. Furthermore, the relevant designs that arise from the obligation to observe the contractual requirements and environmental terms of the project are presented.

##### **4.1.1 Permits and approvals in accordance with the environmental terms of the project.**

In the context of observing the environmental terms and other requirements based on the applicable legislation, Special Technical Implementation Studies (STIS) of the ancillary works are being prepared and submitted for approval and permit. The competent authority for this approval is EYPE/YPEXODE.

The following table (table 4.1.1-1) presents all relevant information on the submissions conducted to EYPE/YPEXODE.



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**Table 4.1.1-1**  
**Environmental permit for ancillary works**

No.	Ancillary work	Area	Submission to EYPE (ref. no. EYPE)	EYPE's Decision	Comments (approval, re-submission-rejection, etc.)
1.	MATERIAL WITHDRAWAL FROM ONOHONO RIVER (BP5N1)	Municipality of Sofades, Prefecture of Karditsa	141388/25-6-2009	141388/04.08.2009	STIS approval
2.	BORROW PIT AT AGIA PARASKEVI, "KALAMAKI BR" (BP1N3)	"Kalamaki Br." Municipality of Agia Paraskevi, Prefecture of Lamia, Prefecture of Fthiotida	136998/05.03.2009	136998/28.07.2009	STIS approval
3.	WORKSITE AT LAMIA (MSS CH. 12+000) (IS1N1)	"Agios Trifonas, Stavros, Municipality of Lamia, Prefecture of Fthiotida.	136998/05.03.2009	136998/28.07.2009	STIS approval
4.	BORROW PIT / DISPOSAL SITE "Pyrgaki - Kofina" (BP/DS1N1)	Pyrgaki, Stavros, Municipality of Lamia, Prefecture of Fthiotida.	136998/05.03.2009	136998/28.07.2009	STIS approval
5.	BORROW PIT "Platana - Rema" (BP1N2)	Platana - Rema, Lygaria, Municipality of Lamia, Prefecture of Fthiotida.	136998/05.03.2009	136998/28.07.2009	STIS approval
6.	BORROW PIT AT SPERHIOS RIVER	Magoula, among Municipality of Ypati	136998/05.03.2009	136998/28.	The position has been rejected by



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No.	Ancillary work	Area	Submission to EYPE (ref. no. EYPE)	EYPE's Decision	Comments (approval, re-submission-rejection, etc.)
	(BP1N4)	and Lianokladi, Prefecture of Fthiotida	09	07.2009	STIS
7.	BORROW PIT AT GERAKARIS STREAM(BP1N5)	Asprokambos, Kombotades, Municipality of Ypati, Prefecture of Fthiotida.	136998/05.03.2009	136998/28.07.2009	STIS approval
8.	BORROW PIT AT "AERODROMIO" AREA (BP6N1)	Kefalovryso, Municipality of Faloria, Prefecture of Trikala	140546/04.06.2009	140546/29.07.2009	STIS approval
9.	ETME Review Borrow Pit "AERODROMIO" (BP6N1)	Kefalovryso, Municipality of Faloria, Prefecture of Trikala	148761/18.12.2009	121188/29.01.2010	STIS approval
10	Borrow Pit "Kioskia" (BP4N1)	Municipality of Tamassi, Prefecture of Karditsa, Anavra	143395/10-08-2009	143395/02-09-2009	STIS approval
11	Borrow Pit "Geladaria" (BP4N2)	Municipality of Tamassi, Prefecture of Karditsa, Anavra	145522/16-10-2009	145522/17-11-2009	STIS approval
12	Anavra Worksite "Kedrakos" position (IS5N1)	Municipality of Tamassi, Prefecture of Karditsa, Anavra	143394/10-08-2009	143394/02-09-2009	STIS approval
13	Agios Georgios Worksite "Voulgarolakka"	Municipality of Kampos, Agios Theodoros, Prefecture of	143394/10-08-2009	143394/02-09-2009	STIS approval



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No.	Ancillary work	Area	Submission to EYPE (ref. no. EYPE)	EYPE's Decision	Comments (approval, re-submission-rejection, etc.)
	position	Karditsa			
14	"GKOLNA" Worksite (BP5N4)	Municipality of Goriani, Prefecture of Grevena	121768/10-2-2010	----	Expected to be approved
15	Borrow Pit in "Mavrogies" position (BP5N4)	Sikeona, Municipality of Filo, Prefecture of Karditsa	121768/10-2-2010	----	Expected to be approved
16	Borrow Pit in "Vrontaria" Position (BP6N2)	Fiki, Municipality of Pitalia, Prefecture of Trikala	7489/21.04.2010	127798/08.07.2010	STIS approval
17	Stone processing installation in the quarry materials – borrow pit in "Pyrgaki" Position (IS1N2)	"Pyrgaki", Stavros, Municipality of Lamia, Prefecture of Fthiotida	144259/11.09.2009	144259/17.11.2009	STIS approval
18	Stone processing installation in the quarry materials – borrow pit in "Kalamaki Vr." Position (IS1N3)	"Kalamaki Vr.", Agia Paraskevi, Municipality of Lamia, Prefecture of Fthiotida	144259/11.09.2009	144259/17.11.2009	STIS approval
19	Stone processing installation in the worksite facilities of Lamia (IS1N4)	"Agios Trifonas", Stavros, Municipality of Lamia, Prefecture of Fthiotida	144259/11.09.2009	144259/17.11.2009	STIS approval
20	Washing of aggregates with a sieve in the sand borrow pit in Gerakaris r. (IS1N5)	"Asprokampos", Kompotades, Municipality of Ypati, Prefecture of Fthiotida	144259/11.09.2009	144259/17.11.2009	Rejected due to refusal of the leasing application by the Mortgage Service of Prefecture of



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					Fthiotida
21	Worksite in Kalampaka MSS position (CH. 132+000) (IS9N1)	Municipality of Kalampaka, Prefecture of Trikala	125561/17.05.2010	----	Expected to be approved
22	Worksite in "Lampes" position (IS6N1)	Proastio, Municipality of Selana, Prefecture of Karditsa	126671/11.06.2010	----	Expected to be approved
23	Worksite in "Samolaka" position (IS2N1)	Stirfaka, Municipality of Lianokladi, Prefecture of Fthiotida	126332/04.06.2010	----	Expected to be approved

Within the 2nd semester of 2009, additional relevant designs of ancillary works such as disposal sites, worksites, borrow pits, etc. shall be submitted in order to receive environmental permit.

Moreover, in line with the environmental terms of the project, the respective permits should be obtained by the competent authorities, such as Forest Services, Archaeological Services, Prefectural Administration Services, etc. The current cooperation with the public authorities is deemed remarkable, completely positive and successful.

The Constructional Joint Venture submits the required requests to obtain relevant permits. The main competent services involved in the project are the following:

- Forest Service of Lamia
- Forest Service of Karditsa
- Forest Service of Trikala
- Forest Service of Kalambaka
- Forest Directorate of Grevena



### CENTRAL GREECE MOTORWAY (E-65)

- ΙΔ Service of Prehistorical and Classical Antiquities
- ΛΔ Service of Prehistorical and Classical Antiquities
- Λ Service of Prehistorical and Classical Antiquities
- 19th Service of Byzantine Antiquities
- 24th Service of Byzantine Antiquities
- 17th Service of Byzantine Antiquities
- Prefectural Administration of Fthiotida
- Prefectural Administration of Karditsa
- Prefectural Administration of Trikala
- Prefectural Administration of Grevena
- Central Greece area
- Thessalia area
- Local Municipalities
- YPEKA
- etc.

The following table (table 4.1.1-2) presents all requests submitted by the Constructional Joint Venture in order to obtain the relevant permits issued by the services in the framework of the project.

**Table 4.1.1-2**  
**Requests for permit by the relevant competent authorities**

No	Service	Subject	Request	Response		Comments
			J/V Ref. No	J/V Ref. No	Service Ref. No	
1.	Ministry of Development Directorate of Quarries, Marbles & Aggregates	Submission of TIS of the borrow pit in "KIOSKIA" location Anavra, Municipality of Tamassio	3324/05.08.2009	6031/16.12.2010	Δ10.Β/Φ.25.9/25274/4531ΠΕ/05.02.2010	TIS Approval
2.	Prefectural Administration of Karditsa Directorate of Development	Submission of additional documents for the issuance of a license for the exploitation of the quarry area – borrow pit in "KIOSKIA" location Anavra, Municipality of	7826/17.5.2010	8798/5.07.2010	Φ26/516/17.06.2010	Permit of exploitation



### CENTRAL GREECE MOTORWAY (E-65)

No	Service	Subject	Request	Response		Comments
			J/V Ref. No	J/V Ref. No	Service Ref. No	
		Tamassio				
3.	Ministry of Development Directorate of Quarries, Marbles & Aggregates	Submission of TIS of the borrow pit in "GELADARIA" location Anavra, Municipality of Tamassio	4147/14.10.2009	6031/16.02.2010	Δ10.Β/Φ.25.10/261 63/4615ΠΕ/05.02.2 010	TIS Approval
4.	Forest Directorate Prefectural Administration of Karditsa	Submission of approved STIS & TIS of the borrow pit in "GELADARIA" Anavra, Municipality of Tamassio for the issuance of lease permit & intervention permit	5973/09.02.2010		1226/33810/15.03. 2010	Lease Approval
5.	Forest Directorate Prefectural Administration of Karditsa	Submission of approved STIS & TIS of the borrow pit in "GELADARIA" Anavra, Municipality of Tamassio for the issuance of lease permit & intervention permit	5973/09.02.2010	6365/04.03.2010	620/32290/02.03.2 010	intervention permit
6.	Forest Service of Karditsa	Submission of access road design for "GELADARIA" borrow pit  Anavra, Municipality of Tamassio	6647/18.03.2010	9416/16.06.2010	2651/89237/11.06. 2010	Design approval
7.	Forest Service of Karditsa	Installation Protocol for the borrow pit in "GELADARIA" location Anavra, Municipality of Tamassio	8095/01.06.2010	8144/02.06.2010	01.06.2010	Approval of Installation protocol
8.	Prefectural Administration of Karditsa Directorate of Technical Services	Design submission for approval of Onochono boundary river	4329/29.10.2009	5679/26.01.2010	Δ155/20.01.2010	Design control by the Directorate of Technical Services of Prefectural Administration of Karditsa for the determination of



## CENTRAL GREECE MOTORWAY (E-65)

No	Service	Subject	Request	Response		Comments
			J/V Ref. No	J/V Ref. No	Service Ref. No	
						boundary lines

S/N	Service	Subject	Request	Response		Comments
			J/V Ref. No.	J/V Ref. No.	Service Ref. No.	
9.	Region of Thessalia, General Directorate for Public Works, Irrigation Works	Submission for approval of a study for the delimitation of Onohonos river	3055/17.07.2010	6032/16.02.2010	376/15215/Tu/01.02.2010	Validation of the study from the Region of Thessalia
10.	Cadastral Service, Municipality of Karditsa	Direct lease of the site for gravel extraction at the Onohonos location, Municipality of Sofades	6099/18.02.2010	8448/17.06.2010	1335/14.06.2010	1. 1. Decision of the Committee for Gravel Extraction at Onohonos river  2. 2. Decision of the General Secretariat, Region of Thessalia to grant, free of charge, the right to proceed to gravel extraction works
11.	Cadastral Service, Municipality of Karditsa	Commencement of the project "Withdrawal of materials and restoration of the Onohonos riverbed" □ f	8096/01.06.2010	8192/07.06.2010	1183/03.06.2010	Positive reply
12.	Directorate for Development, Prefectural Administration of Karditsa	Issuing a permit for the operation of loose materials quarry (no use of explosives) at Sykeona, Municipality of Filo	2063/27.04.2009		2069πε/22.03.2010 (19th Byzantine Antiquities Service)	Positive reply to issue the special permit by the 19th Byzantine Antiquities Service
13.	Directorate for Development, Prefectural Administration of Karditsa	Issuing of a permit for the operation of loose materials quarry (no use of explosives) at Sykeona, Municipality of Filo	2063/27.04.2009	8297/10.06.2010	Τ/ΓΔΑΠΚ/ΑΡΧ/Α1/Φ34/46449/2011/3 1.05.2010	Negative opinion from the Prehistoric and Classical Antiquities Directorate of the Ministry of Culture



### CENTRAL GREECE MOTORWAY (E-65)

S/N	Service	Subject	Request	Response		Comments
			J/V Ref. No.	J/V Ref. No.	Service Ref. No.	
						regarding the granting of the permit
14.	Directorate for Development, Prefectural Administration of Karditsa	Issuing of a permit for the operation of loose materials quarry (no use of explosives) at Sykeona, Municipality of Filo	2063/27.04.2009	6455/09.03.2010	EMNE/Φ23.16/416 πε/01.03.2010	Positive reply to issue the special permit by the Southern Greece Mining Inspectorate
15.	Ministry of Environment, Energy and Climate Change - Special Service for the Environment (EYPE)	Submission of Special Technical Implementation Study for approval for the borrow pit at Mavrogies location, Community of Sykeona, Municipality of Filo	5935/09.02.2009			Approval is expected
16.	Ministry of Environment, Energy and Climate Change - Directorate for Marble & Inert Material Quarries	Submission of Special Technical Implementation Study for approval for the borrow pit at Mavrogies location, Community of Sykeona, Municipality of Filo	5934/09.02.2009			Approval is expected
17.	Ministry of Environment, Energy and Climate Change - Special Service for the Environment (EYPE)	Submission of the STIS for approval for the worksite at Golna location, Municipality of Goriani, Prefecture of Grevena	7434/27.04.2010			Approval is expected
18.	Forest Service of Kalambaka	Approval to install a borrow pit at the location of "Trypa Gavodimou", Community of Ahladea, Municipality of Hassia, Prefecture of Trikala.	5530/15.01.2010			Pending opinion
19.	ΛΔ' Service of Prehistorical and Classical	Approval to install a borrow pit at the location of "Trypa	5530/15.01.2010	8379/22.06.2010	2661/18.06.2010	The ΛΔ Service of Prehistorical and Classical





## CENTRAL GREECE MOTORWAY (E-65)

S/N	Service	Subject	Request	Response		Comments
			J/V Ref. No.	J/V Ref. No.	Service Ref. No.	
	Antiquities	Gavodimou", Community of Ahladea, Municipality of Hassia, Prefecture of Trikala.				Antiquities has sent the request for the installation to the local council, which is competent for all monuments located in Thessalia
20.	19th Service of Byzantine Antiquities	Approval to install a borrow pit at the location of "Trypa Gavodimou", Community of Ahladea, Municipality of Hassia, Prefecture of Trikala.	5530/15.01.2010	8497/18.06.2010	243/09.06.2010	Positive opinion
21.	Forest Service of Karditsa	Approval to install asphalt mix production units and a 3A mixer truck at the location of 'Livadia'. Community of Anavra, Municipality of Tamassio	7887/19.05.2010	8091/01.06.2010	2331/76835/25.05. 2010	Positive opinion
22.	ΛΔ' Service of Prehistorical and Classical Antiquities	Approval to install asphalt mix production units and a 3A mixer truck at the location of 'Livadia' Community of Anavra, Municipality of Tamassio	7887/19.05.2010	8674/29.06.2010	2102/15.06.2010	Positive opinion
23.	19th Service of Byzantine Antiquities	Approval to install asphalt mix production units and a 3A mixer truck at the location of 'Livadia' Community of Anavra, Municipality of Tamassio	7887/19.05.2010	8216/08.06.2010	2328/01.06.2010	Positive opinion
24.	Directorate of Town Planning, Environment & Town Planning applications, Prefectural Administration of Karditsa	Power supply to the asphalt mix production unit and the 3A mixer at the location of 'Livadia', Community of Anavra, Municipality of Tamassio	7860/18.05.2010		2200/15.06.2010	Positive opinion



### CENTRAL GREECE MOTORWAY (E-65)

S/N	Service	Subject	Request	Response		Comments
			J/V Ref. No.	J/V Ref. No.	Service Ref. No.	
25.	Municipality of Hassia	Approval to install a borrow pit at the Location "Voulgara", Community of Oxinia, Municipality of Hassia, Prefecture of Trikala.	6074/17.02.2010			Pending opinion
26.	Forest Service of Karditsa	Approval to install a borrow pit at the location "Amoudes", Community of Filia, Municipality of Sofades, Prefecture of Karditsa.	8049/28.05.2010	8215/08.06.2010	2468/81958/01.06.2010	Positive opinion
27.	ΛΔ' Service of Prehistorical and Classical Antiquities	Approval to install a borrow pit at the location "Amoudes", Community of Filia, Municipality of Sofades, Prefecture of Karditsa.	8049/28.05.2010	8677/29.06.2010	2325/15.06.2010	Positive opinion
28.	19th Service of Byzantine Antiquities	Approval to install a borrow pit at the location "Amoudes", Community of Filia, Municipality of Sofades, Prefecture of Karditsa.	8049/28.05.2010	8374/14.06.2010	2422/04.06.2010	Positive opinion
29.	Prefectural Administration of Karditsa, Directorate of Development	Application for issuing a permit for the borrow pit at the location "Amoudes", Community of Filia, Municipality of Sofades, Prefecture of Karditsa.	8495/18.06.2010	8797/05.07.2010	Φ26/667/22.06.2010	The Directorate for Development has sent a request to 13 Services for their opinion in order to issue the permit.
30.	Forest Service of Karditsa	Approval to install a borrow pit at the location "Haliades", Community of Melissohori, Municipality of Sofades, Prefecture of Karditsa.	8442/16.06.2010	8631/25.06.2010	2758/93518/21.06.2010	Positive opinion



### CENTRAL GREECE MOTORWAY (E-65)

S/N	Service	Subject	Request	Response		Comments
			J/V Ref. No.	J/V Ref. No.	Service Ref. No.	
31.	ΑΔ' Service of Prehistorical and Classical Antiquities	Approval to install a borrow pit at the location "Haliades", Community of Melissohori, Municipality of Sofades, Prefecture of Karditsa.	8442/16.06.2010	8675/25.6.2010	2609/21.06.2010	Positive opinion
32.	19th Service of Byzantine Antiquities	Approval to install a borrow pit at the location "Haliades", Community of Melissohori, Municipality of Sofades, Prefecture of Karditsa.	8442/16.06.2010			Pending opinion
33.	Technical Services Directorate, Prefectural Administration of Karditsa	Local traffic regulation at the local roads 21 (Sofades - Filia Kedros) and 22 (Kedros - Anavra) Prefecture of Karditsa	7914/01.12.2009	5524/14.01.2010	4084/12.01.2010	Positive reply
34.	Water Supply - Drainage Municipal Enterprise	Worksite sewage at Anavra and Agios Theodoros			1408/6.5.2010	Positive reply
35.	Police Station at Sofades	Traffic regulation at the local roads 21 (Sofades - Filia Kedros) and 22 (Kedros - Anavra) Prefecture of Karditsa	6155/23.02.2010			
36.	Police Station at Sofades	Placement of signage at the local roads at Sofades - Ambelos, Sofades - Anogio, Sofades - Karpohori, Sofades - Anavra and Interchange Filia - Anavra	5795/01.02.2010	6987/01.04.2010	2501/3/51.στ/24.03.2010	Positive reply for the placement of signage on the local road Sofades - Ambelos
37.	Police Station at Sofades	Placement of signage at the local roads at Sofades - Ambelos,	5795/01.02.2010	6990/01.04.2010	2501/3/51.ε/24.03.2010	Positive reply for the placement of signage on the



## CENTRAL GREECE MOTORWAY (E-65)

S/N	Service	Subject	Request	Response		Comments
			J/V Ref. No.	J/V Ref. No.	Service Ref. No.	
		Sofades - Anogio, Sofades - Karpohori, Sofades - Anavra and Interchange Filia - Anavra				local road Sofades - Anogio
38.	Police Station at Sofades	Placement of signage at the local roads at Sofades - Ambelos, Sofades - Anogio, Sofades - Karpohori, Sofades - Anavra and Interchange Filia - Anavra	5795/01.02.2010	6986/01.04.2010	2501/3/51.ζ/24.03. 2010	Positive reply for the placement of signage on the local road Sofades - Karpohori
39.	Police Station at Sofades	Placement of signage at the local roads at Sofades - Ambelos, Sofades - Anogio, Sofades - Karpohori, Sofades - Anavra and Interchange Filia - Anavra	5795/01.02.2010	6985/01.04.2010	2501/3/51.η/24.03. 2010	Positive reply for the placement of signage on the local road Sofades - Anavra and Interchange Filia - Anavra
40.	Thermopiles Traffic Police	Commencement of construction works for the toll stations at PATHE (Thermopiles I/C)	5535/15.01.2010			
41.	Ministry of Infrastructure, Transport and Networks - Special Service for Public Works - PATHE	Implementation of weak currents network at PATHE	6027/16.02.2010	6326/03.03.2010	ΛΜ/ΦΚΛΜ10.00/Α Λ/159/22.02.2010	Positive reply
42.	Region of Thessalia, Directorate for Water Supply	Granting of permit to implement works for water resources utilization (excavation at Agios Theodoros worksite)	09.09.2009		419/20891/18.02.2 010	Granting of permit to implement works
43.	Directorate of Town Planning, Environment & Town Planning	Approval of environmental terms for excavation works at Agios Theodoros			76/08.02.2010	Approval of environmental terms



### CENTRAL GREECE MOTORWAY (E-65)

S/N	Service	Subject	Request	Response		Comments
			J/V Ref. No.	J/V Ref. No.	Service Ref. No.	
	applications, Prefectural Administration of Karditsa	worksite)				
44.	Region of Thessalia, Association for Water Supply Network, Municipality of Karditsa & other municipalites	Relocation and protection of water supply network at the section from CH. 60+500 to CH. 90+500	4112/12.10.2009	5579/19.01.2010	17/15.01.2010	Positive reply
45.	ΙΔ Service of Prehistorical and Classical Antiquities	Approval of access road excavation at T2 area	2497/02.06.2009	3153/24.07.2009	3824/21.07.2009	Positive opinion
46.	24th Service of Byzantine Antiquities	Approval of access road excavation at T2 area	2497/02.06.2009	28513/02.07.2009	2299/29.06.2009	Positive opinion
47.	Forest Service of Lamia	Approval of access road excavation at T2 area	2497/02.06.2009	5395/07.01.2010	10521/14.12.2009	Approval to intervene
48.	ΙΔ Service of Prehistorical and Classical Antiquities	Approval of "Samolaka" worksite installation, Styrfakas, Municipality of Lianokladi	2497/02.06.2009	3153/24.07.2009	3824/21.07.2009	There is no objection to the layout planning of the worksite installation
49.	24th Service of Byzantine Antiquities	Approval of "Samolaka" worksite installation, Styrfakas, Municipality of Lianokladi	2497/02.06.2009	28513/02.07.2009	2299/29.06.2009	There is no objection to the layout planning of the worksite installation
50.	ΛΔ' Service of Prehistorical and Classical Antiquities	Opinion for the worksite at the community of Kalambaka, Municipality of	5059/11.12.2009	5508/14.01.2010	5125/21.12.09	Positive proposition



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S/N	Service	Subject	Request	Response		Comments
			J/V Ref. No.	J/V Ref. No.	Service Ref. No.	
		Kalambaka (M.S.S.)				
51.	19th Service of Byzantine Antiquities	Opinion for the worksite at the community of Kalambaka, Municipality of Kalambaka (M.S.S.)	5059/11.12.2009	5580/19.01.2010	5646/12.01.2010	Positive proposition
52.	Forest Service of Kalambaka	Commencement of works at the section from CH. 137+000 to CH. 142+000	4863/02.12.2009			
53.	Municipality of Kalambaka	Commencement of works at the section from CH. 137+000 to CH. 142+000	4864/02.12.2009			
54.	Forest Service of Kalambaka	Updating on the alignment of E65	5096/14.12.2009			
55.	Directorate for Quarries, Marbles & Inert Materials - Department B'	Approval of Technical Implementation Study - Pyrgaki	2139/11.05.2009	5322/23.12.2009	Δ10.B/Φ.46.42/23108/4251/14.12.2009	Approval of the Technical Implementation Study
56.	Directorate for Quarries, Marbles & Inert Materials - Department B'	Approval of Technical Implementation Study - Platana, Rema	2425/27.05.2009	5323/23.12.2009	Δ10.B/Φ.46.43/23110/4253/14.12.2009	Approval of the Technical Implementation Study
57.	Directorate for Quarries, Marbles & Inert Materials - Department B'	Approval of Technical Implementation Study - Kalamaki	2239/11.05.2009	5324/23.12.2009	Δ10.B/Φ.46.41/23109/4252/14.12.2009	Approval of the Technical Implementation Study
58.	Local Organization of Land Improvements (TOEB) - Theopetra	Adaptation of the TOEB network to E65 works		5390/07.01.2010	7/28.12.2009	Announcement of budget
59.	Local Organization of Land	Adaptation of the TOEB network to E65		5391/07.01.2010	101/28.12.2009	Announcement of budget



## CENTRAL GREECE MOTORWAY (E-65)

S/N	Service	Subject	Request	Response		Comments
			J/V Ref. No.	J/V Ref. No.	Service Ref. No.	
	Improvements (TOEB) - Vassiliki	works				
60.	Prefectural Administration of Trikala - Land Improvement Directorate	Construction of required structures (TOEB at Vassiliki)		6004/02.02.2010	204/29.01.2010	
61.	Prefectural Administration of Trikala - Land Improvement Directorate	Construction of required structures (TOEB at Theopetra)		6003/02.02.2010	205/29.01.2010	
62.	Region of Central Greece, General Directorate for Transportation	Gravel extraction at Gerakaris river		5513/14.01.2010	117123/5567/Φ.Α Μ5/07.01.2010	Negative decision
63.	Forest Service of Kalambaka	Protocol of works installation	4863/02.12.2009	5576/18.01.2010	222/5222/18.01.2010	Rejection of request
64.	Prefectural Administration of Fthiotida, General Directorate for Transportation, Directorate for Development	Approved Technical Implementation Study / Granting of permit		5622/21.01.2010	Δ.Α./Φ.24/3466/34 89/11.01.2010	Informative
65.	Prefectural Administration of Fthiotida, General Directorate for Transportation, Directorate for Development	Approved Technical Implementation Study / Granting of permit		5626/21.01.2010	Δ.Α./Φ.24/3465/34 88/11.01.2010	Informative
66.	Prefectural Administration of Fthiotida, General Directorate for Transportation, Directorate for	Approved Technical Implementation Study / Granting of permit		5669/25.01.2010	Δ.Α./Φ.24/3464/34 90/11.01.2010	Informative



## CENTRAL GREECE MOTORWAY (E-65)

S/N	Service	Subject	Request	Response		Comments
			J/V Ref. No.	J/V Ref. No.	Service Ref. No.	
	Development					
67.	Ministry for the Environment, Energy & Climate Change/EYPE	Revision of the STIS "Borrow pit at the area of Aerodromio to cover the needs of E65"	5218/17.12.2009	5847/03.02.2010	121188/29.01.2010	Approval of the revision of the STIS
68.	Hellenic Air force General Staff	Cross-over of fuel duct with E65	5892/05.02.2010 & 8637/25.06.2010	6456/09.03.2010	Φ.550/673242/23.02.2010	
69.	Concessionaire	Termination (of contract)	6006/12.02.2010			Updating on the interruptions of felling works following banning of the Hellenic Army
70.	Hellenic Telecommunications Corporation	OTE network complication with E65	6205/25.02.2010			
71.	Public Power Corporation of Lamia	Budget	2887/06.07.2009	6390/05.03.2010	50473/05.03.2010	
72.	Municipality of Paralitheon	Land disposal - Requests		7015/07.04.2010	850/30.03.2010	
73.	Public Power Corporation of Trikala	Network relocation	2661/17.04.2009	7026/07.04.2010	50394/30.03.2010	
74.	IA Service of Prehistorical and Classical Antiquities	Identification of a new archaeological site		7028/07.04.2010	1818/16.03.2010	
75.	Public Power Corporation	High-voltage pylons network complication with E65	5730/28.01.2010	7127/13.04.2010	20972/08.04.2010	
76.	Forest Service of Lamia	Felling works commencement	7208/16.04.2010			Notification to the Forest Service
77.	Public Power Corporation of	Network relocation	2661/17.04.2009	7393/26.04.2010	50415/07.04.2010	





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S/N	Service	Subject	Request	Response		Comments
			J/V Ref. No.	J/V Ref. No.	Service Ref. No.	
	Trikala					
78.	Land Improvement Service of Trikala	TOEB network at Vassiliki and Theopetra	6004/02.02.2010 & 6003/02.02.2010			
79.	Land Improvement Service of Trikala	TOEB network at Vassiliki and Theopetra	7435/27.04.2010	7573/04.05.2010	967/30.04.2010	Positive opinion
80.	Water Supply & Sewerage Public Corporation of Kalambaka	Drainage network complication with E65	7488/03.05.2010			
81.	Public Power Corporation of Trikala	Network relocation	2661/17.04.2009	07634/06.05.2010	50541/29.04.2010	
82.	Public Power Corporation of Lamia	Network relocation	2887/06.07.2009	7667/10.05.2010	51027/03.05.2010	
83.	Public Power Corporation of Lamia	Network relocation	2887/06.07.2009	7668/10.05.2010	51028/03.05.2010	
84.	Directorate of Technical Service Prefectural Administration of Trikala	Assembly of the drainage network in the Municipality of Kalambaka with E65	74637/27.04.2010	07741/12.05.2010	E2405/12.05.2010	
85.	Public Power Corporation of Lamia	Network relocation	2887/06.07.2009	8031/27.05.2010	51171/21.05.2010	
86.	Public Power Corporation of Lamia	Drilling works relocation	8168/04.06.2010			
87.	Directorate for Public Works Maintenance Control of	Permit to commence work	8606/24.06.2010	8191/07.06.2010 & 8676/29.06.2010	3761/72904/26.05.2010 & 4891/97848/25.06.	



## CENTRAL GREECE MOTORWAY (E-65)

S/N	Service	Subject	Request	Response		Comments
			J/V Ref. No.	J/V Ref. No.	Service Ref. No.	
	Larissa				2010	
88.	19th Service of Byzantine Antiquities	Commitment of the site from CH. 116+660 to CH. 117+260		8299/10.06.2010	2628/10.06.2010	
89.	Public Power Corporation of Trikala	Network relocation	2661/17.04.2009	8373/14.06.2010	50728/08.06.2010	
90.	Forest Service of Lamia	Issuance of permit to intervene in the borrow pit at "Kalamaki Vr.", Community of Agia Paraskevi, Municipality of Lamia, Prefecture of Fthiotida.		7030/07.04.2010	1159/31.03.2010	Issuance of permit for intervention
91.	Forest Service of Lamia	Protocol for installation in the borrow pit at "Kalamaki Vr.", Community of Agia Paraskevi, Municipality of Lamia, Prefecture of Fthiotida.		7325/21.04.2010		Protocol of installation
92.	Forest Service of Lamia	Worksite at "Samolaka", Community of Styrfakas, Municipality of Lianokladi, Prefecture of Fthiotida	2497/02.06.2009	5961/09.02.2010	388/02.02.2010	Positive opinion
93.	Region of Thessalia	Decision to validate the delimitation of Onohnos river	3055/17.07.2009	6114/19.02.2010	469/20664/09.02.2010	Approval
94.	KYD of Karditsa	Transmission of positive decision of the committee for gravel extraction from Onohonos river		7644/07.05.2010	922/29.04.2010	Positive decision
95.	19th Service of Byzantine Antiquities	Opinion for the borrow pit at Vrontaria, Community of Fiki, Municipality of Pialia, Prefecture of Trikala		5855/03.02.2010	3234/26.01.2010	Positive opinion



### CENTRAL GREECE MOTORWAY (E-65)

S/N	Service	Subject	Request	Response		Comments
			J/V Ref. No.	J/V Ref. No.	Service Ref. No.	
96.	Forest Service of Trikala	Characterization of the borrow pit area at Vrontaria, Community of Fiki, Municipality of Pitalia, Prefecture of Trikala			189/4864/14.01.2010	Characterization certificate
97.	Ministry for the Environment, Energy & Climate Change	Submission of the Technical Implementation Study for the borrow pit at Vrontaria, Community of Fiki, Municipality of Pitalia, Prefecture of Trikala	7251/19.04.2010			Approval is expected
98.	IA Service of Prehistorical & Classical Antiquities	Worksite at Magoula, Community of Lygaria, Municipality of Lamia, Prefecture of Fthiotida.	3436/13.08.2010 & 4946/07.02.2010	6693/19.03.2010	1480/03.03.2010	Positive opinion
99.	Forest Service of Lamia	Borrow pits at Markyrahi, Municipality of Xyniada, Prefecture of Fthiotida and Agios Stefanos, Municipality of Xyniada, Prefecture of Fthiotida	4210/21.10.2009	5690/26.01.2010	11287/09/20.01.2010	Positive opinion
100.	IA Service of Prehistorical & Classical Antiquities	Worksite installations at Perivoli, Community of Perivoli, Municipality of Xyniada, Prefecture of Fthiotida.	5699/27.01.2010	5876/04.02.2010	669/01.02.2010	Positive opinion
101.	24th Service of Byzantine Antiquities	Worksite installations at Perivoli, Community of Perivoli, Municipality of Xyniada, Prefecture of Fthiotida.	5699/27.01.2010	6889/29.03.2010	518/11.03.2010	Positive opinion
102.	Forest Service of Lamia	Worksite installations at Perivoli, Community of Perivoli, Municipality of Xyniada, Prefecture of Fthiotida.	5699/27.01.2010			Positive opinion is expected
103.	EYDE/OSYE	Request to withdraw materials from the	6381/05.03.2010	6208/25.02.2010	93/22.02.2010	Positive decision



### CENTRAL GREECE MOTORWAY (E-65)

S/N	Service	Subject	Request	Response		Comments
			J/V Ref. No.	J/V Ref. No.	Service Ref. No.	
		tunnel at Aheloos river				
104.	Prefectural Administration of Trikala	Submission of a study for the delimitation of Ionas river	7188/18.04.2010			The decision of the General Secretariat of Thessalia is expected.
105.	IA Service of Prehistorical & Classical Antiquities	Worksite at Sykia, Community of Koma, Municipality of Lamia, Prefecture of Fthiotida.	8393/14.06.2010	8616/05.07.2010	4080/22.06.2010	Positive opinion
106.	IA Service of Prehistorical & Classical Antiquities	Warehouse at Sykia, Community of Koma, Municipality of Lamia, Prefecture of Fthiotida.	8393/14.06.2010	8616/05.07.2010	4080/22.06.2010	Positive opinion
107.	24th Service of Byzantine Antiquities	Worksite at Sykia, Community of Koma, Municipality of Lamia, Prefecture of Fthiotida.	8393/14.06.2010	8672/27.03.2010	3278/21.06.2010	Positive opinion
108.	24th Service of Byzantine Antiquities	Warehouse at Sykia, Community of Koma, Municipality of Lamia, Prefecture of Fthiotida.	8393/14.06.2010	8672/27.03.2010	3278/21.06.2010	Positive opinion
109.	Forest Service of Kalambaka	Protocol of installation	5132/15.12.2009	5458/12.01.2010	10530/83750/2009/08.01.2010	Section CH. 144+000 – CH. 149+000
110.	Hellenic Railway Corporation S.A. works	Request to remove the materials and demolish the structures at the construction area of E65	5536/15.01.2010	5761/29.01.2010	178902/25.01.2010	Negative reply from the Hellenic Railway Corporation
111.	Gas Transmission System Operator SA	High-pressure gas ducts - Central duct		5616/21.01.2010	Π029140/ΙΓ/κβ/20.01.2010	Updating on works at CH. 3+895
112.	Gas Transmission System Operator SA	High-pressure gas ducts - Central duct	5651/22.01.2010			Reply to doc. 5616/21.01.2010
113.	Public Power Corporation of	Relocation - Modification of	3426/12.08.2009	5732/28.01.2010	50061/25.01.2010	Informative



## CENTRAL GREECE MOTORWAY (E-65)

S/N	Service	Subject	Request	Response		Comments
			J/V Ref. No.	J/V Ref. No.	Service Ref. No.	
	Trikala	distribution networks at the National Road Loggos-Megalohori, Trikala				
114.	ΛΔ' Service of Prehistorical and Classical Antiquities	Engagement of the area to perform archaeological works at a section of E655, area of Loggos, Municipality of Estiaiotida		5856/03.02.2010	262/26.01.2010	
115.	Hellenic Railway Corporation S.A. works	Request to remove the materials and demolish the structures are the construction area of E65	5990/10.02.2010			Request reintroduction 5536/15.01.2010
116.	Gas Transmission System Operator SA	High pressure gas ducts - Karditsa - Trikala		6060/17.02.2010	Π029825/ΙΓ/κβ/11.02.2010	CH. 81+75, CH. 99+450, CH. 104+925,
117.	Municipality of Hassia	Request to withdraw materials from Ionas river	6065/17.02.2010			
118.	Hellenic Telecommunications Corporation (OTE)	Existing network of OTE	6210/26.02.2010			Re-submission of details for the section CH. 0+000 to CH. 6+200
119.	Public Power Corporation of Lamia	Relocation and protection of Public Power Corporation networks	6304/02.03.2010			Section from CH. 30+000 to CH. 43+000
120.	Ministry of Infrastructure, Transport & Networks	Request to use the excavation material that will derive from the tunnel at Aheloos river	6381/05.03.2010	7072/09.04.2010	165/29.03.2010	
121.	Public Power Corporation	Request to spatially relocate the PPC network at section A2	6496/11.03.2010			
122.	Public Power Corporation of Lamia	Network modification for safety reasons at Atnhili, Lamia	2887/06.07.2009	6587/16.03.2010	50512/12.03.2010	



### CENTRAL GREECE MOTORWAY (E-65)

S/N	Service	Subject	Request	Response		Comments
			J/V Ref. No.	J/V Ref. No.	Service Ref. No.	
123.	Municipality of Estiaiotida	Request for waste collection at CH. 108+500	7415/26.04.2010			
124.	PADYTH SA	Request for waste collection at CH 108+500	7415/26.04.2010	7640/07.05.2010	1477/04.05.2010	Negative reply

#### 4.1.2 Project Designs

The contractual scope of the Constructional Joint Venture is to prepare the relevant construction and other designs for the implementation of the project. Furthermore, the environmental terms of the project referred to the relevant hydraulic and landscaping designs should be carried out. In addition, environmental studies to grant permits for the modifications that arise from the finalization of the works have been assigned. The designs are prepared by the Construction Joint Venture and are submitted to the Concessionaire in order to promote them for approval to the Owner of the Project (Egnatia Odos SA) and the department of YPEKA, i.e. the Special Environment Agency (EYPE). The environmental studies are presented in the following table (table 4.1.2-1).

**Table 4.1.2-1**

#### Joint Ministerial Decision / Road Work Designs

No.	Service Protocol No.	Decision Title / Project Section	Expiration
1.	Joint Ministerial Decision 144504/18.11.2005	"Central Greece (E65) Road Axis / Makrihori - Lamia"	18/11/2015
2.	Joint Ministerial Decision 145521/18.11.2005	"Central Greece (E65) Road Axis / Makrihori - Kalambaka"	18/11/2015



### CENTRAL GREECE MOTORWAY (E-65)

No.	Service Protocol No.	Decision Title / Project Section	Expiration
3.	Joint Ministerial Decision 147014/18.11.2005	"Central Greece (E65) Road Axis / Kalambaka - Egnatia Odos & Agia Paraskevi I/C" for its connection with Egnatia Odos".	18/11/2015
4.	Joint Ministerial Decision 103681/05.05.2006	"Connecting road of the Smokovo I/C with the existing road network".	05/05/2016
5.	Joint Ministerial Decision 146113/12.07.2005	Skarfeia - Thermopiles at the section of Skarfia - Lamia of the PATHE Motorway	12/07/2015
6.	Joint Ministerial Decision 126696/06.06.2007	Amendment of the Joint Ministerial Decision 146113/12.07.2005	06/06/2017
7.	Joint Ministerial Decision 131550/04.05.2003	"Optimization of the National Road to a PATHE motorway, Skarfia - Lamia section, subsection from the beginning of the Thermopiles Interchange to Nea Kiti of Sperhios river".	04/05/2013
8.	Joint Ministerial Decision 146109/30.09.2005	"Optimization of the National Road to a PATHE motorway, section from Nea Kiti of Sperhios river to Roditsa Interchange".	30/09/2015
9.	Joint Ministerial Decision 130665/02.05.2003	"Optimization of the National Road Athens - Thessaloniki to a motorway that will serve Patra - Athens - Thessaloniki - Evzoni (PATHE), Lamia - Rahes section, subsection at CH.3+500 to CH.12+000"	02/05/2013
10.	Joint Ministerial Decision 100198/30.05.2006	"Overall Bypass at Stylida - Karavomylos"	30/05/2016

**Table 4.1.2-1**



## CENTRAL GREECE MOTORWAY (E-65)

### Joint Ministerial Decision / Road Work Designs submitted by the Construction J/V

No	Design Title	Submission J/V Ref. No	Decision of Approval	Observations	Expiration Date
1.	Report for the determination of environmental permit procedures of the modification project of Central Greece Road Axis (E-65) in Lamia – Makrihori section (CH. 0+000 – CH. 14+500)  (Supporting documentation of art.13 of JMD with no 11014/703/Φ104/2003 KYA)	6484/10.03.20110	----	----	----
2.	Report for the determination of environmental permit procedures of the modification project of Central Greece Road Axis (E-65) in Makrihori – Kalampaka section (CH. 85+800 – CH. 137+550)  (Supporting documentation of art.13 of JMD with no 11014/703/Φ104/2003 KYA)	3113/23.07.2009 3786/21.09.2009 4796/27.11.2009 5097/14.12.2009 6005/11.02.2010	----	The design was submitted by EOAE (Egnatia Odos SA) the with protocol no A248145/04.03.2010  The design was returned by EYPE (Special Service of Environment) with protocol no 122785/26.04.2010	----
3.	Design for the Environmental Permit of Toll Stations Construction and Operation in Athens – Thessaloniki National Road, in subsection Skarfia – Thermopiles of Skarfia – Lamia Section, in Agia Triada and Molos I/C.  (File under Article 13 of JMD 11014/703/Φ104/2003)	3907/28.09.2009	122881/ 08.03.2010	The design was submitted by EOAE the with protocol no A238274/27.12.2009	12/07/2015
4.	Design for the Environmental Permit of Toll Stations Construction and Operation in Athens – Thessaloniki National Road, in	4049/08.10.2009	121668/ 08.02.2010	The design was submitted by EOAE the with protocol no	04/05/2013





### CENTRAL GREECE MOTORWAY (E-65)

No	Design Title	Submission J/V Ref. No	Decision of Approval	Observations	Expiration Date
	subsection Arxi Thermopiles I/C – Nea Kiti Spexrhios of Skarfia – Lamia Section, in Thermopiles I/C location.  (File under Article 13 of JMD 11014/703/Φ104/2003)			A240617/17.12.2009	
5.	Design for the Environmental Permit of Toll Stations Construction and Operation in Athens – Thessaloniki National Road, in subsection Roditsa I/C end of Lamia – Rahes Section, in Agia Paraskevi and Mavromandila locations.  (File under Article 13 of JMD 11014/703/Φ104/2003)	4049/08.10.2009	The approval is expected	The design was submitted by EOAE the with protocol no A240618/17.12.2009	----
6.	Design for the Environmental Permit of Toll Stations Construction and Operation in Athens – Thessaloniki National Road, in subsection Agia Marina I/C beginning of Stilida – Rahes I/C of Skarfia - Rahes Section, in Agia Marina I/C of Stilida and Karavomilos locations.  (File under Article 13 of JMD 11014/703/Φ104/2003)	4049/08.10.2009	121667/ 08.02.2010	The design was submitted by EOAE the with protocol no A240619/17.12.2009	30/05/2016

#### 4.1.3 Special Designs

In the context of the implementation of the environmental terms and rational management of the environment, the following special designs were prepared during the 1st semester of 2010.



#### **CENTRAL GREECE MOTORWAY (E-65)**

- Delimitation Design of Iona r., Prefecture of Trikala, in accordance with Article 5 of Law 3010/2002.
- Final Design of Landscaping configuration, Irrigation and Environment Rehabilitation for the section of the Motorway from CH. 0+000 to CH. 6+200
- Final Design of Landscaping configuration, Irrigation and Environment Rehabilitation for the section of the Motorway from CH. 56+000 to CH. 90+500
- Final Design of Landscaping configuration, Irrigation and Environment Rehabilitation for the section of the Motorway from CH. 90+500 to CH.109+500
- Technical Operations Designs of Borrow Pit in "Sykeona location, Sykeona Municipality of Filo, Prefecture of Karditsa
- Technical Operations Designs of Borrow Pit in "Vrontaria" location, Fiki Municipality of Pinalia, Prefecture of Trikala
- Final Landscape Design of the Surrounding area of the Administration Buildings of Agia Triada frontal Toll Stations, Pathe
- Second Quarterly Report of Wildlife Monitoring Program Results

#### **4.2 ANTIQUITIES**

The Constructional Joint Venture is in direct communication with the competent archaeological services. Based on the Concession Agreement and the Design/Construction Agreement, the J/V is responsible for performing trial archaeological cuts following the competent authority's instructions.

The following table (table 4.2-1) presents in detail the archaeological cuts performed during the project.

**\*(table)**

[illegible]

[illegible]

## CENTRAL GREECE MOTORWAY (E-65)



### 4.3 ENVIRONMENTAL MONITORING

#### 4.3.1 Waste Management

All types of waste are being managed based on the requirements of the Greek legislation for the environment and the environmental terms of the project. For the construction of the project, worksites manage waste in accordance with the directives for environmental management, which will be monitored by the Department for the Environment of the Joint Venture, until the completion of the Design - Construction Period.

The following table (table 4.3.1-1) presents the method of waste management which derives from the construction works and other activities.

**Table 4.3.1-1:**  
**Waste Disposal Table**

<b>Waste / Material Type</b>	<b>Origin</b>	<b>Collection &amp; Storage Method</b>	<b>Managing Agency</b>	<b>Actions</b>
Waste Lubricating Oils - Mineral Oils (ALE)	Project machinery & motor-powered equipment	In barrels within the worksites	Licensed Operator for Alternative Waste Lubricating Oils Management (ELTEPE)	Agreement with ELTEPE
Batteries - Accumulators	Project machinery & equipment	In wooden pallets located at special areas	Licensed Operator for Alternative Management	Agreement with SYDESYS S.A.



## CENTRAL GREECE MOTORWAY (E-65)

Waste / Material Type	Origin	Collection & Storage Method	Managing Agency	Actions
			(SYDESIS S.A.)	
Vehicle tires	Project vehicles	In safe open areas within the worksite	Licensed Operator for Alternative Management (EKOELASTIKA S.A.)	Agreement with EKOELASTIKA S.A.
Metallic scrap	Project Construction	In safe open areas within the worksite	Any licensed metal collector	Transportation where scrap is produced
Wooden palettes	Procurement of materials for the construction of the project	In open areas within the worksite	Any palette trader / manufacturer	Transportation
Solid hazardous waste	Equipment maintenance, project construction	In safe special areas within the worksites	Any licensed collector of solid hazardous waste	Agreement with the body for alternative hazardous waste management
Liquid hazardous waste	Equipment maintenance, project construction, material excess	In barrels within the worksites	Any licensed collector of liquid hazardous waste	Agreement with the body for alternative hazardous waste management
Electrical & Electronic Equipment (AHHE)	Worksites, Lighting maintenance	In predefined areas within the worksites	Licensed Operator for Alternative Management (APPLIANCES RECYCLING S.A.)	Agreement with APPLIANCES RECYCLING S.A.
Municipal solid	Worksites,	In municipal litter	The Municipal	Agreement or



### CENTRAL GREECE MOTORWAY (E-65)

Waste / Material Type	Origin	Collection & Storage Method	Managing Agency	Actions
waste	offices	bins	Authorities	cooperation
Other solid waste (paper)	Worksites, trial laboratories	In litter bins within the worksites	Any licensed collector of solid non-hazardous waste	Application to Municipalities Working with P.A.DY.TH. SA (Environmental Development of Western Thessaly SA)
Liquid waste	Site Offices	Waterproof cesspits	Any licensed subcontractor	Waterproof cesspits
Liquid waste	Asphalt mix & concrete manufacturing unit	Oil-Dirt collector - settlement tank	Any licensed collector of liquid non-hazardous waste	Agreement with subcontractor

The quantities of waste which are being ecologically managed shall be submitted in the annual report as of January 2010. It is noted that a large part of the produced waste is processed via permanent and legitimate facilities that take part in the construction of the project and that comply with the applicable legislation on waste disposal.

**Table 4.3.1-2:**

### Waste Disposal Table

Waste / Material Type	EKA Code	Method of management (quantities in kilos, c.m. pieces, etc.)				Observations
		Recycling /regeneration	Temporary storing	Temporary deposit	Permanent Disposal/A availability	

### CENTRAL GREECE MOTORWAY (E-65)

Vehicle tires	16 01 03		Storing on wooden pallets in a specially designed area within worksites			Temporary storing of 20 pieces
Batteries - Accumulators	16 06 01		Storing on wooden pallets in a specially designed area within worksites			Temporary storing of 20 pieces
Waste engine oils, turbine and hydraulic systems	13 01 10, 13 01 11, 13 01 13, 13 01 13, 13 03 07, 13 03 08, 13 03 09, 13 03 10	---	Temporary storing in barrels in specially designed areas within the worksites	---	Διάθεση of 4.750 l. in ELTEPE S.A.	---

\*Temporary storage within the facilities of the Joint Venture or the participants

\*\* Temporary storage of materials that will be used for the project

\*\*\* *European Waste Catalogue* (OGG 383B/28.03.2006)



Waste recycling using special bins



## CENTRAL GREECE MOTORWAY (E-65)



Storage of electronic equipment in the worksite at Anavra



Storage of scrap in the worksite at Anavra.



Storage of used batteries and mineral oils in the worksite of Anavra

### 4.3.2 Air Pollution

A parameter control plan is under development in order to reduce impact on the community, on the natural environment, etc.

## CENTRAL GREECE MOTORWAY (E-65)



According to the Environmental Impact Assessment (EIA) of the road works, no excess of dust emission limit is expected greater than 20m from the works at all the length of the motorway under construction and worksite areas. However, all necessary measures to reduce dust emission are taken, such as water springing, filter bags etc.



Photo 1. Installed semi-permanent sprinkler for the worksite at T2 in order to reduce dust emission



Photo 2. Systematic springing of the worksites in order to reduce dust

## CENTRAL GREECE MOTORWAY (E-65)



### 4.3.3 Vibrations

A parameter monitoring plan is under development in order to reduce impact on the community, on traffic, on public utility networks, etc.

So far, and taking into account that the construction works have not progressed, there are no relevant measurements. Measurements shall be presented in the annual report of January 2011.

### 4.3.4 Noise

The Construction Joint Venture monitors during the entire construction process the noise emitted in order to ensure compliance with the applicable noise levels provided by the law and in the event of exceeding the limits all required measures are taken.

By applying our noise emitting monitoring program to a distance of 200m from the point of each construction work, it is possible to compare it with the daily limit of energy noise level (**Leq**), which should not exceed 65 dB(A).

To record noise during the construction stage, measures were taken during the period from 12/2009 to 06/2010. For this specific period, the sites to which measurements were performed are the following:

- ┐ Cut construction works
- ┐ Anavra I/C construction works
- ┐ Onohoros bridge construction works
- ┐ Under-pass – OSE interchange construction works
- ┐ Karditsa I/C construction works
- ┐ Embankment construction works at section CH. 90+500 – CH. 109+500
- ┐ T2 tunnel exit construction works



## **CENTRAL GREECE MOTORWAY (E-65)**

The specific measurements feature sampling of noise emissions during the construction works

The above mentioned measurements record the noise emitted during the operation of the machines at the worksites.

Furthermore, for the estimation of the existing situation, a series of sound measurements were performed at some crucial locations (e.g., Sperhios river, 'Proastio' worksite), at a period to which no construction or operation works were performed. The aim of the specific measurements is the comparison of the results taken to those recorded during the full scale of works.

### Measurement instruments

For the execution of the noise emission measurements the following instruments were used:

- CASTLE type 2 Integrating precision Echo meter, model GA 216 I, in compliance to IEC61672-1-2002 specifications. Echo meter calibrator CASTLE GA 601.
- Type I Integrating precision Echo meter, in compliance to IEC (1979) and 804 (1985) Type 1, ANSI S1.4-1983 & Draft S 1.43, 6.9.92, Type 1S, and BS 5969:1981 Type 1. Bruel & Kjaer Precision Integrating Sound Level Meter Type 2236. Measurements: MaxL, MinL, Peak, SPL, L eq, L N (e.g. L1, L10, L90), SEL, IEL, L EPd. Echometer Calibrator. Lutron SC -64

### Noise indices

The aim of noise measurement is to record noise emissions from the construction works in conjunction with the possible points of increased noise, in order to take all noise protection measures required. For the specific aim, at every measurement the Leq noise indices were recorded: Equivalent constant sound level (in compliance to IEC 651) in dB(A).

### General characteristics of sound measurements

The time period of the sampling noise measurements was 7-10 min, that is the time required to fully record the noise incident.



## CENTRAL GREECE MOTORWAY (E-65)

The sampling measurements were taken in the perimeter of each work spot and at a distance of 200m (location A1-A4) and 400m (location B1-B4) approximately, or at selected points to which the closest sensitive receiver is located at, during the operation of various types of machines. The purpose of these measurements was to record the acoustic environment that includes noise caused by the construction and noise caused by other sources, which may affect adversely the adjacent to the worksite areas and the structure faces there.

### Results of the sampling worksites noise emission measurements

During the noise emission measurements smooth atmosphere conditions were observed, whereas no other source of noise was detected with the exception of the usual ambient noise and the worksite sources, except for the worksite of the Karditsa I/C, close to the National Road from Karditsa to Athens.

The average atmosphere conditions during the noise measurements were the following:

- Temperature from 15 to 35 °C
- Exposure to sunlight
- Weak winds

The results of the measurements are presented in the following tables per section and structure face.

### **Section S1 : Lamia – Makrihori (CH. 0+000 – CH. 85+800)**

#### ■ CH 0+000 – CH. 6+200

Sperhios river - CH. 2+150									
LOCATIO N	COORDINATES		DATE	TIME	DURATION (min)	Leq	L95	L10	L50
	D	Y							
A1	367408,0 3	4299321,47	09.02 .2010	13:3 0	3	44.8	<40.0	41.0	41.0



## CENTRAL GREECE MOTORWAY (E-65)

- The location related to point A1 is within the intervention area, at a distance of approximately 5m from the limit of Sperhios river. The noise measure stands for the existing noise environment situation at Sperhios river area, given that during the measurement no operation whatsoever was performed.

### CH. 28+550 – CH. 43+200

T2 exit - CH. 30+000									
LOCATION	COORDINATES		DATE	TIME	DURATION (min)	Leq (dB)	L95 (dB)	L10 (dB)	L50 (dB)
	D	Y							
A1	350843,83	4319210.20	29.04.2010	15:44	7	65.4	57.5	67.5	60.5
A1	350843,83	4319210.20	21.06.2010	10:38	9:30	81.0	-	-	-

\* the spaces of the measurements correspond to very low values and the sound meter was not set to record them (<40.0db).

- The location related to point A1 is located at the north extremity of Agnatero village of Karditsa Prefecture and was performed during the compaction works of the backfill under development. During the measurement that took place on 21.06.2010, an explosion was carried out in terms of the tunnel construction works.

### CH. 43+200 – CH. 60+500

CUT - CH. 58+500			
MAP POINT	COORDINATES		RESULT (dB)
	D	Y	
A1	334067,88	4339777,12	61,8
A2	334143,43	4340048,93	63,7
A3	333872,74	4340125,57	64,9



## CENTRAL GREECE MOTORWAY (E-65)

A4	333795,66	4339853,91	64,5
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<b>CUT - CH. 58+500</b>			
MAP POINT	COORDINATES		RESULT (dB)
	D	Y	
B1	334365,32	4339889,61	57,5
B2	334090,88	4340332,97	58,5
B3	333575,53	4340016,99	57,8
B4	333849,44	4339570,27	56,3

- The location that corresponds to point B1 is approximately 400 m away from the worksite and 450 m away from the nearest village of Anavra. Therefore, Anavra village, is approximately 1km far from the source of noise.

<b>ANAVRA I/C - CH. 59+888</b>			
MAP POINT	COORDINATES		RESULT (dB)
	D	Y	
A1	333568,34	4341059,33	63,5
A2	333760,59	4341266,46	64,3
A3	333553,33	4341458,79	63,8
A4	333361,09	4341251,56	62,5

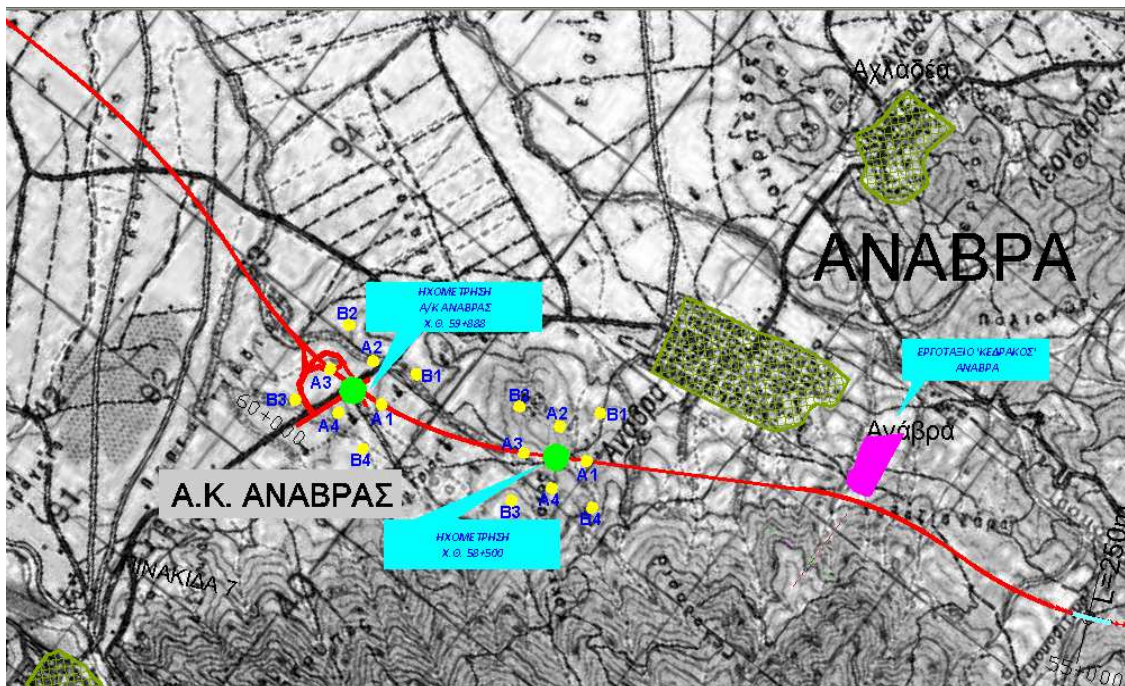
<b>ANAVRA I/C - CH. 59+888</b>		
MAP	COORDINATES	RESULT



## CENTRAL GREECE MOTORWAY (E-65)

POINT	D	Y	(dB)
B1	333859,4998	4340994,395	61,8
B2	333852,3847	4341532,335	60,5
B3	333259,9327	4341524,036	61,1
B4	333269,345	4340984,553	60,3

- In this particular structure face of the underpass there are not possible disturbance sites. The nearest village of Anavra is approximately 2km far from the worksite.





## CENTRAL GREECE MOTORWAY (E-65)



### CH. 60+500 – 90+500

<b>STRUCTURE - CH. 68+900</b>			
<b>MAP POINT</b>	<b>COORDINATES</b>		<b>RESULT (dB)</b>
	<b>D</b>	<b>Y</b>	
A1	334351.59	4349999.95	59.4
A2	334598,85	4349807,78	60.0
A3	334748,85	4349999,95	61.2
A4	334496,28	4350194,11	59.8

<b>STRUCTURE - CH. 68+900</b>			
<b>MAP POINT</b>	<b>COORDINATES</b>		<b>RESULT (dB)</b>
	<b>D</b>	<b>Y</b>	
B1	334260,32	4349759,16	58,6
B2	334871,57	4349821,15	59,2
B3	334818,02	4350332,71	60,3
B4	334208,87	4350269,29	60,5

In this particular worksite, there are no disturbance sources.

<b>ONOHONOS BRIDGE - CH. 70+420</b>		
<b>MAP</b>	<b>COORDINATES</b>	<b>RESULT</b>



### CENTRAL GREECE MOTORWAY (E-65)

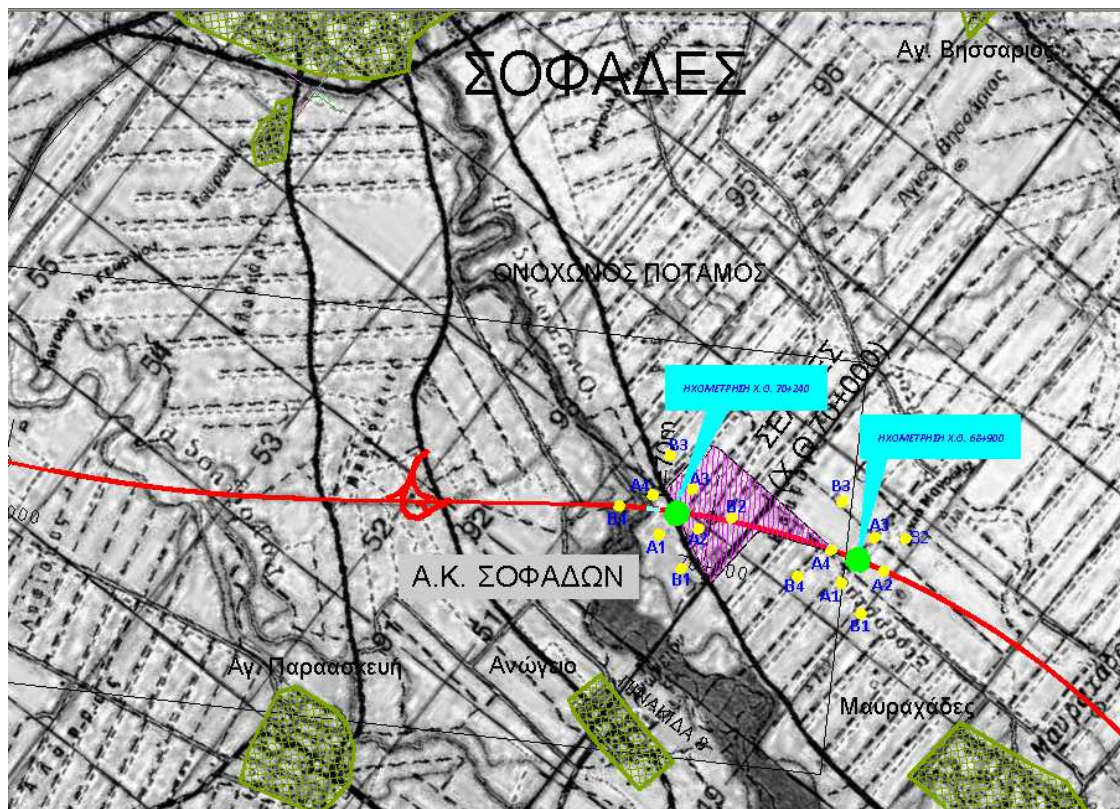
POINT	D	Y	(dB)
A1	333859.58	4351201.41	59.4
A2	334150,6	4351057,94	60.0
A3	334259,58	4351231,4	61.2
A4	333962,43	4351401,51	59.8

### ONOHONOS BRIDGE - CH. 70+420

MAP POINT	COORDINATES		RESULT (dB)
	D	Y	
B1	333763,37	4350962,59	56,8
B2	334262,72	4350887,07	60,0
B3	334355,54	4351500,48	57,6
B4	333857,12	4351571,41	60,5

📌 In this particular bridge site, there are no disturbance sources.

## CENTRAL GREECE MOTORWAY (E-65)



Κ.Δ. - CH. 76+700			
MAP POINT	COORDINATES		RESULT (dB)
	D	Y	
A1	330898,3	4356594,46	61,8
A2	330987,66	4356868,66	60.0
A3	330717,45	4356950,38	61.2
A4	330634,43	4356680,99	61,3

Κ.Δ. - CH. 76+700



### CENTRAL GREECE MOTORWAY (E-65)

MAP POINT	COORDINATES		RESULT (dB)
	D	Y	
B1	331157,44	4356586,94	58,6
B2	331007,38	4357127,88	59,2
B3	330459,11	4356977,24	57,5
B4	330606,47	4356435,59	58,4

┐ In this particular underpass construction site, there are no disturbance sources.

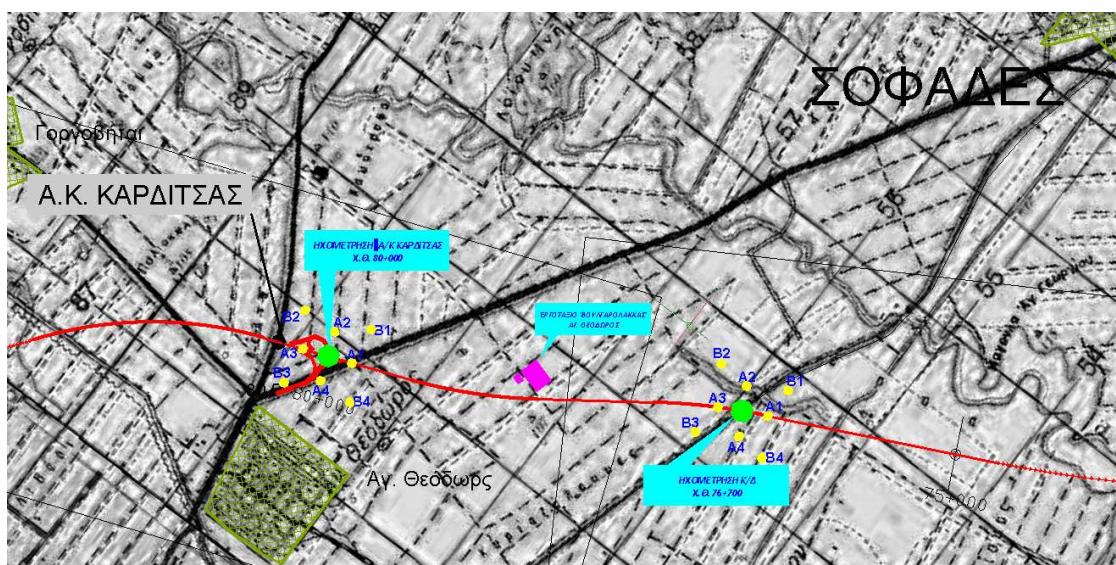
KARDITSA I/C - CH. 80+000			
MAP POINT	COORDINATES		RESULT (dB)
	D	Y	
A1	329288,49	4359458,72	64,9
A2	329405,36	4359716,29	64,1
A3	329147,79	4359833,16	64,4
A4	329030,92	4359575,6	63,5

KARDITSA I/C - CH. 80+000			
MAP POINT	COORDINATES		RESULT (dB)
	D	Y	
B1	329588,78	4359495,52	60,2
B2	329402,26	4360000,85	61,3

### CENTRAL GREECE MOTORWAY (E-65)

B3	328847,5	4359796,35	58,0
B4	329033,81	4359290,94	59,4

- In this particular worksite, the results of the measurements are affected to a large extent by the traffic noise due to the fact that it is adjacent to the National Road Karditsa - Athens.



### ■ CH. 90+500 – CH. 109+500

T2 exit - CH. 102+000									
MAP POINT	COORDINATES		DATE	TIME	DURATION (min)	Leq	L95	L10	L50
	D	Y							
A1	315329,99	4373274,21	10.02.2010	11:00	5	46.8	55.0	60.5	58.5
A2	320402,43	4372511,14	21.06.2010	13:16	7	46.8	-	48.0	41.5





## CENTRAL GREECE MOTORWAY (E-65)

\* the spaces of the measurements correspond to very low values and the sound meter was not set to record them (<40.0db).

- The location related to point A1 is at the north extremity of Agnatero village of Karditsa Prefecture and was performed during the compaction works of the backfill under development. The Position related to point A2 is located at the limit of the 'Proastio' worksite (IS6N1) under approval is at a distance of 210m. approximately from the eastern limit of Proastio village of Karditsa Prefecture. During the measurement procedure at A2 point transportation and storage works for the material and equipment of the worksite were performed.

### Conclusions

*According to the results of the above mentioned measurements, the noise emitted due to various construction works doesn't affect any area close to the works, given that all measurements performed fall within the applicable limits provided by the standing legislative framework, as well as from the Environmental Terms of the project.*

*The noise measurements will continue throughout the entire construction phase, in order for all required noise protection measures to be taken.*

### Noise Protection Measures

In compliance with the Environmental Terms of the project, the Construction Joint Venture will take additional measures against the noise produced. The specific measures relate to the limitation of nuisance caused to the fauna of Sperhios river area. Namely, the additional measures are:

- The superposition of movable noise barriers at the perimeter of the points of noise-emitting works, (e.g. positioning of pegs)
- The limiting of use of percussion drills, peg positioning equipment, as well as the permit to use explosive materials.-{}-
- The determination of movement-specific paths of the vehicles required at the worksite.
- The acceleration of the completion of the works.

## CENTRAL GREECE MOTORWAY (E-65)



Photo 1. Superposition of movable noise barriers at the worksite of Sperhios river bridge (nea kiti - CH. 4+560 approximately)



Photo 2. Absorption material for the development of the movable noise barriers at Sperhios river bridge area.

### 4.3.5 Water resources

### **CENTRAL GREECE MOTORWAY (E-65)**

All measures related to the prevention of pollution - burden to the water are taken. For the specific purpose, holding tanks connected to oil removers have been developed at various worksites. A monitoring of the perimeter plan is been compiled at the source of pollution (runoff tanks). At present, no relevant measurements are available. Measurements shall be presented in the annual report of January 2011.

At the protection of the water resources framework, specialized risk assessment studies for the treatment of accidental pollution and the avoidance of pollution of ecologically sensitive wetlands of:

- Sperhios river
- Kalentzi river
- Pinios river

with oils or hazardous substances.

In the protection of the water resources framework during the development of the project phase, a series of measures are taken, featuring the operation of oil removers, settling tanks, biological cleaning, chemical toilets, etc.



Double settlement tank at the exit of tunnel T2, for the retention of suspended particles and the dealing with opacity of water for the natural recipients. PH measurements at the exit of the tank and its confluence to the natural recipient indicated that the PH of the waters of the natural recipient remains stable.



## CENTRAL GREECE MOTORWAY (E-65)



Use of chemical toilets at the worksite. Installation of a compact biological cleaning station for the process of urban sewage.

Furthermore, the use of hazardous substances is limited to the minimum required, as is the case with other substances that may alter the qualitative characteristics of the water sources.



## CENTRAL GREECE MOTORWAY (E-65)



Use of non-alkaline solidification accelerators for shotcrete.



Operation of a closed and sealed concrete mixer.

#### CENTRAL GREECE MOTORWAY (E-65)



Installation of an oil remover at Ayioi Theodoroi of Karditsa Prefecture worksite.

#### 4.3.6 Natural Environment

A special monitoring program for wildlife is applied. The results of the monitoring program are submitted quarterly to the Division of Environmental Planning of YPEKA. To date two reports of the program's results have been submitted and they were referring to the periods of:

- August-September-October 2009
- November-December 2009 and January 2010

It is noted that the monitoring program is based on similar wildlife monitoring programs which have been developed in the wider region and concern E65 Motorway. More specifically, because of the location, closeness of the projects





#### **CENTRAL GREECE MOTORWAY (E-65)**

E65 Motorway and New rail line between Lanokladi RS - Domokos RS and the synergistic effects of the two projects both in the construction phase and during their operational phase, the first phase of the program implemented by “ERGA OSE SA” (Hellenic Railways Organisations Projects) took into account the E65 Motorway too. The above are applied for the motorway section up to CH. 48+000 approximately. Also, in the project area and particularly in the north part, a relevant wildlife monitoring program has been developed (first phase) under Egnatia Odos SA responsibility. As part of its obligations, the Construction JV continues the above programs. The ultimate goal of the above is the most comprehensive handling of the effects caused by the large infrastructure projects in the ecosystem (fauna) of the project area. Two most recognized non-governmental organizations, Arcturus and Callisto are also involved in the overall effort.

#### **4.4 ENVIRONMENTAL ACCIDENT**

There is a provision for managing and handling disasters such as fire or accidents such as leakage of substances, etc.