


SEMI-ANNUAL REPORT
FOR THE ENVIRONMENTAL MANAGEMENT AND IMPLEMENTATION OF
ENVIRONMENTAL TERMS DURING
OPERATION AND MAINTENANCE OF
A) PATHE MOTORWAY SECTION “METAMORFOSSI – SKARFIA”
B) IONIA ODOS SECTIONS “AGRINIO & ARTA BYPASS”

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

Date	31.07.2017
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REFERENCE PERIOD
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**SEMI-ANNUAL REPORT
FOR THE IMPLEMENTATION OF ENVIRONMENTAL TERMS
DURING OPERATION AND MAINTENANCE**

1 INTRODUCTION

This Report is an approach to the Environmental Management Processes and the observance of the Environmental Terms of the Operator **NEA ODOS S.A.** for the first semester of 2017 (01.01.2017 to 30.06.2017).

The implementation of a program for monitoring the environmental impact from NEA ODOS S.A., apart from being dictated by the environmental terms of the project, is done in such a way that it has multiple beneficial nature to the man-made and the natural environment of the areas of influence, as well as to serve in the best possible way the users, where the PATHE Motorway crosses, Metamorfossi – Skarfia section 172 km. and IONIA ODOS operating sections “Agrinio Bypass” 32,77 km and “Arta Bypass” 16,05 km.

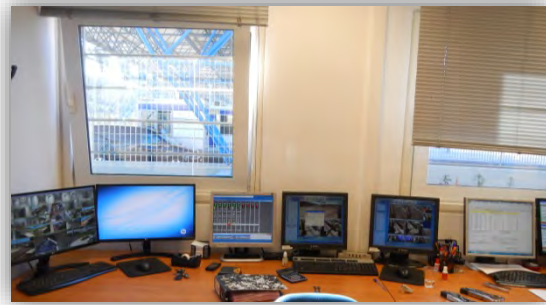


To begin with, monitoring of environmental and social parameters is done in such a way that enables early recognition of harmful tendencies and permits the reduction and/or elimination of the negative effects, by intervening with suitable protective measures. Additionally, the constant monitoring enables the verification of the effectiveness of the proposed



protection measures, so that the protection of the environmental parameters affected by construction of the works for the maintenance and improvement of the motorway is secured over time. The diligent collection and recording of qualitative and quantitative evidence during constant E.T. monitoring also aims to promote further awareness on the impacts that the construction of such projects may have on similar environments. It is pointed out that such an experience in Greece is rather limited but on the other hand, particularly useful whereas it renders the foresight of impact in similar works easier and the quantitative determination thereof more accurate.

A complete environmental monitoring program is implemented on PATHE motorway “section Metamorfossi – Skarfeia” which complies with the Environmental Terms, as these are analysed below.



1.1 PROJECT OWNER

The Project Owner is the Directorate of Operation, Maintenance and Development of Infrastructure with a Concession Agreement (Directorate Δ17), (Supervisor: Ms E. Kanellopoulou, 70 Panormou Str 70, 115 23 Athens).

2 PATHE MOTORWAY, SECTION "METAMORFOSSI – SKARFEIA"

2.1 PATHE Motorway

State: Hellenic Republic

Concessionaire: NEA ODOS S.A.

Motorway: PATHE

Section: Metamorfossi – Skarfeia

The PATHE motorway at the **section Metamorfossi – Skarfeia** includes:

1. 30 (thirty) Junctions

- Metamorfossi I/C CH. 15+570
- Tatoi I/C, CH. 16+795
- Pyrna I/C, CH. 18+770
- Kalyftaki I/C, CH. 20+060
- Varympompi I/C, CH. 23+225
- Mpogiati I/C, CH. 27+960

- Afidnes I/C, CH. 33+765
- Kapandriti I/C, CH. 35+240
- Markopoulo I/C, CH. 39+370
- Malakassa I/C, CH. 44+130
- Oinofyta I/C, CH. 55+690
- Oinoi I/C-1st branch, CH. 62+915
- Chalkida I/C, CH. 65+820
- Semi-junction Schimatari A, CH. 66+385
- Semi-junction Schimatari B, CH. 67+655
- Ritsona I/C, CH. 75+520
- Thebes I/C, CH. 89+835
- Camp I/C, CH. 100+270
- Akraifnio I/C, CH. 107+320
- Kastro I/C, CH. 114+815
- Martino I/C, CH. 125+770
- Malesina I/C, CH. 129+095
- Tragana I/C, CH. 137+475
- Atalanti I/C, CH. 145+325
- Livanates I/C, CH. 149+555
- Arkitsa I/C, CH. 154+500
- Loggos I/C, CH. 166+180
- Latomeio I/C, CH., CH. 172+640
- Semi-junction K. Vourla (West), CH. 177+585
- Semi-junction K. Vourla (East), CH. 179+895

2. 3 (three) Frontal & 10 (ten) Lateral Toll Stations

i. Frontal

- Afidnes near, CH. 32+355
- Thebes near, CH. 96+115
- Tragana near, CH. 135+715

ii. Lateral

- 2 on the Kapandriti I/C, CH. 35+240
- 2 on the Malakassa I/C, CH. 44+130
- 2 on the Oinofyta I/C, CH. 55+690
- 2 on the Thebes I/C, CH. 89+835
- 2 on the Tragana I/C, CH. 137+475



3. 4 (four) Motorists Service Stations

- Varympompi MSS (towards Athens), CH. 24+535
- Kapandriti MSS (towards Lamia), CH. 36+455
- Malakassa MSS (Bilaterally), CH. 47+875

- Schimatari MSS (Bilaterally), CH. 70+695
- Atalanti MSS (Bilaterally), CH. 144+200

4. 13 (thirteen) Temporary Parking Areas with WC facilities

- Parking Area (towards Athens), CH. 38+387
- Parking Area (towards Athens), CH. 63+926
- Parking Area (towards Lamia), CH. 64+007
- Parking Area (towards Lamia), CH. 83+473
- Parking Area (towards Athens), CH. 84+439
- Parking Area (towards Lamia), CH. 97+960
- Parking Area (towards Athens), CH. 98+310
- Parking Area (towards Lamia), CH. 110+718
- Parking Area (towards Athens), CH. 113+668
- Parking Area (towards Lamia), CH. 131+068
- Parking Area (towards Athens), CH. 133+972
- Parking Area (towards Athens), CH. 141+620
- Parking Area (towards Lamia), CH. 142+400



5. 8 (Eight) Winter Maintenance Stations

- Varympompi WMS, CH. 24+535
- Markopoulo WMS, CH. 38+700
- Schimatari WMS, CH. 63+500
- Thebes WMS, CH. 89+835
- Akraifnio WMS, CH. 107+320
- Martino WMS, CH. 125+770
- Tragana WMS, CH. 135+715
- Latomeio WMS, CH. 173+300

6. 6 (six) Tunnels

- CH. 168+609 to, CH. 169+300 (Bilaterally)
- CH. 173+380 to, CH. 175+920 (Bilaterally)
- CH. 176+110 to, CH. 176+380 (Bilaterally)

7. Other support facilities for the operation of the motorway

- Administration building, CH. 23+225
- Customer service building and Parking Areas on the site of Afidnes toll station, CH. 32+355
- Police building, CH. 32+355

- Markopoulo MCC (Maintenance Buildings), CH. 38+700
- Thebes MCC (Maintenance, Fire-fighting and Police Buildings), CH. 89+835
- Traffic Management Center (TMC), CH. 63+500
- Atalanti MCC (Maintenance, Fire-fighting and Police Buildings), CH. 145+325
- Tunnel Control Center, CH. 175+950

The sections of the Concession Contract Project are divided in seven (7) Geographical Units (GU).

S/N	SECTION	Km
1	Metamorfosi – Yliki Section	80.366
2	Yliki – Kastro Section	20.712
3	Kastro – Tragana Section	20.383
4	Tragana – Arkitsa Section	18.77
5	Arkitsa – Agios Konstantinos Section	10.37
6	Agios Konstantinos – Kamena Vourla Section	16.11
7	Kamena Vourla – Mendenitsa (Skarfeia) Section	3.74

2.2 IONIA ODOS Motorway

State: Hellenic Republic

Concessionaire: NEA ODOS S.A.

Motorway: IONIA ODOS

Section: Antirrio – Ioannina

Ionias Odos includes:

1. 19 (nineteen) Junctions

- Antirrio I/C, CH 0+800
- Gavrolimni I/C, CH. 14+270
- Evinochori I/C, CH. 23+300
- Messolonghi I/C, CH. 27+530
- Chaliki I/C 47+200
- Agios Elias I/C, CH. 51+250
- Aggelokastro I/C, CH. 55+500
- Rigani I/C, CH. 60+200
- Kouvaras I/C, CH. 75+500
- Amvrakia I/C CH. 84+670

- Amfilochia I/C, CH. 101+260
- Kompoti semi-junction, CH. 125+700
- Arta I/C, CH. 135+400
- Filippiada I/C, CH. 147+270
- Semi-junction Ammotopos, CH. 154+230
- Gorgomilos I/C, CH. 163+110
- Terovo I/C, CH. 175+700
- Avgo I/C, CH. 187+000
- Egnatia I/C, CH. 196+000

2. 4 (four) Frontal & 10 (ten) Lateral Toll Stations

a. Frontal:

- Klokova – Messolonghi, CH. 10+100
- Aggelokastro – Fyteies, CH. 57+212
- Kompoti, CH. 111+300
- Gorgomilos – Avgo, CH. 187+600

b. Lateral:

- 2 on the Gavrolimni I/C at CH. 14+300
- 2 on the Messolonghi I/C at CH. 27+530
- 2 on the Kouvaras I/C at CH. 75+500
- 2 on Arta I/C at CH. 135+400
- 2 on Gorgomilos I/C at CH. 163+110

3. 9 (nine) Motorists Service Stations

- On Evinochori I/C at CH. 22+400 (bilaterally)
- In Amvrakia at CH. 81+200 (bilaterally)
- In Amphilochia at CH. 95+500 at the right side
- In Filippiada at CH. 148+800 (bilaterally)
- In Episkopiko at CH. 189+600 (bilaterally)

4. Maintenance and Operation Canters (MCC, Fire Department and Police Buildings)

- On the Messolonghi I/C at CH. 26+900
- In the Amphilochia MSS at CH. 95+500
- In the Filippiada MSS at CH. 148+800

5. 4 (four) Tunnels

- Makyneia Tunnel, 542 m long, at CH. 4+000
- Klokova Tunnel, 2950 m long, at CH. 6+380
- Kalydona Tunnel, 1200 m long, at CH. 24+020

- Ampelia Tunnel, 900 m long, at CH. 192+000

6. **Bridges**

- Makyneia Bridge at CH. 3+850
- Evinos River Bridge at CH. 19+300
- Xirorema Bridge (G019) at CH. 100+598
- Krikelo Bridge 1(G029) at CH. 106+430
- Krikelo Bridge 2 (G031) at CH. 106+996
- Menidi Bridge (G043) at CH. 118+564
- Gymnotopos Bridge at CH. 158+120
- Bridge (Brd 162) at CH. 162+301
- Tsagaropoulou Bridge at CH. 166+508
- Bridge (Brd 167) of a length of 105 m. at CH. 167+260
- Kryfovo Bridge of a length of 280 m. at CH. 183+482
- Bridge of a length of >300 m. at CH. 118+304
- Bridge of a length of 430 m. at CH. 166+508
- Bridge of a length of 280 m. at CH. 183+482
- Bridge of a length of 254 (d) & 259 m. (a) μ. at CH. 19+300
- Bridge of a length of 252 m. at CH. 158+120
- Bridge of a length of 105 m. at CH. 162+354
- Bridge of a length of 105 m. at CH. 167+260
- Bridge of a length of 67.5 (d) & 102 m. (a) at CH. 3+850
- Bridge of a length of 50 m. at CH. 100+598

The sections of the Project are divided in five (5) Geographical Units (GU)

S/N	SECTION	Km
1	Antirrio – Kefalovryssos Section (South Agrinio Bypass End)	42,66
2	Agrinio Bypass Section	32,77
3	North Agrinio Bypass End (Kouvaras) – South Arta Bypass End (Kompoti)	53,36
4	Arta Bypass Section	16,05
5	North Arta Bypass End (Filippiada) - Ioannina (Eleousa)	50,30

3 PROJECT OWNER

The Owner of the Project in question is the Special Service of Public Works – Construction Projects with a Concession Agreement of Central and Western Greece (EYDE/ CP C&W GR), (Supervisor: Mr. Z. Karvounis, telephone number: 210-6992217, eyde.epaio.dir@ggde.gr).

4 ENVIRONMENTAL AUTHORISATION

4.1 JMD-ETA and their validity – Present Situation

The per-section validity period of the approved environmental terms for the PATHE section Metamorfosi – Skarfeia as well as the authorizations issued are presented in the following table:

S/N	Section	E.T. Validity	Authorizations issued
1	Metamorfossi – Yliki Section	<p>The terms are in the process of renewal.</p> <p>The Concessionaire has filed a File for the Renewal of the Decision for the Approval of Environmental terms (AEPO) for the PATHE section "Metamorfosi-Yliki" under protocol Number 41729/24-10-2016. The Renewal File was forwarded by EYDE/K.E.S.P.K.& D.E to DIPAYPEN under protocol Number A/1/00β/08/24/11298, 26.10.2017. The file was filed within the period provided for in paragraph 4 of article 5 of Law 4014/2011, thus the existing AEPO remains in force.</p>	<ul style="list-style-type: none"> • No EYPE 113451/21-12-2001 exemption from ETA to address landslide at Malakassa • JMD No 126119/08-02-2007, E.T. Approval • No EYPE 144265/22-09-2009 E.T. amendment • No 143730/10-11-2009, Approval of noise protection measures. • No EYPE 141083/20-10-2009 Construction and operation of MCC at Kapandriti and Thebes approval • No EYPE 196674/25-02-2011 Evaluation of environmental variations by the construction and operation of the administration building at Varympompi. • No DIPA 151044/03.08.2015 TEPEM approval for the general administration building of PATHE at Varympompi (CH. 18+600). • No DIPA 151494/29.10.2015 TEPEM approval for the relocation of the maintenance building from Kapandriti MCC to Malakassa area • No EYPE 195827/31-01-2011 Evaluation of variations by the construction and operation of six Parking Areas. • No EYPE 172045/09-04-2014 TEPEM approval for Hellenic Police's vehicle refueling facilities at Thebes.

			<ul style="list-style-type: none"> • No DIPA 153346/15.12.2015, TEPEM approval for the relocation of the police building from the environmentally authorized position Kapandriti MCC (CH. 29+000) to Afidnes area. • No DIPA 100451/30.05.2016, Evaluation of compliance documentation of at-grade I/C 1 Final Design at Malakassa I/C area. • No DIPA 39764/24.08.2016, Evaluation of compliance documentation of Oinoi at-grade I/C (IKL1) Final Design at Oinoi I/C area. • No EYPE 122399/1-4-2010 Construction and operation approval of Winter Maintenance stations at PATHE. • No EYPE 195241/12-01-2011 Atmospheric pollution and meteorological data stations on the Motorway approval. • Air & Noise Pollution Control (EARTH) Document: 213863/30-11-2012: Noise barrier EAMYE approval for 3rd Lyceum of Kifissia (15+426 - 15+573), and AKKV (171+316 - 171+360 and 178+604 - 178+881) • No EYPE 200817/23-07-2012 E.T. amendment (side network) • No EYPE 200858/25-7-2012 No need to modify the E.T. for the installation and operation of customer service building and Parking Areas on the site of Afidnes toll station. • No DIPA 145495/21.01.2015 E.T. Amendment about the Parking Areas, the future motorists service stations positions of the motorway and the lateral toll stations of Oinofyta. • MD 1170/16-01-2018 E.T. amendment for the alteration of Kifissia, Varympompi interchange (with lateral toll stations) and the lateral toll stations of Ag. Stefanos. • MD 61030/1796/17-09-2018 Environmental terms renewal for the Metamorfosi – Yliki, Yliki – Kastro, Kastro –Tragana and Arkitsa –Ag. Konstantinos sections of the PATHE motorway.
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			<ul style="list-style-type: none"> No YPEN/DKAPA/15969/656/21-03-2018 EAMYE approval for, CH. 21+080 to Athens. No 10300/6-6-2018 TEPEM approval for the MeCH. Laboratories, wash – lubrication facilities at Thebes, Martino & Atalanti MCC.
2	Yliki – Kastro	<p>The terms are in the process of renewal.</p> <p>The Concessionaire has filed a File for the Renewal of the Decision for the Approval of Environmental terms (AEPO) for the PATHE section "Metamorfosi-Yliki" under protocol Number 41729/24-10-2016. The Renewal File was forwarded by EYDE/K.E.S.P.K.& D.E to DIPA/MINENV under protocol Number A/1/00β/08/24/11298, 26.10.2017. The file was filed within the period provided for in paragraph 4 of article 5 of Law 4014/2011, thus the existing AEPO remains in force.</p>	<ul style="list-style-type: none"> JMD No 101617/22-09-2006 & 36118/94/10-07-1995, Approval of environmental terms JMD No 140792/12-06-2009, E.T. amendment No 143730/10-11-2009, Approval of noise protection measures. No DIPA 145495/21.01.2015 E.T. Amendment about the Parking Areas, the future motorists service stations positions of the motorway and the lateral toll stations of Oinofyta.
3	Kastro – Tragana Section	<p>The terms are in the process of renewal.</p> <p>The Concessionaire has filed a File for the Renewal of the Decision for the Approval of Environmental terms (AEPO) for the PATHE section "Metamorfosi-Yliki" under protocol Number 41729/24-10-2016. The Renewal File was forwarded by EYDE/K.E.S.P.K.& D.E to DIPA/MINENV under protocol Number A/1/00β/08/24/11298, 26.10.2017. The file was filed within the period provided for in paragraph 4 of article 5 of Law 4014/2011, thus the existing AEPO remains in force.</p>	<ul style="list-style-type: none"> JMD No 33838/94/10-7-1995 & No 103909/12-05-2006, E.T. Approval No 139132/30-04-2009 E.T. Amendment No 43269/09-09-2016 DIPA, E.T. Amendment, about the construction of right side road network from Malesina I/C to MC 19 on Proskyna – Theologou street. No 143730/10-11-2009, Approval of noise protection measures. No 146696/18-11-2009, Evaluation of environmental variations from the design alterations on positions of Kastro – Agios Konstantinos section of the PATHE motorway. No EYPE 122399/1-4-2010 Construction and operation approval of Winter Maintenance stations. No DIPA 145495/21.01.2015 E.T. Amendment about the Parking Areas, the future motorists service stations positions of the motorway and the lateral toll stations of Oinofyta.

			<ul style="list-style-type: none"> MD 61030/1796/17-09-2018 Environmental terms renewal for the Metamorfosi – Yliki, Yliki – Kastro, Kastro –Tragana and Arkitsa –Ag. Konstantinos sections of the PATHE motorway.
4	Tragana – Arkitsa	<p>The section ETAD is valid until 06.02.2027 (Decision G.D.P.P. DIPA 6366/06.02.2017)</p>	<ul style="list-style-type: none"> JMD No 36759/94/10-7-1995, No 103910/12-05-2006, E.T. Approval No 143730/10-11-2009, Approval of noise protection measures. No 146696/18-11-2009, Evaluation of environmental variations from the design alterations on positions of Kastro – Agios Konstantinos section of the PATHE motorway. No EYPE 122399/1-4-2010 Construction and operation approval of Winter Maintenance stations. No DIPA 145495/21.01.2015 E.T. Amendment about the Parking Areas, the future motorists service stations positions of the motorway and the lateral toll stations of Oinofyta. Decision 6366/06.02.2017 Environmental terms renewal for Tragana – Arkitsa section of PATHE motorway and amendment about the Motorists Service Station of Atalanti.
5	Arkitsa – Agios Konstantinos	<p>The terms are in the process of being renewed. The Concessionaire has filed ETAD Renewal Documentation for the PATHE section “Arkitsa – Ag. Konstantinos” with prot. No 41729/24-10-2016. The Renewal Documentation was promoted by EYDE/KSESP & D.E. to DIPA/YPEN with protocol No A/1/00b/08/24/11298, 26.10.2017. The documentation submission occurred within the period provided for in paragraph 4 of article 5 of Law 4014/2011, thereby the existing ETAD validity continues.</p>	<ul style="list-style-type: none"> JMD No 39516/94/10-7-1995 & No 103908/12-05-2006, E.T. Approval No 143730/10-11-2009, Approval of noise protection measures. Ministerial Decision 145538/21.01.2015 E.T. Approval Arkitsa MSS. No 146696/18-11-2009, Evaluation of environmental variations from the design alterations on positions of Kastro – Agios Konstantinos section of the PATHE motorway. No EYPE 195241/12-01-2011 Atmospheric pollution and meteorological data stations on the Motorway approval. MD 61030/1796/17-09-2018 Environmental terms renewal for the Metamorfosi – Yliki, Yliki – Kastro, Kastro –Tragana and Arkitsa –Ag. Konstantinos sections of the PATHE motorway.

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6	Agios Konstantinos – Kamena Vourla	The terms are in the process of being renewed. The Concessionaire has filed ETAD Renewal Documentation for the PATHE section “Ag. Konstantinos – K. Vourla” with prot. No 28107/24.10.2012. The documentation submission occurred within the period provided for in paragraph 4 of article 5 of Law 4014/2011, thereby the existing ETAD validity continues.	<ul style="list-style-type: none"> JMD No 85676/30-07-2002, E.T. Approval No 143730/10-11-2009, Approval of noise protection measures. No EYPE 122399/1-4-2010 Construction and operation approval of Winter Maintenance stations.
7	Kamena Vourla – Mendenitsa	The terms are in the process of being renewed. A study has been developed and filed to EYDE/KSESP & D.E. (No 30440/17-06-2013) for the section E.T. renewal.	<ul style="list-style-type: none"> JMD No 34031/19-10-1998, E.T. Approval No 143730/10-11-2009, Approval of noise protection measures.

In the reference period, the designs filed for the issue of new or amended E.T. in the section Antirrio-Ioannina of IONIA ODOS are presented in the following table:

S/N	Section	E.T. Validity	Authorizations issued
1	Agrinio – Kefalovryso Section (Agrinio Bypass South Section)	The section ETAD is valid until 18-11-2025 (Decision G.D.P.P. DIPA 149145/19.11.2015)	<ul style="list-style-type: none"> JMD 142128/25-07-2005 E.T. Approval MD ETA 166142/13-02-2013 amendment as to the road corridor alignment design of the mentioned project at Vasiliki, Evinos river and Antirrio areas as well as the micro-optimizations along the above mentioned approved project.” MD 147996/14-04-2015: Approval of Environmental Terms (ETA) for project “Ionia Odos: Antirrio – Kefalovryso (South Agrinio Bypass End)”, Kolova area from K.P. 6+163.5 to 11+827 (6+195.6 to 11+552 originally approved alignment design), and Amendment as to section from K.P. 5+4104.5 to 6+163.5 (5+104.5 to 6+195.6 originally approved alignment design), and K.P. 11+827 to 14+904.4 (11+552 to 14+904.4 approved alignment design). Decision 149145/19.11.2015 G.S.P.P./YPEN: extension of validity period.

S/N	Section	E.T. Validity	Authorizations issued
			<ul style="list-style-type: none"> • MD ETA 8568/17-02-2017 “Amendment as to the environmental authorization of the final design of Antirrio I/C and the lateral toll stations of Gavrolimni I/C and Messolonghi I/C (near K.P. 14+300 and K.P. 27+530 of IONIA ODOS respectively), and (II) amendment environmental authorization of the frontal toll station of Klokova (near K.P. 10+100 of IONIA ODOS). • Decision 23650/15.05.2017 G.S.P.P “Amendment for the environmental authorization of Evinochori MSS.”
2	Agrinio Bypass Section	The section ETAD is valid until 01-02-2027 oik.5559 (Decision G.D.P.P. DIPA 153045/2015)	<ul style="list-style-type: none"> • JMD 84982/96/11.04.1997 Approval of Environmental Terms for the construction and operation of the project “Western Greece Motorway (Ionia Odos)” at the section “Agrinio Wide Bypass – from K.P. 0+000 to K.P. 34+401 or K.P. 34+811 – to Regional Unit of Aitoloakarnania” • JMD 105889/08.07.2008 Extension of validity of JMD 84982/96/11.04.1997. • JMD 144713/23.09.2009: E.T. Amendment • Decision 100391/20.01.2016 E.T. Amendment • Decision No 5559/ 01.02.2017 (Re. 153045/2015) G.S.P.P./YPEN: extension of validity period.
3	North End of Agrinio Bypass (Kouvaras)– South End of Arta Bypass (Kompoti)	The section ETAD is valid until 02-03-2026 (Decision G.D.P.P. DIPA 11198/03.03.2016)	<ul style="list-style-type: none"> • JMD 141564/25-07-2005 E.T. Approval • JMD 167980/30.04.2013: E.T. Amendment • Decision of DG for Dec. EYPE 174140/ 28.07.2014: E.T. Amendment • JMD 150063/25.06.2015: “E.T. Amendment as to the sections at K.P. 105+500 to 108+700, 115+720 to 120+700, 152+446 to 154+796 to 181+710 to 186+650». • Decision 11198/03.03.2016 G.S.P.P./YPEN: E.T. Amendment for the relocation or reconstruction of existing pylons of DEI due to involvement in the IONIA ODOS motorway under construction and Extension of validity period

S/N	Section	E.T. Validity	Authorizations issued
			<ul style="list-style-type: none"> • Decision 9443/22.02.2017 of DEPUTY MINISTER of ENVIRONMENT AND ENERGY: E.T. Amendment for the environmental authorization <ul style="list-style-type: none"> ➤ of Amvrakia MSS (K.P. 81+150 to 81+435), ➤ of Amfilochia MSS and MCC (K.P. 95+300 to 95+762), ➤ of Frontal Toll Stations: of Menidi (K.P. 111+300) and Terovo (K.P. 174+100), ➤ of lateral toll station Gorgomylos I/C (K.P. 163+110), ➤ of the aggregate quarry exploitation of total surface area 33,938 m² at position TOUMPANOS of Amfilochia (K.P. 96+000), ➤ of Episkopiko MSS and MCC (K.P. 189+378 to 189+669) ➤ of the updated final design of the motorway to the sections from K.P. 152+446 to K.P. 162+354 and from K.P. 178+500 to K.P. 182+665.
4	Arta Bypass Section	The section ETAD is valid until 23-09-2024 (Decision G.D.P.P. DIPA 175041/23.09.2014)	<ul style="list-style-type: none"> • JMD 120756/96/03.06.1997, Approval of Environmental Terms for the construction and operation of the project "Motorway Ioannina – Antirrio, section Filippiada – Arta Bypass from K.P. 60+000 to K.P. 82+000 starting at Ioannina to Preveza and Arta regional units, including a 1km section of connecting road with Arta town. • JMD 132550/31.07.2003, Amendment of the Joint Ministerial Decision for the Approval of the Environmental Terms for the construction and operation of the project: "Approval of Environmental Terms for the construction and operation of the project "Motorway Ioannina – Antirrio, section Filippiada – Arta Bypass from K.P. 60+000 to K.P. 82+000 starting at Ioannina to Preveza and Arta regional units, including a 1km section of connecting road with Arta town." • JMD 137938/31.12.2003, Amendment of the Joint Ministerial Decision for the Approval of the Environmental Terms for the construction and operation of the project: "Approval of Environmental Terms for the construction and operation of the project "Motorway Ioannina – Antirrio, section Filippiada – Arta

S/N	Section	E.T. Validity	Authorizations issued
			<p>Bypass from K.P. 60+000 to K.P. 82+000 starting at Ioannina to Preveza and Arta regional units, including a 1km section of connecting road with Arta town.”</p> <ul style="list-style-type: none"> Decision of D.G. for the Environment of the YPEKA (No 175041/23.09.2014) Amendment and renewal - extension of validity period of No 120756/96/3.6.1997 JMD Approval of Environmental Terms (as amended and in force) for the construction and operation of the project: “Filippiada – Arta Bypass (from K.P. 60+000 to 82+000) of Motorway Ioannina – Antirrio, including a 1km section of connecting road with Arta town” as to the final design of the project (longitudinal section/cross section of the road, technical and hydraulic works, side road network, tolls, road safety, etc.)
5	North End of Arta Bypass Βόρειο (Filippiada) – Ioannina (Eleousa)	The section ETAD is valid until 02-03-2026 (Decision G.D.P.P. DIPA 11198/03.03.2016)	<ul style="list-style-type: none"> JMD 141564/25-07-2005 E.T. Approval JMD 167980/30.04.2013: E.T. Amendment Decision of DG for Dec. EYPE 174140/ 28.07.2014: E.T. Amendment JMD 150063/25.06.2015: “E.T. Amendment as to the sections at K.P. 105+500 to 108+700, 115+720 to 120+700, 152+446 to 154+796 to 181+710 to 186+650». Decision 11198/03.03.2016 G.S.P.P./YPEN: E.T. Amendment for the relocation or reconstruction of existing pylons of DEI due to involvement in the IONIA ODOS motorway under construction and Extension of validity period Decision 9443/22.02.2017 of DEPUTY MINISTER of ENVIRONMENT AND ENERGY: E.T. Amendment for the environmental authorization <ul style="list-style-type: none"> ➤ of Amfilochia MSS and MCC (K.P. 95+300 to 95+762), ➤ of Frontal Toll Stations: of Menidi (K.P. 111+300) and Terovo (K.P. 174+100), ➤ of lateral toll station Gorgomylos I/C (K.P. 163+110), ➤ of the aggregate quarry exploitation of total surface area 33,938 m2 at position TOUMPANOS of Amfilochia (K.P. 96+000),

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S/N	Section	E.T. Validity	Authorizations issued
			<ul style="list-style-type: none"> ➤ of Episkopiko MSS and MCC (K.P. 189+378 to 189+669) ➤ of the updated final design of the motorway to the sections from K.P. 152+446 to K.P. 162+354 and from K.P. 178+500 to K.P. 182+665.

4.2 Submissions

In the reference period (A' semester of 2017), no designs were submitted by the operation company for the issue of new E.T. for the PATHE Metamorfossi – Skarfeia section.

In the reference period (A' semester of 2017), no designs were submitted by the operation company for the issue of new E.T. for the IONIA ODOS Antirrio – Ioannina section.

4.3 Outstanding Issues

4.3.1 PATHE Motorway

The environmental studies submitted for the section Metamorfossi – Skarfeia of the PATHE are presented in the following table, however the issue of the E.T. is pending

S/N	Section	Outstanding Issues	Submissions	Observations
1	Metamorfossi-Yliki Section	Renewal of the E.T. of the section	<ul style="list-style-type: none"> The Concessionaire has filed ETAD Renewal Documentation for the PATHE section "Metamorfosi – Yliki" with prot. No 41729/24-10-2016. The Renewal File was forwarded by EYDE/K.E.S.P.K.& D.E to the DIPA/YPEN with prot. No A/1/00β/08/24/11298, 26.10.2017. 	Approval of DIPA is pending
2	Metamorfossi-Yliki Section	Relocation of the Varympompi WMS to a new location northeastern of the Varympompi I/C (around, CH. 23+400)	<ul style="list-style-type: none"> The Concessionaire has filed an amendment file with prot. No 37074/03-10-2014 for the relocation of the winter maintenance station of Varympompi. 	Approval of DIPA is pending
3	Yliki – Kastro Section	Renewal of the E.T. of the section	<ul style="list-style-type: none"> The Concessionaire has filed ETAD Renewal Documentation for the PATHE section "Metamorfosi – Yliki" 	Approval of DIPA is pending

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S/N	Section	Outstanding Issues	Submissions	Observations
4	Kastro – Tragana Section	Renewal of the E.T. of the section	<ul style="list-style-type: none"> with prot. No 41729/24-10-2016. The Renewal File was forwarded by EYDE/K.E.S.P.K.& D.E to the DIPA/YPEN with prot. No A/1/00β/08/24/11298, 26.10.2017. The Concessionaire has filed ETAD Renewal Documentation for the PATHE section "Metamorfossi – Yliki" with prot. No 41729/24-10-2016. The Renewal File was forwarded by EYDE/K.E.S.P.K.& D.E to the DIPA/YPEN with prot. No A/1/00β/08/24/11298, 26.10.2017. 	Approval of DIPA is pending
5	Tragana- Arkitsa Section	Lateral Toll Station at Atalanti I/C and Livanates I/C	<ul style="list-style-type: none"> The Concessionaire has filed a EIS (Pr. No 39707/22-6-15). 	Approval of DIPA is pending.
6	Arkitsa – Agios Konstantinos Section	Renewal of the E.T. of the section	<ul style="list-style-type: none"> The Concessionaire has filed ETAD Renewal Documentation for the PATHE section "Metamorfossi – Yliki" with prot. No 41729/24-10-2016. The Renewal File was forwarded by EYDE/K.E.S.P.K.& D.E to the DIPA/YPEN with prot. No A/1/00β/08/24/11298, 26.10.2017. 	Approval of DIPA is pending
7	Agios Kon/nos-K. Vourla Section	Renewal of the E.T. of the section	<ul style="list-style-type: none"> The Concessionaire has filed ETAD Renewal Documentation for the PATHE section "Ag. Kon/nos-K. Vourla" with prot. No 28107/24.10.2012. 	Approval of DIPA is pending

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S/N	Section	Outstanding Issues	Submissions	Observations
8	Kammena Vourla – Mendenitsa (Skarfeia) section	Renewal of the E.T. of the section.	<ul style="list-style-type: none"> The design for the renewal of the E.T. of the section has been prepared and filed to EYDE/K.S.E.S.P. C&W GR (Prot. No. 30440/17-06-2013) 	Approval of DIPA is pending

4.3.2 IONIA ODOS Motorway

The environmental studies submitted for the section Antirrio – Ioannina of the IONIA ODOS are presented in the following table, however the issue of the E.T. is pending

S/N	Section	Outstanding Issues	Submissions	Observations
1	Kampi – (5) Pente Pigadia Section	Technical Environmental Study (TEPEM) of Filippiada MSS of Ionia Odos CH. 148+800	<ul style="list-style-type: none"> It has been forwarded by EYDE/KSESP/C&W GR/PATHE & IONIA section (prot. No. 9153/29.06.2016) TEPEM for the Environmental Licensing of Filippiada MSS By DIPA 32947/22.09.2016, the determination of the use of a water tank has been requested, in order to comply with the Environmental Permit A request has been submitted by Nea Odos to determine a tank to the Arta Regional Unit, Department of Health by 41816/17.11.16. Nea Odos submitted clarification memos to the abovementioned service for the determination of the tank (42650/13.06.17, 42668/20.06.17) 	Approval of DIPA is pending

5 SENSITIVE AREAS OF THE PROJECT

5.1 PATHE Motorway

The following table presents the natural areas under protection that the motorway passes through or is adjacent to, according to the approved E.T.

S/N	Section	Ecologically Sensitive Areas
1	Yliki – Kastro Section	<ul style="list-style-type: none"> GR 2410001 «Yliki and Paralimni Lakes – Voiotikos Kifissos System»
2	Kastro – Tragana Section	<ul style="list-style-type: none"> GR 2410001 «Yliki and Paralimni Lakes – Voiotikos Kifissos System»
3	Tragana – Arkitsa Section	<ul style="list-style-type: none"> GR 2440001 “Wetland and islands of Atalanti Bay”
4	Agios Konstantinos – Kamena Vourla Section	<ul style="list-style-type: none"> GR 2440002 «Spercheios valley and estuary»

5.2 IONIA ODOS Motorway

The following table presents the natural areas under protection that the motorway passes through or is adjacent to, according to the approved E.T.

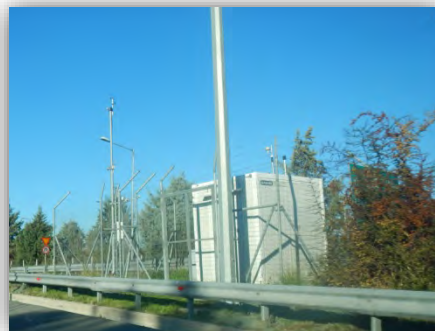
S/N	Section	Ecologically sensitive areas
1	Antirrio – Kefalovryssos (South Agrinio Bypass End)	<ul style="list-style-type: none"> GR2310001 “Acheloos Delta, Messolonghi – Aitoliko Lagoon, estuary of River Evinos, Echinades Islands, Petalas Island” GR2310005 “Mount Varassova” GR2310010 “Mount Arakynthos and the Strait of Kleisoura”
2	Agrinio Bypass	<ul style="list-style-type: none"> GR2310008 “Ozeros Lake” GR2310001 “Acheloos Delta, Messolonghi – Aitoliko Lagoon, estuary of River Evinos, Echinades Islands, Petalas Island”
3	North Agrinio Bypass End (Kouvaras) – South Arta Bypass End (Kompoti)	<ul style="list-style-type: none"> AG00020025 “Amvrakia Lake area”, AG00060068 "katafourko Lagoon", AB3090025 "Louros River"
4	Arta Bypass	<ul style="list-style-type: none"> Arachthos and Louros Rivers
5	North Arta Bypass End (Filippiada) - Ioannina (Eleousa)	<ul style="list-style-type: none"> AG00020025 “Amvrakia Lake area”, AG00060068 "katafourko Lagoon", AB3090025 "Louros River"

6 ATMOSPHERIC POLLUTION

6.1 PATHE Motorway

According to the Environmental Terms in the said road section of PATHE, air pollution measurement network for PATHE motorway of NEA ODOS includes 3 stations at the Varympompi I/C, the Schimatari I/C and the Arkitsa I/C. The Varympompi station was put into trial operation on 21/12/2011. Arkitsa station was put into trial operation on 19/12/2011 and Schimatari station put into trial operation on June of 2013 (later, due to insufficient power supply at the position).

For the year 2016, a complete air pollution monitoring program was implemented by the above three air pollution stations, which are operating on a 24-hour basis. The air pollution report was prepared and will be filed to the Service KAPA/YPEN (Prot. No. 42060/31-1-2017 NEA ODOS S.A.), a similar report will also be prepared and submitted for 2017.



For the measurement of pollutants, the stations have been equipped with approved analyzers in accordance with the National Legislation (Ministerial Decision No 14122/549/E.103/2011 (Gov. Gazette 488/B`/30.3.2011) "Measures to improve the air quality, in accordance with the provisions of Directive 2008/50/EC" of the European Parliament and of the Council of the European Union of 21 May 2008 on ambient air quality and cleaner air for Europe. For every 24 hours, at each station the following are recorded:

1. The CO, CO₂, NO, NO₂, SO₂, O₃, TSP, PM₁₀, PM_{2,5}, C₆H₆ (Benzene), C₇H₈ (toluene) and xylene polluting emissions
2. The meteorological conditions of each installation are

The pollutants are measured continuously throughout the day. The average primary pollution values are calculated every five minutes in the recording system that is installed at each station and connected to the analyzers. These measurements are transferred to the server of the air pollution measuring system (which is installed at Afidnes Control Center), via the Nea Odos optical fiber network, where they are stored. At the end of each month the measurements are corrected on the network server. The corrections include calibration results and analyzer limit and slip corrections. After corrections, the average hourly, eight-hour, and 24-hour values of pollutants (NO₂, CO, O₃, SO₂, Benzene, suspended particles PM₁₀ and PM_{2,5}) are calculated and stored.

For 2016, the annual air pollution report has been submitted to the Directorate KAPA/YPEN with prot. No. 42060/31-1-2017.

For 2016, the measured pollutant records were as follows:

Suspended Particles PM₁₀

The Limit as of 01/01/2005 for PM₁₀ particles is 50µg/m³ on average daily value and should not be exceeded more than 35 times per year. In addition, the average annual value should not exceed 40µg/m³.

Number of exceedances of PM₁₀ daily mean values over 50µg/m³

	Arkitsa	Schimatari	Varympompi
Annual exceedances (times)	3	1	2

Suspended Particles PM_{2.5}

For suspended particles PM_{2.5}, **the limit of the average annual value as of 01/01/2015 is 25 µg/m³.**

The value (25µg/ m³) **was not exceeded** at any station.

NO₂

The Limit as of 01/01/2010 is 200µg/m³ on average hourly value and should not be exceeded more than 18 times per year. In addition, the average annual value should not exceed 40µg/m³.

The value (40µg/m³) **was not exceeded** at any station.

The average daily value (200µg/m³) **was not exceeded** > 18 times per year

CO

The Limit as of 01/01/2005 is 10 mg/m³ (maximum daily eight-hour value).

The value **was not exceeded** at any station.

SO₂

The Limit as of 01/01/2010 is 350µg/m³ as the average hourly value and should not be exceeded more than 24 times per year.

The average hourly value (350µg/m³) **was not exceeded** > 24 times per year at any station.

O₃

The objective as of 01/01/2010 is 120µg/m³ as maximum daily eight-hour value and should not be exceeded more than 3 times per year.

The value (120µg/m³) **was not exceeded**.



Benzene

The limit as of 01/01/2010 is 5µg/m³ on average annual value.

The average marginal value (5 µg/m³) **was not exceeded** at any station.

6.2 IONIA ODOS Motorway

By the approved environmental terms of Agrinio Bypass and Arta Bypass, no air quality program is envisaged.

7 NOISE AND TRAFFIC VOLUME

In the context of the said program, the relevant specifications and locations were the Road Traffic Noise (RTN) was recorded for the depiction of acoustic conditions before and after the implementation of the noise barriers at locations inside and outside the urban planning and in sensitive receivers. The relevant Sheets of the environmental road noise measurements are mentioned in the annual report. Also, processed data from the noise measurements are displayed in the reports. For the quantitative and qualitative evaluation of the limits thereof – according to the MD 1725291 – maximum permitted noise level of the L10 Index (18 hours) at the facades of the residences which are closest to the PATHE axis,

extended noise acoustic measurements are conducted with special automotive noise statistical analysis units. More analytically, measurements are conducted in accordance with the approved noise monitoring program, with automotive stations, at least 2 m from the façade of the closest residence. Usually, in order for the adverse conditions to be eliminated, the measurement is conducted closer to the source and the most exposed façade. The program ensures the complete investigation of the efficiency of the noise barriers installed and examines the necessity to implement additional measures.

For 2016, a monitoring program of OKTH was submitted and approved by the Directorate of KAPA/YPEN with prot. no. 46381/14-10-2016.

During the year 2016, 24-hour noise measurements (hourly analysis) were carried out along the road axle in the Metamorphossi - Loggos section (151km of length), at 45 geographical locations according to the approved audio metering program, which were considered absolutely sufficient for the continuous monitoring of the acoustic environment on an annual base. The main priority of the program was obviously to perform acoustic measurements at the above positions as set out in the approved monitoring program in the context of the relevant Anti-Noise Barriers Study approved by EYPE/YPEKA.

For the Loggos-Skarfia section (21km long), in 2016, 24-hour noise measurements (hourly analysis) were carried out along the road project at 12 geographical units - receivers (one 24-hour noise measurement per geographical location per year), which were considered to be sufficient for continuous monitoring of the acoustic environment on an annual basis.

Noise measurements were carried out at locations corresponding to sensitive special uses in order to further evaluate the possible need for noise barriers.

The following is recorded for every 24-hour measurement:

- ▶ the L1, L10, L50, L95, L99 indicators as well as the maximum (Lmax) and minimum values (Lmin).
- ▶ the RTN (Road Traffic Noise) level L10 (18-hour); & the level A-weighted equivalent LAeq (MD 17252/20.5.92 Gov. Gazette B395/13.6.92)
- ▶ the level A-weighted equivalent LAeq(24h) and finally the indicators Lden, Lday, Levening & Lnight of the Directive 2002/49/EC & JMD 13586/724-28/3/06 and JMD 210474, Gov. Gazette 204/B/9-2-2012.

As for the section under operation of the IONIA ODOS “**AGRINIO BYPASS**”, noise measurements were carried out both within and outside of the approved city and settlement plans in the area of 200m from the road boundary in the above road section.



As for the section under operation of the IONIA ODOS “**ARTA BYPASS**”, noise measurements were carried out both within and outside of the approved city and settlement plans in the area of 200m from the road boundary in the above road section.

For 2017 similar program shall be implemented, which is expected to be completed within the year (recording of 24-hour measurements in selected positions), when it shall be submitted to the Directorate of KAPA for approval.

It is noted that the traffic volume is monitored daily at the section from Metamorphossi to Skarfeia of PATHE motorway, at the transit level at all toll stations (Afidnes, Kapandriti, Malakassa, Oinofyta, Thebes and Tragana), and are reported in monthly reports. For 2016, the Annual Average Daily Traffic was calculated at 19.773 transits in both directions at the Metamorfosi – Skarfeia section of PATHE.

8 WASTE MANAGEMENT

8.1 LIQUID WASTE

An Environmental Management Plan has been prepared and is being implemented where the procedure for the management of hazardous liquid waste is included, in accordance with the environmental terms and the applicable legislation, while due management proof and documentation is requested from the contractors. A relevant file has been created with agreements and waste acceptance sheets, mineral oils licenced management companies.

For hazardous liquid waste which results from the operation and maintenance works of the Motorway, the concessionaire follows all procedures provided for by the law and cooperates with environmentally authorised management agencies.

Inspections are performed at the construction and maintenance work sites and the corresponding check list table is filled in. Based on the checks, in case of failure to comply with the relevant provisions, guidelines (corrective actions) for compliance are provided. The implementation of the corrective actions is checked through new inspections based on the check list.

Furthermore, the concession company submits annual reports for waste producer at the electronic waste registry (EWR) pursuant to Article 42 of Law 4042/2012 (Gov. Gazette 24/A/13.02.2012), as amended by Article 157, paragraph 1 of Law 4389/2016 (Gov. Gazette 94/A/27.05.2016) and JMD 1/1 (Gov. Gazette 1/B'/04.01.2017). For 2015 and 2016 the concession company filed to the EWR the respective waste producer reports for the sections Agrinio Bypass-Arta Bypass and for each JMD ETA (i.e. 9 reports in total per year), since these sections were in operation. Respective reports are expected to be filed for 2017, since all sections of the Motorway are in operation.

8.2 SOLID WASTE

The Concessionaire has concluded an agreement with a subcontractor for the cleaning and the collection of solid waste from the motorway, which are then transferred to appropriate licensed premises.

For the hazardous solid waste resulting from the operation and maintenance works on the motorway, the concession company follows all procedures provided by the current legislation and cooperates with management entities authorized for environmental purposes.

Inspections are performed at the construction and maintenance work sites and the corresponding check list table is filled in. Based on the checks, in case of failure to comply with the relevant provisions, guidelines (corrective actions) for compliance are provided. The implementation of the corrective actions is checked through new inspections based on the check list.

Furthermore, the concession company submits annual reports for waste producer at the electronic waste registry (EWR) pursuant to Article 42 of Law 4042/2012 (Gov. Gazette 24/A/13.02.2012), as amended by Article 157, paragraph 1 of Law 4389/2016 (Gov. Gazette

94/A/27.05.2016) and JMD 1/1 (Gov. Gazette 1/B'/04.01.2017). For 2015 and 2016 the concession company filed to the EWR the respective waste producer reports for each JMD-ETA (i.e. 9 reports per year), since these sections were in operation. Respective reports are expected to be filed also for 2017.

8.3 Waste Producer Table – EWR

Pursuant to Article 42, of Law 4042/2012 (Gov. Gazette 24/A/13.02.2012), as amended by Article 157, paragraph 1 of Law 4389/2016 (Gov. Gazette 94/A/27.05.2016) and JMD 1/1 (Gov. Gazette 1/B'/04.01.2017), the Electronic Waste Registry was established, and by JMD 43942/4026 (Gov. Gazette B' 2992/19.09.2016), liable for the electronic recording and registration are every organization or enterprise the establishments of which produce waste and falling within the scope of Chapter A of Law 4014/2011 (A' 209).

For PATHE motorway as well as the Agrinio and Arta Bypasses, the concessionaire NEA ODOS S.A. was enlisted in the Electronic Waste Registry (Reg. No 3959), since it falls into the scope of application of the provisions of Law 4014/2011, whereas according to the Decision DIPA/οικ. 37674/2016 (ΦΕΚ 2471/B/10.08.2016) the PATHE motorway, Metamorfossi – Skarfeia section, as well as the Agrinio and Arta Bypasses are included in the works of the 1st Group (Works of land and air transportations) – Road engineering works, S/N 1 and Subcategory A1.



Fluorescent tubes and other mercury-containing waste, lead batteries, tires collected from the motorway, engine, gear and lubricating oils, iron and steel, plastics, animal tissue waste (dead animals), plant-tissue waste, and waste produced by the operation and maintenance works on the motorway and the quantity and delivery mode to each approved Alternative Management System of which is recorded.



Moreover, the concessionaire NEA ODOS S.A., in the context of corporate social responsibility, has contracted Alternative Management System companies and recycles paper, plastic, batteries, used/damaged electrical and electronic equipment. Additionally, the company responsible for the operation has a certified quality management system ISO 14001:2004.



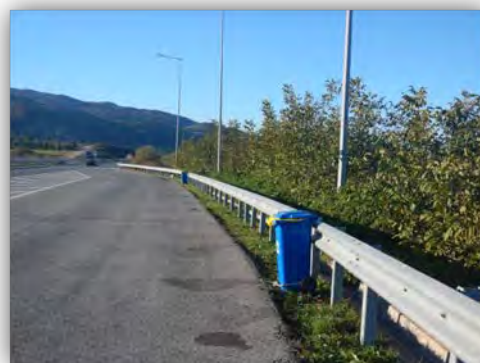
For the fiscal years 2015 and 2016, NEA ΟΔΟΣ S.A., filed according to the provisions of the law, a separate waste producer report in the electronic registry (EWR) for every JMD-ETA of the motorways (9 reports per year, 1 for each Bypass of IONIA ODOS and 7 for PATHE), while respective reports are expected to be filed for 2017 for each JMD-ETA for the whole IONIA ODOS Motorway.

For all previous years NEA ODOS S.A. has prepared and filed the relevant reports for waste producer pursuant to JMD 13588/725/06 and on the basis of Law 2939/2001 (and its amendment Law 3854/2010).

9 CLEANING AND MAINTENANCE

The cleaning and maintenance work taken place during the first semester of 2017 for which the compliance with the Environmental Terms was checked, are the following:

- Vegetation pruning and maintenance.
- Garbage collection by garbage truck.
- Advertising billboard removal.
- Dead animal removal.
- Drain and culvert cleaning and maintenance.
- Sanitation system gutter slots cleaning.



- Drainage and other hydraulic works cleaning.



- Manual waste collection.
- Sweeping/Cleaning.
- Parking Area cleaning and washing.
- WC cleaning
- Bins replacement.
- Fencing Repair.
- Metal safety rails replacement
- Tunnel Maintenance.
- Road Marking Works.

Compliance with the E.T. relating to all the above tasks are recorded monthly in the “checklists” and in the corresponding semi-annual, annual tables per JMD attached hereto.



10 ACCIDENTS – ACCIDENTAL POLLUTION – ACTION PLAN

In case of emergency, the action plan has been prepared by the Concessionaire for the whole Motorway and constitutes an Annex of the Police and Fire Protection Agreement which has been executed with the Ministry of Internal Affairs, the Intervention Plan in case of emergencies which describes the measures for the timely collection and removal of hazardous substances are prescribed, which aims at preventing pollution of the water recipients/soil etc.

The said Action Plan includes all measures/required equipment etc. which will be adopted in case of an accident and leakage of biodegradable substances.

In addition, in case of an accident involving fuel leakage with direct hazard for the pollution of superficial water, the soil etc. and particularly, when the leakage is excessive, absorbing materials will be used such as sand, excelsior or special geotextile immediately once the

leakage is noticed. These materials are directly available by the Concessionaire in order to promptly intervene. The disposal thereof, in case any such incident occurs, will be performed in accordance with the instructions for the disposal of toxic waste.

In order for the ecosystems and the aquifer In the downhill areas to be protected in case of accidental fuel leakage or other polluting substances from the vehicles carrying them and crossing the section Agios Konstantinos-Kamena Vourla of the PATHE, the construction of five (5) Pollution Control Units has been provided, to which all waste tunnels are directed. The disposal thereof, in case any such incident emerges, will be performed in accordance with the instructions for the disposal of toxic waste. It is pointed out that the project was delivered by the Hellenic Republic to the Concessionaire for operation, with only five retention and separation of draining tanks having been constructed for the road surface from the seven (7) which had been provided for in the Environmental Impact Study. The construction of the other two tanks from the Hellenic Republic is expected. In addition, retention – filtering tanks for the pluvial water drained at the section Yliki-Kastro have not yet been constructed, consequently when these will be completed and delivered, the Concessionaire will put into motion a plan for preventing pollution which will include the use of the said tanks in performance of the E.T. and its contractual obligations.

11 SPECIAL TERMS (E.G. TANKS, DRAINAGE MANAGEMENT)

- Worksite infrastructure

A total of 9 Winter Maintenance stations have been environmentally authorized (with No 122399/1-4-2010 of EYPE) along the PATHE motorway. The installed and operating stations are located in the areas of Malakassa, Schimatari, Akraifnio, Martino and Tragana.

- Visual disturbance by signs

All advertising billboards and signs within the concession limit have been removed. Regular inspections are carried out throughout the PATHE and the advertising billboards - signs located within the expropriation limit are removed.

- Tunnels fire safety

There is constant cooperation with the Fire Department. Fire drills under “Large Scale” conditions was conducted on 10/4/2014 (the previous one was on 3/3/2010). The tunnel fire-fighting equipment is functional, with a network of 6" pipelines, under 7 Atm stable pressure, and HDS every 50m in each tunnel over 500m in length, with two taps, a storz and a 25m hose, in accordance with the Construction Design.

- Pollution Control Units

- With the completion of the motorway improvements in Yliki area, it is expected that the retention – infiltration rainwater runoff tanks will be constructed at the site, as provided by E.T. d-29.5 of JMD 101617/22.09.2006 for the Yliki-Kastro section.
- Two of the total seven Pollution Control Units have not been constructed in the section "Agios Konstantinos - Kamena Vourla", which are planned to be constructed in accordance with the E.T. d-32 of JMD 85676/30.07.2002. The Hellenic Republic is expected to install the remaining two tanks.

12 PLANTING – MAINTENANCE OF VEGETATION

The Concessionaire has concluded an agreement with a Subcontractor for the maintenance and management of the vegetation and the planting.

13 CONCESSIONAIRE'S ENVIRONMENTAL DEPARTMENT

The Concessionaire provides an Environmental department with specialized personnel, which is responsible for the inspection and compliance with the E.T. of the motorway entire length. The Concessionaire is also cooperating with special advisor in order to create a group of scientists that covers the extended range of the environment. The group of scientists consists of: Civil Engineer – Transportation Expert – Acoustical Engineer, Environmentalist – Environmental Planner, and Environmentalist – Chemist – Acoustical Engineer, to fully meet the inspection needs of the E.T. for the road project.

14 REPORTS (SEMI-ANNUAL – ANNUAL – FILINGS)

For the previous year (2016) an annual Report of the Observance of Environmental Terms was prepared and filed while for each part of the Motorway separately (corresponding JMD), tables of application of each environmental term (Protocol No 19618/7.3.2017 NEA ODOS S.A.).

For the first and second six-month period of 2016, six-month Reports of the Observance of Environmental Terms were prepared and filed (Protocol No 41506/07.09.2016 & 19618/7.3.2017 NEA ODOS S.A.).

15 MONTHLY FOLLOW-UP – CHECK LISTS

Based on the Environmental Monitoring and Control Program and the Environmental Management System, the “Tables For The Implementation of the Environmental Terms” are established, outlining the ways and methodology of the necessary actions, in order to ensure the implementation of the Environmental Terms.

Environmental supervisors, in collaboration with the project engineers, perform regular (monthly) checks and complete the control tables, i.e. the implementation of the “Environmental Monitoring and Control Program”. They also provide the necessary guidelines or directions based on the Environmental Monitoring and Control Program for any environmental issue that arises.



After each regular (monthly) check, the corresponding checklist is filled out, which shows deviations from the implementation of the environmental terms identified by the inspections. The same table provides the proposed corrective actions. The tables are sent to the company responsible for the operation to take all necessary actions and the appropriate measures to comply with the environmental law and the environmental terms of the project. In the following recheck, it is examined whether all the necessary measures and the proposed corrective actions have been taken and the corresponding fields of the monthly checklist are filled in.

The Environmental Management System (EMS), which is implemented by the company responsible for the operation, consists of the Manual, the Procedures, the Work Instructions related to the environment and the compliance with the environmental requirements of the project. The environmental management manual, procedures and instructions are applied uniformly throughout the project and are constantly evolving to meet project needs.

16 INSPECTIONS BY COMPETENT AGENCIES - FINES

For the reference period (A' semester of 2017) no environmental deterioration problems have been identified caused by the operation and maintenance of the motorways, and no fines have been imposed on the Concessionaire.

17 CERTIFICATIONS

NEA ODOS S.A. has developed and implemented a common Integrated Management System (IMS) resulting from the integration of the Quality, Environment and Safety & Health

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Systems applied by the company. The aim of the IMS is to ensure the most efficient management of quality, environmental and S&H issues by eliminating overlapping procedures and controls.

Additionally, NEA ODOS S.A. has designed and implemented a Road Safety Management System, which has been certified according to the international standard ISO 39001:2012, making it the first second generation Concession Company to receive such certification, which is a milestone for the safe and efficient fleet management, and demonstrates the company's commitment to implement safe practices on the motorway.

Cumulatively, NEA ODOS S.A. is certified according to the following International Standards:

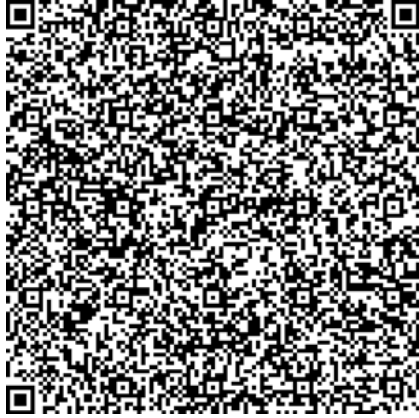
- ISO 9001 (Quality Management System)
- OHSAS 18001 (Health & Safety Management System)
- ISO 14001 (Environmental Management System)
- ISO 39001 (Road Traffic Safety Management System)

On 17 and 18/11/2016 the planned annual inspection was carried out by the independent certification body Bureau Veritas on all activities of NEA ODOS S.A. and in accordance with the International Standards: ISO 9001 (Quality Management System), OHSAS 18001 (Health & Safety Management System), ISO 14001 (Environmental Management System). Following the inspection, the independent body recommended the continuance of the Certification for all standards and for at least one year until the next scheduled annual inspection.



18 COST COVERAGE

The required percentage for the total operating and maintenance of the motorway budget required to fully comply with the Environmental Terms and restrictions of the relevant JMD-ETA: COST COVERAGE – FINANCIAL DATA FOR ENVIRONMENTAL PROTECTION WORKS has been secured as a matter of priority. The annual costs, which relate to environmental protection works, are listed in the annual progress reports on the implementation of the Environmental Terms.



19 Neas Erythreas Avenue, Nea Erythrea, 146 71, Athens, Greece

Tel: 210 34 47 300, **Fax:** 210 61 78 011,

Web: <http://www.neaodos.gr>, **Email :** info@neaodos.gr