10th ANNUAL (2017) AND 19th SEMI ANNUAL **ENVIRONMENTAL MANAGEMENT REPORT** 01.01.2017 -31.12.2017

Environment Department OLYMPIA ODOS S.A.

OLYMPIA ODOS

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A. INTRODUCTION

Based on the Concession Agreement (article 11.2.2& 16.2), as amended and applied with L. 4219/2013 (Gov. Gaz. 269/A/11-12-2013), OLYMPIA ODOS S.A. is obliged, throughout the entire Concession Period to deliver to the Service, a semi annual environmental report. In addition to that, an annual environmental report incorporating the data of the two semi annual reports is submitted to EYPE/MEPPW.This is the Tenth Annual and Nineteenth Semi Annual Environmental Management Report and covers the period 01.01.2017 to 31.12.2017.

During this period, Korinthos-Patras Motorway, a vital road axis, has been completed and opened to traffic along its entire length of 120km, thus making Olympia Odos a safe 202km motorway.

Olympia Odos is one of the major projects of national strategic importance for the economic and social development of the Peloponnese, Western Greece and Epirus, since it links these three Regions with Athens and the port of Patras.

Korinthos-Patras Motorway is one of the most difficult projects constructed in Greece these last years, because of its construction method: **the longer part of the route follows the ancient alignment, meaning that the construction activity along 120km was developing under traffic.** At the same time, large structures were required due to the particularly unstable geological environment along the North coastline of the Peloponnese, while a series of difficulties had to be overcome, such as the crossing of many cities and the simultaneous construction of the Railway Line (ERGOSE).

Olympia Odos is a **modern motorway** with two traffic lanes and an emergency lane per direction, 12 new tunnels of a total length of 12km, 209 bridges, overpasses and underpasses, 29 interchanges that safely connect the motorway to the remaining road network and the roadside areas. Many of the 350 large structures and the 400 retaining structures are impressive constructions that smoothly integrate the motorway into the landscape and offer superb views to the users.

The remaining works, final arrangement of the interchanges, service roads and four sites that are still to be released due to archeological surveys, expropriations and interface with the railway, will be completed by August 31, 2017; this date is the contractual milestone for the completion of the Project.

The project significantly contributed to the local economies by **directly employing more than 3,000 people in the construction and 600 employees in the operation of the motorway, and by supporting multiple employed people as an indirect economic impact.**

The above mentioned semi annual and annual reports shall be publicized on the internet site http://www.olympiaodos.gr created and maintained by the Concessionaire, in accordance with the Concession Agreement.

During the motorway's construction and operation, both the constructor as well as the operator comply with all pertinent provisions, as they are recorded in the Greek Legislation, ensuring the same for their contractors and subcontractors.

Note: all appendices of the present report have been submitted to the Special Environment Service (DIPA) of the Ministry of Reconstruction of Production, Environment and Energy, responsible for the environmental supervision of the OLYMPIA ODOS project and are available upon request.

The work's progress of the Design-Construction Project contractual scope is notified to the Concessionaire, the Independent Engineer and EYDE/KSESP (former EYDE/MK/EPP) through Monthly Progress Reports, which are elaborated by APION KLEOS CJV as required by the contractual document.

Please note that on 07-09-2017 the Project's Independent Engineer issued – under C.A. Art. 18.5.1 (g) – the Works Completion Certificate for the T1 Design-Construction Period Total Deadline ($WCC_{\tau 1}$).

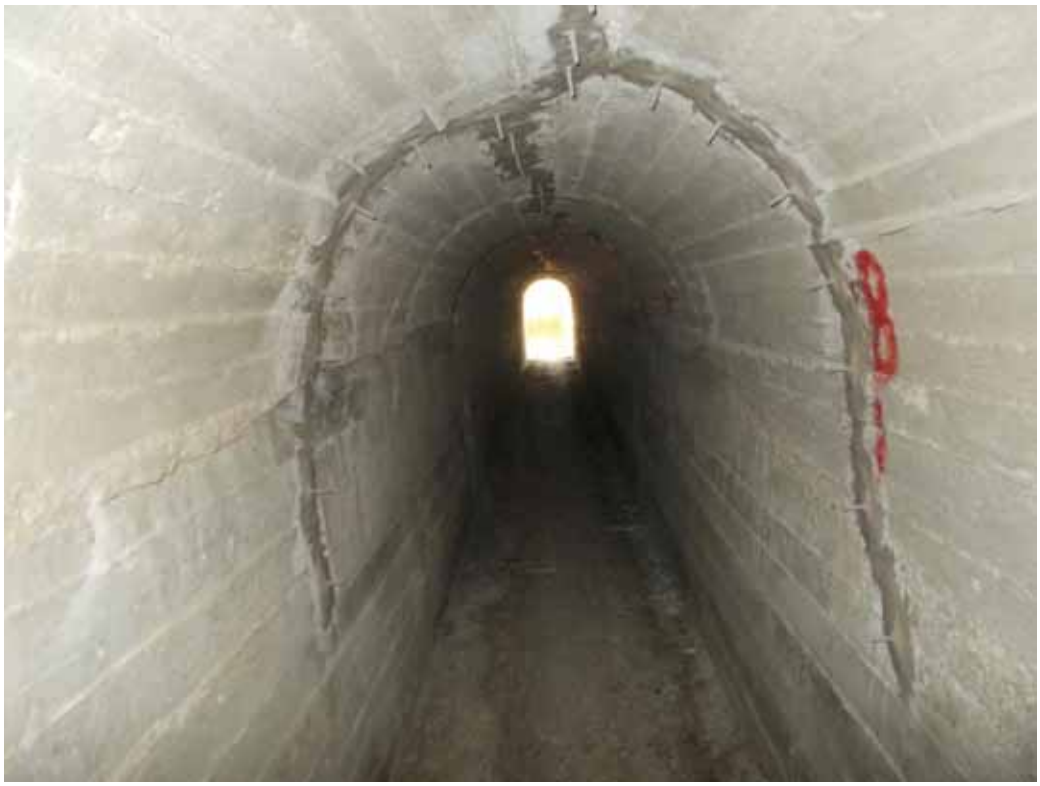
Tables 1 & 2 below depict the progress of the Project's works during the 1st and 2nd half of 2017.


Γ.Ε. 30-34
Γ.Ε. 26-29
Γ.Ε. 35
Γ.Ε. 18-21
Γ.Ε. 22-25
Γ.Ε. 1-15
Γ.Ε. 16-17
Πάτρα
Πύργος
Κόρινθος
Αθήνα

TABLE 1 – PROJECT'S WORKS PROGRESS IN THE 1st HALF OF 2017

G.U.	SECTION	ACTIVITY	PROGRESS
1-3 & 35	**EL-KO & PBP**	Traffic Management.	Continuous process.
		Irrigation system installation.	In progress.
		Steel barriers installation. (ΜΣΟ 13).	In progress.
4-15	**EL-KO**	Traffic Management.	Continuous process.
		Marking and signing works.	Completed.
		H/M works at the motorway's open sections.	Completed.
		Irrigation system installation.	In progress.
		Culvert and structure restoration works	In progress.
		Asphalt restoration works.	In progress.
		Works at EL-KO Administration building.	In progress.
16-17	**KO-PA**	Traffic Management.	Continuous process.
		Storm-protection works: Box culverts construction	Completed.
		Bridges, Over-Passes, Under-Passes construction	In progress.
		Toll Stations: Construction of Zevgolatio FTS building (Toll Administration Building, Tunnel. Canopy, FTS Plaza),	Completed.
		Toll stations construction: Zevgolatio & Kiato lateral tolls.	Completed.
		Technical Base construction: architectural works, E/M infrastructures, steel constructions.	Completed.
		Safety barriers & fencing construction.	Completed.
		H/M works at the motorway's open sections.	Completed.
18-21	**KO-PA**	Traffic Management.	Continuous process.
		Retaining walls construction (R282, G255, G283, G249, G279, etc).	In progress.
		Bridges, Over-Passes, Under-Passes (K203, K206, K214, B211, etc).	In progress.
		Box culverts construction (L110, L115, L119, L120,etc.).	In progress.
		Public Toilets at G.U. 19.	In progress.
		Drainage works (Lykoporia I/C).	In progress.

18-21	**KO-PA**	Asphalt works in Local Roads.	In progress.
		Asphalt works at G.U. 19.	In progress.
		E/M works at G.U. 19.	In progress.
22-25	**KO-PA**	Traffic Management.	Continuous process.
		Earthworks/embankments at G.U. 22-25.	In progress.
		Bridges, Over-Passes, Under-Passes (A344, A508, B343, etc).	In progress.
		Asphalt works at G.U. 22-25.	In progress.
		E/M works at G.U. 22-25.	In progress.
26-29	**KO-PA**	Traffic Management.	Continuous process.
		Geo-mechanical and structural monitoring of Platanos village.	Continuous process.
		Storm-protection works: Box culverts construction (L416, L444, etc).	In progress.
		Retaining walls construction (G486, R458, etc.).	In progress.
		Bridges, Over-Passes, Under-Passes (K290, K291, K302, etc).	In progress.
		Asphalt works at Local Roads: Kalavrita I/C, etc.	In progress.
		Asphalt works: 69+500-74+700 (AK), 69+500-71+500 (ΔK), 75+660-83+700 (ΔK), 74+700-83+700 (AK), etc.	In progress.
30-34	**KO-PA**	Traffic Management.	Continuous process.
		Embankments/Cuts :93+300 - 94+100, 94+100 – 95+500, etc.	In progress.
		Storm-protection works: Box culverts construction (L504, L507, L580, etc.).	In progress.
		Retaining walls construction (R572, G510, etc.).	In progress.
		Bridges, Over-Passes, Under-Passes (K306, K326, etc.).	In progress.
		Drainage works: 90+100-109+000.	In progress.
		Hydraulic works: 90+100-109+000.	In progress.
		Parking area construction (99+228, 99+574, etc.).	In progress.
		Safety barriers & fencing construction. (90+100-109+000).	In progress.
		Signing works (90+100-109+000).	In progress.
		Asphalt works at G.U. 30-34.	In progress.
		E/M works: 90+100-95+500, etc.	In progress.



Rehabilitation works at culvert C27

Construction of Pump Station at k.p. 88+040

Finikas riverbed arrangement – Construction of M2-A3 gabion baskets

CSC – Customer service building Rio tolls

Overpass A344 at Arachovitika I/C

B211 (SR KP 32+763) - Construction of precast beams

K.p. 33+300-37+000 R.B. - Fencing works

K.p. 33+300-37+000 R.B. - Installation of steel safety barriers

K.p. 52+400-52+810 R.B. - Asphalt works

O530 53+174-53+247 L.B..: Drilling of piles

Installation of side signs

Safety barriers at SR 004L

R293 – Construction of retaining wall

Interchange of Lykoporia – Installation of cables, bases and lighting poles

SR033L – Asphalt works of service road

TABLE 2 – PROJECT'S WORKS PROGRESS IN THE 2nd HALF OF 2017

G.U.	SECTION	ACTIVITY	PROGRESS
1-3 & 35	**EL-KO & PBO**	Traffic arrangements.	Constant progress.
		Irrigation system installation.	In progress.
		Steel safety barriers installation (ΜΣΟ 13).	Completed.
4-15	**EL-KO**	Traffic arrangements.	Constant progress.
		Marking and signing works.	Completed.
		E/M works along open motorway.	Completed.
		Irrigation system installation.	In progress.
		Culverts and structures restoration works.	In progress.
		Asphalt restoration works.	In progress.
		Works in EL-KO Management Building.	Completed.
16-17	**KO-PA**	Traffic arrangements.	Constant progress.
		Hydraulic works in GU 16-17.	In progress.
		Construction of waste retention tanks.	In progress.
		Construction of Under-Passes (K229).	In progress.
		Construction of retaining works (R289).	In progress.
		Construction of Toll Stations: Zevgolatio & Kiato Lateral Toll Station.	Completed.
		Construction of safety barriers & fencing.	Completed.
		E/M works along open motorway.	Completed.
18-21	**KO-PA**	Traffic arrangements.	Constant progress.
		Construction of retaining works (G232).	In progress.
		Construction of gabions (G024, G285).	In progress.
		Steel safety barriers installation along Local Roads.	In progress.
		Draining works (Lykoporia I/C).	In progress.
		Asphalt works along Local Roads.	Completed.
		Stream arrangement.	In progress.
		Planting works.	In progress.

22-25	**KO-PA**	Traffic arrangements.	Constant progress.
22-25	**KO-PA**	Earthworks/ embankments in GU 22-25.	In progress.
		Construction of bridges, Over-Passes, Under-Passes (A344, A508, B343, etc).	Completed.
		Asphalt works in GU 22-25.	In progress.
		Sewage works in GU 22-25.	In progress.
		E/M works in GU 22-25.	In progress.
26-29	**KO-PA**	Traffic arrangements.	Constant progress.
		Storm-protection works: Construction of box culverts (L416, L444, etc).	Completed.
		Construction of retaining walls (G486, R458, etc).	Completed.
		Construction of bridges, Over-Passes, Under-Passes (K290, K291, K302, etc).	Completed.
		Asphalt works along Local Roads: Kalavryta I/C etc.	In progress.
		Stream arrangement.	In progress.
		Re-construction of existing culverts (L404, L407, L408, L433, etc)	In progress.
30-34	**KO-PA**	Traffic arrangements.	Constant progress.
		Embankments/ Cuts: 93+300 - 94+100, 94+100 – 95+500, etc.	Completed.
		Storm-protection works: Construction of box culverts (L504, L507, L580, etc).	Completed.
		Construction of retaining walls (R572, G510, etc).	Completed.
		Construction of Bridges (K317).	In progress.
		Hydraulic works in GU 30-34.	Completed.
		Construction of safety barriers & fencing.	Completed.
		Signing works in GU 30-34.	In progress.
		Asphalt works in GU 30-34.	Completed.
		E/M works in GU 30-34.	Completed.
		Planting works.	In progress.

Rehabilitation works at culvert S46 (ΓΕ 1-15)

Construction of drainage ditches at Aigio MSS

K217 – Sidewalk construction

K238 – Antigraffiti coating implementation

G285 – Gabion wall construction

Rehabilitation of asphalt defects at k.p. 45+221

B PROGRESS OF THE ENVIRONMENTAL AGENDA

1. GENERAL

Appendix A of Annex 2 of the Concession Agreement states the Common Ministerial Decisions (CMD) and the Law comprising the Project's environmental licensing and forming the main framework for the monitoring of the progress of the Project's environmental issues.

More specifically :

1. Law 2338/1995, Thiva I/C – Elefsina FTS
2. CMD 126393/16.02.2007, Elefsina – Korinthos (excluding Kakia Skala section), as amended and currently applies via Decision 4281/26.01.2017 (ΑΔΑ: Ω4ΛΠ4653Π8-8ΝΑ)
3. CMD 18112/20.09.1996, Kakia Skala, as amended and currently applies via Decision 4281/26.01.2017 (ΑΔΑ: Ω4ΛΠ4653Π8-8ΝΑ)
4. CMD 92073/16.05.1994, Isthmos – Ancient Korinthos I/C, as amended and currently applies via Decision 4281/26.01.2017 (ΑΔΑ: Ω4ΛΠ4653Π8-8ΝΑ),
5. CMD 104892/16.06.2006, Ancient Korinthos I/C – Patra By-Pass K1 I/C as amended and currently applies via Decision 25406/25.05.2017 (ΑΔΑ: 62ΘΚ4653Π8-7ΨΖ) ,
6. CMD 16049/12.08.2013, Patra By-Pass, as amended and currently applies via Decision 6666/26.01.2017 (ΑΔΑ: ΩΛΝ64653Π8-ΠΛΣ).

2. ENVIRONMENTAL PERMITTING AND ENVIRONMENTAL MANAGEMENT

2.A ENVIRONMENTAL PERMITTING

In the framework of respecting the Concession Agreement environmental requirements, the approved environmental terms and the required environmental permits, requests were submitted, when required, in order forest and archaeological permits and opinions, permits to use water from drillings etc. to be issued.

It should be noted that, the Constructor, via doc. QES/MFR/ECH/ADM/L/2016/010615/8-8-2016, QES/MFR/ECH/ADM/L/2016/010457/29-6-2016, QES/MFR/ECH/STA/L/2016/010712/6-9-2016 and QES/MFR/ECH/STA/L/2017/011573/7-3-2017 informed the responsible services (Department of Natural Resources of PWGIDA, Project's Owner EYDE/KESP/P&VE, DIPA/YPEN) that it does not intend to develop and exploit the quarries in "Agrilitses", "Tsampa" ,"Albani" (Paliovouna or Klokova) and "Psili Rahi #2 & #3» respectively, while returning to the Project Owner the delivery protocols regarding State-owned land.

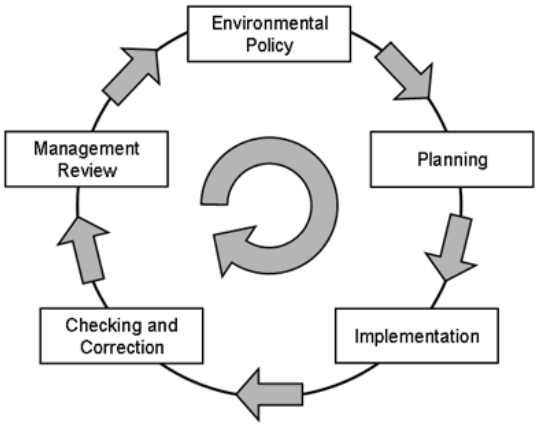
a. Cooperation has completed with the Public Utility Organizations/ Archeological Services in order to relocate various networks located within the Project.
b. Permits have been received from Peloponnese, W. Greece & Ionian Islands Decentralised Administration, Water Resources Directorate to use water resources from the following drillings, so as to cover the irrigation, fire fighting and other needs that shall arise in the Project's short-term parking areas along KO-PA section.

c. Measurements programmes were conducted regarding the effectiveness of the installed noise barriers along Elefsina-Korinthos, Korinthos-Xylokastro, Xylokastro-Drepano and Patra By-Pass sections. These programmes were approved by KAPA Dir./MEECC via doc. No 2753/30-01-2017, 15441/366/22-8-2017, 20444/528/4-10-2017 and 11263/21-8-2017 respectively. According to the results of the approved measurement programmes, the locations were noise barriers were promptly installed were updated for Korinthos-Drepano section in cooperation with SSE &

Environment S.A. Design Firm who prepared a noise barriers Special Acoustic Calculation & Implementation Design (SACID).

2.B ENVIRONMENTAL MANAGEMENT

In the construction as well as in the operation phase, the procedures and directives for the works' environmental management are implemented by the Constructor, aiming at the in compliance with the terms and constraints of the above decisions.
APION KLEOS submits to OLYMPIA ODOS S.A. monthly reports regarding the progress of the construction related works.



Within the framework of the contractual obligations, the Constructor has developed an Environmental Management Plan (EMP) for the Project in accordance with ISO 14001.
The Operator in order to comply with the Project's environmental terms and the implementation of an Environmental Policy has developed an Environmental Management Plan for:

- controlling, monitoring and dealing with the environment impact of the project
- optimum management of liquid and solid waste of the Project
- promotion of best practices to reduce energy and resources consumption

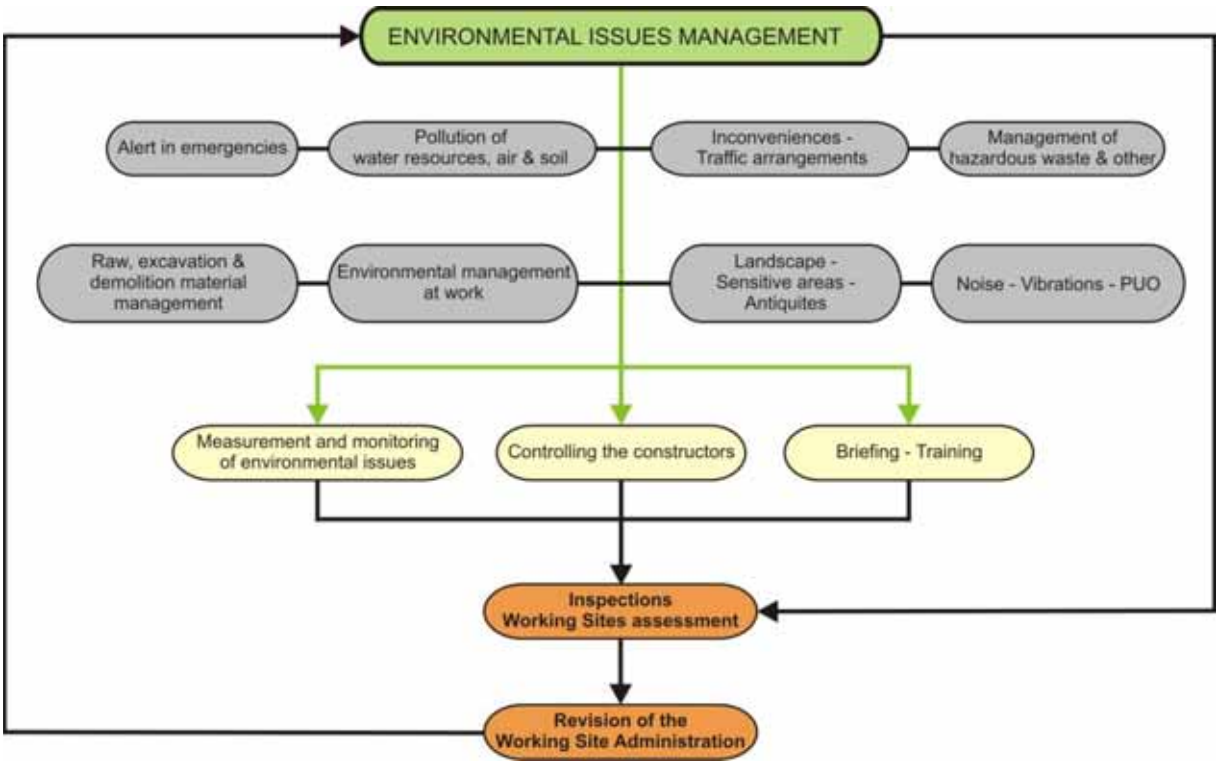
The EMP includes the organizational structure, planning actions, duties allocation, technical methods, procedures as well as processes for the development, implementation, achievement, revision and support of the Constructor's environmental policy as well as the compliance with the Project's environmental terms.

The EMP constitutes the basic and overal framework for the management of environmental issues, whereas the procedures and directives area tool for the rational handling/ management of each environmental issue, taking into account the pertinent legislation and the decisions applicable to each case.

The advantages from implementing the EMP pertain to the following:

- saving natural resources (reduced consumption of raw materials, energy, water etc),

- reducing the waste and by-products process and disposal cost, minimizing fines due to law violations,
- reducing insurance costs by reducing the potential risks and having contingency plans



3. ENVIRONMENTAL PARAMETERS MONITORING PROGRAMME (NOISE MONITORING TRAFFIC LOAD VIBRATIONS, AIR QUALITY, WATER

3.A NOISE MONITORING

- Korinthos Patra section

According to the results of the approved measurement programmes, the locations were noise barriers were promptly installed were updated for Korinthos-Drepano section in cooperation with SSE & Environment S.A. Design Firm who prepared a noise barriers Special Acoustic Calculation & Implementation Design (SACID).

Table 3 provides the updated noise-barriers locations:

TABLE 4:
POINTS OF NOISE-BARRIERS IMMEDIATE INSTALLAITON

NOISE BARRIER		DIRECTION	MINIMUM LENGTH	SOUND-BARRIER HEIGHT
From k.p.	To k.p.			
0+812,6	0+919,6	Κόρινθος	107	4,5
7+822,5	7+956,5	Patra	134	3
20+566,5	20+796,3	Korinthos	230	3,5
26+804,2	26+866,2	Patra	62	4,5
26+059,0	26+231,5	Korinthos	172	4,5
26+524,2	26+705,0	Korinthos	182	4,5
37+176,6	37+240,6	Korinthos	64	4,5
39+142,1	39+241,6	Patra	100	4,5
40+070,3	40+174,5	Patra	104	3,0
39+776,5	39+834,1	Korinthos	58	3,5
40+074,2	40+160,3	Korinthos	86	4,0
44+920,5	44+986,2	Korinthos	70	4,5
53+709,1	53+879,3	Patra	168	4,5
53+880,1	53+964,3	Korinthos	100	4,0
59+152,0	59+192,0	Patra (south)	40	4,5
59+180,1	59+241,8	Patra (south)	62	4,5
59+379,9	59+535,3	Patra (south)	156	4,5
59+535,3	59+607,2	Patra (south)	72	3,5
76+078,8	76+186,8	Patra	110	3,5
82+453,8	82+541,8	Patra	88	3,0

83+645,4	83+718,4	Korinthos	74	3,5
88+494,3	88+590,3	Patra	96	4,5
91+440,0	91+623,7	Patra	184	3,0
91+816,7	91+943,8	Patra	128	3,0
96+183,6	96+259,6	Patra	76	4,0
96+957,5	97+017,5	Korinthos	60	3,0
97+192,6	97+424,6	Patra	232	3,0
97+772,5	97+831,5	Patra	58	3,0
97+104,9	97+254,9	Korinthos	150	3,0
98+852,6	98+964,9	Patra	110	3,0
98+710,9	98+797,0	Korinthos	88	3,0
107+843,6	107+990,6	Korinthos	144	3,5
111+590,9	111+713,9	Korinthos	122	3,5
111+794,9	111+879,0	Patra	84	4,0
111+879,0	111+968,2	Patra	90	3,0
111+713,9	111+922,1	Korinthos	208	3,5
111+968,2	112+186,0	Patra	218	3,5
112+825,9	112+889,3	Patra	66	3,0
114+555,8	114+681,7	Korinthos	126	3,0
114+829,3	114+852,4	Korinthos	54	3,0
114+770,5	114+852,4	Korinthos	82	3,0
115+353,1	115+429,2	Korinthos	76	3,0
115+676,6	115+721,1	Korinthos	44	3,5
115+701,7	115+769,3	Patra	68	3,5
115+769,3	115+883,4	Patra	114	3,0
115+721,1	115+841,4	Korinthos	120	3,5
116+746,1	116+812,0	Patra	66	3,0
118+006,6	118+190,5	Patra	184	3,5
117+484,3	117+527,6	Korinthos	43	3,5
117+527,6	117+686,4	Korinthos	160	4,5
117+686,4	117+739,1	Korinthos	53	4,0
117+739,1	117+773,7	Korinthos	34	3,5
118+137,9	118+237,4	Korinthos	100	3,5
118+190,5	118+362,9	Patra	172	3,0
118+67,1	118+767,1	Patra	110	3,0
118+237,4	118+327,2	Korinthos	90	4,5

After KAPA Dir./ Dep. for Noise, Vibration & Radiation approved the Special Calculation & Implementation Acoustic Designs for "Korinthos-Patra Motorway", which cover the full update and detailed calculation for mapping the environmental traffic noise under EU Guideline 2002/49/EK and CMD No 211773/2012, their construction/installation has already been completed of 10000 m^2 of noise barriers in the following sections:

S/N	From k.p.	To k.p.	Direction
1	7+820	7+956	Patra
2	20+560	20+800	Korinthos
3	26+804	26+866	Patra
4	26+059	26+231	Korinthos
5	26+522	26+705	Korinthos
6	37+175	37+240	Korinthos
7	39+142	39+242	Patra
8	39+776	39+835	Korinthos
9	40+070	40+174	Patra
10	40+074	40+158	Korinthos
11	44+918	44+991	Korinthos
12	53+702	53+880	Patra
13	59+180	59+242	Patra
14	59+379	59+609	Patra
15	76+076	76+186	Patra
16	82+452	82+539	Patra
17	88+494	88+590	Patra
18	91+440	91+623	Patra
19	91+815	91+945	Patra
20	96+182	96+261	Patra
21	96+955	97+017	Korinthos
22	97+104	97+254	Korinthos
23	97+190	97+314	Patra
24	97+378		Patra
25	98+710	98+798	Korinthos
26	98+850	98+965	Patra
27	107+843	107+990	Korinthos
28	111+591	111+922	Korinthos
29	111+794	111+968	Patra
30	112+825	112+889	Patra
31	114+550	114+683	Korinthos
32	115+350	115+433	Korinthos
33	115+676	115+839	Korinthos
34	115+700	115+883	Patra

The noise barriers proposed in the above Designs are of the same type as the ones already approved and constructed for "Elefsina-Korinthos" and "Patra By-Pass".

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- Existing Sections (EL-KO & PBP)

Following the "Special Acoustic sound barriers design" approved by EYPE/MEECC via document No 122052/8.3.2010 and KAPA Dir./Noise, Vibrations & Radiation Dep. document No 110987/6-5-2015, the installation of sound barriers at EL-KO section was completed.
Then an acoustic environment monitoring programme was conducted along EL-KO section which was approved by KAPA Dir./MEECC via doc. No 2573/30-1-2017.

All noise barriers have been constructed along PBP section as well. A report was prepared regarding the effectiveness of the installed safety barriers along this section which was approved by KAPA Dir./MEECC via doc. No ΥΠΕΝ/ΔΚΑΠΑ/12263/246/21-8-2017.
Please note that the gaps presented at the barrier at measurement location Θ16 have been filled (see photos below).

Both EL-KO and PBP section have been delivered to OLYMPIA ODOS S.A. who assigned their constant monitoring to OLYMPIA ODOS OPERATION S.A.

The location selection, where the 24-hour acoustic measurements were performed, depended on: the implementation of noise measures to protect sensitive receivers and residential uses and on the locations of the initial acoustic measurements on 2009 noise monitoring program.

Within the framework of Patra Bypass section noise monitoring program, the following 24-hour measurements were carried out in 17 locations, using special moving noise monitoring stations, suitably designed to meet the requirements of the new European Noise Directive.

Annex 5 presents in detail the results of the variability of noise indicators - that analyzed above - for each 24-hour measurement / position. The tables and diagrams summarize the results of the main noise indicators Lden, Ld-e and Lnight for each 24-hour acoustic measurement:

Observing the 24-hour record results, it is noted that:
in all cases of noise barriers implementation (positions P1, P2, P3, P11, P12, P14, P15 and P16), depict full compliance to the limits, with the exception of P16 position where there is a marginal excess of the Lde indicator due to panel gaps, that are expected to be covered soon. Additionally, at P4 and P13 positions exceedances of statutory limits are observed but they are outside of the urban boundaries and no additional noise measures are required. Concerning P7, which is within the urban boundaries, exceedances of the relevant limits are odseved due to the failure to implement the intended panel.

More specifically, taking into account the aesthetic/architectural requirements and the restrictions imposed by the constructions' static adequacy and road safety elements, the barrier surfaces created with transparent sheets used as much as possible are obviously not making the residents of the areas behind them feel "caged".

The barriers' formulation was based on the following architectural design principals:

- Selection of the proper dimensions for the vertical walls and combination with the transparent panels they support so as to achieve the best possible proportion of transparent and non-transparent parts of the overall barrier superstructure.

- Use of horizontal scotias on the narrow walls (they facilitate the wall's visual integration into the natural environment by breaking up its surface while also being compatible with the vehicles' horizontal direction).

- Alternation of walls and transparent panels so as to avoid – to the extent possible – a monotonous repetition of one single pattern.

- The reinforced concrete non-transparent panels have been placed with proper width variation so as to give a sense of varying degrees of density. This is done in an attempt to distract the viewer from any single part of the construction and make him/her see the whole picture.

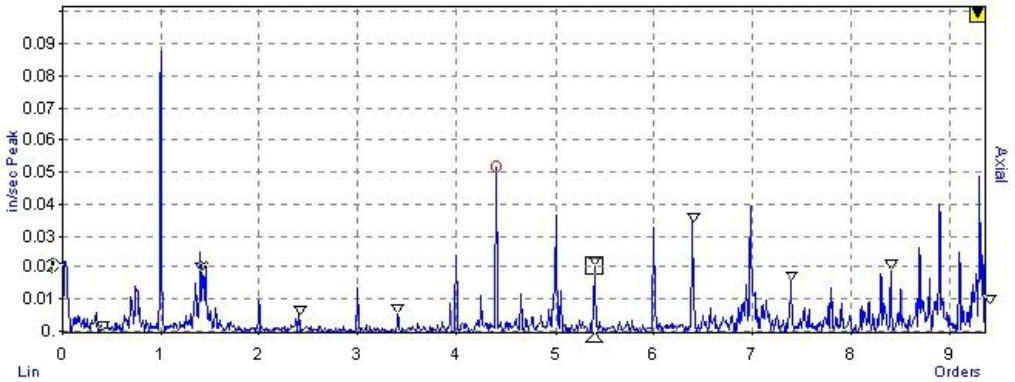
Please also note that protective measures have been taken to prevent birds from crashing on the barrier's transparent parts. To that end, suitable bird images have been stuck on the panels following the successful methods used in other similar cases.

Stickers are the most widespread method in Europe since it requires no a priori selection of potential sections to paint. Rather, one can a posteriori apply the stickers on the locations where birds are establish to fly and hence there is a risk of them crashing on the panel.




3.B TRAFFIC LOAD VIBRATIONS

During the Project's execution, due care is given to minimise vibrations caused by the construction activities to buildings and sensitive locations within the Project's zone of influence.



To that end, the installation is foreseen – at critical points – of measurement and recording systems of all significant variables of the phenomenon (soil movement, speed and acceleration). The local working sites will keep complete records of the recorded data.

In parallel, the Operator carries out traffic counts at the Project's toll plazas. More specifically, each month the company drafts an operation report, including precise traffic data, i.e. number of vehicles passing through all toll plazas and the traffic composition; said report is duly submitted to the competent supervising Services of the Ministry of Infrastructures, Transport and Networks. The company has at its disposal both the primary and the processed traffic data.

3.C AIR QUALITY AND METEOROLOGICAL DATA MONITORING

Complying with the C.A.'s environmental requirements, three (3) permanent Air Pollution & Meteorological Data stations were constructed and put to operation to monitor the impact of the motorway on the wider region.
Two (2) of them have already been delivered to the Concessionaire since 2016 and now operate under the Operator's supervision.

Station at Aigio

Please note that the installation of one (1) more permanent Air Pollution & Meteorological Data station in Egio (direction to Patra) is on progress and its completion is foreseen until 31-8-2017.

Please see below the Glafkos I/C and Tripoli Semi-I/C stations' pollution values:

Station	Suspended particles PM10 & PM2.5	CO	NO NO2 NOx	SO2	O3	BTEX
Korinthos	x	x	x	x	x	x
Glafkos	x	x	x	x	x	x

The following meteorological parameters are also cited:

- Wind direction and speed
- Atmospheric rtemperature and relevant humidity
- Sunshine
- Precipitation

Based on the latest air quality report which can be found as Appendix 4 of the present report, we can draw the following coclusions :

During 2017, with regard to the **monthl**y, as well as the **daily** variation of pollutants (SO_2, CO, NO_2, O_3) and according to the available data, no exceedance cases were observed according to the legislation in force.

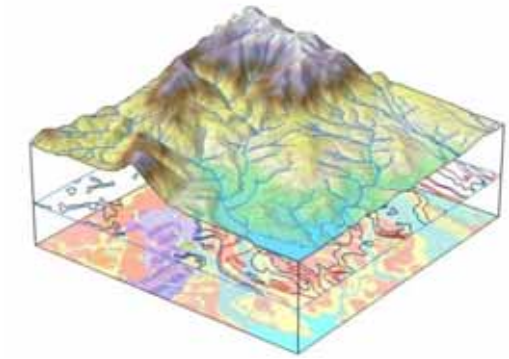
Maximum daily average PM_{10} value was exceeded 1 time in Korinthos and three (3) times in Patra. The limit value should not be exceeded more than 35 times a year. In Korinthos the exceedance was observed on 01/07/2017, whereas in Patra on 11/08/2017, 18/09/2017 and 04/10/2017. According to the Air-Pollution Values of the Western Greece Region (http://www.pde.gov.gr/gr/enimerosi/anartitea/airpollutionofpatras.html) respective exceedances were observed in stations inside Patra (Drosopoulou square and Georgiou square stations).

There was only one exceedance in the daily value of $PM_{2,5}$ in Korinthos station on 23/01/2017.

3.D WATER MONITORING

Permits have been received from Peloponnese, W. Greece & Ionian Islands Decentralised Administration, Water Resources Directorate to use water resources from the following drillings, so as to cover the irrigation, fire fighting and other needs that shall arise in the Project's short-term parking areas along KO-PA section.

s/n	Name	K.P.
1	EL-KO 1	13+750
2	KO-PA 2	28+750
3	KO-PA 3	39+150
4	KO-PA 4	62+700
5	KO-PA 5	87+300
6	KO-PA 6	111+100



Towards enforcing article 5 law 3010/2002 (as amended via L. 4258/2014 and currently applies) and in accordance with the provisions of article 11.2.1 of the Project's Concession Agreement, the CJV proceeded in the elaboration of stream delineation designs (*D. Sotiropoulos & Co, L.S. Lazaridis & Co*) for the stream's section extended along the Projects construction zone or abutted to it and along Korinthos - Patras section for five hundred meters downstream excluding the cases where downstream to the Road Project and up to 500m. HSRL/OSE structures exist or another delimination is in place. The designs have been submitted to the Technical

Services of the local Prefectural Administrations for approval and any other administrative act necessary in order to be rendered fully effective.

Within the year the following partial delineation designs were submitted to the Technical Works Department in Korinthos P.A. and they are in the final stage of approval:

1. "Dritsa" stream (k.p. 4+229), around L103 structure's position
2. "Dristiliza" stream (k.p. 8+491), around L109 structure's position
3. "Gourgourotis" stream (k.p. 11+660), around L116 structure's position
   "Filiza" stream (k.p. 13+882), around L120 structure's position

These delineation designs' submission fulfills the Constructor's obligations out of the C.A. regarding stream delineation.

3E . ENERGY AND CLIMATE CHANGE

In order to minimize the high energy costs of the project and in the meantime contribute to the battle against climate change, Olympia Odos has launched an extensive energy saving program which shall be implemented in several phases. The first phase of its implementation concerns the older tunnels lighting system, situated in Eleysina-Korinthos and Patras-by-Pass sections, which have the highest energy consumption of Olympia Odos motorway. Beginning of 2016, we have conducted a detailed power consumption measurement campaign for each tunnel in Kakia Skala and Patra-by-pass. These measurements permitted to clearly identify the consumption sources and period (lights, jet fans, buildings, pumps…) and concluded that replacing the HPS lighting by LED would generate important savings.

The LED technology offers a much lower power consumption for the same lighting, and this lowers the total power consumption of the installation, offering advantages for the heavy maintenance of electrical panels, transformers, UPS batteries, etc. All the above will have lower stress and they will require less maintenance due to the fact that the total current that will be required for lighting will be much less.

I. Power Consumption

Using the historic power consumption and billing information for years 2012, 2013, 2014 up to August 2015, the consumption and associated cost reach on average per year for the existing section tunnels in Kakia Skala and Patras by Pass, can be seen bellow. At the same time, a study for replacing the currently installed HPS (High Pressure Sodium) lamps in the existing sections was carried out.

The LED lamps are more durable and they don't burn, but just fading slightly while aging. The initial tests show that they will last more than projected with minimal maintenance while offering a very good lighting result, even if they lose some lighting intensity this can be compensated using the dimming (HPS lamps don't have this function).

According to our studies the yearly savings in the electricity bill after the implementation of the LED technology in the Existing Tunnels of our Project is:

	Kakia Skala		Patra by Pass		ALL	
Electricity consumption HPS (kWh)	5,522,400		6,445,200		**11,967,600**	
Electricity consumption LED (kWh)	2,340,000		1,502,600		**3,842,600**	
Yearly difference (kWh)	3,182,400	-58%	4,942,600	-77%	**8,125,000**	**-68%**
Yearly savings (€)	399,200	-46%	737,000	-70%	**1,136,200**	**-60%**

II. Pilot Implementation – Tunnel "Skiron" at Kakia Skala and reduction of CO_2 emissions

A pilot implementation to assess the efficiency of the dimmable LED lighting approach was carried out for one short (360m) tunnel, 'Skiron' at Kakia Skala from K.P. 48+690 to K.P. 49+050.

Before the HPS luminaries' replacement, a power consumption meter was installed at Skiron tunnel, to log measurements between 5 of December 2016 up to 6 February 2017. Subsequently power measurements were conducted for two months in order to assess the cost and energy efficiency of the new installation.

Now, almost one year later, we can have a direct comparison, since we have measurements from December 2016 (HPS) and December 2017 (LED).

In our previous savings assessment, we removed any irregularities (highest and lowest values), but here all days were taken into consideration, since this is a direct comparison.

Skiron Tunnel, Lighting Consumption, December 2016 (HPS lamps).

Skiron Tunnel, Lighting Consumption, December 2017 (LED lamps).

Seeing the consumption for the same month, we had 8,426 KWh with LEDs while the previous consumption was 32,484 KWh. This shows a reduction of more than 70%, which exceeds our calculations of savings of at least 60%. For December 2016, only Skiron Tunnel emitted 2,924 kg of CO_2, while with the LED lamps, the emissions fell significantly, at 758 kg of CO_2.

The calculation of the energy savings from the recorded data and after the neutralization of the seasonality indicates that we are in line with our estimations.

Description	Dec 2016 (HPS)	Dec 2017 (LED)	Savings
Monthly Consumption (kWh)	**32,484**	**8,426**	**74 %**
Daily Average (kW)	**1299**	**337**	**74 %**

Power consumption comparison

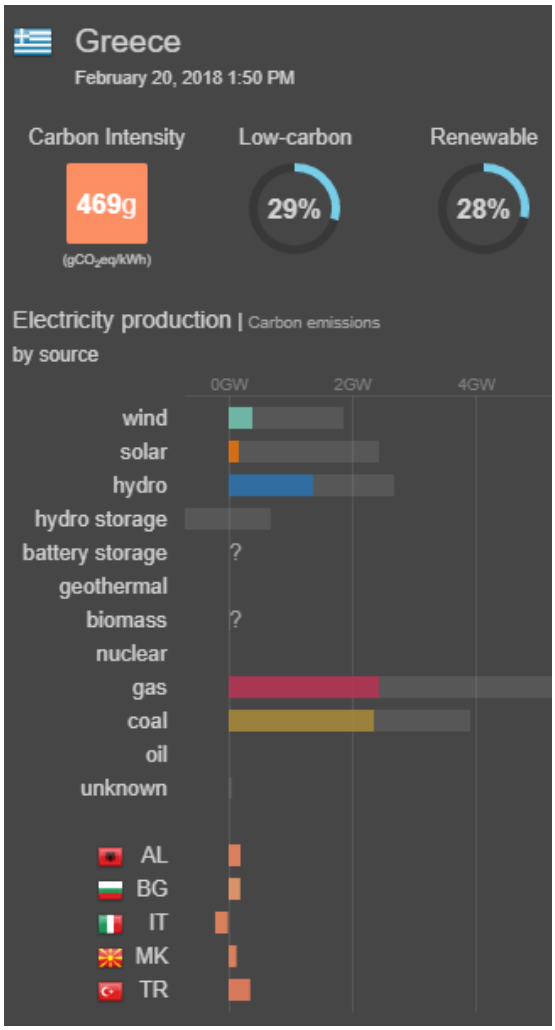
The above power measurements not only confirm our initial energy savings objectives and show clearly that the LED luminaires provide significant energy savings, but they promise even greater savings. For the time being, we are going to keep the projections to the 60%, because the input is just from one tunnel. The result provides more confidence for the upcoming campaign to install LED lamps to the rest of the tunnels in Kakia Skala and Patras by Pass (16 tunnels except Skiron).

III LED Installation, 16 Tunnels (except Skiron)

After the successful results from the pilot implementation, Olympia Odos will start the second LED installation campaign during the year 2018. The implementation will start with the rest Kakia Skala tunnels (Efpalinos, Aithra, Thisseas, Geraneia) in the first part of the year and it will follow with the 12 tunnels in Patras by Pass, the second half of the year 2018.

IV Environmental savings

After the full implementation of LED lamps on the rest 16 tunnels, further to the energy and cost savings, a very big difference will be in the total energy footprint since the CO_2 emissions will be much lower using the LED technology. Greece's carbon intensity for the fuel mixture for electricity production is 469 gram/kWh (for the given period, the data are changing depending on the fuel mixture is used by the country), based on the data provided by IPCC 2014:



Fuel mixture for electricity production in Greece

Source: https://www.electricitymap.org/?wind=false&solar=false&page=country&countryCode=GR

Taking into account the projected savings in KWh using the LED technology and the above fuel mixture, there will be a substantial difference on the CO_2 emissions:

KWh	CO_2 gr/kWh	CO_2 Emissions (tn)
8,125,000	369	3810

Less (in tons) CO_2 emissions thanks to LED technology

4 ENVIRONMENTAL MANAGEMENT, WASTE MANAGEMENT, HAZARDOUS AND NON HAZARDOUS MATERIALS

During the motorway's construction and operation, both the constructor and the operator as well as the cooperating contractors and sub-contractors comply with all pertinent provisions, according to the Greek Legislation. Joint Venture APION KLEOS in the frame of its Environmental Management Plan has developed procedures for the management of waste.

We prioritize the measures and actions towards an effective and rational waste management for the sustainable use of resources and the prevention of downgrading or the restoration, preservation or improvement of the environment.

Waste management is primarily based on sorting waste (prevention, re-use, recycle, recover, final disposal) and their environmentally proper management. The ultimate goal was an more effective management of natural resources and waste by reducing the produced waste, re-using it, recycling and recovering it and managing it environmentally properly thereby reducing as much as possible the risk to human health and the environment.

The respective "Hazardous Waste Management Procedure" has been prepared for the management of waste, documenting the existing legislative framework and the means/ directives for their management.

Patras OMC

Akrata TB

The results of the Project's environmental performance, such as material recycling, mineral oil, batteries, vehicle tyres, hazardous materials, polluting substances, area restoration, excavation and demolition products etc management are presented in Appendix 3 of this Report.

Since the first semester of 2017, Olympia Odos has been registered to the Electronic Waste Registry and submits digitally its reports regarding the waste production associated with the operation of the project, according to the JMD 43942/4026/2016 (B' 2992) and article 42 of the law 4042/2012 (A' 24).

5 ENVIRONMENTAL IMPACT RESPONSE MEASURES DURING CONSTRUCTION

a. Geomorphology - Soil

In order to protect the soil from fuel leaks etc special areas with sealed floor and graded collection drain that ends in a sedimentation basin are provided in order to swill the machinery.

In the machinery maintenance or in other suitable and safe area, used oils from black oils change are temporarily stored. The management of the used oils is in accordance with the provisions of PD 82/2-3-2004. By the PD is given priority to collect and dispose used oils for regeneration treatment.

All necessary measures are taken in order to avoid erosion or filtration at the slopes during the tunnel construction and the water and clay supply to the final acceptor. The sediment before being disposed is being treated in apposite sedimentation tanks.

b. Geology

Special attention was paid during construction of sections passing by geologically sensitive zones, as in those areas stability problems might emerge at the formations. In those sections as slight interventions as possible were conducted.

c. Ecosystems - Vegetation

In the areas where the structures are constructed, and mostly in the areas where bridges are constructed, all the necessary precautions were taken in order to avoid any impact on the riverside ecosystems. All possible efforts were made in order to use the fewer possible quantity of concrete. Where possible the use of gabions was preferred and the proper application/use of additives (e.g. betonite), which were used in order to add improved features to the boring effluents during the borings.

Especially during the dry period, in the construction phase, all the necessary measures were taken in order to avoid dust emissions (infusion of earth materials, trucks covered by dust).
In some case the cleared vegetable materials were cut and temporary stored in mounds in order to create organic fertilizer for future use in planting technical activities.
After clearance, excavation, collection and temporary deposition of the superficial

fertile soil layer followed.

d.Dust emissions avoidance and reduction

During the Project's execution aerial pollutants are released and especially dust from the working sites. Depending on the distances from the nearest buildings (e.g. residencies) they could have adverse implications. This dust release was dealt with (by the local Working Sites) with great success by use of the following measures.

Control of the dust release was affected through simple management methods and the impact level greatly depended on the control measures applied at the source as follows:

- Sprinkling and often – effective clearing of routes within the site and the excavation areas,
- Interventions at the work surface – front where necessary, focusing on the excavations,

- Rain-water run-off to prevent particles from re-entering the atmosphere,
- Maximum speed limits along all non-asphalt-paved surfaces,
- Along the routes of the road building vehicle, the usual control methods are applied in the case of non-asphalt-paved routes ie, asphalt paving where feasible, stabelised pavement infrastructure, water soaking and traffic regulations (*aiming to reduce dust in the dry season and traffic-indiced erosion in the wet season)*,

- Sprinkling during transfer and deposit of sand, aggregates or/and excavation materials significantly reduces released dust,
- According to greek law, all trucks transfering loose materials (e.g. excavation products) were covered. The vehicles entering or leaving the working site were clean.
- It was forbidden for the trucks to pass through settlements during quiet hours,
- Liquid rather than dry concrete was used in the mixing and preparation,
- All machinery and equipment used in works were in good condition and fulfilled the manufacturer's specifications, thus minimising dust release.

Combined, the above measures comprise the so-called Best Management Practises. Given that:

- it is a linear project with many construction activities conducted in parallel and now fast-track under the extremely tight completion time-schedule,
- the water resources available along the Project during summer season were limited,

any impact after the above measures were deemed slightly negative with a very short-term effect and could be dealt with.

The benefits from the project's timely completion reach the residents of the areas temporarily "affected" as well as all other used (visitors, tourists etc) and positively influence all financial parameters and activities in the areas (road safety, accessibility, faster transportation of people and goods, reduced transportation costs etc).

In any event, the local Working Units were conducting PM10 Dust Measurements under standardized ELOT EN 12341 method, with a certified sampler, by a certified firm.

During the measurements, the motorway's construction activities were conducted normally. Each measurement lasted 24 hours and run through one calendar day so that the findings could be directly compared to the maximum rates / target aims set by the current legislation.

Atmospheric PM10 measurements are covered by the current Official Implementation Field of Certification (No 329-3). The methodology to estimate suspended particles has a certified accuracy measurement and it provides a full depiction of the pollution's changes over time along with a good mapping of an area's pollution levels.

The measurements findings reports can be found at the local Working Units' offices while they have also been copied to the Project's Independent Engineer.

6 VEGETATION – PLANTING - ROAD CLEANING

The vegetation and planting pertain to the environmental integration and protection of the areas adjacent to the project.

- Existing Sections

In order to facilitate the fulfillment of the above obligations, a Final Planting Design (*S. Voutsinos & Co*) for the surrounding areas, the respective I/Cs, slopes and median strips was elaborated for Elefsina – Korinthos section. This design was approved by the Project's Independent Engineer. The planting process has been completed according to the design findings.
The planting of Patra By-Pass is in very good shape due to the "recent" construction and maintenance for the last period of time.

Current state of PBP

- New Sections

The Planting Design focuses on the aesthetic incorporation of the new Korinthos-Patra Motorway and the secondary Local Road Network works into the wider narutal environmental of the area they are passing through.

The Planting Design was prepared according to the Design Investigation Standards (DIS). All planting designs concerning the road project Korinthos-Patra have been completed and the indicated planting has commenced.
The designs aimed at describing the prevailing conditions on site and the nature of the problems which arose due to the road's construction. The proposed planting interventions aim to the best possible restoration of the damages caused to the landscape by the Motorway's construction.

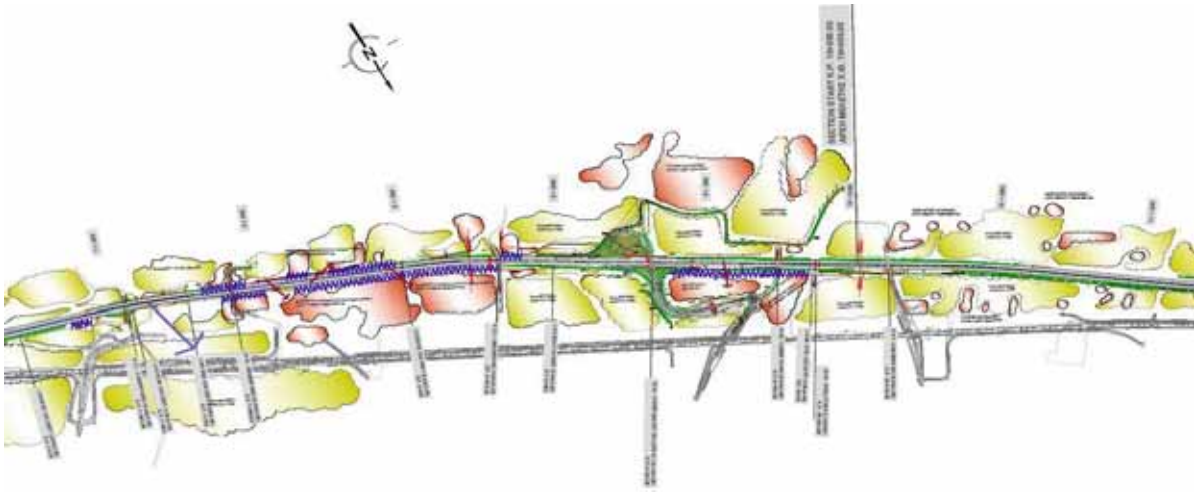
The planting was designed with the main target of adjusting the new plants to the existing vegetation. Trees and bushed are planted taking into account the volume they will take at the final stage of their development.

The proposed planting took into account the following fundamental principles:

- Traffic safety
- Planting – landscape relationship
- Road equipment

During the arrangement of the various greenery (medium, high) to be planted, the following was taken into account:

- ensuring the area's unobstructed function
- the area's general and specific ecological conditions
- the area's aesthetic requirements
- creating natural continuity of the area's flora.



The species to be planted are selected based on the following:

- Their properties (final dimensions, τάσεις, hardwood, evergreen, flowering season, flowers colour etc.)
-The area's ecological data
- The functional aim they are intended to fulfill (decoration, soil retention, groups, growth etc.)
- The local micro-climate
- Ensuring aesthetic harmony and biological equilibrium between the species comprising the groups, growths etc.
- The dimensions of the area and each separate location
- The species' market availability
- The species' locality and that they represent the surrounding area.

Cut & embankment planting standards

The OLYMPIA ODOS OPERATION S.A. (Operator) personnel and the competent subcontractors carried out regular trimming, weeding and cleaning works for the most part of the project, and specifically of 97 km of central reserve, 402 km of shoulders and of the 28 interchanges and their branches, as well as of the parking areas.

Cleaning

During 2017, the Operator's personnel in collaboration with external subcontractors carried out and still does regular cleaning works along the entire project (202 km), in the 28 interchanges, the toll stations (lanes, booths, pavement, surrounding area, buildings), in the tunnels and in the 45 parking areas (washing, sweeping, waste removal from bins and surrounding areas).

It is noted that cleaning pertains to the entire cross section until the expropriation limits.

7 MANAGEMENT OF EXTRAORDINARY INCIDENTS, ENVIRONMENTAL ACCIDENT, GREEN AREAS FIRE

During the operation of the working sites, all fire prevention measures were taken in order to prevent fire coming potentially from working machinery, working teams, transportation of explosives and to minimize the danger of fire being expanded to adjacent areas. The way according which the fire belt was organised, was controlled and approved by the competent Fire Service before the beginning of the works.

More specifically, fire management measures were taken in order to protect forest areas on both sides of the road.

Every year before the commencement of the fire period, the Operator of the Project sees to clean the shoulders and the boundaries of the road from greens that may be the cause of a fire.

The Concessionnaire has also appointed a specialized forestry expert to develop a report on the condition of the vegetation and on the fire protection measures that need to be taken.

The Concessionaire, undertook a series of forest fire prevention measures along the Korinthos Patra NNR within the boundaries of the project.

This intervention has been decided in order to effectively deal with the results of the suspension of the construction activity on our Project and despite the fact that every year before the commencement of the fire period, the Operator of the Project sees to clean the shoulders and the boundaries of the road from greens that may be the cause of a fire.

Within the framework of elaborating the fire hoses designs along the EKPPT motorway, maps were prepared depicting the forest land for "Elefsina – Korinthos", "Ancient Korinthos I/C – Patra By-Pass K1 I/C".

In the framework of road safety, Olympia Odos Operation S.A. has Patrollers and Intervention Teams patrolling the Project with specially marked vehicles dealing with incidents (immobilized vehicles, accidents, traffic problems etc.) by implementing temporary signage to safely arrange traffic and assist the emergency services (Police, Fire Brigade and Paramedics). In this framework, during 2017:

- **4,477,384 km** were travelled by Patrols and Interventions teams (about 12,267 per day) for supervising the road network, of which 2,377,755 km during the second semester,

- 23,172 incidents were handled with the Company's assistance, such as: 13,336 immobilized vehicles (mechanical failure, flat tire, lack of fuel, abandonment), 7,628 obstacles on the pavement, 1,150 road accidents (36 with injured and 1,114 with material damage), 560 user problems (pedestrians, vehicles moving in the opposite direction, non authorized users, dangerous traffic violations), 82 traffic congestions and 416 other emergency incidents (fire, adverse weather conditions, etc.) out of which:

    - 12,864 were handled immediately by the Company, since they were detected (located) by its own vehicles, or by its subcontractors' vehicles

    - 10,308 incidents were handled within 13' in average by the Company, since they were otherwise detected (phone, cameras etc.), while regarding the response of the subcontractors respectively: 19' for light vehicles and 37' for heavy vehicles

Patrol vehicles

The Operator's competent personnel (Intervention Teams) implement on a daily basis temporary signage for incidents and for the safe execution of works carried out on the road either by the Operation Company or the Construction Joint Venture. Regarding Korinthos-Patra NNR special attention is paid due to it features (no central reserve) and the sections with steep turns and limited visibility.

The Operator has action plans related to the protection of the environment either within routine maintenance or emergency and abnormal situations.

B.1 Congestion
B.2 Road Accident
B.3 Immobilized vehicle
B.4 Problem on the pavement
B.5 Problem on infrastructure or equipment

B.6 Problem with user
B.7 Other emergency incidents
B.8 Adverse weather conditions
B.9 Large scale incident in tunnel
B.10 Incident on Korinthos-Patra NNR

The Constructor shall work and cooperate closely with the Environmental Service and other departments of OLYMPIA ODOS S.A. in the application of the procedures – directives for the management of such issues.

8 ANTIQUITIES

Under the principle that cultural heritage and antiquities along the motorway shall be protected, a principle that constitutes prerequisite for the construction of the road, the Constructor was in direct contact and collaboration with the competent archaeological services along the motorway. According to the Concession Agreement and the Design – Construction Contract, Construction Joint Venture is responsible for the execution of archaeological investigations pursuing a recommendation by the pertinent archaeological service.
Works in the positions indicated in the Concession Agreement (article 13.1) and where there is a great potential of Antiquities being revealed have commenced.

Works in the Archeological site of Asopos - Mouliki (K.P. 17+200, side road)

9 TRAINING – AWARENESS RAISING

Environmental training aimed to reinforce knowledge and raise awareness about the environment, to develop the necessary skills, to form the right behaviour, to activate and make informed decisions and responsible actions.

Audit/ inspection is a tool of the environmental management system, including the systematic, substantiated, periodic and objective assessment of the performance of the working sites, the environmental protection management system and processes.

The Construction Joint Venture was organizing training and briefing seminars whereas all internal inspections were accompanied by the training and briefing of all competent persons at working sites regarding issues and developments pertaining to the environment.

Each working site's environmental engineers were regularly organising meetings with all parties involved in the Project's construction, providing them with the suitable training and briefing.

The Construction Joint Venture's Environmental Department in cooperation with the project engineers conducted regular inspections, give the necessary instructions or directions pursuant to the Project's EMP regarding any arising environmental issue. To fulfill that goal, special reports were developed documenting the test results, proposing measures to deal with any environmental issues identified and accompanied by a complete photographic survey.

Environmental training during the Project's construction was divided in 2 categories. The first one pertains to the specialized environmental training of the staff related to the Project's environmental management (environment engineers, foremen in sensitive areas) and the second one to the general environmental training of the whole staff.

Table 3 describes the whole number of hours (persons x time) for environmental training during 01/01/2017 - 31/12/2017.

TABLE 3	
TRAINING TYPE	TRAINING TIME (HOURS)
SPECIALISED TRAINING	55
GENERAL TRAINING	35

10 CORPORATE SOCIAL RESPONSIBILITIES ACTIONS

Finishing the last section of Olympia Odos and giving it to public use, an essential and important national infrastructure was completed. For Olympia Odos, however, the construction project completion does not mark the end of the route. It is, however, linked to a new subject, which concerns the smooth and safe motorway operation, but also a new corporate vision focusing on Sustainable Development.
For us, Olympia Odos is more than just a road project. It is a road that creates better conditions for everyday life, but also for the future of hundreds of thousands people. It is an essential strategic ally in the economic and social region development. In Olympia Odos, we are committed to contributing substantially to this goal, through our strategy and actions in the field of Sustainable Development. By implementing this commitment, the Concessioner already invests in projects covering a wide range of sectors.

In order to boost local development, Olympia Odos has supported a series of institutions and events, such as the Patras IQ Innovation and the Patras Development Forum, the Oinoxenia Aigialia festival, the Achaia Business Festival while at the national level has collaborated with the Greek Gastronomy Guide, which aims to promote the goods and the values of the Greek culinary culture. At the same time, supports the work of of Western Greece and the Peloponnese Road Axis Observatory, which has been operating since 2009, aiming to promote the socio-economic effects of major transport projects in Region's economy.

For Olympia Odos, culture and the environment are two sectors that are iclosely linked to the goals of sustainable development. Olympia Odos passes through a significant cultural and natural heritage part of our country, linking emblematic monuments and archaeological sites, as well as areas of particular natural beauty and environmental value. Protecting this wealth , is a challenge that requires all the forces to be joined. At this point, the Concessioner has implemented and enhanced actions such as reforestation, archaeological excavations and educational visits of students to museums, while:

- strongly supports Elefsina in the action program as the "European Capital of Culture 2021".
- has developed a solid partnership with "DIAZOMA" Association for the promotion of the Olympia Odos Cultural Route
- since2016, is the official supporter of the voluntary movement "Let's do it Greece", which aims to create a large network of active citizens, sensitive to environmental issues, such as waste management.
- we cooperate with SKAI for six consecutive years, for the project "Clean Greece", with toll awareness actions.

Recognizing education and innovation as equally important pillars of sustainable development, Olympia Odos supported actions local Institutions, such as the Kalogeropoulion Foundation of Corinth and the Chevalier Education Club of Kalavrita, as well as events such as TEDx Patras and the Olympiada of Educational Robotics.

The sport sector is also a sector of action for the company, counting many years of collaboration with the Hellenic Paralympic Committee as an Official Supporter, while at the local level, the company supported sports organizations and events such as Patras Cycling Club, Apollon Patras, Patras Sailing Club, Loutraki Triathlon, the sand sports athletic events in the Municipality of Xylokastro, the Ilia Marathon and others.

Our approach is also important in the field of social solidarity, through the support of dozens initiatives and institutions at local level. Among others, in 2017 the company supported Institutions such as Alma Life, SOS Children's Villages, Patras Mental Health Association, Patras Family Association, Smile of the Child and Corinth Efthimeio Center, municipal social departments, voluntary organizations and associations.

"Kilometers of Solidarity"

Olympia Odos, together with the Rio-Antirion Bridge and New Road, created in 2016 the social union "Kilometers of Solidarity" is an effort to join forces in the field of solidarity contributing in practice to the quality life improvement. Through the actions of the Association " Kilometers of Solidarity ", clubs, associations and organizations are supported in Western Greece.

Road Safety

An important pillar of Olympia Odos Sustainable Development Strategy is to raise public awareness and responsible driving behavior. In addition to the existence of modern infrastructure and services, road safety remains a major issue in our culture and behavior. Our aim is therefore to contribute to the upgrading of driving education in Greece, by developing collaborations with Institutions utilizing our access to international experience and knowledge on the subject.

For this reason, Olympia Odos implemented educational actions in the framework of events such as the Voluntary Road Safety Week of the "Kouros" Megara Group and the Pan-Hellenic Motorcycle Championship. We also participated in "Pan-European Day Without Fatal Accident" events, organized by the Hellenic Motorway and Infrastructure Authority (HELLASTRON).

Olympia Odos was an ally in the cultivation of a responsible driving culture in Greece, "Foundation for Responsible Driving" of the VINCI Group.The Fondation Vinci Autoroutes was established in 2011 as a road safety observatory, organizing campaigns and funding research such as the annual Euro-barometer on road safety, which includes Greece the past few years.

Olympia Odos is a road made by people for people. The local communities were since the very beginning companions in the implementation of a difficult construction project. Today, we continue together, joining our forces for a better future.

11 EXPENSES OF THE PROJECT RELATED TO ENVIRONMENTAL PROTECTION MEASURES AND ACTIONS

According to the certified construction expenses of the project for 2017, the expenses related to environmental protection for the year 2016 are up to the amount of 1.078.211 euros (value without VAT). This amount corresponds to the 0.4% of the total certified expenses for the construction of the project.

The afore mentioned expenses are related to
1. Work site studies
2. Sedimentation tanks construction
3. Bag filters used in asphalt and cement production sites
4. Oil traps/oil separators
5. Anti dust measures
6. Volatile emissions / dust measurements
7. Water quality measurements, vibrations measurements
8. Slopes planting
9. Personnel related costs from the Allottees
10. planting

The expenses related to the management of waste of the construction activities are not presented in this report.
The total of the construction related expenses as well as the type of construction activities and the progress of the project, are incorporated in the reports that the Concessionaire and the Construction J.V. are dully submitting to the competent authorities and the Independent Engineer.

Along with the environmental expenses related to the construction of the project, we must add another 600,000 euros that are related to the waste management of the operation of the motorway and the fees to environmental consultants.

According to the 2018 planning and forecast, the environmental protection expenses are up to 2,300,000 euros.These expenses are related to environmental monitoring activities, planting and the change of lighting in the tunnels.