Road Infrastructure

- **Environmental Impact Assessment (EIA) and Special Ecological Assessment (SEA) for the project: Road connection of Ancient Olympia to the Pyrgos-Kalo Nero-Tsakona highway and onward to the coast.**
  Scope:
  - Construction of a new 9.5 km road aimed at significantly reducing travel time between Ancient Olympia and the coastal area of Anemochori (from ~1 hour to ~8 minutes).
  - The current route is inadequate with poor geometric standards, steep gradients, and varying widths.
  - The project crosses the municipalities of Ancient Olympia, Pyrgos, and Andritsaina-Krestena in the regional unit of Ilia.
  - The area lies within the protected Natura 2000 site "OLYMPIA" (Special Conservation Area GR2330004).
  - The route passes through Zone A (Absolute Protection) of the declared archaeological site of Olympia.
  - Part of the road crosses the possible path of the ancient Sacred Way from Ancient Ilida to Ancient Olympia.
  - The Special Ecological Assessment follows national guidelines (Appendix 3.2.1 of decision 170225/2014.

- **Technical Assistance to EGNATIA S.A for the environmental permitting of road improvement works in 16 islands of the Aegean Sea.** The project of the road improvement works in the Aegaen Sea Islands concerns the expansion, the reconstruction and/or the improvement of the road infrastructure in 16 different islands in order to improve their safety and to assure the communication of their settlements. The total length of the improved road network is about 30 km. The technical assistance includes the preparation of all the necessary environmental studies for the environmental permitting of the projects and the preparation of all the documents for the permitting of the construction works from the archeological, forest and monument's conservation Greek authorities.

- **Environmental Impact Assessment study for the national road N. Moudania to Potidaia.** The study prepared for the Egnatia S.A. The project concerns the improvement of a part of about 5 km length of the main highway which connects the peninsula of Kassadra in Chalkidiki with Thessaloniki and is the main road connecting the region of Chalkidiki with the Egnatia Highway. In the neighborhood of area of the works is located a special protected area rich of habitats designated as important from the European directive. This part of Chlakidiki is also one of the most visited parts of the region during the summer and alongside the highway is located a great number of hotels. For these reasons The study focused In the framework of the study were assessed the impacts on the environment by the planned works and in particular the impact in the acoustic environment and the habitats during the construction works and their operation due to the expected increase of the vehicle traffic

- **Environmental Impact Assessment study for the road of connection National road Thesalloniki-Asprovalta to National road Thessaloniki-Poligiros.** The study prepared for the Egnatia S.A. The project concerns the construction of a new highway connecting the national road Thessaloniki – Asprovalta with the national road Thessaloniki - Poligiros the main city of Chalkidiki region and will serve mainly the eastern part of the Chalkidiki region. The estimated length of the new highway is about 28 km. The study examined three different alterative locations of the proposed highway. The main aim of the study was to propose the most environmental accepted alternative estimating the

expected noise levels and assessing the impact in the urban areas as well as in the natural environment of each one of the proposed alternative locations.

- **Environmental Impact Assessment study for the road of connection National road Thesalloniki-Asprovalta (Gerakaros) to National road Thessaloniki-Poligiros (Geroplatanos).** The study prepared for the Egnatia S.A. The project concerns the construction of a new highway connecting the national road Thessaloniki – Asprovalta (in Gerakarou village) with the national road Thessaloniki – Poligiros (in Geroplatanos village) the main city of Chalkidiki region. The estimated length of the new highway is about 26 km and is planned to serve the western part of Chalkidiki region and to improve the conection of the area with thessaloniki airport. The highway is planned to operate complementary to the planned new highway connecting the national road Thessaloniki – Asprovalta with national road Thessaloniki - Poligiros the main city of Chalkidiki region which will serve the eastern part of Chalkidiki. The study examined three different alterative locations of the proposed highway. The main aim of the study was to propose the most environmental accepted alternative estimating the expected noise levels and assessing the impact in the urban areas as well as in the natural environment of each one of the proposed alternative locations.

- **Environmental Impact Assessment study for the improvement of the connection of Volos Industrial area and old national road Volos - Larisa.** The project concerns the construction of all the necessary works for the operational improvement of the existing main interchange of the National road Athens Thessaloniki with the old national road Volos- Larisa and the Main industrial area of the town of Volos. The aim of the study was the environmental permitting of these works

- **Environmental Impact Assessment study for the construction of a new connection road of Liti village with the National highway Thessaloniki- Alexandroupoli.** The study prepared for the Egnatia S.A and concerns the preliminary environmental assessment of the construction of a new road of about 2 km in order to assure the connection of the Liti village with the national road and with Thessaloniki. The study examined different alterative locations of the planned road with aim to propose the most environmental accepted alternative estimating the expected noise levels and assessing the impact in the urban areas as well as in the natural environment of each one of the proposed alternative locations.

- **Environmental Impact Assessment study for the operation of the railway connection of Ag. Anargiroi (Athens) to Corinthos (Peloponnese).** The study prepared for the OSE S.A (Greek Railway Company). The aim of the study was the environmental permitting of the operation of the existing railway network between Ag. Anargiroi (Athens) and Corinthos (Peloponnese). The total length of the railway network examined is about 86 km. The main subjects treated were the measurement of the noise level today and the prediction of the estimated noise level in the future with the aid of special computational modes according to operation plan of the national manager of the railway infrastructure.

- **Technical assistance for the Compliance to the Environmental Terms during the construction of the expansion works of the of Athens metro from Aigaleo-Xaidari, and for the construction of Xaidari's Station and Elaionas's depot (line 3).** The technical assistance includes the organization and the realization of all the actions, measurements, and studies need for the compliance to the environmental terms concerned the construction of the planned works. The assistance addressed to the contractor of the construction and included the following:
    - The preparation of a special study for the protection of the urban vegetation during the construction works which includes the recording of all the species of vegetation that have to be removed for the construction.

- The measurement of the noise level before the construction, the prediction of the noise level and the vibrations during the construction works and the proposition of special measures for the protection of sensitive areas and/or buildings. The set up of a monitoring program of noise and vibration levels for different phases of the construction and determination of the actions that should be taken in the case of the recording of high levels of noise and vibration.
- The proposition of the parameters of air quality that should be monitored during the construction and the equipment need for this purpose, especially during the construction of the Eleonas depot which is located in an old waste dump area. Additionally special specifications were elaborated for the management of the dust during the operations
- The preparation of a special study for the disposal of the soil removed from the construction area especially from the Eleonas depot site which was an old waste dump site.

- **Environmental Impact Assessment study for the operation of the railway line between the railway station Leptokarya – R.S. Thessaloniki and R.S. Plati – R.S. Skidra for the Hellenic Railways.** It concerns EIAS for completed works of A1 classification. In the framework of the study were assessed the impacts of the railway function on these parts, in order to get the environmental permission for its function. Besides the analysis for the impacts upon the natural and artificial environment, were executed special measurements of railway noise and were assessed the impacts in 2008 and 2020 using models.

- **Environmental Impact Assessment study for the improvement of the part of the national road from Sozopoli junction of unequal level to Moudania junction of unequal level of the National Road Thessaloniki – Moudania (Vertical Axis 58 of the Egnatia Road).** It was charged by Egnatia Road S.A. It concerns EIA of AI classification. The works include road widening of about 3 m, of the present N.R. along circa 15 km. This high road is the main joining road of the prefecture of Chalkidiki to Thessaloniki and to Egnatia road. The EIAS included the impacts´ analysis on the artificial and natural environment as well as the detailed environmental examination on the alternative solutions with special research and comparative evaluation of the zero solution.

- **Environmental Impact Assessment study of the upgrading of Preveza-Igoumenitsa national road (sections Karteri-Parga intersection and Karteri Egnatia intersection)** in Western Greece in association with the Greek firms ‘G. Vavizos and Partners S.A’. and ‘G. Mikroudis’, for the Greek Ministry of Environment, Physical Planning and Public Works. The study focused on the assessment of project impacts on the adjacent townships and infrastructure and the adjacent wetland of Kalodiki marsh, seeking for the environmentally best alternative.

- **Environmental Impact Assessment study for section Tripoli-Megalopoli of the new national road Tripoli-Kalamata in Peloponissos** in association with consultant D. Gatsos, for the Greek Ministry of Environment, Physical Planning and Public Works. The study focused on the assessment of project impacts on the natural and human environment. Air quality and noise levels have been evaluated using appropriate software.

- **Environmental Impact Assessment study of the construction of the Athens metro depot and station in Sepolia for the project owner Attiko Metro s.a.** For the purposes of this study: (i) the detailed development of the construction site (including all probable construction equipment and vehicles) was studied in detail, (ii) the impacts on the traffic in the area from the site were assessed in detail (including impacts on traffic volumes and traffic light service times), (iii) the impacts from construction equipment, construction vehicles and the differentiation in traffic of the area on the noise and air pollution levels was assessed with state-of-the-art mathematical models, (iv) the economic and social impacts from the traffic, noise and pollution from the construction site were

assessed and (v) mitigation measures were proposed for the reduction of negative impacts from the construction.

- **Assistance to the Special Agency of Public Works - Division of Large Scale Projects of Western Greece,** in adapting and specifying the environmental terms regarding the highways connecting Igoumenitsa Port with Egnatia National Road. In this study existing land uses were considered. The expected noise levels and the effects on the landscape were estimated. The benefits of the works for the area were examined. Realised in association with Prisma Consulting.
- **Environmental Impact Assessment for a section of the Vytina-Olympia highway upgrading,** in association with consultant G. Mantelis, for the Ministry of Environment, Physical Planning and Public Works.
- **Environmental Impact Assessment study of the upgrading of the Athens - Thessaloniki highway, section Aerino - Monastiri,** in association with the consultant Th.Mazis for the Ministry of Environment, Physical Planning and Public Works. The study focused on the assessment of project impacts on air quality, noise levels, landscape, aesthetic and land use impacts in the area.
- **Environmental Impact Assessment study of the upgrading of the Athens - Thessaloniki highway, section Tragana - Arkitsa,** in association with the consultant G. Mantelis, for the Ministry of Environment, Physical Planning and Public Works. The study focused on the assessment of project impacts on air quality, noise levels, landscape, aesthetic and land use impacts in the area.
- **Environmental Impact Assessment study for the improvement of the Old Larisa - Volos National Highway,** in association with consulting firm ERISMA - Th. Mazis, for the Ministry of Environment, Physical Planning and Public Works. The study focused on evaluating the impacts on air quality, noise levels, landscape and land uses.
- **Environmental Impact Assessment study for the highway and submerged tunnel for the link between Perama and the nearby island of Salamina,** for the Greek Ministry of the Environment, Physical Planning and Public Works. The study focused on the effects of dredging and dredged material disposal, landscaping of the access highways, air pollution effects, assessment of noise pollution and mitigation measures.
- **Environmental Impact Assessment study of the new subway system of Thessaloniki,** for ADK Consulting Engineers. The study focused on the expected change in traffic, noise and air pollution from the operation of the subway system in Thessaloniki and the impacts from construction of the system.
- **Environmental Impact Assessment study of the state airport in Kefallinia island,** in association with ADK Consulting Engineers. In the framework of the study, the impacts on air quality were assessed with the use of numerical modelling.
- **Environmental Impact Assessment study of the state airport, Kapodistrias, in Corfu Island,** in association with ADK Consulting Engineers. In the framework of the study, the impacts on air quality were assessed with the use of numerical models