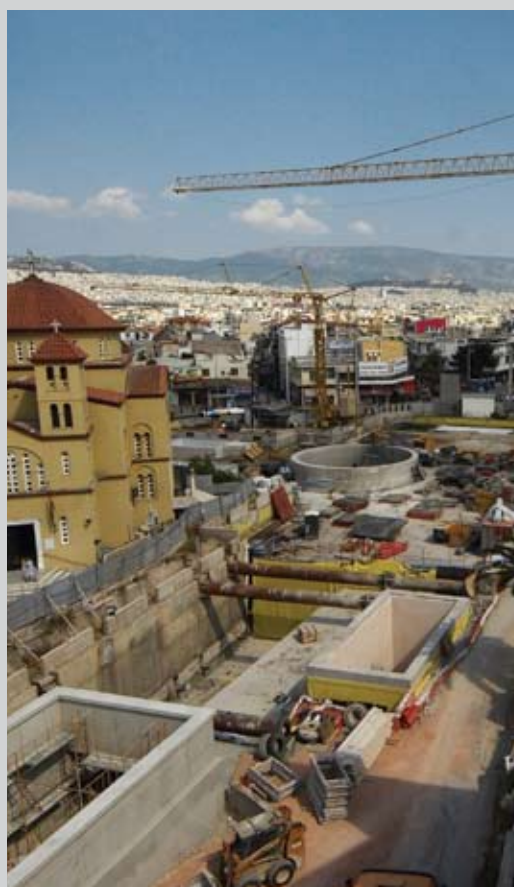




ATTIKO METRO

SUMMARY OF ACTIVITIES 2004-2009





**HELLENIC MINISTRY
FOR THE ENVIRONMENT,
REGIONAL PLANNING
AND PUBLIC WORKS**

Dear friends,

Completing an important cycle of contribution to the greatest transport and environmental Project in Greece, i.e. the Metro development in Athens and Thessaloniki, the Management of Attiko Metro wishes to express its profound thanks to all those who have contributed to the progress of the Project for their excellent co-operation: the political leadership and the executives of the HELLENIC MINISTRY FOR THE ENVIRONMENT, REGIONAL PLANNING AND PUBLIC WORKS, all Attiko Metro employees, the representatives and staff members of the Local Authorities and of the various State services, the executives and staff members of the Contractors - Constructing Joint Ventures, as well as all citizens of Athens and Thessaloniki for their patience to the disturbance caused by the execution of the Metro construction works.

This synopsis of Attiko Metro S.A. activities covering the period from Spring 2004 to Fall 2009 presents in brief the intense efforts made by Attiko Metro people, as well as the highlights of the Athens and Thessaloniki Metro Projects.

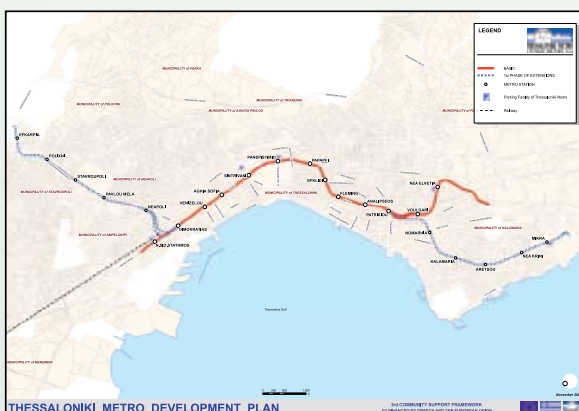
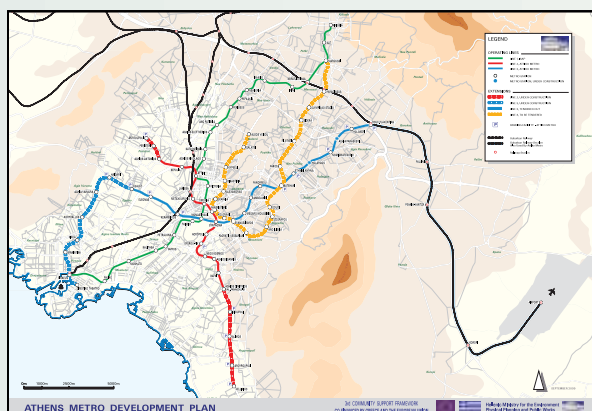
Throughout this time period and with a high sense of responsibility we dedicated ourselves to the execution of the Metro Project. We have developed the most extended front of Metro works in Greece and have doubled the production rate of Metro works, insisting on achieving the dual target of the Company: to construct high standard Metro works and, at the same time, safeguard the Public Interest. We made every possible effort to enable the Metro works to progress as expediently and as quickly as it was possible within the complicated and demanding socio-financial environment of modern Greece; we gained our strength from the unified and substantiated effort of all Attiko Metro people.

With the firm belief that Athens and Thessaloniki still need a lot of Metro, we are convinced that the high level of specialization, organization and dynamism of Attiko Metro people guarantee that a constantly growing number of Metro lines and stations will bring closer the various neighborhoods of Athens and Thessaloniki, decisively improving the environment and the quality of life in the two major cities.

Respectfully,

The BoD of Attiko Metro S.A.

George Yannis - Chairman, Manolis Drakakis - Vice Chairman, Theodoros Kontogiannopoulos - General Manager, Evangelos Kolonias, Vassilis Sgouros, Nikolaos Sykianakis, George Strouzas - Members



The Largest Front of Metro Projects in Greece

The Metro Project undoubtedly constitutes **the most significant transport and environmental Project** in Attica; for this reason, as of Spring 2004, Mr. George Souflias, HELLENIC MINISTRY FOR THE ENVIRONMENT, REGIONAL PLANNING AND PUBLIC WORKS, made its development a top priority. During the last five and a half years, all available funds for the transport infrastructures in Athens were allocated, on a priority basis, to the Metro extensions, whose rate of construction has doubled as of 2004, compared to the respective rate before 2004.

In Spring 2004, twenty (20) Metro Stations were operating in Athens. Before the Olympic Games, four (4) new Stations, as well as three (3) Stations on the Suburban Railway Line to the Airport were completed and commissioned. Another Station on the Suburban Railway Line was commissioned in summer 2006, while three (3) new Metro stations on the extension to Aegaleo were commissioned in May 2007. Moreover, as of Spring 2004, ten (10) more Metro Stations have been designed, put to tender and are under construction; the commissioning of these Stations started gradually from the Fall of 2009 and will be completed in the Summer of 2010. Thus, **in a few months, the capital of Greece will have a Metro network comprising of 41 Stations**, serving more than 1,000,000 passengers on a daily basis.

Concurrently, Attiko Metro has designed and procured the Metro extension to Piraeus with six (6) new Stations, while the tendering procedure for the new extended Line 4 (U-shaped Line) with 21 new Stations is at the final stage of preparation; thus, by the middle of the next decade, Athens will have a dense Metro network comprising 68 Stations.

Moreover, Attiko Metro **managed to start the construction of Thessaloniki Metro Project**, which was for a number of decades an unrealizable dream of the citizens of Thessaloniki. More specifically, since the Spring of 2004, the base Project of Thessaloniki Metro, i.e. a 9.5 km-long Line with 13 Stations, was designed, put to tender and it is currently constructed at an intensive pace. This Project is foreseen to be commissioned at the end of 2012. Moreover, during this time period Attiko Metro has designed and put to tender the first extension of Thessaloniki Metro to Kalamaria with five (5) new Stations.

Today, **the largest front of Metro works ever executed in Greece** and one of the largest fronts of Metro works executed in Europe is currently implemented. The overall budget of the Metro works currently executed in Greece exceeds two (2) billion Euro, whereas once the construction of the two new extensions begins, this budget shall exceed the amount of three (3) billion Euro. The citizens of both Athens and Thessaloniki shall be greatly benefited, since the Metro will significantly improve their day-to-day activities, the quality of their lives, as well as the environment of their cities.

For the implementation of this huge Project, **Attiko Metro continuously hires the appropriate personnel and properly organizes its Services** in order to meet the constantly increasing quality and safety requirements concerning the works, as well as the constantly increasing requirements of the Legislation and the Society. A special Service has been established at Thessaloniki in order to supervise the Project's execution; this Service is gradually staffed and organized, so that it can soon become an independent Company responsible for the supervision of Thessaloniki Metro works.



Completion of Olympic Projects (2004)

Just before the 2004 Olympic Games, **four (4) new Metro Stations** were commissioned, i.e. Aghios Dimitrios (June 2004), Halandri and Doukissis Plakentias (July 2004) and Aghios Antonios (early August 2004).

These are Metro projects that were designed at the late 90's and before the Olympics they were at an advanced construction phase, since their construction had started in 2001. These Olympic Projects, thanks to the intense efforts made during the last six months before the Olympic Games, were timely commissioned. Along with the above Stations, **the Metro line to the Airport** was commissioned, with three (3) new Stations on the Suburban Railway line.

For the smooth operation of the Olympic Metro Projects, a series of Electromechanical systems, as well as the new Depot at Doukissis Plakentias Station with a stabling capacity of 12 trains, were gradually completed. Moreover, **twenty one (21) new Trains (Series II)** were put into operation just before the Olympic Games; seven (7) of these trains were dual voltage trains, rendering them capable to run on both the Metro and the Suburban Railway networks.

Completion of the Extension to Aegaleo (2007)

The design for the Metro extension to Aegaleo (with three (3) new stations) was prepared at the end of the previous decade, while its construction commenced in 2001. Right after the 2004 Olympic Games, the Project entered a new and intensive construction phase and it was **timely completed in May 2007**.

This Project constituted a great technical challenge for Attiko Metro, as **the boring of the Metro tunnel passed under Kifissos river**, as well as under the weak ground underneath Iera Odos and the wider area of Keramikos. Thanks to the systematic work, the construction of this difficult -in technical terms- part of the Project has been completed in an absolutely safe manner. It is worth mentioning that the most ancient bridge in Greece has been revealed in the Metro worksite of Eleonas, and it will soon be displayed.

Thanks to the operation of the Metro network, the Western suburbs were upgraded, while the peculiar "isolation" – in terms of traffic - ceased to exist and they were freed from the environmental pollution due to the traffic congestion. Fifty thousand (50.000) passengers now use the Metro system on a daily basis from Aegaleo, Eleonas and Keramikos in order to move safely and rapidly to the city centre in just 6 min.





Design – Procurement and Construction of 10 new Stations in Athens

During the last five and a half years, Attiko Metro, thanks to its systematic efforts, succeeded in achieving record times in the design and procurement of Metro projects (2004-2006), as well as in the construction of Metro works (2006-2010). More specifically, from Spring 2004 until April 2006, Attiko Metro completed the design, tendering and award of ten (10) new Metro Stations in the areas of Ilioupoli, Alimos, Argyroupoli, Elliniko, Peristeri, Anthoupoli, Haidari, Holargos, Aghia Paraskevi and Nomismatokopio. Since Spring 2006, Attiko Metro addressed in a prompt and efficient way all complex issues related to the occupation of areas, archaeological excavations and relocations of Public Utility Organization networks. The works for the construction of the relevant tunnels and stations were completed at an intensive pace and **from autumn 2009 until next summer, all 10 new Stations are gradually commissioned.**

In other words, within just a six-year period, Attiko Metro succeeded in completing the design, tendering, construction and in gradually commissioning 10 new Metro Stations in densely populated urban areas, **reducing, thus, to the half the overall time period required for the delivery of Metro works in Greece.**

Among one of the problems which were promptly and efficiently addressed by Attiko Metro was the tender procedure concerning the extension of the Metro towards Elliniko, which foresaw the construction of an overhead Metro bridge along Vouliagmenis Avenue. This tender was cancelled and within a very short time period Attiko Metro proceeded with the design and tendering of a new, entirely underground and, thus, environment-friendly, project. It is worth pointing out that this project progressed very rapidly and silently **thanks to the Tunnel Boring Machine which constructed 5.5 km of underground tunnel in just 18 months!**

Record-times were also achieved in the construction of the new Metro Station in Aghia Paraskevi, a project presenting an extremely difficult challenge in technical terms, since **the operation of the Line had to be interrupted in order to dismantle a section of the Metro tunnel and construct the Station box.** From mid February 2009 and within a time period of merely 6 months – just as Attiko Metro had promised – the Metro tunnel was dismantled, all Station levels were constructed, all electromechanical systems were re-connected and the Airport Line was re-commissioned.

During this time period, apart from these 10 new stations, the new **Depot of the Metro**, expanding over a surface of 88,000 m², was constructed **in the area of Eleonas**, an area regarded in the past as the “land-fill of Athens”.



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Design – Procurement and Construction of the Thessaloniki Metro

The Thessaloniki Metro, an unfulfilled dream of decades for the city of Thessaloniki, was placed in the first row of priority of the HELLENIC MINISTRY FOR THE ENVIRONMENT, REGIONAL PLANNING AND PUBLIC WORKS and Attiko Metro in Spring 2004 and this Project is **now becoming a reality**. Attiko Metro performed in a systematic manner the design and the tendering of Thessaloniki Metro and is now constructing it at an intensive pace.

In the new tendering of the project, significant improvements were made to the design of the Thessaloniki Metro, so as to avoid delays due to technical reasons in the construction of this 9.6km of Line project with 13 Stations. The Thessaloniki Metro constitutes the **greatest public project currently under execution** in Greece with a budget of € 1.1 billion.

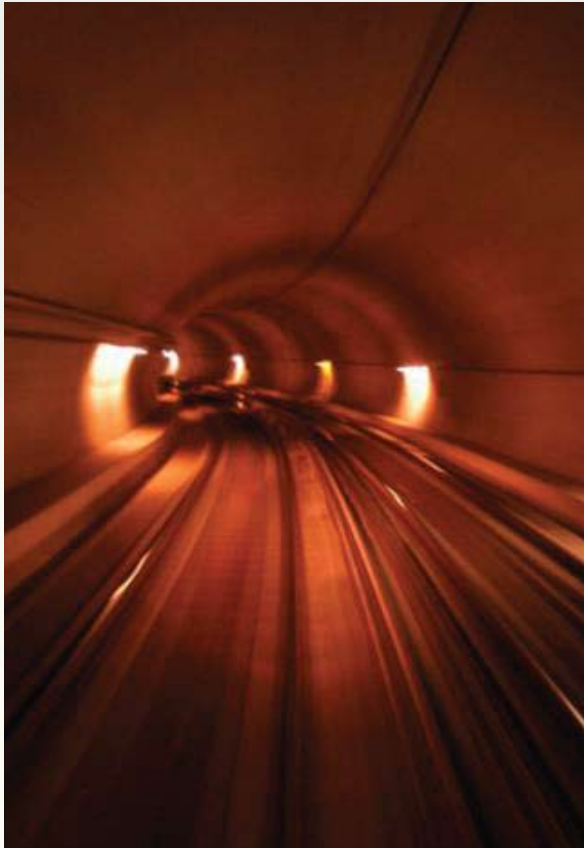
In April 2006, the construction agreement of Thessaloniki Metro was signed, including the most stringent and state-of-the-art quality and operability specifications, so that **the Thessaloniki Metro becomes one of the most modern Metro systems in Europe**. The eighteen (18) ultra-automatic and fully air-conditioned trains of the Thessaloniki Metro will run without a train driver, with an attendant aboard the train, while all stations of the network shall be equipped with Platform Screen Doors for increased safety and comfort.

The construction works for this complex project progress at an intensive pace in all Metro fronts. More precisely, the diversions of public utility organization networks have been completed in 13 worksites, all necessary expropriations/ site occupations are implemented and thus, currently, the two **Tunnel Boring Machines (TBM)** have already constructed 4,000m of tunnel, while in 6 Stations, the construction of the diaphragm walls, i.e. of the 4 sides of the Stations' box, has been completed.

The construction progress of the Thessaloniki Metro works advances at an intense pace and it is worth mentioning that during the same time period of constructing the Athens Metro Base Project, the two Tunnel Boring Machines had not even started their construction activities.

Moreover, thanks to the Metro construction works a major archaeological excavation, is conducted in the heart of the city of Thessaloniki. Until the present day, archaeological excavations have been performed over a surface of 10,000 m² and more than 4,000 archaeological finds have come to light. The most significant archaeological finds shall adorn central Stations of the Metro network, revealing, thus, unknown aspects of the history of Thessaloniki.





Future Metro Projects

Attiko Metro designed and **put to tender the extension of the Metro towards Piraeus**. The underground Metro Line shall continue its route from Haidari to reach Aghia Varvara, Korydallos, Nikea, Maniatika and Piraeus with 6 new Stations. This is a € 515 million investment project to be developed in areas of the Attica Basin which had been forgotten and are significantly downgraded in transportation terms during the last decades. Six joint ventures/ technical companies participate in the tender. The construction of the Metro extension to Piraeus shall commence in 2010, on condition that no entanglements arise from objections, appeals, etc.

Moreover, Attiko Metro designed and **put to tender the first extension of the Thessaloniki Metro to Kalamaria** with 5 modern Stations. This is a project with an overall budget of € 425 million, while 6 bidding joint ventures / companies are competing for the award of the project. The construction of a parking facility of a capacity of 1,000 places for private vehicles in the terminal station in Mikra has been included in the scope of this tender. The construction of the Metro extension to Kalamaria shall commence in 2010, on condition that no entanglements arise due to objections, appeals, etc.

Moreover, the necessary designs concerning the construction of the extension of Thessaloniki Metro network to **Stavroupoli**, a 5 km - long extension with 5 Stations, are at an advanced stage, so as, upon securing the necessary funds, the tendering of the project may proceed.

Attiko Metro has already proceeded with the design of the **new major Metro Line 4** (Alsos Veikou - Panepistimio - Katehaki - Maroussi) of the Athens Metro, a 21 km-long Line with 21 modern Stations, so that this new Line may be soon put to Tender. It is anticipated that this Line shall alter dramatically Athens transportation map, while it shall significantly improve life in the Attica Basin. Based on a special study of Attiko Metro, the development and the operation of Line 4 may be implemented without burdening the state budget or the funds of the 4th CSF through the implementation of a special funding scheme concerning the utilization of the future revenues of ATTIKI ODOS tolls upon its being rendered to the State.

Rolling Stock and Electromechanical Systems



Attiko Metro, in the framework of enhancing the infrastructures of the Metro System in Athens, has designed, put to tender and is currently implementing a series of individual projects necessary for the provision of high-quality services to the Metro users.

168 air-conditioning systems have been installed at the **14 second-generation trains** ensuring, thus, the best possible air-conditioning conditions for the Metro passengers during summer months.

The **Automatic Passenger Information System** was installed in all Metro Station platforms for optimum information of the passengers.

The **Automatic Train Operation Control System** has been completed. As soon as the train drivers receive the relevant training, this system shall ensure reduction of the train headways especially during rush hours, and, thus, best passenger service.

Finally, Attiko Metro designed and put to tender the supply of **17 - new third generation - Trains**, whose manufacturing has already commenced, to meet the continuously increasing needs in passenger traffic in the framework of the ever expanding Metro network. Particular emphasis has been given on the energy efficiency of the new trains (the minimization of energy consumption was the basic criterion of the Tender), while all third-generation trains shall be of high aesthetics and shall be equipped with state-of-the-art air-conditioning systems.



Other Attiko Metro Projects

For the facilitation of the Metro passengers transferring to and from Bus Lines, Attiko Metro proceeded with the construction of **four new Transfer Stations** at central Stations of the Metro network. The Transfer Stations to/from buses in Doukissis Plakentias and Halandri were delivered in 2004. Syngrou-Fix Transfer Station was delivered in 2005 and Nomismatokopio Transfer Station in 2009.

At the same time, for facilitating the Metro users transferring to / from the Metro system using their private vehicles, Attiko Metro proceeded with **the construction of 8 parking facilities at specific Stations of the Metro network**. More precisely, during 2004-2005, the first Parking Facilities in Metro Stations were completed and rendered to the public, namely at Ethniki Amyra with 300 places, at Katehaki with 240 places, at Doukissis Plakentias with 630 places allocated over two areas, at Halandri with 280 places and at Syngrou-Fix, a six-storey underground parking facility of a capacity of 640 places. Moreover, three new major Parking facilities have been designed, put to tender and are currently being constructed to be gradually delivered to the public: at Nomismatokopio, a three-storey underground building of a capacity of 635 places, at Haidari with 383 places and at Keramikos, a five-storey underground building of a capacity of 280 places.

Upon completion of each Station, Attiko Metro proceeded with the reconfiguration of the area where the relevant works had been executed through the creation of open green and recreational areas. A good example of the reconfiguration works performed by Attiko Metro is the **green oasis of approximately 10,000 square meters** created in Keramikos Station, a landmark of a downgraded area which was finally upgraded. In the same area, a second park of a surface of 9,000 square meters is under construction adjacent and over the underground Parking Facility currently under construction in Keramikos.

At the same time, **the program for the display of archaeological finds** revealed during the excavations of the stations and tunnels continued; this program included, inter alia, the completion in 2004 of the special area with the ancient Roman Baths at Zappio and the display in 2007 of the ancient Iridanos river-bed in an appropriately configured area of 300m² at level -2 of Monastiraki Station. Moreover, in progress are the works for the display - in special showcases and especially configured areas at Aegaleo and Eleonas Stations - of the archaeological finds revealed during the construction of the Aegaleo extension.

Moreover, Attiko Metro continued the implementation of the art program at the Metro Stations, **by placing nine (9) new works of art in total of modern Greek Artists** at the following stations: Katehaki (Peklaris, 2004), Doukissis Plakentias (Varotsos, 2004), Halandri (Karras, 2004), Panormou (Katzourakis, 2005), Aghios Ioannis, Keramikos (Bouteas, 2007, Sarantopoulou, 2008), Eleonas (Lazogas, 2008), Aghios Antonios (Voutsina - Papastergiou, 2009) and Aegaleo (Opy Zouni, 2009). It is finally stressed that the pedestrian bridge at Katehaki Station designed by the architect Mr. Kalatrava was completed before the 2004 Olympic Games.



The Plan for 200 Metro Stations in Athens

With the beginning of the construction of the new Projects in 2006, Attiko Metro prepared the new Metro Development Study, within the framework of the Special Transportation Program of the new Athens Master Plan. The first phase of this Study showed that, in order to serve 85% of the inhabited areas of Attica basin (distance up to 1 km from a Metro Station), it is required to construct an **approximately 220 km-long Metro network with eight (8) lines and 200 Stations**. During the planning of the new Metro Lines (5-8), consideration was given to the existing and future land uses (residencies, work areas etc.), the transport needs, the technical particularities related to the construction of the Metro network in densely populated areas, as well as to the requests presented by the various Municipal Authorities within Attica Basin. In particular, the proposed complete Athens Metro network, as shown on the map, is as follows:

Line 1: from Keratsini and Piraeus to Kifissia and Nea Erythrea (ISAP)

Line 2: from Zefyri and Peristeri to Elliniko and Glyfada

Line 3: from the Airport and Messogion Avenue to Aegaleo and Piraeus

Line 4: from Petroupoli and Galatsi through Panepistimio Station to Maroussi and Lykovryssi

Line 5: from Vyronas and Pangrati to Patissia, Nea Philadephia and Ano Liossia

Line 6: from Melissia, Halandri and Gyzi to Kallithea and the peninsula of Piraeus

Line 6A: from Thission and Petrou Ralli to Keratsini and Perama

Line 7: from Haidari and Kavalas Avenue to Nea Smyrni and Alimos

Line 8: circular Line connecting a number of the aforementioned areas

In order to complete this Athens Metro network, the required estimated funding rises to fifteen (15) billion Euro within the period of the next twenty years; all alternative funding methods are under examination, especially the utilization of revenues (tolls etc.) from the vehicles' traffic, according to the basic environmental principle "the polluter pays", i.e. polluting vehicles pay for the "clean" Metro.

Based on a timely and well documented planning, we plan the future of Athens, a future friendlier to the citizens and the environment, with a **comprehensive Metro network and, ultimately, a Metro network better than other European Metros**.





ATTICA MASTER PLAN FUTURE METRO LINES DEVELOPMENT PLAN



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