



# Greek philosophy

**Stefanos Saroglidis explains how the new Athens metro works – and who does what in the Operations Control Centre**



The information controller has a general overview of the train mimic board.

The new Athens metro began operations in January 2000. It has two lines, with a total length of 25km and 23 underground stations.

Since August 2004, metro trains have been using the railway infrastructure of the Greek Railways Organisation to reach the new International Airport of Athens, as well as three other stations. The Attiko Metro Operating Company (AMEL), which is a subsidiary of the Attiko Metro (AM) Company, the organisation that constructed the system, is responsible for the operation of the service.

The system operates daily from 05:30 until 00:30, after which the traction power is cut and maintenance groups are authorised to go into the tunnel and the technical rooms in order to undertake preventive and corrective maintenance.

The co-ordination of the operating and maintenance personnel during normal, downgraded and emergency

operating conditions is undertaken by the Operations Control Centre (OCC), which is located at the interchange station of Syntagma.

Traffic regulation and maintenance activities are controlled by a separate traffic regulator who is located in the Depot Tower. The OCC monitors and controls various subsystems within the metro network such as:

- Train operation (signalling/interlocking and traffic regulation)
- Power supply operation (traction and low voltage power supply, electrical and mechanical equipment, fire alarm and fire fighting systems)
- Station operation (passenger supervision and information systems)
- Radio communications between trains, local staff and OCC.

## FUNCTIONS WITHIN OCC

The task of supervision and control of signalling and train running is assigned to two traffic

regulators, one for each line.

The traffic regulators monitor and control train movements and co-ordinate all train and station operating personnel during downgraded operating conditions, emergencies and delays.

A mimic board (visual control panel) provides a general view of Lines 2 and 3, while the relevant controls are carried out through the automatic train supervision (ATS) visual display units, which are located at the traffic regulators' desk.

Under normal operating conditions, all train movements are controlled automatically by the ATS according to a predetermined timetable. In case there is a delay on the line, the traffic regulator can intervene in order to distribute the delay across the line, avoid train clustering and minimise the effects of problems with the passenger service.

During normal operating conditions, the power controllers in the OCC monitor and control the power supply for trains, tunnels, depots and stations, as well as the electrical and mechanical equipment such as pumps, lifts, escalators, ventilation, fire alarm and fire fighting systems.

After the revenue service has ended and traction power has been cut, they authorise maintenance personnel to start working in the tunnels and station technical rooms.

A second mimic board provides an overview of the power supply system, while controls are possible through various monitors of the relevant power remote control system, environmental control system and building maintenance system (BMS). On top of these, the power controllers operate the

Technical Report Centre, where all equipment failures are reported.

When such failures disrupt station and train operations, they co-ordinate maintenance personnel in order to minimise the disturbances to the passenger service. In case of fire or smoke in the tunnel or in a station, they activate the proper ventilation scenario in order to direct fresh air towards passengers in air-lacking areas.

The information controllers in OCC can monitor passenger flow and supervise passenger behaviour in all station areas via a CCTV system. If there is severe overcrowding or other downgraded operating conditions in stations, the information controllers alert local staff and use the PA system in order to make announcements to passengers.

On top of this, the information controllers are responsible for informing the public relations department and the public information office in case of delays or other major incidents that affect station or train operations.

## THE NETWORK CONTROLLER

The role of the network controller is to take responsibility for the operation of OCC during the shift. He or she is the final authority for control operations and has the general responsibility for the safe and effective operation of Lines 2 and 3 of the metro system.

The network controller co-ordinates staff within OCC in case of major disruptions and sets strategies for fast recovery from incidents so that the effects on passenger service are minimised.

In case of fire or smoke in the system, he or she requests attendance of external emergency services such as the Fire Brigade.

On top of these, the controller ensures that the company's

management is informed of any major incidents or other changes in the traffic conditions and acts as a contact point between the other public transport operators in the Athens area and the metro.

The most difficult and challenging part of the network controller's job is to manage and co-ordinate staff under stressful conditions. To this end, the network controller needs to have very good communication skills and be able to act as a team leader in normal and emergency situations as well.

The controller must know how subsystems relate to each other and be able to set priorities when various incidents occur simultaneously.

The job demands strict keeping of rules and regulations, as well as flexibility in dealing with unexpected problems.

In case of major incidents, the train service has to be adjusted to satisfy increased passenger demand. During last winter, for example, the metro had to operate overnight due to heavy snowfall. The OCC played a critical role in co-ordinating the staff that provided the extended service.

Similarly, when Athens hosted the Olympic Games of 2004, the metro operated until 02:30 in the morning and OCC staff co-ordinated all the available resources in order to serve the residents as well as the visitors of the city.

The company wants to provide a high quality passenger service and the role of the network controller is to ensure that the train service meets the passengers' expectations as far as possible.

Even though it is a stressful and demanding job, the provision of a reliable and dependable service to the citizens of Athens makes it a rewarding and fulfilling one as well.

Being a member of a team that works for the safe and efficient operation of the Athens metro is certainly a job to be proud of!  
*Stefanos Saroglidis is an employee of Athens metro.*

## DIARY OF EVENTS

### SCOTTISH AND IRISH AREA

For information on all Scottish events and matters, please contact [scottish@railwayoperators.org](mailto:scottish@railwayoperators.org) or call acting chairman Jim Summers on 01324 625284.

### MIDLANDS AREA

**Monday 25 September:** Central Trains' Soho Depot in Birmingham

**Monday 30 October:** Visit or event to be confirmed

**Monday 27 November:** Visit to Midlands Metro. To contact the Midlands Area, call Julia Stanyard on 0121 345 5030 or email: [midlands@railwayoperators.org](mailto:midlands@railwayoperators.org)

### NORTH EAST AREA

All North East Area meetings normally take place at 17:30 for 18:00, at York. For further news on the IRO in the North East, email: [northeast@railwayoperators.org](mailto:northeast@railwayoperators.org)

### NORTH WEST AREA

**Forthcoming events:**  
**Tuesday 19 September:** Joint event with CILT at Liverpool John Moores University in Liverpool at 18:30. Prof Chris Nash from Leeds University comparing approaches to rail privatisation and open access across Europe. Buffet will be provided. Please advise C Evans if you wish to attend.

**October:** Manchester Airport visit, date and itinerary to come.

**November:** Visit to a train simulator in the North West, date and venue being finalised. To contact the North West area on any matter, please contact Clive Evans on 01270 629009 or email: [northwest@railwayoperators.org](mailto:northwest@railwayoperators.org)

### SOUTH WEST AREA

For information on all South West events and matters, contact Lawrie Hall on 01453 822150 or email: [Southwest@railwayoperators.org](mailto:Southwest@railwayoperators.org)

### SOUTH EAST AREA

**Monday 18 September:** Ian Dobbs, chief executive of Stagecoach Group's Rail Division since June 2005, will address the next meeting of the Institution of Railway Operators. Dobbs has operational responsibility for all of Stagecoach Group's rail interests, including South West Trains – the UK's biggest rail franchise – and Sheffield Supertram. All IROSE meetings take place at the Union Jack Club, Sandell Street, near Waterloo Station. Doors open at 18:00 for an 18:30 start.

**Monday 20 November:** Track for operators operations master class. To contact the South East area on any subject email: [Southeast@railwayoperators.org](mailto:Southeast@railwayoperators.org)

### YOUNG PROFESSIONALS

**Monday 18 September:** Stella Morris – head of guards at South West Trains – will talk to us at the Union Jack Club at 16:30. This will be followed by a presentation from Ian Dobbs, chief executive of Stagecoach Rail at 18:30 for IROSE. Go to [www.iroyoungprofessionals.org.uk/events](http://www.iroyoungprofessionals.org.uk/events) to register for this event.

### YOUNG PROFESSIONALS VISITS

**Monday 11 September:** John Thompson at Southeastern is kindly hosting a visit behind the scenes at London Bridge Station and Signal Box at 16:00.

**Monday 9 October:** Young professionals are visiting South Eastern's Slade Green depot. Places for both are limited and booking is via the website. See [www.iroyoungprofessionals.org.uk/events/2006\\_july.shtml](http://www.iroyoungprofessionals.org.uk/events/2006_july.shtml) for a review and photos from previous events.

### YOUNG PROFESSIONALS INFORMAL NETWORKING

**Thursday 7 September:** In response to feedback, we have organised a monthly Informal Networking events over drinks at a central London location. The first of these will be at the Euston Flyer (between Euston and Kings Cross). Drop in and meet members from 17:30.

### MEMBERS' NEWS

The following employers operate a Corporate Membership scheme, by paying a one-off annual fee which covers all their employees' affiliate or associate membership subscriptions:

Network Rail • Eurostar UK Ltd • First ScotRail • First Great Western • One • Railnews • Iarnród Éireann (Irish Rail) • EWS Railway • Northern Ireland Railways • Central Trains • Virgin West Coast • Virgin Cross Country • First Transpennine Express • Southern • Corus Rail Consultancy • London Underground Ltd • Docklands Light Railway • Transport for London • Stagecoach Rail • South West Trains • Sheffield Supertram • Arriva Trains Wales • Southeastern Railway • Island Line • London Lines • Silverlink Trains • c2c Rail • Gatwick Express • RWA Rail • Midland Mainline.

Those with full membership will continue to pay their subscription personally, irrespective of whether they can subsequently claim it back. Please note that, as the IRO's subscriptions are tax-deductible, a receipt will be issued for all payments, whether by cheque, standing order or internet payment.

If your company would like to explore the benefits of corporate membership of the institution, please contact us. We welcome applications from all industry companies, suppliers and associations – please contact Chris Daughton on 01444 248931 or [admin@railwayoperators.org](mailto:admin@railwayoperators.org)