

Attiko Metro Operation Company S.A.

The relationships between standardized procedures and measuring Customer Satisfaction:
The Case of Athens' Metro.

A1. The Structure of the Company

Attiko Metro Operation Company S.A. (A.M.O.C S.A.) operates Lines 2 and 3 of Athens' Metro since their opening in 2000. It is founded as a Legal Entity of Private Law and is totally owned by the Greek State, applying the principles of private economy and performing for the public benefit under the supervision and control of the Ministry of Transport and Communications.

The overall length of Line 2 is 12.4 Km, operating 14 stations, and the overall length of Line 3 is 13.7 Km operating 10 stations. There is also a special half an hour service to the Athens' airport. The annual ridership is about 170 millions. The average annual raise of ridership is about 10% through the last five years.

A.M.O.C. S.A. is the operating company of the Athens Metro and offers comfortable services to customers. The employees of A.M.O.C. S.A. have exceptional training, skills and know-how to operate the most modern systems, rolling stock and installations of infrastructure and every day they carry out a work load of a very high quality.

The Athens Metro is synonym to the upgrade of urban transportation, being the main reason for traffic decongestion and environmental improvement.

A2. The External Environment

Athens Urban Transportation Organization S.A. is the responsible authority for the planning, co-ordination and control of all public transport modes in the wider area of Athens (thermal buses, trolley buses, metro).

The planning of Athens Urban Transportation Organization S.A. is realized in such a way that all the public transport modes are supplementary to each other in order to achieve best service, but Attiko Metro Operation Company S.A. has to be the backbone player for public transport in Athens.

A.M.O.C. S.A. has succeeded in being the mode of transportation that managed to carry passengers consequently, reliably, fast and, above all, safely.

The Athens Metro is the only mode of transport in Athens that passengers consider that they are transported enjoying the highest degree of comfort, reliability, speed and safety. It uses modern sophisticated trains that offer high quality of transportation.

Additionally the Athens Metro has installed a modern system of automation and safety in the network to facilitate and serve customers with special needs. Many researches and statistical surveys have proven that the Attica citizens trust the Athens Metro for their daily transfers, making the Metro one of the main components of an integrated public transport system.

A3 Organizational Philosophy and Design

The company's policy is to provide the highest Customer Service at any time, combining speed, comfort and safety.

It incorporates a number of principles. These are equally relevant to the company as a whole:

- Passenger is the principal focus of the business
- The safety statement of Attiko Metro Operation Company S.A. lies in: "the avoidance of death, injury, or poor health caused by operational or occupational accidents, incidents or hazards, and the avoidance of damage to property and to the environment"
- The company must operate in a framework of Standard Operation Procedures (SOPs) where the synergy of departments is essential to achieve the optimum result.
- Departments which do not have a direct interface with passengers must adopt customer-focused behavior to their internal customers
- Performance is measured through Key Performance Indicators (KPIs), linked to business objectives, in a culture of continuous improvement
- Frequent customer surveys present the customer satisfaction level and any corrective or preventive actions are implemented
- Quality and management principles and techniques, as EFQM model, ISO-9001/ 2000 and Business process re-engineering are applied
- I.C. Technologies are used appropriately
- The organization must be designed to ensure that the vital relationship between income, cost and quality is recognized, and trade-offs are optimized
- Bureaucracy and overhead costs are minimized through the delegation of activities to line management
- The organization has a minimum of hierarchical levels, with the ability to reward additional skills and/or responsibilities within a hierarchical level

To illustrate the point about the number of hierarchical levels, in operations, there will typically be no more than four hierarchical levels between the Chief Executive of the company and "front line" production staff, concentrating the efforts in order to achieve an efficient and customer-focused organization.

B. Operating Philosophy of Attiko Metro Operation Company S.A.

Attiko Metro Operation Company S.A. has developed a statement of its operating philosophy and principles. This emphasizes in the fact that passenger is the purpose of A.M.O.C. S.A. Commitment to safety, security, quality, the environment and customer service.

This statement includes many elements of best practices adopted by metros internationally.

In order to achieve this vision, the company applies a quality system, which consist of:

1. Standard Operation Procedures - Synergy of the departments - Staff Effectiveness
2. Quality and Performance indicators

3. Measuring of Customer Satisfaction
4. Improvement actions through EFQM model.

All the above are analyzed in the following chapters:

1. Standard Operation Procedures - Synergy of the departments- Staff Effectiveness

The operation of line 2 and line 3 is determined by 166 Standard Operation Procedures plus the Regulation Book, which have been issued and approved by the company.

The company's SOPs are presented in the table below:

Procedure Group	Total Issued
Administration	10
Security	11
Safety on the Track	20
Signals	9
Power	7
Communications	2
Incident	22
Trains	33
Stations/Revenue	45
Major Incident	7
Total	166

This framework of Standard Operation Procedures (SOPs) is implemented to ensure the synergy of the company's departments in order to achieve the optimum result.

All the employees have been trained extensively on these procedures in order to execute their duties accordingly and to handle successfully any kind of incident.

Systematic projects are implemented for the identification, control and elimination of risk and areas of improvement.

There are regular meetings where the operation incidents are analyzed, and necessary corrective and preventive actions are decided in order to achieve maximum customer satisfaction and optimum passenger and employee safety.

Simultaneously, a continuous revision system of SOP's is implemented.

The opportunities to improve staff effectiveness are based on benchmark analysis of the London, Barcelona, Vienna and Washington metros. These opportunities are a combination of maximizing the output of each member of the operations workforce, as well as other human resources factors discussed below.

- Efficient recruitment, training and retention processes
- Matching of shift rosters to business needs, which inevitably requires

flexible working hours and shift lengths

- Elimination of restrictive and unnecessary demarcations between jobs
- Optimization of scheduled maintenance (work content; frequency; "balancing" of rolling stock inspections; adherence to specifications)
- Multi-skilling of staff
- The staff effectiveness towards the company's efficiency has to be set to the optimum level
- Elimination of waste in all forms, including inappropriate work rules, restrictive working practices, administrative practices, conflicting objectives etc.

2. Quality and Performance indicators

The policy of Attiko Metro Operations Company S.A. is oriented on the following areas:

- safety,
- reliability,
- speed
- customer satisfaction.

The company has adopted specific tools to monitor goals on these areas and has established several self-evaluation procedures of Quality and Performance, which are divided to the following categories:

- A. Quality Key Performance Indicators
- B. Staff Key Performance Indicators
- C. Vehicle Key Performance Indicators
- D. Safety Key Performance Indicators

Planning, Quality and Performance Indicators Division is responsible for collecting and analyzing the data and issuing the relative reports on weekly and monthly basis.

The value of each indicator is compared to the target benchmark (weekly or monthly) which has been defined by the company and taking into account the annual moving average.

The benchmarking has been defined in cooperation with other European Metros, which have similar network and more years of operation, and the results are indicative of the status of the company in the inter-Europe sector of transportation.

3. Measuring of Customer Satisfaction -Customer Satisfaction Surveys (CSS)

According to the Customer Satisfaction Surveys (CSS) principles customers should be surveyed independently, based on the most important aspects of their journey, on a regular and timely basis.

A.M.O.C. S.A. measures the customer satisfaction on an annual basis, using the survey of European Foundation of Quality Management (EFQM) "European Performance Satisfaction Index"(EPSI).

The survey is fulfilled by Foundation for Economic & Industrial Research of Greece (IOBE) and the last results have shown that A.M.O.C. has the first place in Europe according to Customer Satisfaction Index (CSI)= 83.74%

European Performance Satisfaction Index (EPSI) is a dynamic tool used in Marketing and contributes decisively to the implementation of strategy policy and decision making, aiming to improve competitiveness in micro and macro-economic level.

EPSI is a modern and well established international method of measuring customer satisfaction in the fields of services and products from companies and organizations of the private or public sector.

EPSI derived from the following fields, the value of A.M.O.C. is presented in parentheses:

- Ü Image (85.00%)
- Ü Expectations (77.9%)
- Ü Perceived Quality (Product) (81.7%)
- Ü Perceived Quality (Service) (85.4%)
- Ü Perceived Value (81.4%)
- Ü Loyalty (90.6%)
- Ü CSI (Customer Satisfaction Index) (83.7%)

In the same survey the company measures customer satisfaction in ten specific transportation characteristics in order to define the perceived quality by the passengers.

The gap between delivered and perceived quality is the area where the company focuses its efforts to fulfill customer's demands and needs.

These ten specific transportation characteristics are:

- Reliability of the timetable (91%)
- Frequency of the timetable (85%)
- Commercial speeding (99%)
- Conditions (89%)
- Cleanliness in stations (97%)
- Cleanliness inside the train (96%)
- Personal safety (85%)
- Helpfulness & appearance of the staff (86%)
- Signs and other information displays (84%)
- Ease of ticket availability (ticket offices and ticket machines) (94%)

Additionally the passengers are given the chance to complete a customers' satisfaction questionnaire, which is published in the company's magazine every month. This magazine is free distributed in all stations. The questionnaires are regularly collected and analyzed.

There are regular meetings where the results are analyzed and the appropriate actions are decided to achieve the best customer satisfaction.

4. Improvement actions through EFQM model.

The company has set continuous improvement as the main target. For this reason the section of Rolling Stock has been certificated for the first level of EFQM Levels of Excellence “Committed to Excellence”.

The section of Rolling Stock has followed the self-assessment questionnaire of EFQM model, and defined the areas of improvement. Consequently, it had developed and implemented successfully three improvement action plans.

The whole procedure is used as pilot project for the rest of the company.

The project provided many advantages for the company. The main advantages are the following:

- Total assessment of the Section through the Self-assessment method of EFQM.
- Transfer of the Self-assessment experience in the whole company
- Determination of the weak areas and implementation of the necessary corrective and preventive actions.
- Improvement of the company’s image, because the customers realize that there is a continuous improvement process.

B. Conclusion

The function of the Athens Metro has been proved very useful and practical for the everyday life of the Athen’s inhabitants. Additionally, the people of the whole Attica area have widely acknowledged its efficient operation. In this framework, the contribution of the pre - mentioned quality system to the metro’s efficient function is decisive.

Our ambition is to further develop the pre – described quality system – that is now used as pilot project in a specific sector – in the rest of the company.