



« Out-Of-Fare-Box » Financing for the Operation of Metros and Urban Rail

Urban Mobility Forum in Egypt

Cairo, 19-20 November 2016
Semiramis InterContinental Hotel, Cairo



Report of activities

Object : **Out-of-Fare-Box Financing for the Operation of Metros and Urban Rail: Urban Mobility Forum in Egypt**, leverage on the “Sustainable Urban Transport” program of the Center for Mediterranean Integration of Marseille (CMI)

Authors : S. Abd Alla, A. Huzayyin and L. Tomasoni-Pradel

Co-authors: J. Allaire, Y. Amsler, T. Gouin and E. Riot

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Executive summary

Since 2010, the Center for Mediterranean Integration (CMI) in Marseille has been undertaking the important task of strengthening the competences of national and local authorities on the theme of sustainable urban transport. After the inaugural conference in Damascus, three thematic seminars were held to exchange experiences between the participating Mediterranean countries. For the second phase of the program, the CMI wished to organize a national event in its member countries in order to be as close as possible to the issues and concerns of local and national decision makers. This forum, organized in partnership with the Ministry in charge of urban transport of the hosting country, aims at addressing actual burning urban transport issues using a largely participative approach.

Given the Egyptian context, where the first Metro in Africa and the Middle east was constructed and opened in 1987, and the urgency of addressing the issue of financing urban transport, this event has addressed the “out-of-fare-box” financing for the operation of metros and urban rail. The Urban Mobility Forum (UMF) was organized in close collaboration with the Egyptian partners and contemplated the participation of His Excellency the Minister of Transport and of Her Excellency the Minister of International Cooperation and of local and national stakeholders, policy makers, top level representatives of the Ministry of Transport, representatives of the a number of cities nation-wide, private and public associations and universities, as well as international experts.



The UMF gathered numerous stakeholders involved in the organisation and operation of metro and urban rail in Cairo and professionals from other Egyptian cities in order to discuss “out-of-fare-box” financial mechanisms and come-up with a few applicable and appropriate measures and actions to increase metro and urban rail revenues. The Forum focused on the Cairo metro system but the contributions and the conclusions are relevant also for urban rail and public transport in other cities in general.

A short-list of 30 measures and actions was identified and it will be submitted to the approval of HE the Minister of Transport in order to draft an action plan and assess more in detail their applicability and feasibility in Cairo, Alexandria and other cities. Those measures are presented in detail in the last part of this report.

Introduction

■ 1.1 Context

Egypt population reached 92 million according to the latest figure announced in the autumn of 2016 and its population is growing by 2 to 2.5 million people per year. This puts heavy pressure on the country's transportation system, particularly in Greater Cairo (GC) and Alexandria in responding to the fast growing transport demand. The urban transport gap has been primarily filled by paratransit systems and a growing use of private cars with obvious consequences of road congestion, accidents and air pollution.

Although problems are particularly acute in the main conurbations, GC and Alexandria, other cities suffer from lack of adequate public transport supply. Governorates are the main responsible for urban transport regulation, licensing paratransit drivers, construction and operation of shared taxi terminals and parking lots inside its boundaries. However, the Ministry of Transport (MOT) is the authority directly in charge of metro in GC and urban railways.



Informal transport services, provided by individuals, including inter-urban and intra-urban minibuses and shared taxis with 7 to 17 seats, regular taxis, pickups and light vehicles, represent a substantial part of all motorized trips per year. This in addition to own account transport as school, tourists and factory and private and government buses. In the past decade, three wheelers called "tuk tuks", operating as informal taxis accommodate up to two passengers, spread everywhere especially in most small cities and villages. Nevertheless, they indeed provide a flexible, fast and cheap transport mode, even if they are not always comfortable or safe. Recent regulation measures prohibit "tuk tuks" from accessing main road axes and districts of the inner city. The quality of the bus service in GC and Alexandria is improving thanks to a gradual but regular renovation of the fleet. Nonetheless there is still an effort to do to increase the supply and the integration with other modes (for more details on GC transport supply and demand and their evolution and impact on mobility, energy consumption and the environment read *Huzayyin et al., 2013*)¹.

Considering Egypt context, the Cairo UMF focused on the funding of the operation of GC metro and urban rail in order to discuss "out-of-fare-box" financial mechanisms to come-up with applicable measures and actions. By keeping fares very low, Egyptian cities are successful in making their public transport services affordable but this has led to increasing subsidies and lack of investment in improved services. The public opinion is now wondering if keeping all fares low but enduring the consequences of poor quality and inadequate quantity, of public transport, is the best way of making services acceptable to low-income groups. There is evidence² from many cities that people with moderate income are prepared to pay higher fares on public transport for better services hoping to escape congestion.

Firstly in Alexandria and then in Heliopolis (residential district in the north of Cairo), Egypt introduced tramways in the late 19th century. Since their gradual decline in the 1960s and 1970s, currently tramway in Cairo captures now less than 1 per cent of all public transport trips. GC has the first Metro

¹ Ali Huzayyin and Hndawi Saleh, "Analysis of thirty years evolution of urban growth, transport demand and supply, energy consumption, greenhouse and pollutants emissions in Greater Cairo", RETERC Journal, Vol 1, 2013, Elsevier.

² Greater Cairo: a proposed urban transport strategy - World Bank, 2006

in Africa and the Middle East since 1987 now operating a network of three lines and its development project foresees six lines operational by 2025. The Metro service is catering around 903 million³ passengers per year (more than 2.5 million⁴ passengers per day). Many users of private cars, shared taxis and public transport buses shifted to the Metro irrespective of the lack of integration with public transport buses and insufficient ample space for park-and-ride facilities around the metro stations.

In the Opening Session, **Prof. Dr. Ali Huzayyin**, explained the concept of the workshop pointing out the measures of “out-of-fare-box” financing that can be applied to reduce the gap between metro operation cost and fare revenues as he illustrated in the Figure shown below. He also stressed the related challenges of application of those measures, including for example, law and regulations constraints, lack and/or the high cost of acquiring the “Right of Way” around metro stations to exploit land value, marketing and attracting profitable advertising on the metro system, provision of rewarding contracts for commercial exploitation of metro stations, enforcement of transport tax, etc.

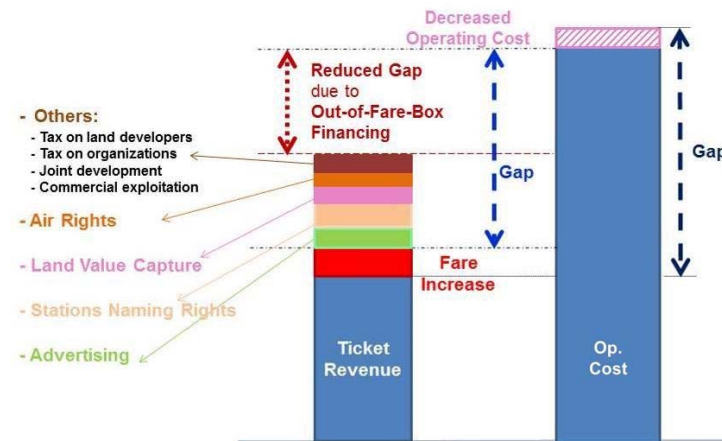


Figure: Illustration given by Prof Ali Huzayyin of the gap between metro operation cost and fare revenues and means to reduce this gap

During the first session of the Forum, **Eng. Ali Fadaly, Chairman of the Egyptian Company for Metro (ECM)** gave comprehensive picture about the «Current financial mechanisms applied to the metro system in Cairo : opportunities and obstacles». Currently Cairo Metro consists of three lines stretching over 72 km, comprising 64 stations, and served by up to 117 trains carrying more than 2.5 million passengers every day.

³ Egyptian Company for Metro (ECM), 2016

⁴ ECM 2016

Eng. A.Fadaly stated that the gap between fare revenues (594 million EGP) and operating cost (873 million EGP) is (-)165 million EGP. He then indicated that this gap can even increase if EMC outsources maintenance next year and stressed the difficulty to introduce any fare increase. The National Authority for Tunnels (NAT) of the MOT, is the agency responsible for the construction of Cairo Metro. ECM, which functions as a sub-body under Egypt National Railways (ENR), was established to operate, maintain and manage GC Metro. On exploiting advertising at present, EMC has only one single advertising contract with the MOT for Investments and Projects, the Company that is developing the advertisement business in Cairo Metro 3 lines for 5 years through indoors and outdoors products. Since bidding for the right of use of the 3 lines of the Metro



advertising business, a full technical scanning for the whole territory was processed to identify the locations fitting to outdoor advertising business where 40 outdoor locations were identified. The Cairo Governorate was approached to finalize the related licenses and permissions, only 25 locations got the initial approval from the authorities and 15 are still pending.



Mr. Sherif Nabih, Chairman of the MOT for Investments and Projects, offered a complete explanation of the current situation during the first session MOT for Investments and Projects is the company in charge of enhancing advertisement and commercial use of metro stations in Cairo. Unfortunately they are facing obstacles in dealing with all related parties due to an inadapted regulatory framework (locations require approvals by the governorates and Urban

Harmony Authority). He also admitted that his company needs to improve its capabilities as the working team has difficulty in dealing with commercial enhancement of the metro advertising contract. Mr. M. Nada, a consultant from the same company in the audience, explained that tenders for commercial initiatives had no reply from companies and the Ministry is wondering the reasons and a way to make contracts more flexible and less restrictive.

■ 1.2 Objective of the Forum

The metro operation deficit and the corresponding national subsidies have been discussed for many years in Egypt; becoming a matter of public opinion.

In a quite decentralised institutional context, the MOT has chosen to devote this forum to the “out-of-fare-box” financing of the operation of metro and urban rail. UMF focused on the Cairo metro system but the contributions and the conclusions are relevant also for other cities and other formal public transport.

■ 1.3 Structure of the event

UMF allowed successful exchanges and discussions between Egyptian stakeholders and international experts intervening mainly for some thematic insights and the animation of the debates.

The two days event was organised mainly in **4 sessions** :

- Session 1: **Challenges for funding operation of metros and urban rail**
- Session 2: **Practical applications of “out-of- fare-box” financial mechanisms for metro operation**
- Session 3: **Advertising and commercial enhancement of metro stations**
- Session 4: **Processes and examples of land value capture around metro stations**

The forum started by presenting the Egyptian context through presentations of the metro legal and regulatory framework and then offered a wide background of possible “out-of-fare-box” financial mechanisms that can be integrated in local policy. Each session allowed the participants to take part in the exchanges and sharing of ideas.

The Session Chairs also invited each of the participants to write practical solutions in order to discuss together their applicability to the Egyptian context. The audience ideas increased the exchanges quality and helped in identifying priority axes of action.

■ 2. Highlights of the event

■ 2.1 Opening by the Minister of Transport (MOT)

Opening by the Minister of Transport **His Excellency Dr. Galal Said, the Minister of Transport**, attended the two days of the event participating actively in all discussions. During his opening speech, he explained that he preferred to focus on the metro and urban rail operation cost innovative mechanisms as the Cairo metro urges a pragmatic approach to cover its financial deficit.

Dr. Said welcomed the international experts and invited them to share their innovative ideas and best practices from all over the world. GC is a very populated area with more than 18 million inhabitants and its roads cannot allow all citizens to use private car. Congestion is one of the most crucial problems especially if we consider its economic cost for the society. H.E. highlighted that mass transport systems are “The solution” and both direct and indirect beneficiaries should take part in funding the development and functioning of the network.

Dr. Said finally added that the metro is a public service heavily funded by the government and that it was important at this stage to address mainly the operation costs during the UMF as the construction costs are far more than 1 billion EGP per kilometer.



In the end of his talk, the Minister expressed sincere thanks and appreciation to AFD, CODATU, CEREMA and EuroMed for organizing this event in Cairo. He also deeply acknowledged the big effort of CODATU and its distinguished team as well as Prof. Dr. Ali Huzayyin for the careful planning of the programme and the precise identification of topics of the presentations. and gave gratitude to all distinguished speakers and the attendees.

■ 2.2 Opening by the Minister of International Cooperation (MOIC)



Her Excellency Dr. Sahar Nasr, the Minister of International Cooperation, delivered a speech emphasizing that MOIC prioritizes the transport sector which is considered the second largest beneficiary from the international cooperation portfolio worth USD 4.5 billion out of the current cooperation portfolio in Egypt. She highlighted MOIC’s keenness on choosing projects related to the transport sector to contribute to achieving long and short-term sustainable and comprehensive development, which would, in turn, contribute to optimizing available resources in terms of time, energy and cost, besides facilitating internal and external trade and decreasing environmental pollution. The Minister reiterated the importance of investing in the transport sector through providing an adequate infrastructure, including paved roads and railways that would facilitate the movement of individuals and goods, which, in turn, serves as a basis for implementing ongoing national projects and rendering them successful such as the New Administrative Capital, the New Suez Canal, the Golden

Triangle and the 1.5 Million Feddan. The Minister also asserted MOIC’s interest in implementing targeted projects for the development of the transport sector due to its positive impact on the individual’s productive capacity and the country’s development. Further, the Minister referred to her constant keenness on enhancing cooperation between Egypt and all its development partners in the said sector and other sectors in order to achieve Egypt’s sustainable and comprehensive development goals.

■ 2.3 Other Speeches in the Opening Session

During the opening session and after the introduction of the context of the Forum given by **Prof. Dr. Ali Huzayyin**, as indicated in section 1.1 above, **Dr Julien Allaire**, CODATU Executive Manager, expressed his thankfulness to the Ministry of Transport and HE the Minister for the active participation in organising the Forum and the will to find solutions to reduce metro operation financial gap. He emphasized the willingness of CODATU to extend cooperation with the Ministry. **M. Stephanie Lanfranchi**, AFD Cairo director, stressed that AFD welcomes all activities that can straighten the cooperation between the French and the Egyptian parties in transportation and other sectors. **Mr Dominique Rojat**, AFD representative in CMI, welcomed all participants and explained that CMI is happy of the organization of this national event in Egypt in order to be as close as possible to the issues and concerns of local and national decision makers.

■ 2.4 Constructive Debates

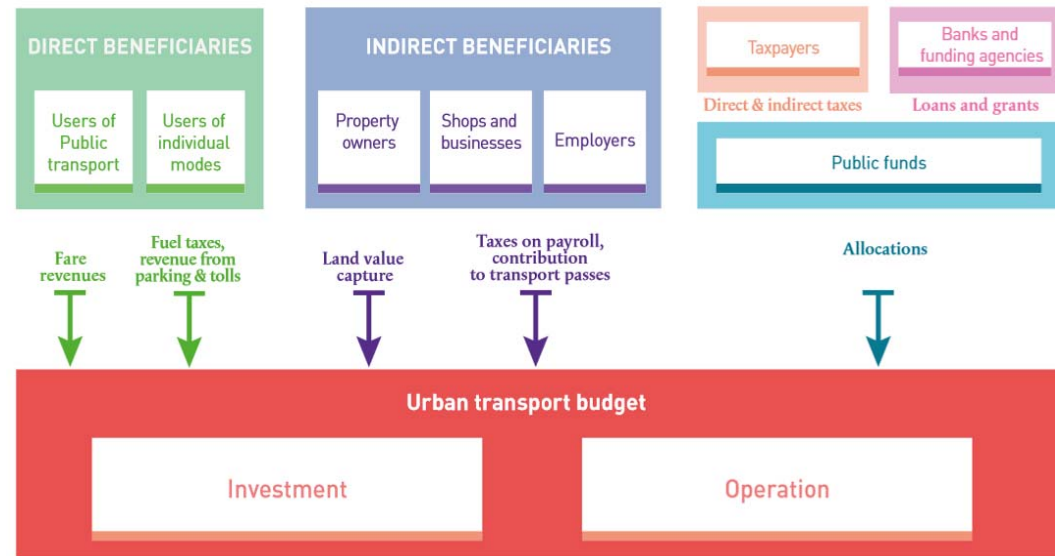
With the construction of lines 3, 4, 5 and 6, Cairo Metro is expected to triple the current number of users. The development of such a big metro network will need a strong support to the economical enhancement of the system operation.

During the UMF, **H.E. Dr. Said** was very much interested in the French tax “*Versement Transport*” (VT) which was levied since 1973 on the total gross salaries of all employees of public and private companies of more than eleven employees and which finances nearly 40% of the overall cost of the French urban public transport networks (including Paris area).

Various experts presented the VT showing that most of the public transport financing in France comes from indirect beneficiaries (employers). Land value capture and the congestion charge have been largely discussed in France but never implemented.

Mr. Thierry Gouin from CEREMA added that in France the construction, operation and maintenance cost amounts to about 16.5 billion € (9 b€/year for the Paris Area and 7 b€/year for the rest of the country) and is made up by 30% public funds, 40% indirect beneficiaries and 30% direct beneficiaries.

Indirect beneficiaries are therefore the first funders of public transport in France thanks to the contribution from employers (VT). The introduction of taxes on land-values and land developers has been considered and included into two laws after the French summit on the environment (*Grenelle de l’Environnement*) in 2007 but they never entered into force.



However, some cities developed local initiatives to better coordinate transport and urban planning and make a better use of local resources to fund public transport enhancement. One mechanism is particular worth to be considered, the “Corridor Contract” (*Contrat d’axe* in French), which consists of a win-win partnership between local stakeholders and land-developers to densify and plan the land around stations and thus increases the effectiveness and profitability of the transport system.

One of the two laws approved after the French Environment Summit of 2007 gave the right to French cities to experiment the “Congestion charge” as it was done in London or Stockholm, but it has not been implemented so far.

In France, car users are also considered as indirect beneficiaries and they contribute to public transport development; revenue collected through car users’ fees and fines are directly assigned to public transport funding.

Mr. Olivier Badard from RATP Dev explained that in Paris non-fare revenues contribute to an economically balanced contract and they are revenues obtained through the financial enhancement of users. Non-fare revenues consist in creating value by capitalising on physical spaces and transport based media and they are managed by a dedicated Unit for Advertising and Commercial Activities, which is responsible for signing contracts and managing contractual relations (legal, financial, operational) and coordinates the project and operational aspects with technical departments. In Paris, non-fare revenues amount to around €95 M per year (75 M€ advertising and 20 M€ retail). Some people from the audience expressed concern on Minister's interest in VT as Egypt has been recently going through a taxation reform that has imposed new taxes, like the value added tax.

The Forum discussions highlighted that rail transport generates value for citizens, business and public authorities and part of the land value increase created by a rail project can be used for the development of local infrastructures and services through "Land Value Capture" (LVC) mechanisms. LVC is a financial mechanism used to finance part of a rail project investment by returning the increases in property prices arising from the project to the source of investment – the taxpayer. **Mr. Yves Amsler from UITP** invited Cairo and other cities to develop a trans-institutional short, mid or long-term holistic vision of sustainable urban mobility with urban rail as a backbone through a master plan integrating transport and land use.

Prof. Dr. Ali Huzayyin explained that the ideas presented by the experts have to be analysed and implemented in full coherence with the Egyptian context. In Egypt, the "Betterment Tax" is already collected by local governments in the cities; as **HE the Minister of Transport** confirmed but is named "Betterment Fee". However, the collected revenues are not invested in urban transport improvement as **Prof. Dr. Ali Huzayyin** stressed. **Mr. David Moncholi from the Euromed RRU project** highlighted that "a good tax is a tax we do not call tax" and that the transfer of the French VT experience is possible in Egypt but it should be considered more as a "transport contribution" than a tax.

Mr. Christophe Chevallier from AREP Ville stated that Transit Oriented Development (TOD) projects have to take into account the local context, to define the *genius loci*, to understand the governance mechanisms and to articulate the different scales and temporalities in order to create and exploit the added land value. In Egypt, AREP Ville, and BECT Consulting firm, won a design competition for redesigning Ramses II square creating a new district at the heart of Cairo and coping with issues relating to urban mobility and different types of pollution caused by urban traffic congestion (public transport and personal vehicles).

Concerning the commercial enhancement of stations, the challenge is to find a balance between selling advertisement and retails' spaces and the passengers' comfort. The approach requires marketing skills: stations have to be considered as real estate property and potential market places.

In this sense, **Dr. Etienne Riot from AREP Design** presented a comparative study between France, Italy and England on the overall approach for commercial enhancement in stations. He first described the three economic dimensions concerning railway stations. They are:

- an essential facility, concerned by transport economics,
- a real estate property, where various actors can find a common interest to develop the quality of the asset, and
- an urban market place, where passenger flows can be transformed into commercial activities.

Then, he highlighted the presence of more than one approach to combine those three dimensions in line with the key principles for retail (transforming passenger flows, finding a good balance between revenues and amenities, making the station more attractive and strengthening the urban integration of the station).

Egyptian participants expressed the need of workshops, training and technical visits in order to respond to staff requirement to better deal with management and operation tasks and the many experts offered their companies' help. In this sense, for example, technical visits in Europe can be organised and a study on Attaba metro Station needs to be launched. Egyptian stakeholders should consider activity within the area in and around metro stations and promote them as "attractive poles" for travellers in order to make retailers have more consumers and benefit from a larger turnover that can be exploited through a sales tax.

Furthermore, **Mr. Martin Sabbagh from JCDECAUX** clarified that advertising is much more than putting advertising signs everywhere in stations: advertisement has to reach people in the more comfortable way to be successful and "beautification" of the spaces is fundamental to reach this goal. Advertisement has to be nice in order to effectively benefit from a captive audience.

In Cairo, the MOT for Investments and Projects Company is facing difficulties with advertising for the last 3 years of its contract with ECM as companies ask for 10 years contracts at least. **Mr. Sabbagh** highlighted that long-term contracts with one major specialised company allow investment in best quality and ensure viability of investments and in the Egyptian case of Cairo metro such a contract would be the first one and the contracted company could act as the single entity for dealing with advertisers.

During the Forum, the audience was interested in the selling metro stations' naming rights practice presented by **Dr. Lorenza Tomasoni-Pradel from CODATU and the Euromed RRU project**. Authorities appreciate revenues from such a practice but some experts consider it a risky one that can cause loss of identity and degrade the image of the city. **Dr. Tomasoni-Pradel** explained that the name selling is flexible in terms of duration of the contract (from 24 hours to 20 years) but needs restriction on the choice of stations (protect historical sites for instance) and on the choice of the brands as they have to be in line with local cultural behaviours.



The exchange with the Egyptian authorities' representatives let the audience understand that companies struggle in dealing with too many institutional parties. During the discussions, experts and audience agreed that GC Transport Regulatory Authority (GCTRA) would act as the entity leading transport regulation in the GC region, under the supervision of the MOT. Effectively, GCTRA has never started to be operational and the MOT should facilitate its institutional improvement by proposing actions to empower it. In this respect, **HE the Minister of Transport** indicated that a new Law is underway on the mandate of GCTRA.

As mentioned earlier, keeping public transport fares very low, cities are successful in making those services affordable for all citizens, yet this has led to increasing subsidies limiting the investment in improved services. During their speeches, the experts suggested reviewing the fare policy at least in Cairo and Alexandria and invited the MOT to investigate how to justify and implement an increase in the fare revenue in a way acceptable by the population. At present, the metro ticket price increase proposed by the MOT is under evaluation in Parliament; the fare

should at least increase at the same rate as inflation. **Dr. Julien Allaire from CODATU** stated that Cairo holds probably the cheapest metro ticket price in the world and that solutions must be found also from the fare box.

Public transport remains heavily subsidized by the central government. Ticket prices are extremely low, and social and political issues make it difficult to increase fares. The authorities therefore wish to identify innovative sources and financing mechanisms that can alleviate the State's contribution to the urban transport systems. The discussions expressed the need for more integration and more institutional cooperation especially between the GC governorates and the MOT. Given these challenges and the local context, it seems necessary today to relaunch and accelerate the implementation of new solutions and projects.

During his concluding speech, **HE Dr. Galal Said** explained that Ministry is looking for solutions based on the “out-of-fare-box” as the funding gap between metro operation cost and fare revenues is rapidly increasing. Foreign experts explained that in France the taxation transfer is transparent and that citizens can follow the investment process. There is only one authority collecting the tax earmarked for urban transport and transferring it to the relevant stakeholders. In Egypt, taxes are not dedicated; the State collects taxes and then decides the allocation of budget, so the MOT has to struggle to convince the Ministry of Finance (MOF) to pay attention to urban transport. He then pointed out that efforts made by Egyptian stakeholders were not enough to cope with the complex reality of Cairo but that authorities are currently doing their best to improve the situation. Lastly, **Dr. Said** stated that all solutions that are discussed during the Forum are applicable for all Egyptian cities and not only Cairo and he invited governorates to take advantage of the results of the UMF.

■ 3. Measures of out-of-fare-box financing of Metros & Urban Rail according to Measure Type

Measures are presented under five groups as below:

- Group 1: **Utilization of Metro Assets and Potentials** Measures
- Group 2: **Ticketing and Fare Values** Measures
- Group 3: **Operating Cost** Measures
- Group 4: **Fees and Charges** Measures
- Group 5: **Other** Measures

All the measures are applicable to Cairo Metro. Some of them can be also applied to the Egypt National Railways network, the Alexandria future modern tram and with, some adaptation, even to the bus network.

For each measure the following elements are given.

➤ The **expected time of application** indicated as:

- VS = Very Short; measures to apply almost immediately, less than one year.
- S = Short; measures anticipated to be applied in about 2 years.
- M = Medium; measures to be applied in about 3 years.

➤ The **level of difficulty for implementation** is indicated as:

- L = Low: Easy implementation by the operator or the transport authority (without the assistance of external specialised agency).
- M = Medium: Need for internal or external specialised skills (e.g. JCDecaux or AREP).
- H = High: Need for complex multi stakeholders scheme and high technical skills.

➤ The **approximate potential revenue**⁵ is indicated as:

- L = Low: less than \$ 10 M per year.
- M = Medium: less than \$ 50 M per year / significant for covering operation costs.
- H = High: less than \$ 100 M per year / significant for covering operation costs.
- Very H = Very high: more than \$ 100 M per year / may cover part of the investments.

⁵ Potential revenue estimations for each measures are suggested by the international experts and refer to the implementation of those measures world-wide. In Egypt those estimations might be different and more analysis should be conducted if any of the measures is adopted

For each measure, the general requisites for application are indicated. However, those must be detailed as given below.

Recommended Steps for Application of the Measures:

- Action Group: three senior officials from the MOT to be appointed by the Minister.
- Mandate: Facilitation of application of the measures.
- Power: Get autonomous power to perform this mandate.
- Work pace: Full time bases.
- General Guidelines of the mandate:
 - Make detailed list of the requisites of application of each measure.
 - Work with the concerned agencies on the implementation of the requisites of application of all the measures.
 - Focus immediately with the concerned agencies on the application of VS and S measures.
 - Prepare with concerned agencies the application of M measures in the designated time of less than two years.
 - Work on devising other measures not in the following Tables.
- Follow-up and reporting:
 - Follow up the implementation of the requisites of application of the measures.
 - Follow up the application of the measures.
 - List obstacles to application of measures.
 - Prepare weekly short Progress Report on their work.
 - Report the progress to the Minister on weekly basis.

As indicated in the following Tables international expertise is in some cases needed among the requisites of application of some measures. CODATU, CEREMA, AFD and the Euromed RRU project can help in a variety of ways in those respects and this can be discussed with MOT to ensure feasibility and future sustainability.

■ 3.1 Group 1: Utilization of Metro Assets and Potentials Measures

Measure	Time for implementation <i>Very short (VS) – Short (S) – Medium (M) – Long (L)</i>	Level of Difficulty of implementation <i>Low (L) – Medium (M) – High (H)</i>	Approximate Potential revenue <i>Low (L) – Medium (M) – High (H)</i>	General Requisites
1. Advertising: at Stations (interior & exterior), in trains, on tickets, in P+ Areas, on the Website of the ECM	VS/S	M	M	<ul style="list-style-type: none"> - <u>Timely actions</u> - Introduce liberal regulations - Utilise International expertise - Experienced marketing
2. Land Value Capture around Metro Stations: - ECM land [£] - New land ^M	S/M	M	H	<ul style="list-style-type: none"> - International expertise - Specialized designers - Experienced developers - Experienced marketing
3. Exploiting Air Rights at Stations	M	M	M	
4. Stations Naming Rights	VS	L	L	<ul style="list-style-type: none"> - International expertise - MOT grants top approval - <u>Timely actions</u> - New liberal regulations
5. Commercial exploitation of Metro Stations	VS/S	L/M	M	<ul style="list-style-type: none"> - International expertise - <u>Timely actions</u> - New liberal regulations - Experienced marketing
6. Exploiting Stations Parking (P+ Pass and Ticket).	VS	L	L	<ul style="list-style-type: none"> - Specialized designers - Experienced developers - Experienced marketing - Leased to Private operator(s)
7. Private TV Chanel at Stations platforms	VS/S	L	L	<ul style="list-style-type: none"> - MOT with UTV&R for license - Marketing with Private TVs

■ 3.2 Group 2: Ticketing and Fare Values Measures

Measure	Time for implementation <i>Very short (VS) – Short (S) – Medium (M) – Long (L)</i>	Level of Difficulty of implementation <i>Low (L) – Medium (M) – High (H)</i>	Approximate Potential revenue <i>Low (L) – Medium (M) – High (H)</i>	General Requisites
8. New Ticketing System	S	M	L	<ul style="list-style-type: none"> - International expertise - Can be coupled with fare increase
9. Limiting trips on Students Pass	VS	L	L	<ul style="list-style-type: none"> - Timely action - Implement survey and assessment - Awareness - Media planning
10. Increase of Metro Fare Values	S	H	M	<ul style="list-style-type: none"> - Better linked with new ticketing system - International expertise analysis - Top level decision.
11. Extra fare for Line 3 extension to Airport	M	L	L	<ul style="list-style-type: none"> - Timely action - Can be linked with increase in values of fares
12. Surcharge on Metro passes price paid by Companies of 50+ employees	VS	M	M	<ul style="list-style-type: none"> - MOT negotiates agreement with Companies & MOIT and MOSS

■ 3.3 Group 3: Operating Cost Measures

Measure	Time for implementation <i>Very short (VS) – Short (S) – Medium (M) – Long (L)</i>	Level of Difficulty of implementation <i>Low (L) – Medium (M) – High (H)</i>	Approximate Potential revenue <i>Low (L) – Medium (M) – High (H)</i>	General Requisites
13. Reduction of Operating Cost: - Engineering of operation - Engineering of maintenance - Management of operation	VS/S	L	M	- Internal expertise - International expertise - On-the-Job Training (local and abroad) with exams and allowances
14. Alternate Metro trains stopping at minor stations	VS	L	M	- ECM to decide minor stations via survey of passengers per hr. per station - Electronic LCD Panels at stations platforms to indicate the stations of alternate train stopping - Voice announcement in the stations of alternate train stopping
15. Reduction of Metro unnecessary staff	VS/S	M	H	- Shift to ENR - Stop new appointment - MOT grants agreement
16. IT Services for metro operation	S/M	M	L	- International expertise
17. Selling services/products of the Metro Workshops	VS	L	L	- Survey of capabilities - Ideas and pricing - Market research - Marketing
18. Improve multimodal integration	M	H	L	- Improve the dialogue between different decision-makers and stakeholders - Improve physical integration by building new stations or reorganising flows and equipment in the existing one

■ 3.4 Group 4: Fees and Charges Measures

Measure	Time for implementation <i>Very short (VS) – Short (S) – Medium (M) – Long (L)</i>	Level of Difficulty of implementation <i>Low (L) – Medium (M) – High (H)</i>	Approximate Potential revenue <i>Low (L) – Medium (M) – High (H)</i>	Requisites
19. Betterment fee	S	M	Very H	<ul style="list-style-type: none"> - MOT grants concerned approvals to apply Local Authorities similar regulations on ECM - ECM decides on whom they should be applied - ECM decides on rules for fee amount determination
20. Charge on employment	M	M/H	Very H	<ul style="list-style-type: none"> - International practice and expertise - MOT starts effort on new Law. - MOF top management study visit to France to know French application of VT (Payment for Transport)
21. Charge on land developers	M	M/H	H	
22. Introduce Tax System to MOF	VS	M/H	Very H	
23. Fees on excessive car use (congestion charge or similar)	M/L	H	M	<ul style="list-style-type: none"> - MOT to negotiate with MOE/MOI
24. Exploit investment on Metro network expansion with CO2 savings grants	VS	M	L	<ul style="list-style-type: none"> - MOT to negotiate with MOE
25. Tax on fuel	M/L	H	Very H	<ul style="list-style-type: none"> - MOT to negotiate with MOF

■ 3.5 Group 5: Other Measures

Measure	Time for implementation <i>Very short (VS) – Short (S) – Medium (M) – Long (L)</i>	Level of Difficulty of implementation <i>Low (L) – Medium (M) – High (H)</i>	Approximate Potential revenue <i>Low (L) – Medium (M) – High (H)</i>	Requisites
26. Protection of stations shop owners from metro vehicles informal venders	VS	L	L	- Timely actions from Transport Police
27. Selling Metro Brands	VS	L	L	<ul style="list-style-type: none"> - Plan - Timely action to produce - Marketing - Lease to private company
28. Surcharge on use of mobile phone in metro network	VS	L/M	L	<ul style="list-style-type: none"> - On individuals, or more appropriate on Mobile Companies - ECM negotiations with mobile phone companies - MOT to negotiate with NTRA - Timely action
29. Enhance staff capacity in terms of management and operation	VS	L	-	<ul style="list-style-type: none"> - International expertise - Training (exams & allowances)
30. Agencies of privileged groups to pay surcharge of fare value increase to their affiliated riders. Those include: MOSS to the handicapped, MOEd to students, etc.	S	L	M	<ul style="list-style-type: none"> - Determine annual loss of revenue due to special fare for privileged riders - MOT: discuss with concerned agencies & get Cabinet approval

Annexe 1 : Abbreviations and Definitons

Abbreviations

AFD: French Development Agency

AREP: French national rail operator’s architectural, design and engineering consultancy for railway stations

CEREMA: National Centre for Studies and Expertise on Risks, Environment, Mobility, and Urban and Country planning

CMI: Center for Mediterranean Integration

CODATU: Cooperation for Urban Mobility in the Developing World

ECM: Egypt Company for Metro Management and Operation

LVC: Land Value Capture

MOE: Ministry of Environment

MOEd: Ministry of Education

MOF: Ministry of Finance

MOI: Ministry of the Interior

MOIT: Ministry of Industry and Trade.

MOSS: Ministry of Social Solidarity.

MOT: Ministry of Transport

NTRA: National Telecom Regulatory Authority

RATP: Paris area Public Transport Network main operator

RRU: Road Rail and urban Transport

UITP: International Association of Public Transport

UTV&R: Union of TV and Radio

VT: “Versement Transport” (French Employers Contribution to Public Transport)

Definitions

➤ **Betterment Tax - levy on property that has benefited from transport infrastructure gains**

The Betterment Tax is a tax based on the increased property value directed at the beneficiaries of PT investment (also known as Benefit Assessment).

➤ **Tax Increment Finance - economic development incentive package**

The Tax Increment Finance is an economic development mechanism available to local authorities (a township, municipality or county) for supporting private investment mainly for specified urban redevelopment in specified areas. It involves tax mechanisms and capital allowances.

➤ **Joint Development - cooperative system between public sector and private developers**

The Joint Development is a voluntary legally binding agreement between the public agency and the private developers, leading either to revenue payment by the private sector to the public sector, or to shared construction costs (internalisation of “air rights”). It needs a public authority to fund its investment in public transport and create a source of revenue to maintain the public transit systems and encourages property development close to stations.