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The Metropolitan Transport Authority in Europe. Towards a methodology for defining objectives, responsibilities and tasks

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Abstract

The paper presents the concept of European Metropolitan Transport Authorities (MTAs) and outlines main aspects for the creation or the restructuring of an MTA. The parameters that should be considered during the design stage are identified and the way in which they influence an MTA's configuration is described. This analysis aims at designing a simple and easily understandable methodology to support the work of experts that are involved in MTA reform projects. Finally, the identified design aspects are applied to the case of Greece in order to define the fundamental attributes of an ideal MTA model that could be applied at regional level in the Greek context.

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Keywords: metropolitan transport authority; public transport; organisational design and methodology; restructure

1. Introduction

Around 80 % of the EU-27 population lives in cities and urban areas whose competitiveness in the global competition as well as their energy consumption, emissions of pollutants, travel cost and time are determined among others by the efficiency of transport networks and particularly the infrastructures, services and facilities (Masi S., 2009). This fact increases the need for societies to promote the integration of the transport system favouring public transport and the "soft modes" of mobility. This need enhances the importance of authorities that are responsible for the management of the transport system.

According to the European Regulation 1370/2007 for the <u>public service obligation</u> (PSO) in inland transport a "competent authority" is defined as "any public authority or group of public authorities of a Member State or Member States which has the power to intervene in public passenger transport in a given geographical area or any body vested with such authority" (EU regulation). The adopted definition

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of the competent authority by the regulation is rather wide, being able to include every possible form and type observed. Member states have a large freedom to define the competent authority, local or not (Avanzata T., 2010). For instance, a competent authority could be one of the following broad groups: (a) municipalities, counties, regions or other public entities, (b) a group of authorities, (e.g. a group of municipalities or a region and municipalities), (c) ad hoc bodies vested with the power to intervene in the transport system in certain geographical areas.

Within the UITP, which is the international association of <u>Public Transport</u> (PT) that aims to double the market share of public transport worldwide by 2025, there is a new division that concerns <u>Organising Authorities</u> (OA). According to the division's mission statement, organising authorities *are organisations which act in the public interest and ensure a well-functioning and integrated transport system within their territory* (UITP-OA). OAs comprise a dynamic sector accounting for 186 members located in 53 countries within the UITP OA division (Masi, C., 2009).

These authorities have been historically developed in large urban areas where the PT system is complex and traffic problems are more intense. However, during the passage of the time, in many cases their territory has been gradually extended covering the whole metropolitan area of an important city and being transformed to MTAs. MTAs contribute to the urban sustainability and the improvement of the quality of life by managing in a holistic way the complexity of the transport system and its interrelations with other sectors such as urban planning. MTA types are rather diverse since they have been developed under different historical circumstances and local conditions. Their success depends on their well designed structure and the effective way in which they are being incorporated in the current administrative context. Nowadays, the need for the creation of new MTAs in some areas and the need for the already existing ones to be adapted according to the challenges and demands of the EU Regulation 1370/07, draw the interest of research on the study of the MTA organisational forms.

During the last decade new authorities were founded and older ones were restructured in Western Europe in order to better meet the needs and fulfil the new requirements that arise. Moreover, a number of EU funded projects on public transport system organisation have been conducted, such as ISOTOPE, QUATTRO, MARETOPE, PRECO, VOYAGER, SPUTNIC and CAPRICE. Now, there is a need for the authorities in Eastern and Central Europe that are not properly established to be restructured and provided with all the necessary competencies (Schuchmann, A., Papadimitriou, S., 2009).

2. Current trends and MTAs drivers

2.1. MTA's drivers

The MTA in cooperation with the PT operators contribute to the success of the public transport system by making it more attractive in comparison with the private motorised transport and therefore comprises an important element to guarantee the sustainability at any metropolitan area. The driving factors that force societies to develop and enhance the institution of organising authorities are identified and briefly discussed below:

Global perspective:

- Holistic approach in PT provision: Favouring PT modal share against other individual motorised
 transport can result positively in traffic congestion, improvement of public space and pollution and
 noise reduction. If MTAs did not exist, the evolution of the transport system would not comply with
 regional planning and land use policy and operators would provide only the minimum services
 according to market rules ignoring the external costs and benefits (UITP-OAC).
- Increasing social inclusion: MTA contributes to the increase of mobility that comprises a prerequisite for the participation of people in social life activities. MTA can intervene by imposing public service obligations that secure minimum quality and quantity service specifications and

- standards, high environmental standards, accessibility in isolated areas or for people with reduced mobility and special fares for vulnerable population groups. From this point of view, MTAs are of vital importance because they contribute in sustaining the model of life for many people (UITP-OAC).
- Complexity of PT system and the need for integration: Integration concerns the different transport modes (intermodality) and operators, the various public authorities (horizontal integration in case of neighbouring authorities) and stakeholders involved (complex institutional framework and shared responsibilities), the spatial differences (urban vs. rural) and different scales of trips (local vs. metropolitan), the interaction of policies (sectorial integration), the planning at the different administrative levels (vertical integration) the single fare policy and image of services (a unified logo) and the synchronised timetables (Masi., C., 2009, Lecler, S., 2001, UITP-OAC). The integration of modes should be both technical (i.e. interchanges) and logical which refers to the role that each mode plays within the system (backbone, feeding role etc.) (Lecler, S., 2001). By integrating the transport system, MTAs succeed in making PT user-friendly and attractive for a wider range of people since interchanges are faster and more comfortable. Moreover, information becomes more easily accessible and passenger needs can be satisfied by a variety of services. The integration of the system has also positive financial implications for the whole system because the different operators are encouraged to act in a supplementary way and not competitively, preventing them from looking only after their own interests (UITP-OAC).

Territorial perspective (from the viewpoint of a relatively centralised and regulated country):

- International level: The EU regulation 1370/2007, which must be transitioned in European countries, imposes authorities to sign a public service contract with an operator when they procure transport services. This requirement requires proper expertise and knowledge on competitive tendering procedures and cost estimating in order to be fulfilled. In this way, the decision to create an MTA is more likely to be taken. In this sense, an MTA must be able to draft contracts, control the fulfilments of their obligations and ensure the efficient use of public funds. In the frame of the implementation of the EU PSO Regulation, for example, the Portuguese government who was directly in charge of the organisation of PT at the cities of Porto and Lisbon, set up in 2009 two competent authorities, controlled jointly by the central government and the local authorities (Mounier E., 2010).
- National level: The target of decentralising responsibilities as well as funding resources from the central government to the regional and local administrative entities in combination with the weakness of local self-governed administration to undertake the transport relevant activities point to the urgent need for the creation of new MTAs. In addition, MTAs could act as consultants of the government for the completion of emerging acts on transport, urban planning etc. Moreover, the distribution of transport responsibilities to many public bodies has caused overlaps and malfunctions that can be faced by an MTA under which the majority of transport issues can be gathered. In an era of severe financial difficulties and introduction of competition, MTAs can guarantee working agreements, set quality standards, protect the interests of small operators and use compensations efficiently.
- Local level: There is a need to promote synergy among the transport authority, the organisation for urban planning and the various local authorities by ensuring that targets for the transport system are coherent with the ones defined by the urban planning and land use planning. Moreover, there would be a need for integration when transport systems that are under construction, will begin operation. On the other hand, fragmentation of authority among different agencies, which are responsible for several dimensions of a potentially new application, such as the bus rapid transport, should be eliminated in order to ease its smooth introduction. The successful implementation of such innovative solutions, requires a single competent authority and of course some institutional adaptations (Golman, T., Gorham, R., 2006). Finally, the modal share of PT is relatively low; hence there is a need for it to be increased.

2.2. MTA categories

Van de Velde D.M. (1999) proposed a global classification of organisational forms of PT delivery as they can be identified in Europe. According to it, these forms are distinguished by (a) authority initiative (concessions) and (b) market initiative (authorisations). The first one includes private concessions, in other words delegated management, as well as public network (management contract or direct public management). On the contrary, the second one contains open entry market, as well as regulated authorisations that are dominated by either private or public companies. In authority regimes market entry is impossible since transport authorities have the legal monopoly of initiatives. In contrast to this, in market initiated regimes, transport services are delivered by operators that enter into the market on an autonomous basis (van de Velde, D.M., 1999). The several evolutions in transport organisational forms that have been encountered in Europe were categorised by van de Velde (2003) as following: (1) from public management under authority initiative towards an involvement of the private sector, (2) from public companies operating under market initiative towards authority initiative with private involvement and at last (4) any reform of the existing regimes.

In 2001 Lecler S. presented three emerging main models of PT authorities namely: (1) the model of authorities created *ab nihilo* [sic] by public authorities and responsible for the strategic and tactical levels, mostly found in Spain, Germany and France, (2) the model of historic public operators turned gradually into PT authorities responsible for the tactical level (e.g. Stockholm, Milan, London, Rome and Brussels) and (3) the model of public authorities in charge of several metropolitan issues, among which transport is a primary one (e.g. Copenhagen, Helsinki). Lecler S. argues that in the second model there is the advantage of the already obtained knowhow of the entities regarding the operation of the PT system. According to him also, there are three main systems in terms of who is responsible for organising the PT: (1) areas where ordinary local authorities have the competence, (2) areas where the operators have this responsibility and finally (3) areas with a specific body engaged.

Table 1. Types of the MTA owners and board composition

Organi	isational	structure
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	o gamento una su neture					
	owners composition	composition of the Board				
а	state owned corporation: 2 cases [19, 12]	representatives of the personnel [19]				
b	Region or County acting also as MTA: 5 cases [2, 3, 4, 7, 8]	representatives of the national government with or without voting rights [1, 2, 3, 12, 19]				
с	Region/s and/ or County/ies (or local government/s) and local authorities: 7 cases [1, 10, 13, 14, 15, 16, 18]	representatives of the consumer union [2]				
d	Two Regions: 1 case [5]	representatives of the private operators [2, 3]				
е	Several municipalities: 1 case [6]	representatives of the trade union or commerce chamber [2, 9]				
f	an ad hoc body under the control of a Region: 1 case [9]	representatives of municipalities and other L.A. $[1, 2, 3, \overline{5}, 6, \overline{7}, 8, 9, 10, 13]$				
g	city owned corporation: 2 cases [11, 17]	representatives of regions or local government [1, 2, 3, 4, 5, 7, 9, 10, 11, 13]				

(1) Barcelona - ATM, (2) Madrid - CRTM, (3) Valencia - eTM, (4) Stockholm "AB Storstockholms Lokaltrafik", (5) Conpehagen Movia Public Transport, (6)Helsinki - HSL, (7)Amsterdam "Stadsregio Amsterdam", (8) Lisbon "Grande Area Metropolitana de Lisboa", (9) Paris - STIF, (10) Lyon - SYTRAL, (11) Milan - ATM, (12) Bologna - SRM, (13) Torino - AMMT, (14) Berlin - VBB, (15) Hamburg - HVV GmbH, (16) Frankfurt - RMV, (17) London - TfL, (18) South Yorkshire - SYPTE, (19) Athens - OASA Source: [data from "European Metropolitan Transport Authorities (EMTA)" website and MTAs websites, processed by authors]

Table 1 presents the possible types of MTA ownership and board composition that are found in the examined European urban areas. It is clear that the involvement of both Regions and smaller local authorities such as Municipalities comprise the most common application.

3. MTA design aspects: a systematic approach

3.1. Design aspects

Any design of a new MTA or re-organisation of an existing one should address some structural and operational issues. Below, the eight main issues that any organisation design should deal with are indentified and briefly discussed.

- Service area/ territory: refers to the spatial responsibility of the MTA. It should be clarified that the
 existence of a single service area for the whole transport system which can differ in terms of the
 mode or other parameters is not essential. In case that a fully integrated transport system is desired, a
 uniform service area is preferred.
- 2. Legal regime: there are various legal forms that can be utilised. These can be either forms of a public body that comply with the public law or types of a private company:
 - i. A public body (authority) specialised in the transport sector,
 - ii. An internal department of an existing public authority of general interest (in-house operation), for example the transport department of a municipality
 - iii. A union of local authorities (municipalities or/and regions)
 - iv. A company, (commonly a corporation) founded by public authorities and assigned to manage the transport system at local level.
- 3. Management partners: this concerns the bodies, authorities or companies that are involved in the creation and operation of the MTA and the relative attached participation level. Usually, this is reflected in the distribution of the shares of holders in case of an incorporated company or in the composition of the body's board.
- 4. Consultation procedures and cooperation forms: regarding citizen participation in the management of the transport system or in the decision-making processes this could be assured by three basic ways:
 - i. Participation of users' representatives at the MTA's board of directors either by having membership status with full rights of voting or by participating only in the dialogue.
 - ii. Introduction of customer satisfaction surveys at a regular basis by using the typical questionnaire surveys or by exploiting the new social media networks of the web (or by running polls at the MTA's website).
 - iii. Establishment of users' committees with the aim of discussing any transport related matter of their concern. These committees may consist either of general public participants or special focused population groups, such as committee of women, workers, people with disabilities, etc..

Moreover, it appears that cooperation and trust encouragement between authorities and operators, which is rather essential for achieving the desired performance level, especially in the competitive tendering based contracts, can be assured by the interesting solution of "development teams", which were tested in the Dutch Province of Overijssel (Eerdmans, D. A., et al., 2010). Taking place during the service development process in the frame of a contract, they ensure a better fit between the two parties' aims.

5. Tasks and responsibilities: these comprise probably the most significant part of the design process because they determine the scope of the organizing authority. Since it is claimed that there are three basic levels of responsibility in the definition of PT, the strategic level for a long term period concerning overall objectives of transport policy, the tactical level for a medium term period regarding the supply of PT and the operational level for short term referring to the operations and their anticipated costs, the combination of the assigned tasks and responsibilities sets the MTA on the appropriate place among these levels. Tasks that are regarded as belonging to the tactical level such as planning of networks, co-ordination of services, ownership of infrastructure, fare policy, ticket sales and marketing/ information to passengers can be assigned to either MTAs or operators (Lecler, S., 2001). As emphasised by European Public Transport Operators Organisation (EPTO), there

should be an efficient recognition of the different skills and resources that every involved body brings to the PT, attributing the tactical decisions to be adopted mainly by the operator in order to promote innovation and develop more customer-oriented strategies (Maczkovics C. et al., 2010). Moreover, the number of responsibilities influences the three design dimensions that are discussed below. For example, staffing needs depend on the number and nature of tasks. In the same way, the essential funding is related to the tasks and the number of employers. Finally, the organisational chart should be designed in parallel with the staffing determination. Table 2 groups the several tasks and responsibilities which were identified. Three different combinations of these can conclude to three MTA scenarios in terms of their core scope. The last scenario concerns the extension of powers to other fields interrelated with transport such as urban planning and rural development. This can be realised by a potential merger of the former MTA with the Organisation of Planning when such one already exists.

- 6. Financial resources: a crucial dimension that influences the sustainable operation of the organisation. Possible funding alternatives could comprise the following:
 - i. Subsidies from various local public bodies or the central government.
 - ii. Revenues from passengers' fare tickets: either by keeping a percentage of the total revenues before distributing them to the operators, or by imposing a relevant tax when the operators collect the fare tickets on their own.

Other revenues either conventional such as funding from the stakeholders (i.e. share capital increase), revenues by the commercial exploitation of the transport infrastructure (vehicles, stations, stops etc.), publicity and advertisement or more innovative such as congestion charging (the case of London), transport taxes to the enterprises according to their size (the case of France), charging of the added value of real estate due to the creation of PT stations or lines, road traffic fines, taxi licensing incomes, bus enforcement fines, taxes against the usage of private cars imposed to the parking enterprises or petrol stations, sponsorships of the system in the framework of the corporate social responsibility, events sponsorships, naming rights for stations, lines and stops, partnership marketing programmes and loyalty programmes (Yıldızgöz K., 2011) that could include low expenses agreements for PT customers and other exclusive members' benefits.

Regarding the coverage of operational costs by each category of financial resources there is a great variety among the metropolitan areas. According to the EMTA barometer of 2008, which includes the biggest transport authorities in Europe, in average 47% of the operational costs among the surveyed areas are covered by fares while 51% are covered by public subsidies (EMTA, 2010). The remaining part of the cost which may range reaching 8% in average in EMTA barometer of 2006, is covered by the other revenues.

7. Staffing and expertise: this issue concerns the estimation of the needs in terms of the human resources and the specialisations. An organisational study should examine all possible alternative ways of executing the role of an MTA, for example by retiring redundant workplaces, transferring employers from other public entities to the MTA, hiring new permanent personnel, utilising staff contracted for a defined small time duration or outsourcing some activities to external parties and consultants etc.. Following that, the study should propose the most appropriate and efficient ways of delivering the tasks and responsibilities in terms of cost and service quality.

Table 2. The list of tasks and responsibilities for three different MTA scenarios

			Core scope of the MTA						
RESPONSIBILITIES		TIES	1. Acronym	a. MAPT		b. MATM		c. MATM-ReD	
			2. Rating level	C	E	C	E	C	E
1	Z = = = = = = = = = = = = = = = = = = =	Responsibility of	Urban buses and interurban buses	•	•	•	•	•	•
2		mode mode	Interurban railway	•	•	•	•	•	•
3			Metro/ Tramway	•	•	•	•	•	•

			T						
4	•		Ferry water transport	•	•	•	•	•	•
5			Taxi services		•	•	•	•	•
6	-		Municipal transport	•	•	•	•	•	•
7			Transport services for disabled	•	•	•	•	•	•
8	•		Flexible transport (eg DRT, night serv.)	•	•	•	•	•	•
9	•	Special transport	Transport service for workers		•	•	•	•	•
10		services	School transport service		•	•	•	•	•
11	•		Tourist service and services to airports	•	•	•	.	•	-
12	•								
			Other modes (carriage with horses etc.)	•	•	•	•	•	•
13		Determination of se		•	•	•	•	•	•
14		Coordinating trans	port services (including freight trans.)	•	•	•	•	•	•
15			Bus lines	•	•	•	•	•	•
16		N	Urban Ferry transport	•	•	•	•	•	•
17	•	Network design	Metro/ Tramway/ Suburban railway	•	•	•	•	•	•
18	•		Cycle lanes				•	•	•
19		Planning and operations of bus lanes				•	•	•	•
20									
			luct studies and projects	•	•	•	•	•	•
21	•	Design of transport				•	•	•	•
22		Management of url	-			•	•	•	•
23		Research and innov	vation	•	•	•	•	•	•
24		General transport	and mobility plans (city, region etc.)			•	•	•	•
25	*		ation of stops, stations, parking places	•	•	•	•	•	•
26	Transport and traffic management		users (direct and indirect)	•	•	•	•	•	•
27	Ĭ.	Information provis		•	•	-	.	•	.
28	Š		IUII	•	•	•	•	•	
	ě	Marketing	m er 1: 1 . 1 .	•	•				
29	Ĕ		Traffic lights and signs			•	•	•	•
30	. Je	Troffic and	Definition of one – way roads				•	•	•
31	ja,	Incident —	Pavement establishment				•	•	•
32	d t		a. Traffic calming, b. limitation measures			•	•	•	•
33	Ě	шапачешені —	Incident management			•	•	•	•
34	Ţ.		icators and level of road safety					•	•
35	ods	Audit of the adequa					•	•	-
	Ě								<u> </u>
36	Ţ		nent (accessibility, soft modes: cycling & walking	•	•	•	•	•	•
	4.	, car & bike sharing							
37	t ent		s and awarding of transport services	•	•	•	•	•	•
38	ac ac	Monitoring of comp	pliance with the contract's terms	•	•	•	•	•	•
39	nta 18e	Quality manag., ev	aluation of LoS and users' satisfaction	•	•	•	•	•	•
40	Contract management	Ctandond-1-1-E- ···	one stone welling stock stations		•	_	•	•	
		Standards' definition	on: stops, rolling stock, stations	•		•			
41		Fare policy			•	•	•	•	•
42	82	Tickets sales							
43	Financial tasks	Fare revenues man	agement	•	•	•	•	•	•
44	7 7				<u> </u>	.	.	•	.
	cia	Subsidy manageme							
45	an an		structure, rolling stock and systems		•	•	•	•	•
46	į		ax, b. Pricing strategies (i.e Congestion				•		•
	F		ion with traffic limitation measures						
47		Tax for the added v	value of property due to new infrastr.				•		•
48	ıψ	Infuscion -t	Stops			•	•	•	•
49	7.5.h	Infrastructure	a. Terminal stations, b. Depots				•	•	•
50	ne	Ownership of	Issue & collection of tickets (e-ticketing)			•	•	•	•
51	Ownership	systems	a. Telematics, b. info terminals			-	.	•	<u> </u>
JI		Jocans	a. reiematics, c. mio terminais			•		-	<u> </u>
52	Land use, environment and development	Land use issues							
34	us d d	Lanu use issues							•
	Land use, environmen and developmen								
53	La nvi	Several environmental (air pollution, noise emissions, energy							
55	न न	consumption, etc) a	and development issues						-

Legend: (1). a. Metropolitan Authority of Public Transport, b. Metropolitan Authority of Transport and Mobility, c. Metropolitan Authority of Transport, Mobility and Regional Development, (2). C: Conservative, E: Extensive

A key issue of the authorities' staffing concerns the competitive tendering experience and their limited knowledge on the consequences of their choices, since some of them use competitive tendering only once in a couple of years and following that their staff moves on (Eerdmans, D. A., et al., 2010). This has a negative impact on the quality of the contract and causes disappointments about the performances of PT contracts. It is estimated that a time period of at least 3 to 5 years is essential

- to establish the necessary expertise in an MTA (Schuchmann, A., Papadimitriou, S., 2009). Finally, it is pointed out that authorities that derive from previously operating companies tend to have more personnel than others which were created from the beginning (Lecler, S., 2001).
- 8. Organisational chart: the grouping of similar tasks in combination with the available resources indicates the minor and major fields of activity, their relationships and their relative ranks. The visual illustration of the structure of an organisation is a diagram called organisational chart that shows the different elements and levels of management, their interrelations and the needed personnel assigned to them.

3.2. Crucial factors to be considered in MTA design

1. Available resources and framework: traditions/ historical background and initial conditions:

The role of an MTA is influenced by the background on public services delivery and the particular circumstances of the existing transport system. Taking into account that an MTA has to close the gaps between transport demand and offer, any organisational design must consider the available potential and skills of the other parties currently involved in the strategic, operational and tactical level of transport management in order to avoid potential overlaps and resources wastes. For example, the expertise of the transport operators in certain fields such as innovation and business development, the obtained experience and capabilities of the local authorities in transport issues, the administrative structure of the state and the existence of other entities at the strategic, tactical and operational level will probably have impact on the decision to create an ad hoc body (i.e. a new MTA) or to MTA's degree of responsibility at the three decision making levels and the number of its tasks. Usually, a new MTA or the restructuring of an existing one is needed when MTA will elaborate contract management. In this case MTA should have knowhow about cost structures of operators and knowledge about the passenger focused integration of the system (Schuchmann, A., Papadimitriou, S., 2009). It should also be stated that ownership of infrastructure is closely linked with the legal framework of transport operations and the relations between OAs and operators determine whether the authority will be responsible for certain tasks or not.

2. Stakeholders' interests and the externality of the consultancy team as a prerequisite for the transparency and the broad strategic view:

A critical parameter of an MTA development, as well as of any decision making process, particularly focused on strategic choices of public interest, refers to transparency and non discrimination. The organisation design or any re-engineering attempt should be realised by external consultants that are appointed only for this particular purpose without having, directly or indirectly, any other interest related to the organisational reform. Despite the fact that this may seem obvious, the opposite practices still exist. A study for an MTA reform that would be conducted in-house by an existing body responsible for transport, would be limited ab initio in its scope and concept. The existing body would tend to conserve the already formed situation being *de facto* unable to perceive itself just as a component of the whole transport sector's environment. This limitation reduces the reform potential, since possible proposals, such as the merger of two different public bodies into a combined one which subsequently leads to a new board of directors with a number of members reduced by 50% become more unlikely (or are excluded). Furthermore, being an external consultant to a current transport authority ensures a high level of independence and could bring a broad experience of organisation design studies in other fields of the economy. The externality comprises also an advantage, especially in transport problems that are generally complex and involve many stakeholders who usually have conflicting interests and different hidden agendas that must be brought together for the integration of the transport system. In this sense, externality increases the transparency of the design procedure and eliminates discrimination among stakeholders involved. Another issue is related to the power of the transport operators who are sometimes appreciated more than the authorities by the population, especially in situations of monopolies making difficult for MTAs to impose their decisions (Lecler, S., 2001).

3. Political pressure: Diverse legislation, institutional settings and political ideology:

The legislation regarding the public transport regulatory settings may differ significantly among countries ranging from the authority initiative to the market one. The first one represents a rather regulated market where the organising authority may choose either to procure PT services or provide them itself. In the second case, operators can enter the market autonomously and sometimes they are subjected to settings on market entry and market behaviour that concern fares and supply (UITP-OA). The two opposite regimes determine the role and subsequently the responsibilities of the OA, which may deliver or purchase services or simply intervene by setting the minimum requirements for companies freely operated. Authorities may also impose public service obligations regarding the fares, quality service characteristics or even new services that cannot be justified from a commercial point of view. The adopted regulatory regime is purely a matter determined by the dominated political ideology and the amount of public funding that is committed for PT. Another key issue is the existence of a unified law for PT or a fragmented legal framework. In the latter case, the assignment of responsibilities to a new MTA will be proved a rather difficult task. Moreover, the obligation of authorities to sign a public service contract with operators as it is laid down by the EU regulation 1370/2007 usually leads to additional tasks such as the controlling of a quality management system. Finally, the involvement of the national government in OA operation comprises, in most cases, an exemption and it progressively reduces in favour of the decisions taken at local level.

3.3. Towards a future concrete methodology

The proposed methodological approach is illustrated in Figure 1 which shows a flowchart of steps that could be followed in any study for the development of an MTA.

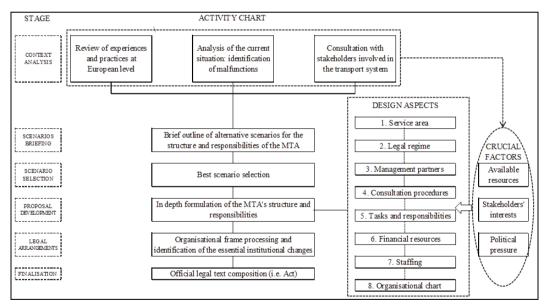


Fig. 1. The proposed methodological approach for the development of an MTA

The procedure is not exclusively one-way, being applied only in one direction. There are also interactions among the steps that are interrelated with two-way flow and there may also be a loop in the case where the process should be repeated.

The systematic approach proposed does not constitute a concrete methodology for designing a transport authority. Nevertheless, it is a helpful tool for any study relative to MTA creation or reform, since it illustrates the basic steps to be followed. The new EU PSO regulation affects the provision of PT and stimulates countries to undertake initiatives for restructuring their transport and contract awarding system. This trend in combination with other MTA drivers at global/ international, national and local level increases the possibility of establishing new MTAs or reforming the existing ones. Therefore, it is considered that there would be a need for a general well-structured methodology potentially applicable in any case. The design of an MTA is an interdisciplinary task and could involve knowhow and expertise from several fields. For instance, the "enabling framework" based on the logic of complexity, proposed by the LSE/ CRG (Mitleton-Kelly, E., 2005), could probably be exploited in developing a methodology for MTA organisational restructuring.

4. Challenges of structuring MTAs in the Greek context

4.1. A proposal model for the country

• The administrative system in Greece

In 2011, the so called Kallikratis Plan, produced by the Ministry of Administrative Reform and e-Governance, was entered into effect in Greece by the Law 3852/2010 changing drastically its administrative system. The former system of 13 regions, 54 prefectures and 1003 municipalities was overhauled and replaced by a new one consisting of 7 decentralised administrations, 13 regions (officially called "peripheries") and 325 municipalities. These three types of administrative bodies correspond to three different levels of governance and management. The third level refers to the decentralised administrations that consist of two or three regions and are run by a general secretary appointed by the central government, while the other two levels of governance concern institutions that are fully self-governed and run by popularly elected councils and governors with five-year term. As far as the regions are concerned, they are divided into regional units that usually have the same borders with the replaced prefectures and were entrusted by many powers of the abolished prefectures.

• Brief outline of the current legal framework on PT

Road passenger transport is organised according to the Law named 2963/2001 that regulates the fixed public passenger urban and interurban bus transport services provided by private companies commonly known as "KTEL" in all areas of Greece with the exception of a few areas where particular transport operators are responsible and allowed to offer transport services. The exemptions of the pre-mentioned Law include the wider area of the city of Thessaloniki where OASTh operates, the wider area of Athens where PT services are offered by a railway transport company and a road one, both owned and supervised by the MTA of Athens (a state owned entity) named OASA and three other cases in islands, namely: the municipal transport operator of Rodos (named RODA), the municipal transport operator of Kos (named DEASKO) and the in-house provision of PT by the Municipality of the Kalymnos island. In all other areas, particularly at regional unit level, there are private bus operators assigned by the state with the exclusive right to provide fixed passenger transport services. Up until today, the licenses are fixed and no other operator can enter the market. In case that the competent local authority wishes the creation of a new bus line, the responsible KTEL is obliged to provide it when a minimum threshold of subsidy is fulfilled. Otherwise, municipalities are allowed to offer the transport service.

• Economic, political, social and legal implications

The recent financial crisis in Greece led to the signing of a memorandum with the EU, IMF and ECB as well as to reform act initiatives in several fields, which are either voted for already or being in progress. These promote the liberalisation and deregulation of the economy (e.g. road freight transport, taxi sector etc.), the decentralisation of the administration ("Kallikratis plan") and the reduction of public expenses

by merging institutions (e.g. higher education sector, national health system) or restructuring them (e.g. PT system in Athens).

According to the EU regulation 1370/2007 on PSOs, after 2019 any competent authority will be able to either provide in-house public transport services or award the provision of PT by tendering or directly to an internal operator. The Greek government plans to assign a study in order to investigate the operation of the KTEL sector and the potential for liberalisation of the market as well as the reform initiative that liberalises the taxi services sector. Although the opening of the passenger PT sector is not included among the engagements of the government, it seems that the compliance with the orders of the EU regulation after being fully implemented at the nearest future could not be efficiently achieved within the existing regime. Contract awarding through tendering procedures and definition and controlling of the terms and conditions of a contract is not sensible to be undertaken by the government but they should be executed at regional level where the special local needs and characteristics are well known and respected. Apart from tendering, there is a vast variety of issues related to transport, mobility and regional development that are usually ignored and should be dealt with.

At the moment, MTAs exist only for the wider areas of Athens and Thessaloniki which also benefit from the existence of Organisations of Planning and Environmental Protection (OPEP). OPEPs are under the Ministry of Environment and Climate Change and are responsible among others for regional plans, land uses and to a certain extent on transport networks. The remaining areas of the country are usually unable to conduct long term planning and control their transport system. The two aforementioned areas also favour significant governmental subsidies for the reduction of the fare tickets for the citizens. As a result, PT users at the other cities or rural areas are being discriminated against, since they have to pay more for their transport by KTELs which are commercially operated and almost fully non-subsidised. Therefore, apart from the running of the tendering procedures, there is a strong need for the management of transport and development issues at regional level. This could also contribute to the integration of the different transport modes promoting safety and cost efficiency, the implementation of a common fare policy minimising discriminations, and the reduction of regional inequality ensuring the environmental protection.

Although there is a gap between transport management needs and offer, the regions are not currently able to accept such responsibilities. It is commonly known that the administrative system at local level is not characterised by high operational efficiency or the potential to face problems that need appropriate expertise and specialisation. The establishment of new entities such as MTAs emerges as an appropriate solution that could tackle the transport and development challenges described above. Each of these bodies could cover the territory of a region and be engaged with the responsibility of transport, mobility, planning and development. The case of an integrated authority in terms of mobility and regional planning responsibility could comprise a "model application" possibly transferred and applied in all Greek regions (including Athens and Thessaloniki where a conventional MTA already exists). An alternative solution could be the creation of a respective department within the Regions' organisational structure.

5. Conclusions

MTAs are gradually extending their territorial range covering large metropolitan areas and widening their role taking action in mobility and regional development policy and planning. This occurs in order to ensure sustainability that is vital for the continuation and competitiveness of societies. Nowadays due to limited public funding given the economic crisis and due to the settings that the EU regulation brings, transport authorities, especially those in Eastern and Central Europe, have to restructure themselves in short time in order to adapt to the new context (Schuchmann A., Papadimitriou S., 2009). In many areas, the adoption of competitive tendering for the award of PT services and the request for a contractual agreement between the authority and operators, results to a better defined role for both parties and their engagement to fulfil the contract obligations. Moreover, a trend of decentralisation of the transport

sector's power from the central government to the competent local authorities is observed. In some cases the role of a transport authority is executed by the competent Region, especially where local administration has the potential to act as an MTA. Having identified a simple process of steps to define the main tasks and structure of an MTA, a proposed model for Greece was analysed showing that a possible merger of the current organising transport authority and the Organisation of Planning seems to be a very promising idea.

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