



Urban Mobility and Sustainable Development in the Mediterranean

Technical Regional Seminar

Blue Plan, Sophia Antipolis

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Summary of Discussions

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On 23 and 24 November 2009, a technical regional seminar was held in Sophia Antipolis. Organised by the Blue Plan, its theme was that of urban mobility and sustainable urban development in the Mediterranean. In the course of the seminar the work conducted by the Blue Plan and most particularly its recent case study programme, which encompassed six Mediterranean cities (Tangier, Algiers, Tunis, Cairo, Aleppo and Istanbul) was presented to some forty experts from around the Mediterranean.

The seminar provided the opportunity to establish a cross-perspective on the specific features of the various situations encountered, as well as to conduct a regional level debate between experts and local practitioners, but also with the French Development Agency, the World Bank and Veolia-Environment, members of the study programme's steering committee.

The seminar was structured around 4 workshops on cross-cutting and systemic themes. The aim was to address the issues pinpointed by the case studies whilst transcending the sectoral compartmentalisation so often witnessed when urban mobility is analysed and discussed.

This summary reflects the main aspects to be flagged up from the discussion between contributors and participants in each of the workshops.

- **Workshop 1: What of accessibility in Mediterranean Cities?**

- *Gradual awakening to the stakes relating to sustainable urban mobility*

All of the cases studied provide evidence of the implementation or planning of urban transport and infrastructure projects encouraging growth in the provision of public transport, such as the Algiers metro and the extension of the Cairo metro system, Istanbul's high performance routes with exclusive lanes and the tram projects in Morocco and Tunisia.

These examples, which are the fruit of public policies promoting the development of mass public transport, clearly illustrate the progressive awakening of the public authorities to the importance of urban mobility and its related issues, i.e. economic attractiveness, urban accessibility, local pollution or reducing the carbon footprint.

However, although this awakening is well advanced amongst decision-makers and practitioners in the urban transport field, it still has a long way to go on the town planning front, with **integrated transport/town planning approaches still being few and far between**. Virtually across the board there are examples of highly « functionalist » urban development practices, characterised in particular by the importation of generic urban products, largely inspired by international standards and clearly car-dependant to the detriment of the creation of public space: housing estates, shopping centres, new towns...

These practices are characterised by a clear predominance of operational over territorial, integration-focused reasoning on the part of public and private players alike.

- *The role of the car in the cities in question*

In virtually all the cases studied, irrespective of their level of development, mass motorisation and public policies aimed at equipping households or developing road infrastructure were observed.

Future public urban policy in the Mediterranean will be required to toe the line between, on the one hand, the need to reduce car dependency and curb the drive for mass motorisation and, on the other, policies to open up local markets to imported goods and provide access to consumer credit for cars, in response to the aspirations of the public in developing countries to adopt the modes of consumption of more developed states.

As is illustrated by the example of Greater Lyon, in some cities to the north of the Mediterranean the balance of the modal split is starting to lean towards public transport at the same time as there are indications that the level of motorisation is becoming uncoupled from car use. However, more consistent public action still needs to be sought on the ground.

Rather than promoting the « car-free city », it would appear preferable to develop a more pragmatic approach such as **selectively regulating car use**, on a case by case basis linking incentives such as enhancing PT provision, renewing the car pool and adapting the road network with coercive measures such as introducing PT routes with their own exclusive lanes, dissuasive parking policies or even the introduction of urban tolls...

- *Putting the curbing of demand first*

The urbanisation processes observed in the cities to the south and east of the Mediterranean are usually marked by the predominance of the « extensive » approach, which triggers informal, unregulated development (Istanbul, Tangier). Although it is difficult to measure, the economic, social and environmental impact of this widespread urban sprawl is enormous- uncoupling of work from home, land consumption, drop in economic attractiveness, increased dependency on fossil fuels...

Although it was not possible to fully address all of these aspects in the studies presented, it is clear that across the board public transport provision and the major urban networks in particular are unable to keep pace with the rise in demand for mobility in cities witnessing such growth rates.

The case of Cairo, with its extreme density, clearly illustrates that promoting greater urban density is not enough to hope to deal with the interactions between travel and urbanisation. Public policies towards **curbing urban sprawl and encouraging urban renewal** should be seen as a priority for public action ahead of supply-based approaches.

An integrated town planning/travel approach should take precedence over the widely observed extensive style of development process, in other words a « reticular metropolisation » process, within which public transport provision shapes urbanisation with densification being confined to the area around the main thoroughfares.

➤ ***Soft modes largely shunned by public projects and policies***

With the notable exception of Cairo, walking is the main means of travel for the urban population in most of the cities to the south and east of the Mediterranean.

However, more often than not soft modes do not figure in the public authorities' concerns as they design and implement urban transport projects. As was illustrated by the presentations of the situation in Lyon or in Cairo by default, walking nonetheless has to play a central role amongst the systems feeding into the main public networks.

As such, **integrated town planning/transport approaches must focus on dealing with public spaces**, as regards inter-modality, pedestrian accessibility and also urban regeneration.

➤ ***What sources of funding exist for the compact city?***

Despite an ancient urban and architectural culture stretching way back, the will to invest in shaping the city and more generally its urban services and collective amenities is still limited in modern-day Mediterranean cities.

Against a backdrop of limited local authority funds, it is during the project design phase that fresh resources for public transport may be contemplated- real estate development in relation to new transport networks or advertising resources linked to urban facilities, for example.

It is difficult, however, to drum up such fresh resources to fund public urban amenities which are not attached to any major infrastructure.

Such is the case for urban community services (public toilets, lighting and street furniture), more generally for the planning of public areas (parks, gardens for children...) and more particularly as regards integrating man-made features such as bus stops, pedestrian walkways, parking places, cycle paths, exclusive lanes etc. into the public space in order to encourage more sustainable urban mobility.

➤ ***Towards a multi-modal approach for public transport networks***

In most of the cities studied there is a lack of coordination between the various urban transport networks, whether this be in terms of the mode of transport, pricing, timetables or transit areas (positioning of stops, treatment of stations or interchanges).

The widespread growth in specialised school, university, administrative or private transport seems to be intensifying to the detriment of the emergence of a comprehensive and coordinated provision of transport.

With the exception of the informal systems, which are particularly reactive to user demand- as witness for example the springing up of spontaneous informal interchanges in Cairo- the institutional operators' own business rationale appears to take clear precedence to the detriment of user mobility.

During project roll-out or the drawing up of sectoral policies, **the public authorities still all too often give priority to a specific type of public transport** (metro, tram or road...) without paying adequate attention to issues relating to the integration of the various existing modes of transport.

Establishing a city-wide multi-modal network- either a single network or one coordinated by a single authority- within which each mode of transport would be fully integrated in terms of its own comparative advantages- must be one of the major aims for public urban transport policies.

➤ *The user as the focus of project and public policy design*

With the exception of Istanbul, in the almost total absence of fare integration provisions, the public's everyday travel is all too often hampered by the local institutions' administrative boundaries or the operational scope of the operators present on the ground.

A supply policy which is too exclusively focused on the running constraints of the various networks cannot satisfactorily meet the public's needs. Good public policy practices towards the development of public transport (Lyon, Barcelona) show clear concern on the part of the public authorities and transport operators for the user.

In the cities to the south and east, these so-called «client-oriented» approaches should be applied to the issues of road safety, pedestrian accessibility but also services to employment hubs.

- **Workshop 2: How can informal practices be taken on board in Mediterranean urban systems?**

➤ *A common feature shared by cities to the south and east of the Mediterranean*

Whatever name they go by (collective taxis, large taxis, shared taxis, « Dolmus » in Istanbul), there is a wide variety of informal transport provision in the cities to the south and east of the Mediterranean.

With the exception of Tunis, the informal sector represents a very large chunk of the urban transport market. In the case of Tangier its role is indeed pivotal after a few years during which institutional provision was totally inadequate.

This feature is not specific to Mediterranean cities. Such modes of transport are widespread in Africa and South America. Their **constant growth is coming about in tandem with the extensive, rapid and informal urbanisation trends** to be seen in these cities, where the institutional provision of public transport cannot keep pace with the growth in demand.

➤ *The socio-economic importance of the informal sector*

The economic models underpinning the informal systems to be observed in the Mediterranean are relatively similar in all the cities studied. This sector, which tends to hinge on private investment (operating licences and vehicle purchase), is a major job provider in the cities, in terms of both the running and the upkeep of the fleets of vehicles.

Thus, **any initiative aimed at regulating the so-called informal sector involves major stakes at both economic and political level** for the public directly involved as well as for the competent authorities.

➤ *A mixed environmental appraisal*

These informal transport systems contribute to congestion by increasing road traffic and making local pollution worse as a result of the dilapidated state of the fleet.

However, although this needs to be specified more closely by a case by case approach, it should be pointed out that the various informal public transport systems may nonetheless actually present **a rather positive « carbon account » compared with traditional public bus systems once their effective passenger levels are factored in.**

The “pooled” nature of such systems (up to 5-7 passengers per vehicle), their routes and the fact that stops are on request produce an optimisation of their load factor compared with « institutional » forms of transport whose level of service and usage are in constant decline virtually everywhere.

➤ *Towards the integration of informal systems*

Generally affordable for a single journey but expensive when a connection with other networks is involved (lack of integrated ticketing), not very comfortable (run-down fleet), **informal systems nonetheless provide users with a good level of service** thanks to their ability to adapt dynamically to demand.

Although they take up little space in local authority deliberations on network planning and project design, informal modes of transport nonetheless have **a key role to play as feeders for the institutional public transport systems** and should be seen as an integral part of global provision in the Mediterranean cities.

Buying into the modern supply management tools which exist to the north might allow this collective mode of transport to be optimised without foregoing its benefits.

➤ *Towards North-South convergence?*

In the cities on the northern shores, the recent development of made-to-order public transport systems (car sharing and small peri-urban collectives) is a reaction to the diversification of demand, largely linked to urban sprawl and lifestyle changes (size of families and population ageing). They operate along rather similar lines to the informal modes of transport in the cities to the south and east of the Mediterranean.

Moreover, with the growth of new technologies relating to non fossil fuels, electric and hybrid cars, the car sector is undergoing far-reaching technological change. This should lead to the relevance of the various modes of urban transport used being revisited.

As might be suggested by examples such as Cairo with the replacement of the taxi fleet by cars running on City Gas or Israel with the experimental development of a fleet of electric vehicles, **because it is confined within certain specific limits the informal sector could represent a real opportunity for spreading these new green technologies.**

It is highly likely that these now unavoidable changes will cause the classical patterns of modal split to evolve by arguing in favour of the **rehabilitation of informal systems in the eyes of the local authorities** in the cities to the south and east of the Mediterranean.

- Workshop 3: **What is the environmental impact on Mediterranean cities?**

- *Worrying prospects*

In most of the situations studied **to the south and east but also in certain cities on the northern shores, similar trends were observed:**

- Increased demand for travel which is closely linked to urban sprawl and the uncoupling of work from home,
- Widespread congestion on the main thoroughfares and, consequently, slower travel speeds, particularly marked in Cairo and Istanbul,
- Mass motorisation trends being driven by the opening up of the markets and the introduction of consumer credit, particularly marked to the south and east.
- Recurring shortfalls in public transport provision: service routes, level of service, dilapidated fleets, lack of inter-modality.

Notwithstanding several examples of pro-active public policies towards the renewal of the car fleet and, consequently, a decrease in greenhouse gas (GHG) emissions, along the lines of the Bonus-malus systems and scrapping premiums in Europe, the renewal of the NGV taxi fleet in Cairo or the marked growth in the conversion of buses/vehicles to LPG-fuel in Turkey and Algeria, the fact remains that **the trends observed in the Mediterranean will doubtless produce some particularly worrying effects in terms of final energy consumption, GHG emissions or local pollution.**

- *Unfavourable geographical features*

Apart from the fact that global warming is likely to produce particularly noticeable effects in the Mediterranean, **a set of specific natural aggravating factors in the region** encourage the formation of ozone (relief plus hot, dry climate as well as particle concentration (proximity of the desert in Cairo and also in Tunis)).

- *Network congestion which increases GHG emissions*

In most of the situations studied there is still no apparent prospect of breaking out of the vicious circle observed-motorisation/network congestion/drop in travel speeds/ decline in public transport.

In Cairo and Istanbul as in the other cities studied, the poor state of repair of the car fleet, buses and collective taxis as well as the **drop in running speeds as a result of the major congestion on the roads clearly aggravate the emission of greenhouse gases.**

The poor cold and overall performance of ageing, low speed engines are one of the contributing factors. Although there are signs of improvement virtually across-the-board as the vehicle fleet is gradually replaced, particularly through the adoption of European standards in Istanbul, they still have a long way to go.

As is illustrated by most of the situations described, **technological progress cannot be the only lever on public policy to reduce GHG emissions in the urban transport sector.**

- *Public health, a major issue in urban mobility*

In virtually all the situations observed, polluting industry and activities have already been decentralised and **urban transport has now become one of the main causes of GHG emissions and local pollution (through particle concentration) in the cities.**

More-so than passengers on public transport, it is those who travel by private vehicle who are most affected by the inhalation of particles inside their cars, particularly when they are sitting in traffic jams.

In Europe, it is estimated that measures taken towards reducing particle concentrations have meant that some 348 000 deaths per year have been avoided, almost 40 000 of them in France. The cost of the fall in life expectancy as a result of air pollution has been estimated at around 16.3 billion Euros/yr in France, where a « Particle Plan » has been initiated in the wake of the Grenelle Environment Round Table (Grenelle de l'environnement).

However, **it is still notoriously difficult to establish this type of estimate for the cities to the south and east, and there is a need for specific research to be conducted in order to further this type of analysis** (data, indicators and methodology).

➤ *New tools to take account of new issues*

It emerged from the work conducted that it was very difficult to access data- patchy information where it existed at all, and lack of reliability therein.

Where measuring stations do actually exist, there still appear to be shortcomings in their networks, monitoring and the circulation of the results and regrettably there are no indicators to monitor or evaluate the impact on public health.

In accordance with the example of the innovatory observation mechanism which exists in Marseilles and Nice, **a far-reaching overhaul of methodological approaches could be conducted in order to assess the socio-environmental impact of urban transport on the public and to take full account of such concerns during urban planning exercises.**

➤ *The awareness of local decision-takers still needs to be raised*

Whilst combating global warming has already drawn the attention of public decision-takers to the GHG reduction stakes, **awareness of public health issues relating to air quality, and more specifically fine particle concentration, remains limited to the south and east.**

Besides the systemic approaches conducted, **the ensuing economic impact needs to be better evaluated if greater account is to be taken of the issues relating to urban mobility** in project design and the shaping of public policy.

Accurately estimating the economic impact produced by the importation of fossil fuels for cars or the cost of non-action in the face of non-sustainable trends (urban sprawl, mass motorisation and the deterioration of air quality) can play a determining role in public decision-taking.

• **Workshop 4: What sort of municipal engineering for the Mediterranean cities?**

➤ *No real urban contractor*

The modes of governance applied in the vast urbanised areas on the southern and eastern but also sometimes the northern banks do not appear able to respond to the demands of sustainable urban management.

At territorial level: with the exception of Aleppo and Istanbul, where far-reaching institutional adjustments have come about through the merging of urban municipalities into a metropolitan body, **urban sprawl is overflowing official administrative boundaries and constantly causing the administrative set up to disconnect just that bit further from the area within which it operates.**

At institutional level: with the relative exception of Istanbul, the cities studied are marked by **the persistently dominant role of the State, major administrative centralisation and a lack of autonomy on the part of the intermediary levels**, within a regional context of weak democratic debate and limited political pluralism.

At technical level: the limited attractiveness of the civil service and the fact that municipal engineering is widely dissipated amongst numerous public and private institutions, **is undermining consultancy capacity, leading to the predominance of operational reasoning** and limited regulation of the informal or industrial private sector.

➤ *Sectoral Partitioning and institutional rivalry*

When decisions are passed to the highest level, institutional rivalry may well be exacerbated. More often than not such rivalry is intensified by clashes between different professional cultures (Transport/town planning) and may trigger **genuine competition between institutions in the field**.

The distribution of roles is often confused, which may produce a degree of inconsistency in public action. **The relatively systematic setting up of autonomous public agencies dedicated to rolling out a territorial project does nothing to bolster the conventional administrative structure**, nor does it facilitate the optimisation of the human resources available.

Although coordination bodies have been set up, generally speaking their supervisory powers do not extend far enough to allow them to arbitrate.

➤ *Lack of continuity in public action*

The lack of genuine local governance likely to provide for coordination between the local and central institutional players is reflected in the field in **major contradictions between the public policies rolled out**. The multiple project opportunities generated by the recent economic context (real estate bubble and massive foreign investment) have simply rendered the work of the public authorities even more inconsistent in most of the situations observed.

Born of the most ancient urban civilisations in the world, many of the Mediterranean cities studied are now marked by **the inadequate recollection amongst their practitioners and professionals** of how their areas have evolved and operate and about previous urban planning exercises.

Capitalising upon knowledge must be one of the major concerns for the technical institutions in order to allow current dynamics to be fully understood and to ensure the continuity of public action.

➤ *Minor account taken of local specificities*

The huge aspirations expressed by the public and decision-takers regarding « globalised » consumption patterns are leading to the transposition of exogenous products, methods and practices in urban planning as well as in transport. In Cairo as in Las Vegas one is likely to stumble across pyramids, shopping malls, golf courses and housing estates...

The origin of the investors behind the major urban projects but also **the constant influence of international expertise on local consultancy is making it increasingly difficult to take the local context into account**.

It is essential for the implementation of local initiatives and specific solutions that specifically Mediterranean expertise be developed in research, higher education and on-going training. That could, for example, lead to the setting up of technical institutions devoted to the Mediterranean city, particularly as regards urban transport, along the lines of what already exists in certain states to the north (the example of the French INRETS was mentioned). Strengthening Mediterranean cooperation should be a way of making an active contribution thereto.

- **Conclusions of the seminar and prospects**

Based on the joint acknowledgement of the many similarities between the cases presented, three key ideas were selected for submission to the Mediterranean's public decision-takers on matters of urban transport: Cognizance, Concept and Coordination: the « 3Cs » for the Mediterranean cities:

- **Improving cognizance and instruments to monitor urban dynamics...**

- In order to take account of the new territorial scales: operational level of vast inter-dependant, heterogeneous urban areas run by a variety of administrative bodies.
- In order to take account of urban development sustainability factors: environmental impact and social integration/insertion.
- Through the development of new monitoring and assessment tools: Measuring impact (e.g. congestion)/ indicators (e.g. accessibility)/ modelling (e.g. air quality)/ economic impact: assessment of the cost of non-action.
- Through building up local technical expertise: research, training and cooperation,
- In order to bring about a cross-breeding of professional cultures

- **Refreshing urban models and concepts ...**

- In order to establish pragmatic approaches adapted to local specificities rather than through simply transposing generic, standardised urban products.
- In order to achieve urban models which are less road and car dependant, within which town planning and public transport networks are closely linked according to a reticular form of metropolisation,
- In order to rehabilitate the role of public space in terms of both town planning and transport, to encourage the integration of soft modes and the emergence of inter-modal hubs,
- In order to fully integrate informal forms of transport within overall provision,
- In order to establish approaches based on use rather than supply.

- **Improving coordination between the players in urban development...**

- In order to establish more systemic rather than sectoral approaches. A city is not created according to its networks, but on the other hand nor can a city be created without networks.
- In order to achieve specific, integrated approaches by genuinely “territorialising” public policies.
- In order to achieve more effective strategic planning through the emergence of a strong urban contracting authority.

Given the major challenges which the Mediterranean cities will be called upon to face in terms of both population growth and adapting to climate change, an integrated and systemic approach to urban development should be encouraged:

- Thought out on the basis of usage rather than systems;
- Dove-tailing the diversification of transport provision with curbing demand for mobility;
- Determined to genuinely bring growth and development processes under control.