

Cities and Transport in the Mediterranean Region: Editor's Introductory Note

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Introduction

The Mediterranean region consists of 20 countries bordering the Mediterranean Sea with two of them being islands (see Figure 1). It is a region with many and distinct differences, not only in terms of national population size but, also in terms of national population densities, demographic growth rates, systems of administration, economic management and development. The region can rightly claim the title of being “the cradle of civilization” *a propos* its great ancient civilizations from which most modern scientific and ethical values have developed. It is also a great tourist destination in the world and a major transport corridor of global significance.

Transport has always formed a major part of the social and economic fabric of the region - effectively supporting activities in commerce and industry as well as recreational activities and cultural exchanges that affect the daily lives and well-being of the population in a multitude of ways. The Mediterranean Sea has been the connecting element between the populations and the civilizations that emerged in its various parts throughout the centuries. For these reasons, maritime transport has always been the core of the transport system in the Mediterranean area, even more so

since the opening of the Suez Canal when the Mediterranean Sea became a major transport corridor of global significance connecting the countries of Central and Western Europe with the Middle East and Asia. This corridor attracts approximately 30% of global maritime traffic which is subsequently directed either towards the ports of Western Europe in the Atlantic Ocean and the English Channel, or increasingly to several world-level ports that have developed within the Mediterranean area. These ports are becoming maritime hubs of major significance to Europe and globally. Transport continues to be a major element of urban life in Mediterranean countries affecting both the quality of life and the economy in multiple ways. The urban transport and mobility system consists of infrastructures, equipment, and services that vary in terms of size, state of maintenance, and quality of service among the various cities of the region. In some cases, it is rather chaotic and in a disparate state of repair, while in others it is much more orderly and highly operational.

Urbanization trends in the region are characterized by high population dynamics that have already resulted in 2/3 of the population living in urban areas. There are nearly 30 urban areas of major size (i.e. more than 2 million



Fig. 1: The Mediterranean Sea region – countries and cities.
Source: Nations online Project (<https://www.nationsonline.org/>)

inhabitants) as shown in Figure 2. Two of these, Istanbul and Cairo, are megacities of some 15 million inhabitants. There are also hundreds of small or medium-size cities (i.e., in the range of 100 000 to 2 million inhabitants) and thousands of smaller cities and villages as well as countless historic places. Here, too, there are many and very pronounced differences between the urban areas of the Mediterranean region, including different levels of development, diverse systems of governance and public administration, varied political priorities and levels of stability. The more pronounced differences are visible between the cities on the northern side of the Mediterranean Sea and the cities on the southern and eastern sides.

However, in spite of their differences, Mediterranean cities still share some of today's main urban challenges. The more pronounced of these "common" challenges are the following: Environmental degradation (mainly pollution of air and soil); sanitary and public health conditions; daily economic life (income, employment, opportunities); quality of residential inventory; and the needs for mobility and transport (especially public transport services). Of increasingly universal concern are also the issues of security and climate change, especially the effects of sea-level rise (Woertz, 2018). The present special issue of *Ekistics* and the *New Habitat* deals with one of the major "common" urban challenges mentioned above: the provision of mobility and transport.

Sustainability and mobility: Two key preoccupations for the Mediterranean urban areas

The search for priorities and ways of facing the urban mobility challenges must go hand-in-hand with similar concerns for the rest of the challenges facing the urban areas in the region. In this sense, "sustainability" and "mobility" are two notions that should be considered together. Perhaps the best definition of "sustainability" and of "sustainable development" is the one given by Professor Chaline some 20 years ago (Chaline, 2001) in which "sustainable development" – especially in the urban scale – resembles a virtuous triangle the apexes of which are:

- A social environment ensuring fairness, cohesion, equal access to services and fair distribution of costs and profits
- A monitored economic environment governing economic, thought-out and efficient development
- A natural and urban physical environment whose qualities must be preserved, managing carefully the resources and potential.

Clearly, sustainability is the key overall framework within which the system of transport and mobility must operate, and with which it should be harmonized. This basic principle was very eloquently described some 60 years ago, by the founder of *Ekistics*, C. A. Doxiadis in his presentation of *Ecumenopolis* the global city of the future:

The systems of transportation and communications will be the circulatory and nervous systems of Ecumenopolis. More than anything else, they can unify the universal city or break its inhabitants. The question is often asked

whether people in the cities of the future will fly, sail, drive, or walk. The answer is that they will do all these things, in a balanced way. The basic principle will be for man to walk over short distances (not losing this natural ability and what goes with it), to drive over the longer ones, to sail for pleasure, and to fly -- by new planes and rockets - over the longest distances. The second principle is that the interconnections between the systems of walking, driving, sailing and flying should be such that no time is lost at all. The third principle is that the different lines of movement should not cross, except in the case of pedestrian paths; pedestrians are self-regulating organisms of the highest flexibility, and not only do they

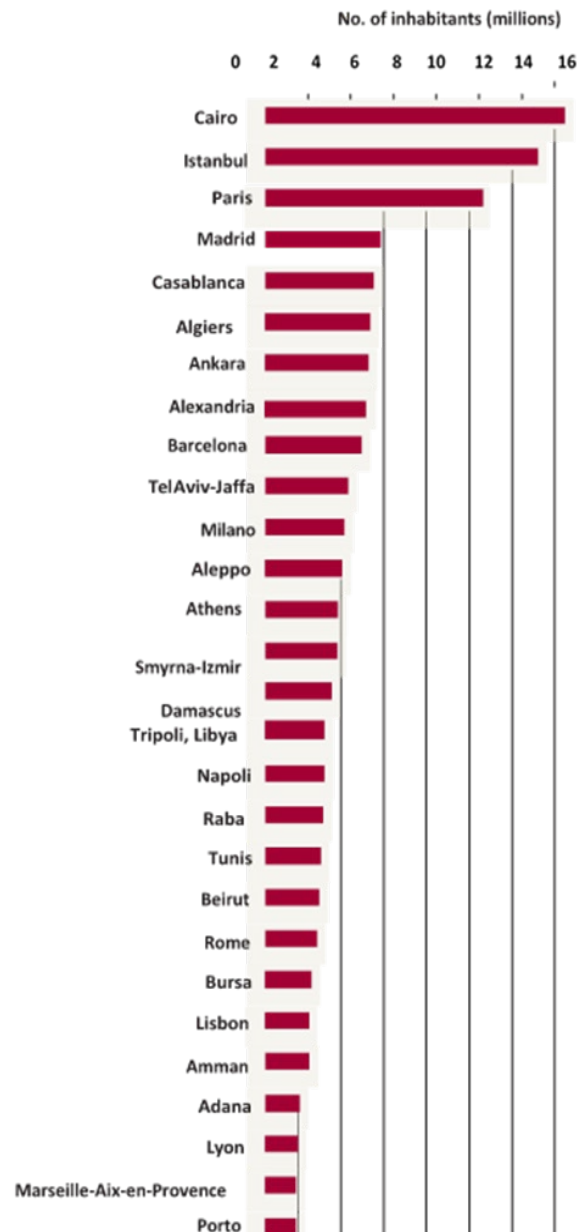


Fig. 2: Major cities in the Mediterranean region by size (2006 census data updated to 2020 with annual growth rates) Source: http://www.citymayors.com/statistics/urban_2020_1.html

find no need to avoid crossing each other's paths, they want to, for they are social animals.

In many urban areas of the Mediterranean region today, the development of new or the upgrading of existing urban mobility systems (for passengers and freight) is following Ekistics or similar principles. New and more environmentally friendly transport systems and technologies are being introduced, or are being planned to be introduced, and the well-known and tested legacy policies for the development of both the cities and their transport, systems give way to new ones influenced by the on-going fourth industrial revolution. For example, in fostering new clusters of urban economic activities based on the digital sphere or in developing the new electric and autonomous mobility systems of the future.

Sustainability and mobility are therefore two key preoccupations emerging for the system “cities and transport” in the Mediterranean region. Moreover, as the big urban areas increase in size, growing along major transport axes, we are witness to the unfolding of the “Ecumenopolis” in several areas of the region. In the south of France (Marseille-Aix-en-Provence region), in the north of Egypt (Alexandria – Cairo area), or in some parts of the northern Adriatic Sea (Athens-Piraeus area), Istanbul and its environs, and in some parts of the Levantine region. For these areas, the application of the principles of sustainability for transport as well as for the urban system as a whole is progressing to differing degrees but – overall – is still far from being realized (Bilbao-Ubillos, 2008). The current urban mobility patterns - especially in the countries of the south and the eastern sides - remain dominated by the private car. Despite the progress accomplished by manufacturers in terms of reducing the levels of pollution and Green House Gas (GHG) emissions from the conventional internal combustion engines (ICEs), cars are still the major contributors to urban air pollution. The congestion of urban traffic networks magnifies this now endemic problem. As a result, long queues of traffic, accidents, and increasing economic costs related to extended travel times are the norm. Estimates suggest that the current cost of urban congestion amounts to an average of 5-6% of the Gross National Product (GNP) per year (Cornago et al, 2019).

Relevant international cooperation initiatives

Achieving sustainable development and efficient, clean, mobility are two of the main goals of many international organizations and initiatives for the region. In 2012, the United Nations Environment Programme (UNEP) published the Mediterranean Action Plan (MAP), which provided a multilateral framework of cooperation for sustainable development in the region and included actions in the transport sector (UNEP/MAP, 2012). The Mediterranean Commission on Sustainable Development (MCSDD) developed the plan that had been set up within the UN's Environment Programme. On the recommendation of the same Commission, the UN has supported the development of a number of “regional activity centers” which were established in a number of countries in the area. Two of them, the Blue Plan or Le Plan Bleu based in Marseille, France and the Priority Actions Program (PAP/RAC) have consistently supported the Mediterranean countries in improving their transport networks, urban mobility as well as the sustainable

management of their coasts and port areas – all within the frame of sustainability and environmental preservation.

The European Union (EU) has eight member-countries in the Mediterranean region: Spain, France, Italy, Slovenia, Croatia, Greece, Malta, and Cyprus. They occupy most of the northern side. In all of these member-countries (like in all the rest of the EU) all urban areas with a population above 100 000, are obliged to develop and implement sustainable mobility measures and policies through the so-called Sustainable Urban Mobility Plans (SUMP). The SUMP generally promote low-carbon, network-oriented urban developments that rely on public transportation and use of new and sustainable transport services based on “clean” vehicles (e.g. electric cars and buses using “green” electricity, or other clean energy sources) as well as shared transport and other mobility services. In 2008, on the initiative of the EU, the Union for the Mediterranean (UfM) was developed. This intergovernmental organisation involves all member countries of the European Union and 15 other countries from the Southern and Eastern Mediterranean, whose mission is “to enhance regional cooperation, dialogue and the implementation of development projects and initiatives.”

As the successor to the Euro-Mediterranean Partnership (EUROMED) launched in Barcelona in 1995, the UfM has created the Euro-Mediterranean Transport Partnership (EuroMed Transport) in order to promote specific actions and programmes in the transport sector. Its key priorities are still the promotion of transport safety, sustainability, and efficiency in the transport systems of all countries in the Mediterranean region. A comprehensive presentation of these priorities is included in the Barcelona Declaration of '95 that established the predecessor of the UfM (the EUROMED). The UfM's main financial instrument for attaining its objectives is the MEDA Programme. This programme provides financial support to implement the UfM's policies for a number of beneficiaries in the Mediterranean region, which include not only states and regions, but also local authorities, regional organisations, public agencies, local or traditional communities, organisations supporting business, private operators, cooperatives, mutual societies, associations, foundations, and non-governmental organisations.

Other EU initiatives directly relevant to and with impacts on Mediterranean region countries are the following:

- ❖ European Committee of the Regions (CoR) and its Euro-Mediterranean Regional and Local Assembly (ARLEM). An assembly of local and regional representatives from the European Union and other Mediterranean countries, the ARLEM was set up in 2010 in order to:
 - represent local and regional authorities politically
 - maintain political dialogue
 - promote inter-regional co-operation.
- ❖ European Neighborhood Policy, or ENP” As an “umbrella” foreign policy initiative, the ENP aims at building privileged relationships between the EU and a number of counterpart countries based upon the common values of democracy, human rights, rule of law, good governance, market economy principles and sustainable development. So far, the ENP

includes ten countries from the Mediterranean region. Part of the ENP focuses on urban areas and the development of sustainable transport. The main aim is to promote and explore synergies and cooperation between the EU and the participating countries. The ENP body charged with forming such synergies is the Global Task Force of Local and Regional Governments. Formed in 2013, this task force is active in four main areas: (1) good governance, democracy, rule of law and human rights; (2) economic development for stabilization; (3) security; and (4) migration and mobility (Woertz, 2018).

There are also a number of other major international organizations and initiatives promoting cooperation and development in the Mediterranean region (with a strong interest in sustainability and mobility as part of their agenda). These are the following:

- Council of European Municipalities and Regions (CEMR). This is an organization of European local and regional governments dating back to 1951. Today, CEMR includes approximately 100 000 local governments in 41 countries, including most of the countries in the Mediterranean region. It also has 60 Associations of local governments as members. CEMR is the European section of the world organisation United Cities and Local Governments (UCLG).
- Mediterranean network of cities or MedCities: MedCities was initially established in 1991 in Barcelona by 16 Mediterranean cities with the purpose of supporting environmental protection from a local perspective. By 2015, however, MedCities had become a large independent organization with more than 50 local authorities from throughout the Mediterranean basin. It currently focuses on helping Mediterranean local governments achieve their strategic priorities.
- Cooperation for Urban Mobility in the Developing World (CODATU). This is perhaps the most “transport related” Organization that was born from the world conference on urban transport, organized in Dakar in 1980. It is an association with an international vocation whose objective is to promote sustainable mobility policies through training activities and scientific exchanges on urban and periurban mobility. It has issued many documents and guidelines for urban transport and mobility in the Mediterranean area. It offers “guidance and recommendations for urban transport in the Mediterranean region”, that provides practical insights with a high level of detail on a wide range of key areas, including transport institutions, planning, financing, and pricing. Since the early 1980’s, these guidelines have served as a basic aid to taking relevant action for central and local governments in the region (CODATU, 2008).

Aims and rationale of this special issue

The great variations observed in the urban transport systems of the countries in the Mediterranean region make any exercise that reveals their problems and challenges a worthwhile exercise. Moreover, such research also

uncovers good practices and success stories developed in response. The dissemination of these findings is an extremely valuable outcome that permits the ongoing improvement of mobility and transport in the region. The present special issue of *Ekistics* and the *New Habitat* aims to participate in this type of practical research that focuses on the challenges of human settlements and their solutions. In this respect, the present special issue can be understood as an exercise in reviewing the measures, policies, and success stories in applying modern concepts of sustainability and mobility in the urban areas of the different countries of the Mediterranean region. The success of which, can be determined by the idea that any transport and traffic related policy or measure in the urban context must be in harmony with the overall principles of sustainability and livability as expressed by *Ekistics* principles.

The title of the present special issue, “Cities and transport in the Mediterranean region” defines its scope. The articles presented focus on the cities and transport interaction of the region’s urban areas and the relevant transport policies, technologies, and management measures currently in place (or that could be implemented) to ensure the efficient movement of persons and goods in harmony with the sustainable urban development and “livability” concerns. Of interest are special topics that address the development of urban transport networks and infrastructures as well as those concerning new and more efficient mobility services, as well as the relevant managerial and governance issues (at local or central government level) associated with them.

In the limited space available and for the minimization of the time between submission and publication, the call for papers specified that papers should be of limited length in the form of extended abstracts. They should focus on outlining the problems and the solutions and / or the best practices that the authors want to report, while avoiding lengthy analytics, state-of-the-art reports and the usual features of a full-length paper. Our main aim is to provide our readers with an initial, synoptic but authoritative look at some key existing or potential problems and issues in the area. Indeed, we are aware of hundreds of positive initiatives, solutions and policies that can serve as successful examples. By publicizing a number of them from large-scale international projects to local level applications and collaboration initiatives, we hope to incite and perhaps initiate a more consolidated intra-Mediterranean dialogue and cooperation in tackling these issues. Such a dialogue could then lead to the adoption of harmonized policies (suitably adapted and “localized” of course), with a direct impact on the lives of millions of citizens.

In preparing this issue, we hope that readers will find our approach useful, and that the papers published will provide sufficient depth in terms of information, methodological approaches, policy recommendations and initiatives to help them better understand the challenges facing the region and to develop the required solutions. It is further hoped that the authors will find in the publication of their papers here, encouragement to go on to publish full-length papers in this or other scientific magazines, explaining in more detail their research approach and its results.

References

- Bilbao-Ubillos J. (2008). The costs of urban congestion: Estimation of welfare losses arising from congestion on cross-town link roads. *Transportation Research Part A: Policy and Practice* 42(8), October 2008: 1098-1108. Retrieved from: <https://doi.org/10.1016/j.tra.2008.03.015>.
- Chaline Cl. (2001). Urbanization and town management in the Mediterranean countries Assessment and perspectives for sustainable urban development. Plan Bleu and Mediterranean Commission on Sustainable Development. Paper prepared for the Mediterranean Meeting on «Urban Management and Sustainable Development», Barcelona, 3-5 September 2001.
- CODATU (2008). Urban transport in the Mediterranean region: Guidance and recommendations, CODATU (Cooperation for Urban Mobility in the Developing World), Regional Seminar on Urban Transport in the Mediterranean Region - Skhirat, Morocco, January 22-23, 2008. Retrieved from: http://www.codatu.org/wp-content/uploads/guide_skhirat_08_UK.pdf
- Cornago E., Dimitropoulos A., Oueslati W. (2019) Evaluating the impact of urban road pricing on the use of green transport modes: The case of Milan. OECD. Working paper no. N° 143 ENV/WKP (2019)2. 6 February.
- Liapi L. (February 2015). City size and urbanization in Mediterranean cities *Scienze Regionali*, February. DOI: 10.3280/SCRE2015-001011
- UNEP/MAP (2012). State of the Mediterranean Marine and Coastal Environment. United Nations Environment Programme/Mediterranean Action Plan (UNEP/MAP) – Barcelona Convention, Athens, 2012. Retrieved from: http://planbleu.org/sites/default/files/publications/statemedenvt_part1.pdf and <https://web.unep.org/unepmap/meeting-body/mediterranean-commission-sustainable-development-mcsd>
- Woertz E. (October 2018). Mediterranean Cities: The urban dimension of the European neighborhood policy. CIDOB (Barcelona Centre for International Affairs), *International Notes* no. 202.