A Program for the Development of the Metropolitan City of Reggio Calabria. Preliminary Issues.

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Abstract. The objective of this paper is to talk about a possible idea of Territorial Organization of Reggio Calabria’s Metropolitan City and about the institutional processes of Metropolitan construction. These Preliminary Issues must take into account the existing system of material and immaterial relationships, that are the result of a series of sectorial issues organization, for example social and economic dynamics, until cultural identities [1].

Starting from the analysis and mapping of the metropolitan area competitiveness factors, we tried to define a first future Organization of the metropolitan territory. In particular, we have analyzed the main infrastructures, as a set of public goods and services, that they taking a major role in the programming of the Metropolitan Cities. One of this is the transport system, that has always an important role for development and control of a territorial System / Organization [2]. The integrated approach transport - territory must become an opportunity to pursue for the competitiveness development of Reggio Calabria’s metropolitan city.

Introduction

The forecast of specific government forms for the metropolitan areas, as well as the definitive institutional set - up and constitutional then of the territorial Autonomies, are considered a strategic priority for Italy: in fact, they have the role of subjects able to meet the challenges of global competition successfully. (Confindustria, ANCI 2014)

The Infrastructure of the Metropolitan city are constituted by the totality of goods and material and immaterial service of collective use, they are entrusted to public management, and the management of private stakeholder or to an entity characterized by the coexistence of public and private stakeholders. This theme has never grown so fast as in this delicate phase of redefining the Territorial Organization, we are coming to realize that the boundary of the metropolitan area is very complex, it influences the subsequent operation of local institutions.

When we speaking about metropolitan areas, the mobility problem is one of the principal strategic objective in the whole world, the same idea of "city" has changed depending on transports revolution that has expanded urban space and highlighted the deficiency of Municipality dimension. It has to be faced by making a function of an organic and coherent point of view, that believes in the new territorial structure, not only an essential central brick of institutional, social and democratic capacity of Italy, but also as a prime engine for the national economic recovery.

We are in front of a review (Law 7 August 2012, n. 135 [3]) that the Country wait from too many years (well 24, by the Law 8 June 1990, n. 142) and that should pursue the objectives of the administrative and bureaucratic simplification, the rationalization of the skills, the optimization of the costs, the reduction of the political and administrative class in a point of view of strong and synergistic integration of policies and management of administrative capacity in the territories.

Thus, among the many aspects of future planning, the present contribution aims to analyze some preliminary issues: they are related to one more efficient organization of the Metropolitan city of Reggio Calabria’s territory, in connection with the functions and purposes for which was established, in a programming logic that is the antithesis of traditional planning.
The Territorial Competitiveness Factors

The Metropolitan City is called to take a major role in the formulation of strategies and development policies at the local level that they see not only the public consent, but also the active involvement of all public and private stakeholders, that are interested in the development, consolidation and maintenance of competitive conditions in a specific territory [4].

Therefore the city is at the centre of a complex system in which it plays a coordinating role in the development process, or operator of realization of ideas, programs and resources aimed at developing of the city [4].

The challenge of the competition has been transferred for a long time from the level of the single companies to that of the territories; the promotion of the local development can be realised only through programs complexes that take part at the same time on [1]:

- the increase of local economic and social factors;
- the promotion of local productive systems;
- the promotion of technological innovation.

One of the most important indicators of the territory competitiveness is given by its attractive ability, with a regarding people and capitals; the main factors that impact on this ability are [5]:

- Transport Infrastructure;
- Accessibility and Urban Mobility;
- High Formation, the Research and the Innovation;
- Instruction and Professional Formation;
- Credit;
- Public Administration;
- Quality of people's lives.

Programme vs Plan

The Strategic Spatial Planning is considered one of the tools that, the new body must soon provide itself to realise the founding goals: certainly, these tools are a step forward the ordinary urban planning [1]. They can be used to identify priorities and to capture aspects, for example the organisation, the management, and in general, the non – material aspects, which can not be learned by the other tools.

But, they fail to resolve the main problems that have led to the failure of planning tools, even more recent conception:

1) the separation between the planning time and the time of economic resources allocation;
2) the absence of feasibility and sustainability appraisals (in three dimensions!), and the effectiveness of actions assumed [6].

For these reasons it is necessary:

- to work with programming tools and not with planning tools (or simultaneously), which they locate resources, times, stakeholders, expected results, etc.. [7];
- to realise the metropolitan cities from the red tape of the Regions: if we really want to accelerate spending and make it more able to meet the needs expressed by the citizens and the businesses, every metropolitan city must equip itself to a POR, negotiated directly with the national and European authorities, that does not involve negotiating with the Regions.
The regulatory matter on territorial organization of the Metropolitan City

The Italian legislation relative to metropolitan areas began with the law n. 142 / 1990. In this document two levels of local government were identified: the Metropolitan Cities and Municipalities. Three governmental bodies were established for the Metropolitan City: the Metropolitan Council, the Executive Council and the Metropolitan Mayor. According to Draft Law n. 1212 / 2013, approved at the Senate the 25th March 2014, the metropolitan city of Reggio Calabria will be established on 1 January 2016 and the Metropolitan Council will be composed of the metropolitan mayor and fourteen councillors (depending on the number of inhabitants) [8], because the Reggio Calabria Province has 550,832 inhabitants [8,21]. Already, from this first analysis, it appears that it will be necessary to articulate the metropolitan territory of Reggio Calabria into 14 areas and / or districts. The provincial capital, on the proposal of its council, can be subdivided into metropolitan municipalities endowed with a certain degree of autonomy, and the Metropolitan Council is responsible for the approval of the final Statute. In particular, it will propose this organization, with city council’s decision, and it will be adopted at the procedure laid down in Article 6, paragraph 4, of the consolidated legal text [8]. Depending on the Statute, the Metropolitan Council and the Mayor can be elected either directly (by citizens) or by mayors and councillors of the municipalities, as a second - level institutional body. In fact, the council’s proposal shall be submitted to referendum to all citizens of the metropolitan city, and it must to be made on the basis of their regional laws, and it must to be approved by a majority of the participating that shall take part in the vote. In addition, the statute may provide for the formation of uniform areas, for specific functions, taking account of territorial specificities, with body of coordination, connected to the bodies of the metropolitan city, with no new or increased costs for public finance, of course.

The associate management of the fundamental functions will be obligatory that are [8]:

a) the adoption and the annual update of the strategic plan of the metropolitan area, that is the act of address for the authority and for the exercise of the municipalities functions and of the municipalities associations included in the area, also with a regarding the exercise of functions delegated or assigned by the regions;

b) the general land use planning, including communication facilities, networks, services and infrastructure of interest for the metropolitan community, even by setting constraints and objectives to activity and performance functions of the municipalities in the area;

c) the structuring of coordinated system for managing public services, the organization of public services of general interest in the metropolitan field;

d) the urban mobility and the viability, also with an ensuring the compatibility and the coherence of the municipal urban planning in the metropolitan field;

e) the promotion and the coordination of economic and social development, also with an ensuring help and support to economic activities and to innovative research and they must be correspond to the vocation of the metropolitan city as outlined in the strategic plan of the territory;

f) the promotion and the coordination of computerization and digitization systems in the metropolitan areas.

This new model requires the overcoming of polycentric administrative. It is characterized, for example, by local planning activities, that are not synergistic between them and the coordination of most of the administrative activities [9]. The model of a metropolitan city, must not have the function of giving an added value to the system of the municipalities included in the area, but it must be able to become an institutional pilot for new ways of services organization and resources management. Together and in full support to the municipalities, a public institution must be capable to valorise the metropolitan area specificity, like a conurbation characterized by economic, social, cultural and institutional links. It is an important challenge for the Country, because it will concern the way to organize the territory, the wealth production and the delivery of services to citizens.
The Territorial Competitiveness Factors: Transport Infrastructure

In this phase of analysis we have reconstructed the design of public transport supply in the metropolitan area of Reggio Calabria.

In the specific case, the supply is oriented on 4 reference systems, such as defined by law regulamentations (Law n. 59/97) [10]:

1. street transport: urban bus;
2. railroad transport;
3. port transport;
4. airport transport.

The law defines that the implementation of minimum facilities must regard (art. 16 paragraph 1) to quality and integration of transport links of school and work commuting, of use of services by customers to access to different administrative services, health and social, of requirement to decrease the engorgement and pollution.

Fig. 10 - Graphic identification of logistics nodes

1.1 Road Network: Urban Bus

The public road transport is managed by A.T.A.M. SpA, that is the acronym of Transport Company for Metropolitan Area in Reggio Calabria (view Fig. 11). The 44 lines generally move on quite long paths, (715 km) traversing the whole city, from little Catona (at north) to Bocale (at south) to Pordagoni (at east). It has 1400 bus stop in the urban and extra - urban area, whose 22% has poles about lines and paths, The 2% has a bus shelter and 76% metal discs [18]. The frequency is not equal; the most of lines are programmed to 8 or 12 daily paths, it means less of a run in one hour.

2.1 Railroad Transport

The Central Station (view Fig. 10) in Reggio Calabria represents the national terminal of F.S. and meeting point of two railroads, Tyrrenian and Ionian coast. These railroads can not satisfy the supply of commuting, both the number of national trains (2 Frecce Argento and 4 Frecce Bianche) and both the punctuality of service for all regional trains. The situation on Ionian coast is most problematic because it needs more long time to cover the distance and there are few trains. Moreover, there is a convention between A.T.A.M. and Trenitalia that gives birth to “Trebus” [18], a transport system with an integrated fee, that allows to residents in the city as to travellers who daily reaches Reggio Calabria from provinces and non, by bus or train, to make use of both the facilities to move around the metropolitan area. The service allows to move in urban area from Catona to Bocale by A.T.A.M. or Trenitalia, to move in extra urban areas from or to Gambarie, Mannolo, Santo Stefano, Cardeto north and south, Sant’Alessio, Laganadi, Trevalloni, Sanbatello, Cardeto center by A.T.A.M. and from Rosarno to Melito Porto Salvo or on the contrary by Trenitalia.
3.1 Port Transport

As regards the maritime public transport, the Port of Reggio Calabria (view Fig. 10) is, according to Villa San Giovanni port, an important maritime road junction that links Sicily, in particular there are different links with Messina and Eolie Islands. Along the path of Reggio Calabria - Messina, the port is interested on a metropolitan service about fast transport of passengers between the Stretto Cities. This service is entrusted at Stretto's Metromare Consortium, Bluferries Srl, who is made by R.F.I. and USTICA LINES Companies. The links between Reggio Calabria and Eolie Islands are made by private ferryboats, only to passengers and which are managed by Ustica Lines [19].

4.1 Airport Transport

The Tito Minniti Airport (view Fig. 10) is located in the south area of Reggio Calabria (location Ravagnese), that allows direct flight connections with the Centre and the North of Italy. The So.G.A.S. Spa is the company who run the Stretto Airport, which is composed of: Province, Municipality of Reggio Calabria, Calabria Region and Chamber of Commerce. It manages the airport system and all the facilities to users, under National Board control for the Civil Aviation. The companies lines are the Alitalia and the Blu-express which fly by Rome, Milan and Turin. From results of traffic about the principal Italian airports, we can see that the Airport of the Stretto is a secondary junction, despite his catchment area involves the Reggio Calabria and Messina provinces. In fact, we need to note, in the latest years, the high levels of decrease. Actually, the number of annual flights is 5,037 with a number of 553,575 passengers [20]. The potentiality of Tito Minniti Airport growth are considerable and it depends on the integration of the Stretto’s Metropolitan Area (Reggio Calabria - Villa San Giovanni - Messina).

The Territorial Competitiveness Factors: Accessibility and Urban Mobility

The theme of accessibility and mobility within the urban and metropolitan areas is one of the problems of efficiency and competitiveness of the metropolitan city and the quality of citizens life [11]. It is evident, how the bus is the urban transport for excellence, that allows to reach both logistical road junction and all the metropolitan ranks. In Reggio Calabria, nowadays, it is a service that undermines the complete use from the users, because it has a poor integration to the other structures present in the territory. Above all, the principal point of weakness is the absence of regular and punctual services and also the loss of general information about paths, timetable, and connection. The internal links of the metropolitan city are penalized from the inadequate infrastructural facilities and from the non-existence of a network, or rather, a transport system (plane - train - ferryboat - bus) that is integrated, connected and equal. In fact, we speak about a city that is not “linked”, not structured very well, as “unimodal” transport [12].

The Territorial Competitiveness Factors: Functions of Metropolitan Rank

In the Metropolitan City, there are the principal headquarters of the metropolitan rank function, such as [5]:
- the High Formation, the Research and the Innovation;
- the Instruction and Professional Formation;
- the Public Administration;
- the Health Structures.

The Metropolitan area of Reggio Calabria has 6 University headquarters. The Mediterranean University of Reggio Calabria is one of the three poles (the University of Calabria and the University of Catanzaro) on which is structured the University System of Calabria. It is composed of Architecture Area, Law and Economic Area, Engineering Area and Agrarian Area. The “Dante Aligheri” University and the Secondary School of Public Administration complete the Institutes of
High Formation in the metropolitan area. As regards the instruction and professional formation, the city offers a great variety of curricula.

There are:
- 6 Colleges: 2 Classical, 2 Scientifical, 1 Artistic, 1 Linguistic;
- 1 Technical Institute for Surveyors;
- 2 ex - institute and Magistral school;
- 2 Professional Institutes Industry and Handcraft;
- 1 Artistic Institute;
- 6 Commercial and Technical Institute;
- 2 Industrial and Technical Institutes;
- 1 Technical Institute for Social activities;
- 1 Academy of Music;
- 1 Academy of Arts;
- 1 Professional Institute for Commercial and Touristic Services.

The most important Public Administration headquarters are: the Municipality, the Province, the Prefecture, the Region, the Tribunal and the Ce.dir. As regards the health structure, Reggio Calabria has got two public hospitals, the Riuniti Hospital and the Morelli hospital, and some private structures such as the “Madonna della Consolazione” Policlinic and the “Franco Faggiana” Orthopedic Institute. (view Fig. 11)

**Fig. 11 - Graphics identification of metropolitan rank functions and the main directions of urban bus lines**

**Territorial Organization of the Metropolitan City of Reggio Calabria. Methodological Aspects**

The Nineties are characterized by radical innovations approach and methodologies of action on cities and on regional systems. The European Union has an important role. It accompanies and stimulates these mutations. In 1995, the Madrid Document has identified the “level of Territorial Organization” as one of the four criteria for the identification of territory problems. However, the Territorial Organization can not be guided from simple considerations of quantitative type (as the number of inhabitants, the territorial extension, etc...), but it must take into account the existing system of relationship, that are the result of a series of sectorial issues organization, of the social and economic dynamics, until the cultural identities [1]. “Dynamics”, such as those above, can be find answer only in a supra - municipal body, which is able to seize the needs of the system beyond the known localism. For these reasons, in order to proceed to a hypothesis of territorial delineation of the future metropolitan city of Reggio Calabria, we have been taken into consideration the following subdivisions:

- the **Optimal Territorial Areas** (view Fig. 1);
- the **Social and Health Districts** (view Fig. 2);
- the **Judicial Districts** (view Fig. 3);
- the **Local Labour Systems** (view Fig. 4);
- the **Territorial reorganization program** (view Fig. 5);
- the **Framework of the Integrated Planning Units** (view Fig. 6);
- the **Provincial Constituencies** (view Fig. 7);
- the **Municipal Constituencies** (view Fig. 8).
Today, the Reggio Calabria Province consists of 97 municipalities, for a total of 550,832 inhabitants [21].

1. The Optimum Territorial Area (OTA) is the geographical area where, according to the Galli Law 36/1994, Art. 8, the Integrated Water Service is organized in the forms and ways established by Law 142/90. The Integrated Water Service consists of all public services of catchment zones, water treatment, feeder services and distribution of water for civil use, gathering system and purification service of waste water, to be organized through OTAs. With the Law 10/97, the Calabria Region regulated the forms and ways of cooperation between the Local Bodies to organize the Integrated Water Service. Under the Regional Calabria Law, 5 OTAs were made, including the OTA5 - Calabria - Reggio Calabria.

2. The healthcare and social-health activities are the responsibility of the Corporation and they are organized at the territorial level, through the Social Health Districts and Management Directions Districts [13], on the basis of the complexity of the services to be provided and the optimal dimension defined by the regional level. The Local Health Corporation is made up of 4 Social Health Districts, and they are geographical areas of service provider, homogeneous areas of provider of health and social-health activities.

3. The Judicial Districts are the territorial jurisdiction of a court.

4. The Local Labour Systems (LLS) are the places of population in which they live and work everyday. They are territorial units, consisting of parts of more than one municipalities contiguous to each other, geographically and statistically comparable [14]. They are based on ISTAT data according to the daily commute for work purposes. And it is an analysis tool appropriate to research the socio-economic structure according to a territorial perspective.

5. The Territorial reorganization program was produced by the Reggio Calabria Province under the Regional Law n. 15 of November 24, 2006 and it was approved by Decision of the Provincial Council n. 68/07. The regional law would set as a prime criteria for the provincial reorganization program, the activation of a process that, taking account of the proposals made by the municipalities, establish the definition of geographical areas and optimal levels referred to the associated exercise of functions and services, in relation to the reference demographic, territorial and organizational indices, and on the condition that the municipalities are composed of a population of not less than 10,000 inhabitants, except for the real situations that have a special territorial, linguistic and cultural affinity.

6. The Framework of the Integrated Planning Units (FIPU) aims, in line with the Regional Council Resolution n. 163 of 2010, is to define the necessary territorial and sectorial priorities for the identification of the Integrated Projects of Local Development.

7. Is called Electoral Constituency or electoral district or electoral college, each of the parties that is split the territory of a Country or other local body for the election of a collegiate body, typically a representative assembly, such as a chamber of Parliament.

8. The Article 13 of Law 142/90 requires that the municipalities divided their territory into Districts of Decentralization if they have population exceeding 100,000 inhabitants. The Municipal Constituencies are participation structures, consultation and management of basic services, and it exercises the delegated functions by the Municipality. The Constituencies have the representation role of needs of the population, to participate in the decisions of the Administration, for consultation on various competence matters of the Municipality. With regard to the Basic Services, the Constituencies competence are divided into Social Services and Leisure and Cultural Services.
The first results: The Districts

To the various systems of relationship between the municipalities, we have generated an idea of the Territorial Organization of Reggio Calabria’s metropolitan city. For this reason, the District would become the most suitable tool for this purpose. In fact, it includes the whole territory of the Municipalities characterized by a level of geographical - territorial unit. The study of previous territorial subdivisions on the Province of Reggio Calabria’s territory has allowed the territorial division into 14 Districts (the first results are shown in Figure 9), according to Draft Law n. 1212 / 2013 [8]. The Districts are headed by one of the Municipalities or Ex – Constituencies (view Table 1):

![Fig. 9 - The territorial delineation of 14 Districts](image)

Table 1 - The Districts should have the ideal size not less than 30.000 inhabitants

<table>
<thead>
<tr>
<th>DISTRICTS</th>
<th>Residents</th>
<th>The number of Municipality</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Reggio Calabria downtown 1 (Stretto 1)</td>
<td>44,057</td>
<td>-</td>
</tr>
<tr>
<td>2 Reggio Calabria downtown 2 (Stretto 2)</td>
<td>37,028</td>
<td>-</td>
</tr>
<tr>
<td>3 South Reggio Calabria (Stretto 3)</td>
<td>39,341</td>
<td>-</td>
</tr>
<tr>
<td>4 Pellaro (Stretto 4)</td>
<td>38,037</td>
<td>-</td>
</tr>
<tr>
<td>5 Melito (Grecanica)</td>
<td>40,952</td>
<td>11</td>
</tr>
<tr>
<td>6 Siderno (Locride 1)</td>
<td>42,752</td>
<td>10</td>
</tr>
<tr>
<td>7 Bovalino (Locride 2)</td>
<td>37,441</td>
<td>15</td>
</tr>
<tr>
<td>8 Caulonia (Locride 3)</td>
<td>47,543</td>
<td>16</td>
</tr>
<tr>
<td>9 Rosarno (Piana 1)</td>
<td>38,030</td>
<td>11</td>
</tr>
<tr>
<td>10 Polistena (Piana 2)</td>
<td>37,124</td>
<td>5</td>
</tr>
<tr>
<td>11 Gioia Tauro (Piana 3)</td>
<td>42,099</td>
<td>3</td>
</tr>
<tr>
<td>12 Taurianova (Piana 4)</td>
<td>30,914</td>
<td>8</td>
</tr>
<tr>
<td>13 Bagnara Calabra (Costa Viola)</td>
<td>33,592</td>
<td>14</td>
</tr>
<tr>
<td>14 Villa San Giovanni (Stretto 5)</td>
<td>41,885</td>
<td>3</td>
</tr>
</tbody>
</table>
Conclusions: Metropolitan Vision and System

The Districts, that will require further research, aim to become the "territorial laboratories" to enable a strategic and integrated planning, a new model directed towards the culture of territorial sustainable transformation (from an environmental, economical and social perspective), with an increasing awareness for the urban and territorial complex reality and a critical comprehension of the multifaceted links governing territorial management processes [7].

It is believed that, this work may be, therefore, a prerequisite to a program aimed to identify fundamental strategies for land use management, which characterize the choices in the short-medium-long term in the new metropolitan city, reviving the competitiveness of municipalities for the economic and sustainable development. In addition, this idea must be submitted to a referendum of all citizens of the metropolitan city, and consequently approved by a majority of the participants to the vote, according to Draft Law n. 1212 / 2013.

Within this framework Bobbio [15] highlights how Italian reform was proposed “late” and therefore “without success”, while in Europe a “bottom-up” approach was spreading, in which “most metropolitan problems are addressed through purpose-oriented networks of coordination and cooperation involving municipalities, governmental agencies at various level, as well as private service providers” [16]. In fact, we need a “bottom-up” approach, which is essential for the successful action for the Territorial Organization.

For this reasons, it is quite a long time, that the need is felt for an integrated approach to the territory-mobility system, an approach targeted to point out strategies being more effective and consistent with the goals of competitive growth. It is easy to think, it needs to realize new structural action in the transport area such as roads, railways and buses, stations and parkings, for a correct development of a metropolitan area and to allow a right level of mobility [17].

At the contrary, it needs to improve the existing links, to promote, at the maximum level, the integrated use of the whole system of transport supply from airport to station, to port, to bus. It needs to act a politic integration:

- **Interstructural integration**, that is realized through the links between parking, station, bus stop;
- **Modal Integration**, that is the possibility to use different types of transport as possible so that the customer can have the idea to travel on a unique transport;
- **Fee integration**, that is the introduction of a unique fee system available for all the types offered.

The future Program should start from here. All citizens should have quick access to the metropolitan rank services, such as economic, financial and cultural places, universities, centres of excellence hospitals, ports and airports. Inevitably, the Program will be done in an integrated view with the mobility of transport and traffic. So, starting from the existing infrastructure, we need to put the goal to exploit the maximum potentiality for the programmation of the integration public transport systems to the service of the Reggio Calabria metropolitan city. It needs to promote an effective and efficient use of this system [7].

Only through the power and synergetic development of existing physical (airport, railroad, port and bus) and non-physical (university, public administration, health, etc...) Infrastructure, it is possible to think about a future metropolitan city, that can become an attractive and competitive pole. It needs to put attention at the development of those action, as a set of nodes and "directions of force", that become a facilities system to residents, with a creating a circle system that can improve the supply of integrated facilities for everyone who move around the city.

Acknowledgements

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