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METHODS, TOOLS AND BEST PRACTICES TO INCREASE THE CAPACITY
OF URBAN SYSTEMS TO ADAPT TO NATURAL AND MAN-MADE CHANGES

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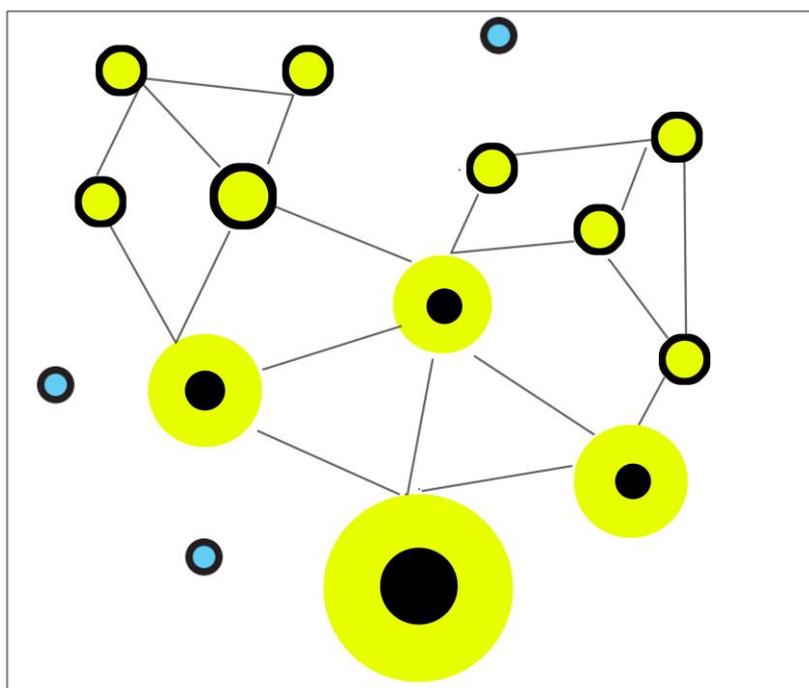
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METROPOLITAN GOVERNANCE FOR TERRITORIAL COHESION

SUSTAINABLE DEVELOPMENT POLICIES FOR
URBAN AND INLAND AREAS

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ABSTRACT

This paper proposes and defines new metropolitan governance strategies for territorial cohesion between inland and urban areas. Different reflections are here presented to comprehend how is it possible to implement cities' ability to understand and manage metropolitan dynamics. In Europe, urbanisation and land abandonment is a widespread phenomenon compared to many other parts of the world. According to research carried out by the European Union it is estimated that four out of five European citizens will be living in urban areas abandoning villages and rural areas.

Many European metropolitan areas are characterized by overpopulated centres, degraded suburbs and different abandoned or almost abandoned inland areas. These areas, if well connected among them and to the main metropolitan centre, can contribute to solving many urban challenges. There is the necessity to image metropolitan areas as a single entity to increase the cohesion of lands. The latent capital of inland areas can be considered as driving factor behind territorial cohesion and development. This paper analyses in deep the case of the Italian Metropolitan Cities proposing a new governance approach to increase the capacity of urban systems to adapt to natural and man-made changes, considering the hinterland as a strong point rather than a disadvantage.

Strategic and Spatial Plans drive the growth of metropolitan areas in a competitive space-economy and support sustainable development policy by ensuring a balance between urban areas with strong competitiveness and inland areas.

KEYWORDS:

Cohesion; Metropolitan Governance; Urban and Inland Areas Relationship

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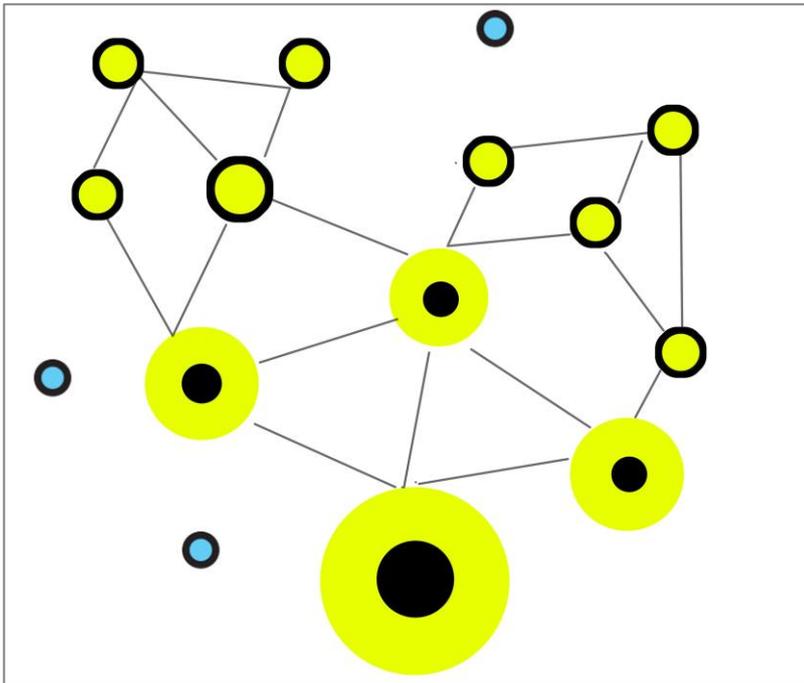
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以区域凝聚力为目的的大都市管治

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摘要

本文提出并定义了新的有利于内陆地区和城市地区地域凝聚力的大都市治理策略。本文描述了如何实现城市理解和管理大都市发展动力的能力，提供了多种不同思路。与世界其它地区相比，欧洲的城市化与土地遗弃现象十分普遍。根据欧盟调查结果显示，80%的欧盟公民都将放弃乡村生活，选择在城市区域生活。

欧洲众多大都市都有着市中心人口过多、郊区退化的特点，同时还伴随着不同程度或几乎完全被遗弃的内陆区域。如果能实现这些区域彼此之间以及与主要大都会中心之间的良好连接，可有助于解决许多城市问题。有必要将大都市想象成一个可增加区域凝聚力的单一实体。内陆地区的潜在资本将成为国家增强凝聚力与发展的有力驱动因素。本文针对意大利主要大城市进行深入分析，提出了新的治理方案以提高城市系统适应自然和人为变化的能力，认为内陆地区是有利发展点而非不利因素。

政策和国土规划推动了大城市区域在竞争较强的空间经济的发展，并通过保证竞争力强的城市区域和内陆区域间的平衡，支持可持续发展政策。

关键词：

凝聚力、大都市治理、城市与内陆地区关系

1 INLAND AREAS AS AN OPPORTUNITY FOR METROPOLITAN CHALLENGES

Metropolitan areas have to manage a really diversified territory: overpopulated cities and less-populated, sometimes almost abandoned, hinterlands and villages. In Europe this configuration is more evident. Some Metropolitan areas organize part of territory as big as regions becoming the key public actor for land development. The big challenge of these Metropolises is to manage their territories in a homogenous way, considering urban centres, hinterlands and inland areas as part of the same machine. From this perspective, inland areas can be considered as an opportunity to solve some problems that are affecting urban areas. These problems are generally caused by man made changes such as migration flow, mass tourism, This paper proposes and defines a new metropolitan governance with strategies for territorial cohesion between the inland and urban areas. Different reflections are here presented to comprehend how is it possible to implement cities' ability to understand and manage metropolitan dynamics. The aim is to improve the competitiveness of cities exploiting the virtuous and synergic linkage between urban and inland areas. From this perspective metropolitan strategic planning can provide city solutions. Metropolization and urban sprawl are not sustainable anymore; there is a need of a balanced and polycentric development and of a new relationship between urban and rural regions.

The new strategy Europe 2020 for smart, sustainable and inclusive growth, states the need to develop territorial policies according to a multilevel governance approach responding to the structural weaknesses in the European economic model. This strategy promotes the so called 'Territorial Cohesion Policy' where Economic and social cohesion – as defined in the 1986 Single European Act – is about 'reducing disparities between the various regions and the backwardness of the least-favoured regions'. The EU's most recent treaty, the Lisbon Treaty, adds another facet to cohesion, referring to 'economic, social and territorial cohesion'. The idea is that cohesion policy should also promote more balanced, more sustainable 'territorial development' – a broader concept than regional policy, which is specifically linked to the ERDF and operates specifically at regional level. The final objective of the EU 2020 is to deliver high levels of employment, productivity and social cohesion in each European region, while reducing the impact on the natural environment. These regions often correspond with a Metropolitan area or they have a strong connection with a metropolis. With the 'partnership agreement' each Member State declares to follow the European framework in planning their territories. For this reason, Metropolitan Authorities have to consider in their strategic plans policies on territorial cohesion. Moreover, the European Union has recognized the centres of metropolitan zones as direct partner in the same way as the Regions and in addition to them to pursue the territorial cohesion. In this way, the European Union showed the need to sustain and enhance the territorial growth developing the territory around the metropolitan zones taking concrete actions on the Lisbon strategy for territorial competitiveness. Territorial cohesion is important to guarantee a form of equality between all the citizens of the European Union, irrespective of where they live. There are different elements that could demonstrate progress in territorial cohesion such as access for all to high-quality public services, economic and social development at regional and metropolitan level or more generally the quality of life of a place.

Even though the Territorial Cohesion strategy is at the heart of any European development policy, its implementation at local level did not produced, in the last few years, significant results. Most of the time the Territorial Cohesion polices have focused on subsidies to enterprises or on sectorial actions, to create new jobs or improving the transport network (enhancing the physical connections between territories). In this way, Regional Authorities have realized pilot actions for a balanced development, following the top-down approach. The international debate on territorial cohesion has recently stressed the need of place-based interventions for local context, identifying and aggregating the knowledge and the preferences of local actors. This approach is very different from the previous one used by many regional authorities, that only aims at addressing the territorial disparities in terms of gross domestic product and employment. A place-based policy is a long-term

strategy aimed at tackling persistent underutilisation of potential and reducing persistent social exclusion in specific places through external interventions and multilevel governance; it promotes the supply of integrated goods and services tailored to contexts, and it triggers institutional changes (Barca F., 2009).

The place-based policy is sometimes incompatible with the key priorities established by the European Union in the Territorial Agenda 2020. This is because each Region chooses only four of these priorities where all the EU funds (ERDF) - for territorial cohesion - will be concentrated. With so few choices, it seems impossible to define the best opportunities of development in relation to territorial specificities. For this reason, the paper proposes to include territorial cohesion strategies in Metropolitan Spatial and Strategic Plans using a place-based approach, in order to promote harmonious development and to tackle disparities of municipalities. To this end the starting point of the research set out here is a survey on the organisational structure and the policy instruments currently used by European metropolitan regions.

The second paragraph is entirely devoted to an explorative study that tries to characterize the various dimensions and variants of metropolitan governance in Europe. Metropolitan regions are considered the practical testing ground for EU cohesion strategies but they represent a no uniform sample. For this reason, the authors have identified and highlighted the repeated elements making a classification of the main governance models. Thanks to this classification, it has been possible to highlight the main metropolitan functions and the topic usually talked in Metropolitan Spatial and Strategic Plans. Well-studied urban governance policies are fundamental for efficient cohesion and place-based strategies. Based on this analysis, the paper suggests more harmonized Spatial and Strategic Plans that gradually increased recognition of the importance of territorial cohesion. In the second paragraph, the authors introduce another fundamental concept strictly related to territorial cohesion: the so-called territorial capital. Territorial capital is defined as the system of territorial assets of economic, cultural, social and environmental nature that ensures the development potential of places (Perrucca G., 2013). Inside Metropolitan regions, inland areas are the ones with more unused capital as a result of a de-anthropic process. This capital can include: cultural and cognitive traditions, architectural heritage, natural areas, the productive systems (agricultural, tourism, manufacturing), In a local development strategy, the unused capital should be considered as a measure of potential development, the presence of innovative subjects that do exist in inland areas may represent the trigger; the local development policies are, first, the activation of the latent capital (Fazia C., Passarelli D., Foresta S., 2016). In this context, Metropolitan policies can be considered as the main driving factor of territorial sustainable development because they can be a concrete instrument able to use the latent capital of the inland areas. In a globalized world, metropolitan areas are more and more seen as magnets of innovation and economic growth, but it is evident that the distribution of the rise in productivity is unequal across the district managed. Territorial cohesion must comply with the current need for sustainable development, which is why we wish to state right from the beginning that the dense urban model guarantees a sustainable development in Europe, and must consist of strong metropolitan urban centres and smaller peripheral centres, providing social and economic structure (Auran, 2013). The latent capital of inland areas can be considered as driving factor behind territorial cohesion and development. Unfortunately, a lot of small centres in the hinterlands of big Metropolis are on the way of being abandoned. This phenomenon connected to man-made changes is threatening the traditional relationship between urban and inland areas.

In the third paragraph, the authors present different best practices for improvement in metropolitan policies. There are many examples of innovation and resilience across Europe and in Italy that can be shared. This research shows the most up-to-date and relevant examples. The presence of innovative subjects, tourism and local-regional productions can be seen as real job opportunities. A deep and comprehensive cooperation between all the actors involved, is the key to innovation and development: between inland areas and metropolitan institutions and between academics and business. Metropolitan regions are the central actors

that can establish new cohesion policies. In the third paragraph, are also describes tools and methods for a good metropolitan governance adopted by different European metropolitan region in order to develop a resilient and sustainable territory.

The final paragraph analyses in deep the case of the Italian Metropolitan Cities proposing a new metropolitan governance approach to increase the capacity of urban systems to adapt to natural and man-made changes, considering the hinterland as a strong point rather than a disadvantage. In particular, the authors discuss methodologies in creating and implementing metropolitan Strategic and Spatial Plans for territorial cohesion. These plans drive the growth of metropolitan areas in a competitive space-economy and support sustainable development policy by ensuring a balance between urban areas with strong competitiveness and inland areas.

2 METROPOLITAN GOVERNANCE

According to Eurostat, the Commission for European statistics, metropolitan areas are districts or a combination of districts which represent an agglomeration of at least 250 000 inhabitants. They are named after the principal functional urban area inside their boundaries. These districts generally include a commuter belt area around a big city which concentrates people, institutions, business and industries. These large cities assume service functions for a large surrounding area and sometimes their influence goes beyond this area. There are around one hundred major metropolitan districts in Europe, where are concentrated the majority of economic activities and people – each of these areas has more 1,000,000 residents -. According to the Eurostat definition, the number of metropolitan areas – with more than 250.000 inhabitants - goes up to 305. It is evident that these areas are fundamental for the future development of the whole Europe becoming the predominant form of human settlement. European metropolitan regions account not only the majority of EU population – 59% - but also 62% of EU employment and 67% of EU GDP¹.

In some EU Member States, capital cities exert a form of 'capital magnetism', through a monocentric pattern of urban development which attracts investment/resources so these are concentrated in the capital; whether such disparities have a positive or negative effect on the national economy is open to debate, as capital cities that dominate their national economies may create high levels of income and wealth that radiate to surrounding regions and pull other cities/regions up (Eurostat, 2016).

According to the Eurostat definition, in Europe there are three types of metropolitan regions: capital city metropolitan regions; second-tier metropolitan regions; smaller metropolitan regions. With 13.6 million and 11.9 million residents respectively, London and Paris are by far the largest metropolitan district in Europe. However, considering the first fifteen metropolitan areas, there are great differences between the number of residents that live inside the metropolitan capital or outside, in suburbs or inland areas. As stated in the table below (Fig. 1) only six out of fifteen European major metropolitan areas have more than the 50% of their residents inside the capital city of the area. Extending this analysis to all the other major metropolitan areas; approximately 1/3 of the metropolitan population lives in the main urban cores. This ratio is smaller for metropolitan areas with more than 5.000,000 of citizens.

In the last few years, European metropolitan areas have increased again their population as a result of the international migration and the constant flow from rural areas to urban centres. Madrid and Rome registered the most significant growth in residents, with a positive trend (1.5 and 1.4 respectively). The increase in population in urban areas has resulted in a large gap between urban and inland areas. Policies on metropolitan developments should reduce regional disparities: urban areas have to be considered as the asset for the development of the whole territory inside the metropolitan area.

¹ European Commission data, 2014.

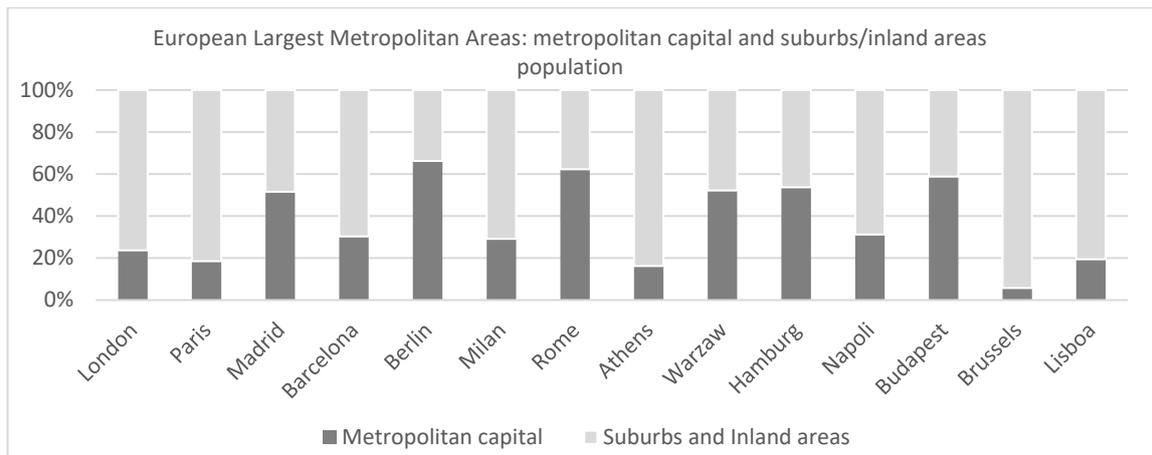


Fig. 1 Percentage of European metropolitan residents that live inside the metropolitan capital or outside (suburbs and inland areas)

The European Territorial Agenda 2020 is the most important strategy about territorial cohesion in Europe. The place-based approach is defined as the best tool to be applied in cohesion policies to reach tangible results. This approach is designed at a local level to meet unique conditions and it engages stakeholders from a diverse range of sectors. The Agenda enhances the leading role of EU Metropolitan Regions: local authorities responsible for cohesion policy implementation. Metropolitan Regions are presented as drivers of innovation and growth, with the responsibility for the development of their wider surroundings. However small and medium-sized towns can play a crucial role at regional level: policy efforts should contribute to reducing the strong territorial polarisation of economic performance, avoiding large regional disparities in the European territory by addressing bottlenecks to growth in line with Europe 2020 Strategy (Territorial Agenda of the European Union, 2011). From this perspective Metropolitan governance tools play a key role to design a competitive and resilient territory where urban areas are the dynamic core.

Metropolitan Regions in Europe are characterized by different size and form and follow different governance structures. In particular, according to a research carried out by the OECD (Organisation for Economic Co-operation and Development)², there are: informal/soft coordination; inter-municipal authorities; supra-municipal authorities; special status 'Metropolitan Cities' (Fig. 2).

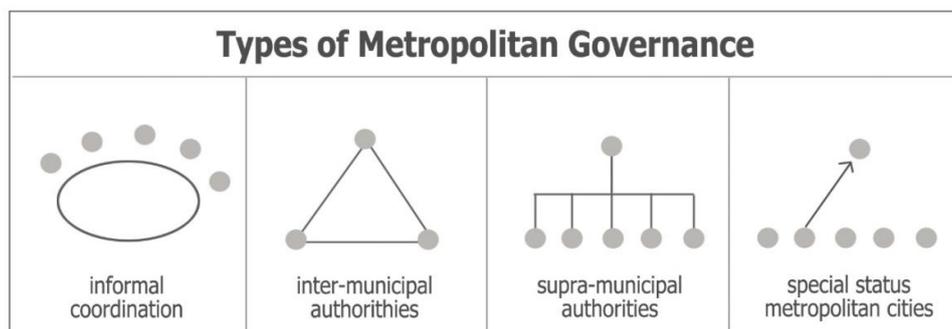


Fig. 2 Types of metropolitan governance in Europe according to the Organization for Economic Co-operation and Development

The first type gives an informal support across an area and all the municipalities involved have the same importance sharing expertises and problems. This solution is adopted by different metropolitan areas such as Athens-Attica in Greece and 'Delta Metropool in the Netherlands'. The second type is an official authority with members from all the municipalities inside a geographical area. There is any kind of hierarchy between the

² OECD, 2015. *Governing the City*, OECD Publishing, Paris

members inscribed. In Europe, the Metropolitan area of Frankfurt is considered as an inter-municipal authority. The third type foresees an upper level of government exercised by the biggest municipality inside the group. It is a vertical structure such as the Greater Paris, The Metropolitan city of Milan or the London Authority. The fourth type is referred to international megalopolis. These metropolises, because of their incredible dimension, have a special status. In Europe, there are not examples of Metropolis with this last type of governance, famous international cases are Hong Kong in China or Daejeon in Korea.

Metropolitan areas are also determined by different roles. They can be 'International centres of attraction', a magnet for capital, labour, goods, services and culture like London, New-York or Milan. Other metropolitan areas are 'Key actors for national economy', developing and supporting innovative areas of expertises and productive sectors like Bordeaux, Munich and Genoa. Finally there are 'Crossroads metropolises', important hubs for transport and goods, which gather different services, styles and culture. It is evident that even if the metropolitan level is openly encouraged by the European Union, there is a varied situation where metropolitan authorities are far from one Country to another. There are even more dissimilarities if we analyse metropolitan governance tools and strategies. However, it is possible to identify which are the main functions and topics tackled. In general, European metropolitan areas deal with:

- transport and mobility. This is one of the main metropolitan functions. It is needed to respond to the travel demand of residents and goods, enhancing the existing network and developing sustainable connections over the whole metropolitan area. Good linkages lay the groundwork for territorial development and cohesion;
- innovation and growth. This is one of the main European priorities that should be applied at all territorial levels. Metropolitan areas have a key role in creating jobs and boosting growth supporting research and innovation establishing links between research institutions, universities and the business community;
- territorial cohesion. Territorial cohesion policies are essential for sustainable growth. They boost productivity and specialisation throughout the territory of the metropolitan region reducing economic and social disparities. In particular, metropolitan areas should develop a tailored, place-based development policy that takes into account the diversities over the whole covered area.
- tourism and culture. Tourism and culture are important sectors that can be drivers of economic growth. Metropolitan areas should promote a balanced approach between the needs to boost tourism on one side, and the preservation of natural and historical sites, and local traditions on the other.

These topics should be the main elements of metropolitan Spatial and Strategic Plans. Unfortunately, only few metropolitan districts in Europe have already defined their definitive governance tools. It is important to shift from symbolic to decision-making functions. Metropolitan governance requires political influence and leadership within institutions, recognition of regional geographical scope of metropolitan areas, and concerted efforts to encourage cooperation through established and recognized authorities (World Bank, 2011). This does not mean that metropolitan areas should have only political functions but they might have an economic role, establishing new networks and using the latent territorial capital for the economic development of the whole territory covered. In these terms, metropolitan governance should be a process by which governmental and non-governmental actors, such as civil associations, private stakeholders work together establishing new policies for territorial development. In the fifth paragraph the authors propose innovative ways to implement metropolitan governance Plans in order to better exploit the territorial capital working in an integrated manner. Considering the great differences, over mentioned, between European metropolitan areas this research is focus on Italian Metropolitan Cities where it is possible to compare and to analyse in deep the current metropolitan governance. Before doing that the main reasons of abandonment of inland areas and some best practice on metropolitan governance are reported. These arguments are the basis of the policies proposed after.

3 INTERNATIONAL BEST PRACTICES, TOOLS AND METHODS FOR METROPOLITAN GOVERNANCE

Metropolitan regions/areas have become an increasingly important topic of debate all around the world in recent years. The Metropolitan Area of Guadalajara (MAG -Mexico) has established an 'International Forum on Metropolitan Governance Innovation' to define an innovative metropolitan approach. This International event represents an opportunity to learn and exchange good practices on Metropolitan Governance. The Forum serves as a space to disseminate relevant contents of the existing public debate, mainly focused on the definition of the necessary measures to improve urban regions and cities. Furthermore, it actively contributes to the global agenda that UN-Habitat promoted during the Third United Nations Conference of Human Settlements - HABITAT III, held in Quito, Ecuador. In Europe a similar experience is carried out by EMI, the European Metropolitan network Institute. EMI was set up in The Hague in 2010 to create innovative knowledge about European metropolitan areas. It supports the sharing of experiences and competences between research institutions, public authorities and EU institutions to fill the gap between research and practices.

This chapter collects and presents some of the best practices, tools and methods implemented at an international level for innovative and sustainable metropolitan governance. There is not a unique efficient model because metropolitan regions are very different all around the world. In the metropolitan areas of Vienna and Budapest more than 70% of the population lives in the core city; in Paris only the 20% and the other population lives in the metropolitan conurbation. There are also many other different examples such as the metropolitan area of Genoa, Cagliari or Nice where the surfaces covered by the main city are respectively one-seventh, one-fourteenth and one-forty-first of the surface managed by the metropolitan authority. These diversities cause very different governance needs. A series of good governance approaches are listed below. The Greater Stuttgart Region is composed of 179 municipalities, including the city of Stuttgart and many other small and middle-sized towns. Because of their location and size, these municipalities have very different problems and needs. For this reason the metropolitan assembly includes urban and a rural lists ensuring equal representation. Both parts cooperate on transport and economic issues enhancing the urban-rural relationship for territorial cohesion. The area covered by the Greater Stuttgart Region is managed according to three main tools: the Regional Land Use Plan, the Public Transport Development Plan and the Economic Development Strategy. The Regional Land Use Plan protects the natural environment preventing urban sprawl; it designs green corridors and landscape parks. The Public Transport Development Plan is probably the most important document for territorial cohesion. It ensures good connections between central and marginal, urban and inland areas, keeping affordable costs. The Economic Development Strategy aims at creating innovative centres over the whole territory supporting start-ups and networks. From this perspective, the Greater Stuttgart Region decided to establish the Centre for Satellite Communication – called 'DeSK' - in a rural area near Backnang considered unattractive for investments.

This area also suffered from depopulation, above all young and skilled people had left Backnang to find a better job in Stuttgart. After the establishment of the DeSK many young engineers moved back to this rural area strengthening the local economy. New linkages with the main hubs of the region were built, enhancing the transport network and increasing the quality of life of the citizens in Backnang. The Amsterdam Metropolitan Area is distinguished by strong and solid rural activities in contrast to the urban areas around it. In the last few years, this metropolitan district developed many best practices to boost the relationship between the urban and rural municipalities within its borders. One of these experiences is called "The Amsterdam Food Strategy". This strategy aims at developing rural and peri-urban areas thanks to food and agricultural initiatives. In particular, a metropolitan food chain has been established giving to urban citizens the possibility of eating fresh and healthy food coming from the surroundings, improving their eating habits. Before this project the 40% of Amsterdam's footprint was caused by the provision of food from abroad.

The Amsterdam Food Strategy enhanced the relationships between urban consumers and the neighbouring rural areas with their farmers. This project contributed also to strengthen the local economy, creating a strong linkage between the city of Amsterdam and the surrounding area. Another interesting experience launched by the Amsterdam Metropolitan Area is the project "Garden for West" against land abandonment. Thanks to this initiative many abandoned peri-urban farmlands have been reintegrated in the metropolitan landscape. New urban farmers are now cultivating these lands reducing food miles and making productive unused territories. The City-Region of Warsaw in Poland includes 29 municipalities in a range of 100 Km around the core of Warsaw. This metropolitan area is at the forefront of providing a good and sustainable transport system. The best practice of the City-Region is the realization of the 'Joint metropolitan transport ticket' which constitutes the most important element for the functioning of a metropolitan area. This ticket is almost only funded by the city of Warsaw; the other municipalities give one twentieth of the subsidiary cost needed for each inhabitant. The city region is also realizing a communication axis for commuters in order to serve all the municipalities localized around the capital city. The main problem is that currently in Poland there are not incentives for actions and projects developed by metropolitan areas. It exists only voluntary spatial plans and new urban policy visions prepared by the existing metropolitan regions without a common national framework. In Italy, the *Strategia Nazionale per le aree interne* (National Strategy for inner areas) represents an interesting opportunity for the territorial cohesion supporting inland areas development. This Strategy is applied by metropolitan areas or by unions of municipalities and its objective is to promote the correct relationship between urban and inland areas. This document states that every citizen has the same rights (mobility, education, health and digital connection) wherever he lives. In addition, this Strategy will be realized with the direct cooperation of local stakeholders (through a participatory process). Some other best practices in Italy have been realized by the metropolitan city of Genoa and Milan.

This first metropolitan area is preparing a Strategic Plan which aims at enhancing the relationship between urban and inland areas. The Plan foresees common territorial services and infrastructures, a sustainable waste management strategy and specific interventions for the economic development. Five main strategic topics have already been identified according to the following hierarchy of priorities: education, mobility, tourism, sense of belonging and spatial relationships and correlations.

The Metropolitan City defined a participatory strategy in implementing this new policy instrument, involving local stakeholders (civil associations, public-private partnerships, unions, enterprises, etc.) to cooperate in terms of public goods. In particular, many best practices have been selected to recognize all the interesting experiences already adopted throughout the metropolitan territory. All these practices will be the basis of the future policies. In the meantime, the Metropolitan City of Genoa has developed a web site called *Fuori Genova* (Outside Genoa).

The site is above all a database which gathers different information about the whole metropolitan area organized according the following categories: public spaces, companies, artisan, civil associations, historical sites, parks, natural sites and tourism. It is a contact point between public and private actors, where it is possible to share personal opinions about metropolitan projects and policies. It offers also the possibility to discover development opportunities creating new networks. All information is geo-referenced on an interactive map (Fig. 3).

The Metropolitan City of Milan is the first Italian metropolitan area adoption a Strategic Plan (Fig. 4). The Milan Metropolitan Area includes 248 municipalities and its urban agglomeration has more than 7 million inhabitants. It is a typical polycentric area dominated by the city of Milan that is driver of the local and even national economy. Since Milan is gradually running out of space to accommodate new developments, the city is increasingly more dependent on possibilities offered in the broader region; this requires Milan and the surrounding region to cooperate better with each other (Hollander, Meijers, 2012).

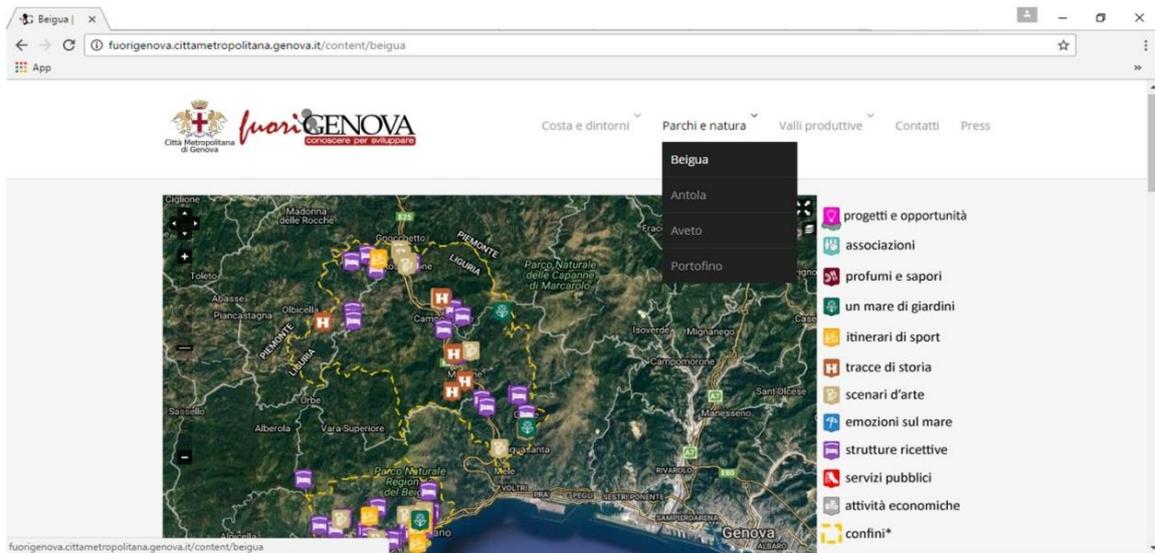


Fig. 3 The web site realized by the Metropolitan City of Genoa to promote and valorise all the metropolitan area

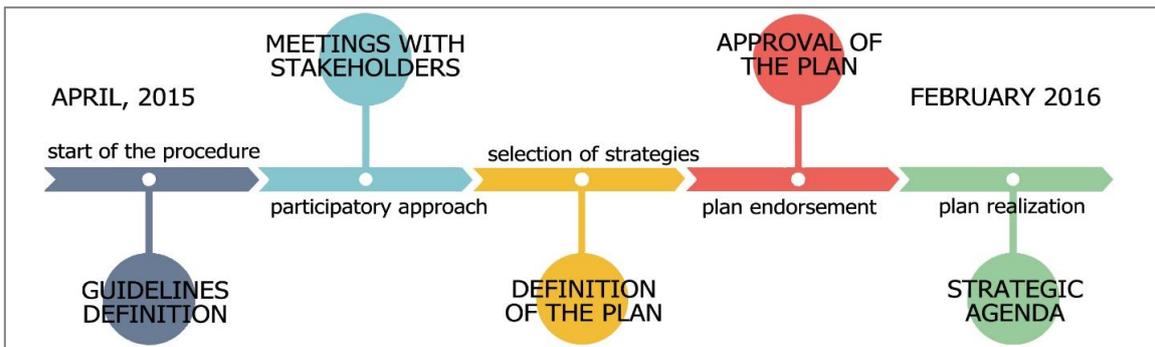


Fig. 4 The Strategic Plan of the Metropolitan City of Milan: The planning process

The Strategic Plan of Milan follows a twin-track approach: at the local level defining policies and instruments for territorial cohesion (public transport, water and energy supply, environmental protection, waste management, tourism and economic development) and considering the Metropolitan City as the aggregator of all the services needed; at the international level strengthening the role of the Metropolitan City of Milan in the global market. Another interesting approach identified by the Strategic Plan of Milan is the six strategies procedure. Considering the polycentric structure of the metropolitan area, the Plan defines six different place-based strategies taking into account spatial diversities.

The examples above mentioned can be all considered as best practices for territorial cohesion but address different topics. They are place-based solutions to straight territorial cohesion focusing on diverse emerging challenges: transport, employment, tourism and resilience (Tab. 1). The solutions presented here contribute to the jobs agenda, enhance physical connections, develop new sustainable tourism itineraries and cope with changes. The most complete case among these examples is the Strategic Plan of Milan. This plan considers all the main topics related to territorial cohesion (transport, waste management, tourism, employment...) in a single document. From this perspective, all the other best practices can be considered as single actions inside an integrate vision/plan. But it is a more challenging strategy, which presents political and organizational challenges of combining resources, priorities and actions. For this reason, the paper proposes - in the following chapter - a new metropolitan governance approach to implementing metropolitan Strategic and Spatial Plans supporting territorial cohesion.

BEST PRACTICES FOR TERRITORIAL COHESION ACROSS EUROPE

Topic addressed	Example
Transport/ Better physical connections between territories	- 'Joint metropolitan transport ticket' City-Region of Warsaw
Job opportunities/ Better level of employment	- 'DeSK' The Greater Stuttgart Region - 'Food chain' Amsterdam Metropolitan Area
Tourism/ Sustainable tourism, new touristic itineraries	- 'Fuori Genova web portal' Metropolitan City of Genoa
Resilience/ Practices against inland areas abandon	- 'National Strategy for inner areas' Italian national strategy
Governance strategy	- 'Strategic Plan of Milan' Metropolitan City of Milan

Tab. 1 Best practices for territorial cohesion across Europe

4 TOWARDS METROPOLITAN GOVERNANCE FOR TERRITORIAL COHESION. CASE STUDY: ITALIAN METROPOLITAN CITIES

As stated in the previous paragraphs, there is an increasing need for governance strategies at the metropolitan level. This research proposes new governance models for Italian metropolitan cities to increase territorial cohesion. The governance strategy of European metropolitan areas depends on local and national circumstances (laws, culture, economic situation ...). There are more diversities than similarities. For this reason the authors focused on the specific case of the Italian metropolitan areas where it is possible to make comparisons and specific propositions. In Italy there are 14 Metropolitan Cities established with the law 142/90 (article 114) and the subsequent laws 3/2001 and 56/2014. According to the 56/2014, 'Metropolitan cities' are recognized as local authorities for large areas instead of the previous 'Provinces'. Italian Metropolitan cities have been operative since 1 January 2015 and their basic tasks are:

- adoption and annual update of the three-year Strategic Plan for the metropolitan region. This plan is a guidance, a framework program for all the municipalities within the metropolitan area;
- general urban planning tools including communication strategies and infrastructure services;
- public services management. In accordance with local municipalities, Metropolitan cities can prepare procurement documents, organize public competitions and supervise service contracts;
- mobility and transport services and infrastructures, ensuring the compatibility of the metropolitan plan with the local plans;
- promotion and coordination of social and economic development, supporting economic activities and innovative researches as defined in the strategic plan;
- promotion and coordination of the digital agenda inside the entire metropolitan region.

Urban planning is a key function for all the Italian Metropolitan Cities. This role is carried out thanks to two governance tools: the Strategic Plan and the Metropolitan Spatial Plan. The three-year Strategic Plan is the most important instrument able to design mid and long term scenarios. It is updated every year and approved by the Metropolitan Council. The Metropolitan Spatial Plan is a tool for urban planning which substitutes the previous Provincial Spatial Plan. Both these Plans are very important for urban development and territorial cohesion. Currently only the Metropolitan City of Milan and the Metropolitan City of Naples have approved respectively the Strategic Plan and the Spatial Plan. Almost all the other metropolitan areas have defined the guidelines for their plans, but they are far from getting their final strategies. Finally, the Strategic Plans of the Metropolitan City of Genoa and Florence are awaiting approval. The authors have deeply analyzed all the

metropolitan documents to implement the current strategies to support territorial cohesion. The approach used defines specific indicators according to three main topics that could significantly contribute to metropolitan sustainable growth: the relationship between urban and inland areas, cohesion policies and resilience policies. These indicators are reported in table 2.

METROPOLITAN SUSTAINABLE GROWTH – INDICATORS	
URBAN INLAND RELATIONSHIP	<ul style="list-style-type: none"> – INTEGRATED TERRITORIAL VALORIZATION AND CONSERVATION – supporting compatible activities (tourism, services and training) to: produce new economies, protect the natural environment, maintain the hydrologic asset, valorise local traditions and biodiversity. – SERVICES IMPROVEMENT AND INNOVATION – transport, healthcare, education... – INNOVATIVE AGRICULTURE - short food supply chains, local food protection, agriculture development economics – ECONOMIC, SOCIAL AND ENVIRONMENTAL REVITALISATION – above all in the outskirt and inland areas
COHESION POLICIES	<ul style="list-style-type: none"> – SOCIAL INCLUSION – disadvantaged people supports, integration and welcome plans, educational activities – BIODIVERSITY AND ECOSYSTEM SERVICES – green infrastructures to enhance social inclusion – CLIMA CHANGE MITIGATION – natural capital protection
RESILIENCE POLICIES	<ul style="list-style-type: none"> – CLIMA CHANGE – Risk mitigation planning, territorial security – SOCIAL ECONOMIC DEVELOPMENT – smart growth

Tab. 2 Indicators used for the analysis of the Metropolitan Strategic Plans

This research addresses the issue of resilience considering this phenomenon according to its general definition: the capability to react to an external cause that disturbs the original form. From this perspective the progressive abandonment of inland areas can be seen as the disturbing element able of compromising the original territorial balance. Resilient metropolitan areas are territories that react to this phenomenon finding new ways of cooperation between urban and inland areas. In table 3 is reported an analysis on all the existing Metropolitan Plans in Italy, in according to proposed indicators in table 2.

Metropolitan Area	Municipalities	Surface_(km²)	Residents Istat 2016	Planning process	Urban Inland relationship	Cohesion policies	Resilience policies
Reggio Calabria	97	3210,37	555.836	2013 Strategic Plan (proposal)	yes	yes	no
Naples	92	1178,93	3.113.898	2016 Spatial Plan (approved)	yes	yes	no
Bologna	55	3702,32	1.005.831	2016 Strategic Plan (guidelines)	no	yes	no
Rome	121	5363,28	4.340.474	2015 Strategic Plan (guidelines)	yes	yes	yes
Genoa	67	1833,79	854.099	2016 Strategic Plan (awaiting approval)	yes	yes	yes
Milan	134	1575,65	3.208.509	2016 Strategic Plan (approved)	yes	yes	yes

Turin	315	6827,00	2282197	2016 Strategic Plan (proposal)	yes	yes	no
Bari	41	3862,88	1263820	- Provincial Plan	no	no	no
Cagliari	17	1248,68	431657	- Provincial Plan	no	no	no
Palermo	82	5009,28	1271406	- Provincial Plan	no	no	no
Catania	58	3573,68	1115535	- Provincial Plan	no	no	no
Messina	108	3266,12	640675	- Provincial Plan	no	no	no
Florence	42	3513,69	1013348	2016 Strategic Plan (awaiting approval)	yes	yes	no
Venice	44	2472,91	855696	2015 Strategic Plan (guidelines)	no	yes	no

Tab. 3 Analysis on all the existing Metropolitan Plans in Italy

After the analysis on the current policies³ and strategies adopted or defined by Italian metropolitan cities, the research presented here proposes innovative ways to implement these tools in order to better exploit the territorial capital working in an integrated manner on the whole metropolitan area. In particular, the research defines the topics and elements that should be included in the metropolitan strategic and spatial Plans. These topics are:

- **inland and urban areas relationship:** metropolitan spatial and strategic Plans should pay particular attention to the relationship between inland and urban areas inside the metropolitan area. It is essential to understand the mutual potential for common synergies and benefits contributing to territorial cohesion;
- **public endorsement:** metropolitan Plans should be politically supported but they should also get public endorsement to be truly effective. Many non-governmental actors (civil associations, private companies, universities, professional associations, etc.) should be involved in the planning procedure and declare publicly their support. This procedure strengthens the actions and the strategies defined by the metropolitan plan. Private and public partnership should be encouraged; they can have a key role for the financial sustainability of the Plan;
- **time-bound objectives:** the strategic Plan is a long-term plan with wider strategies for future development and growth. The spatial Plan is a short-term plan with more immediate objectives. In both cases, it is important to establish a reasonable timetable with mid-term and final goals;
- **pilot actions:** both the strategic and the spatial Plan should foreseen specific pilot actions to test the strategies proposed. It is important to establish for each pilot action the budget, the actors/stakeholders involved, quality/quantity assessment indicators, mid-terms and final outputs;
- **hierarchy of priorities:** it is important to establish a hierarchy of priorities to understand which actions and strategies are firstly needed and more effective. It is suggested to do a sustainability analysis to define the social, economic and environmental benefits and costs. Through this analysis it will be easier to compare the strategies and the actions defined by the plan;
- **participatory process:** it is suggested the participation of governmental and non-governmental actors in the planning process (above all during the preparatory phase and the definition of common strategies

³ The authors have analyzed all the documents (plans and policies) produced by Italian metropolitan cities since they creation in 2015. Three main topics of analysis (urban and inland relationship, cohesion policies, and resilience

- and goals). The participatory process is a fundamental element for territorial cohesion, because everyone is invited to give its opinion. This process could be a workshop, a forum or a public debate with direct or indirect stakeholders. Every municipality inside the metropolitan area should take part in these events;
- **innovation and growth:** innovation and growth are a transversal topic to all the other elements. They are important to revitalize the metropolitan area supporting sustainable economic development;
 - **territorial cohesion:** as stated in the first paragraph territorial cohesion is a necessary precondition for sustainable growth and development. It is one of the main European priorities for 2020 that should be pursued at every governmental level. Metropolitan Strategic and Spatial Plans should be inspired by international best practices to plan their territorial cohesion strategies (the 'Joint metropolitan transport ticket' of Warsaw, the web portal '*Fuori Genova*' realized by the Metropolitan City of Genoa and called 'DeSK' centre of Stuttgart). Some important aspects to be considered are the transport system and the territorial capital (culture, tourism, etc.);
 - **resilience:** A resilient metropolitan area is able to address the challenges of today and tomorrow. Resilience strategies are needed to tackle the abandonment phenomenon of inland areas. Also in this case some best practices should be considered like those showed in the previous paragraph (the 'Food chain' of Amsterdam and the Strategic Plan of Milan).

In table 4 is reported a possible scheme to be followed during the planning process to include the over mentioned topics.

PLANNING PHASE	DESCRIPTION	ISSUES TO BE CONSIDERED
Planning of the organizational structure and team	Procedures required as preparatory works: identification of the organizational structure and team that will follow all the planning phases.	<ul style="list-style-type: none"> - Inland and urban areas relationship - Public endorsement - Participatory process
Spatial analysis	Background analysis on the state of the art over the whole metropolitan district with a focus on the current relationship between inland and urban areas. It is suggested a SWOT analysis.	<ul style="list-style-type: none"> - Inland and urban areas relationship - Territorial cohesion - Resilience - Participatory process
Goals definition	Strategies selection, strategic goals definition and approaches identification.	<ul style="list-style-type: none"> - Inland and urban areas relationship - Time-bound objectives - Hierarchy of priorities - Territorial Cohesion - Resilience - Participatory process - Innovation and Growth
Definition of the Plan	Setting goals, determining actions to achieve the goals, and mobilizing resources to execute the actions.	<ul style="list-style-type: none"> - Inland and urban areas relationship - Territorial Cohesion - Resilience - Pilot actions - Time-bound objectives - Public endorsement - Innovation and Growth
Implementation	Implementation of Pilot actions and strategies.	<ul style="list-style-type: none"> - Inland and urban areas relationship - Territorial Cohesion - Resilience - Pilot actions - Innovation and Growth
Monitoring	Results assessment to verify the implementation of the plan and the achievement of the objectives.	<ul style="list-style-type: none"> - Time-bound objectives

Tab. 4 Planning process scheme for Metropolitan Strategic and Spatial Plans

Metropolitan governance strategies should be seen first of all as a tool for territorial cohesion developing and reinforcing the competitiveness of Europe as a whole. From this perspective urban areas are considered, as metropolitan regions, centers for development able to transfer innovation to the inland areas around them. These areas, if well connected among them and to the main metropolitan centre, can contribute to solving different urban challenges. Many cities have social, economic and environmental problems resulting from pressures such as overcrowding, pollution, traffic, mass tourism. Rural areas have social and economic problems resulting from the abandonment of land, agriculture and livestock activities, but generally the quality of life is better than a lot of peripheral urban areas. Finding the balance between these two realities inside metropolitan regions is one of the major challenges for the territorial cohesion in Europe. The economic gap between coastal/central and inland parts of a Country prevents a harmonious and sustainable development. There is the necessity to image metropolitan areas as a single entity to increase the cohesion of lands.

The latent capital of inland areas can be considered as driving factor behind territorial cohesion and development. The paper suggests following a place-based strategy developed locally to address local conditions. This strategy goes beyond the list of goals followed by Regional Authorities on the basis of the EU Territorial Agenda 20-20.

The metropolitan level is of particular interest because it can address territorial challenges in a more effective way if compared to the municipal level. It is also more direct and practical rather than the regional level which deals with general orientations.

In conclusion, Metropolitan Strategic and Spatial Plans should support development and networking policies and by ensuring a balance between densely inhabited urban areas with strong competitiveness and inland areas with a great unexploited territorial capital. For this reason, here are proposed some innovative topics and elements that should be considered by Metropolitan Authorities towards an effective metropolitan governance for territorial cohesion.

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IMAGE SOURCES

Cover: authors' elaboration

Fig. 1: authors' elaboration from Eurostat data (2016)

Fig. 2: reworked version by the authors from a research of the OECD (2015)

Fig. 3: fuorigenova.cittametropolitana.genova.it

Fig. 4: <http://www.cittametropolitana.mi.it/PSM/>

Tab. 1, 2, 3, 4: authors' elaboration

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