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METROPOLITAN SPATIAL PLANNING FOR FUNCTIONAL URBAN AREAS IN EUROPE

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Abstract: Since the publication of the Torremolinos Charter in 1983, metropolitan areas have increasingly consolidated as catalysts and drivers of global development, as a consequence of complex processes of socioeconomic reorganisation and rescaling. These heterogeneous and context-dependent processes make metropolitan challenges hard to define and address from a univocal perspective. The metropolitan conundrum has gained attention in the agenda of EU institutions, acknowledging the fact that to leave this process ungoverned could pose serious threats to social, economic and territorial cohesion. At the same time, it puts traditional spatial governance and planning models into crisis, with existing territorial units that are challenged by spatial development dynamics are hardly manageable through rigid administrative boundaries. Despite the efforts dedicated to adapting the EU action, however, introducing suitable multi-scalar institutional arrangements aimed at metropolitan development and governance remains a challenge.

Keywords: Metropolitan areas, European Union, spatial planning, governance, cohesion policy

1. Introduction

Metropolitan areas have progressively usurped the role of cities as catalysts and drivers of global development (Bassand, 1993; Brenner, 2003; Soja 2011). Whereas the complex processes of rescaling that progressively led to this reorganisation of socioeconomic and territorial relations were not yet fully recognisable at the time when the Conference of Ministries responsible for Regional Planning discussed and approved the Torremolinos charter on European/regional spatial planning (CEMAT, 1983), the latter explicitly recognised that “the profound changes brought about in the economic and social structures of the countries of Europe […] demand a critical review of the principles governing the organisation of space” (CEMAT, 1983, p. 2-3). After over 40 years, however, metropolitan matters and challenges remains hard to define and address from a univocal perspective, due to their highly heterogeneous and context dependent nature (da Cruz & Choumar,2020). Through time, the importance of metropolisation processes has been recognised by European Union (EU) insti-

tutions (Lang & Torok, 2017). Acknowledging the fact that to leave this process ungoverned could pose serious threats to social, economic and territorial cohesion, through time the EU cohesion policy has been adapted to cater to the needs of metropolitan areas. New instruments were introduced to ensure greater flexibility in tailoring funding allocations to territorial needs (Pagano & Losco,2016). At the same time, the increasing trend towards metropolisation has put traditional spatial governance and planning models into crisis, with existing territorial units that are ill-equipped to deal with phenomena hardly manageable within their fixed administrative boundaries (Salet et al., 2003; 2005; 2015). A growing number of institutional experimentations emerged in European countries and regions, aiming to address the metropolitan dimension. These episodes of metropolitan governance are heterogeneous in their scope and institutionalisation, ranging from informal inter-municipal cooperation that varies through time and in relation to the issues at stake to institutionalised structures that take on the responsibility to manage metropolitan development (ESPON, 2021).

The present contribution sheds light on the above, reflecting on how the spatial governance and planning of functional urban areas have been approached at the EU level as well as within the various European countries and regions. More in detail, drawing on the results of the ESPON COMPASS (Comparative Analysis of Territorial Governance and Spatial Planning Systems in Europe. Nadin et al., 2018, 2024)[1] and ESPON METRO (The Role and Future Perspectives of Cohesion Policy in the Planning of Metropolitan Cities. ESPON, 2021)[2] projects, the paper explores the heterogeneity that characterise metropolitan governance and planning in Europe from a multiscalar perspective. After this brief introduction, the process of metropolisation is introduced, together with the various attempts that have been put in place to make sense of the latter from a functional perspective. The third section explores how the EU has progressively shifted its approach from sustainable urban development to urban policies tailored to functional territories, in so doing also inspiring changes in various member states. Section 4 focuses on the emergence of metropolitan governance at the domestic level, presenting an overview of how, in various European countries, metropolitan trends and dynamics have been addressed. Section 5 then reflects on the different approaches to metropolitan governance and planning by means of concrete examples, discussing and comparing evidence collected in relation to nine metropolitan areas. A concluding section rounds off the contribution, highlighting how to adopt suitable metropolitan governance that can tackle functional development dynamics remains a challenge, with metropolitan institutions that often lack the tools, jurisdiction and funding that would allow them to embrace their role to a full extent.

2. Metropolitan Europe: a functional perspective

Over the past four decades, Europe and other regions have witnessed the emergence of novel forms of urbanisation, spurred by ongoing socioeconomic, environmental, and terri-

1.The ESPON COMPASS Project (2016-2018) concerned the comparative analysis of territorial governance and spatial planning in 39 European countries (Full information available here: https://www.espon.eu/planning-systems).
2. The ESPON METRO Project (2020-2021) explored how the EU Cohesion Policy has contributed to the consolidation of metropolitan governance and cooperation in 9 case studies in Europe (Full information available here: https://www.espon.eu/metro).

torial changes within and around its main cities. These diverse and multifaceted transformations consolidated into some sort of 'metropolitan Europe', characterised by complex spatial relationships between urban cores and their suburbs gaining significance amid the expanding urbanisation archipelago of highly interconnected economic and social spaces (Brenner, 2003). However, grappling with metropolitan matters and challenges remains arduous, owing to the intricate interplay among city centres, suburban zones, and vast peripheries characterising metropolitan territories, with variations across European countries and regions (Salet et al., 2003; 2005; Herrschel,2009). Consequently, a singular definition of the metropolitan dimension has yet to be universally agreed upon, and debates persist over the conceptual and geographical delineation of metropolitan Europe, fuelling numerous scholarly inquiries (da Cruz & Choumar,2020; Moreno-Monroy et al., 2021).

Various attempts have been devised through time to define metropolitan territories, conceptualising them as comprising densely populated urban cores and less-densely populated municipalities with highly integrated labour markets (see, for instance: OECD 2012, 2013; Fadic et al., 2019; Dijkstra et al., 2019). The OECD produced a preliminary definition of metropolitan areas as socio-economic, geographical, and political spaces delineated by the shape, size and nature of the interactions among individuals and organisations (OECD, 2013). As such, metropolitan areas may exhibit either a monocentric or, more commonly, a polycentric structure, with urban agglomerations characterized by historically distinct and administratively independent urban areas situated in close proximity and linked by urban infrastructure. The amalgamation of cities into metropolitan areas thus may arise from either an incorporation process, whereby dominant cities extend their sphere of influence by assimilating smaller cities, or from the amalgamation of smaller cities through the ongoing expansion of urban activities (Halbert et al., 2006; Hall & Pain, 2006). Whereas gaining insights into the metropolitan attributes and developmental trajectories of urban agglomerations can enhance our understanding of spatial dynamics (Brezzi et al., 2012), the hurdles associated with the comparison of metropolitan areas remained intricately tied to the selection of the analytical unit. Central considerations revolve around whether these units are delineated based on administrative boundaries, the continuity of built-up areas, or functional criteria such as commuting patterns, among other parameters, as well as the scale of aggregation. Furthermore, the precision of the definition hinges on various factors, including the availability of socio-economic indicators within a given national or regional context, thereby affecting their cross-contextual comparability.

Aiming at taking this issue, various methodologies have been devised at both national and international levels, which can be broadly summarised in three primary approaches aimed at defining, and characterising metropolitan phenomena (ESPON SPIMA, 2018):

- The administrative approach, which delineates metropolitan areas based on legal boundaries supplemented by criteria such as population size or density, and facilitates governance issues for public administrations since metropolises are contained within administrative boundaries.
- The morphological approach, which defines metropolitan areas by aggregating continuous built-up areas meeting specific criteria of population density or the proportion of municipalities covered by urban settlements, and is better suited for environmental

concerns such as land-use changes, greenhouse gas emissions, housing development, and transportation policies.

- The functional approach, which delineates metropolitan areas based on flows between a core area and its surrounding territories, typically using travel-to-work commuting flows. Small administrative units like municipalities or census tracts are commonly employed to delineate the core and hinterland of metropolitan areas.

According to the findings of the ESPON SPIMA project (ESPON, 2018), the functional approach proves most effective in capturing the socio-economic dynamics and characteristics of metropolitan areas, as their socioeconomic influence often transcend administrative boundaries or continuous built-up areas. Unlike the administrative approach, the functional approach excels in capturing urban areas' interactions, thus identifying self-contained socio-economic urban units. Following this research trajectory, the OECD, in collaboration with the European Commission and Eurostat, has recently finalized a definition of Functional Urban Areas (FUAs) (Dijkstra et al., 2019). This EU-OECD methodology for defining FUAs entails several key steps (Dijkstra et al., 2019):

1. Initially, a population grid is utilized to delineate 'urban centres' independently from administrative or statistical boundaries, identifying clusters of contiguous cells with high population density and over 50,000 inhabitants.
2. Subsequently, each 'dense urban centre' is adjusted to align with the nearest local units to establish a city.
3. Finally, commuting patterns are examined to determine which surrounding 'dense urban centres' encompass less densely populated local units that are part of the city's labour market, as well as those linked to access to education, health care, cultural amenities, etc.

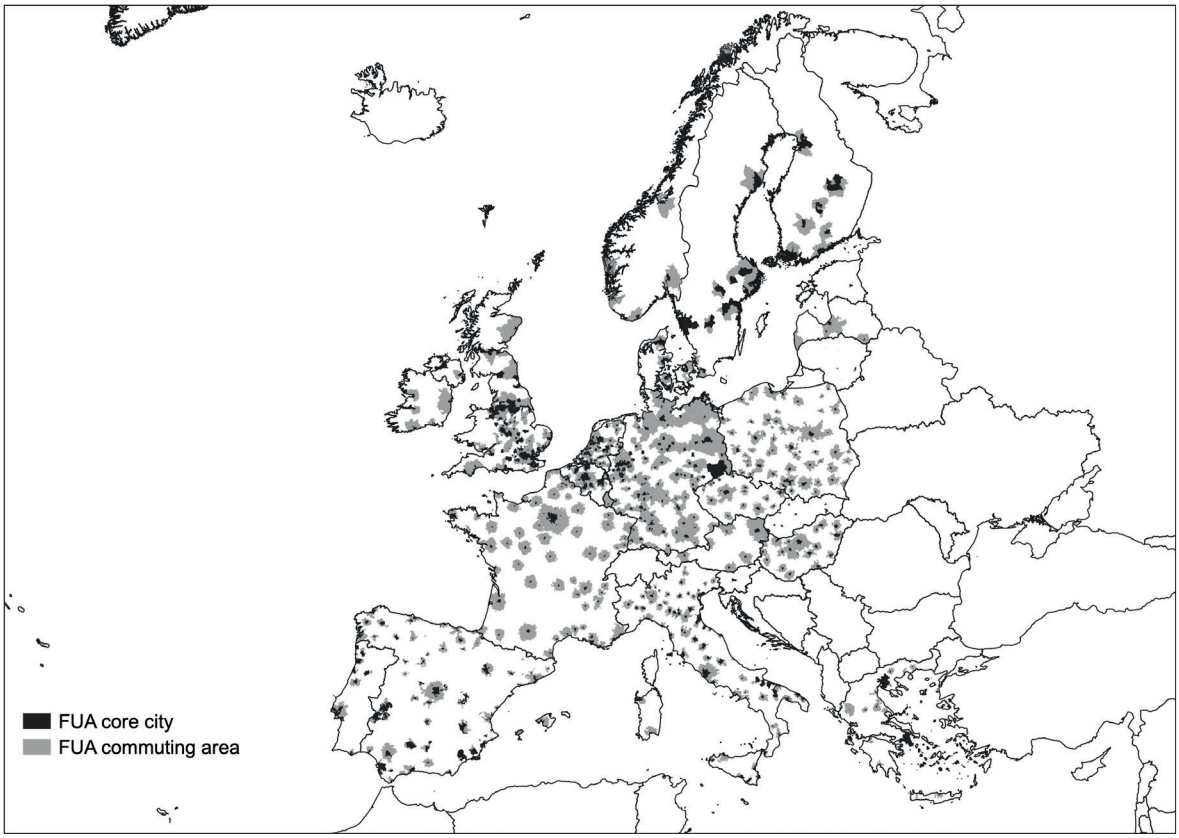
This methodology has been incorporated into the revised European NUTS[3] regulation (REGULATION (EU) 2017/2391) and have been applied to perimeter the FUAs characterising most European countries (Figure 1), in so doing highlighting once more how urbanisation processes in Europe have progressively led to the emergence of a large number of metropolitan regions, in turn requiring dedicated governance efforts.

3. From sustainable urban development to metropolitan policies. The European Union's approach

The acknowledgement of the significance of metropolitan areas by EU institutions is increasingly evident, marked by their prominence in EU spatial development strategies and guidance documents, as well as the augmented allocation of funds toward urban development goals during the recent programming periods. This recognition underscores metropolitan areas' dual role as pivotal drivers of social and economic development and as fo-

3. The NUTS classification (Nomenclature of territorial units for statistics) is a hierarchical system for dividing up the territory of the EU for the purpose of (i) collecting, harmonising and analysing European regional statistics and (ii) framing of EU regional policies (additional information are available at: https://ec.europa.eu/eurostat/web/nuts).

Figure 1. Functional Urban Areas in Europe according to the EU-OECD methodology



Source: authors' own elaboration on EU-OECD data.

cal points for social unrest and environmental challenges (Atkinson & Zimmermann, 2016; Cotella, 2019; Medeiros, 2019). Notably, while the European Commission's 2011 report titled 'Cities of Tomorrow' initially highlighted the necessity of metropolitan administrative restructuring for economic recovery post-2008 crisis (CEC, 2011), the renewed Leipzig Charter on Sustainable Cities (DE Presidency, 2020a) and the EU Territorial Agenda 2030 (DE Presidency, 2020b) reaffirm the centrality of metropolitan areas. These documents advocate for strengthened metropolitan governance within the different European countries, with the EU Territorial Agenda 2030 that emphasises place-based territorial development and multilevel policy coordination, and the New Leipzig Charter that provides guidance on policy implementation within functional urban regions[4]. Interestingly, this 'metropolitan turn' in the European spatial planning discourse contributed to further articulate the European Commission understanding of and approach to urban matters, enlarging the scope of attention and action from sustainable urban development interventions dedicated to deprived neighbourhoods to broader strategies embracing metropolitan areas and the actual relations occurring within their different parts (Fioretti et al., 2020).

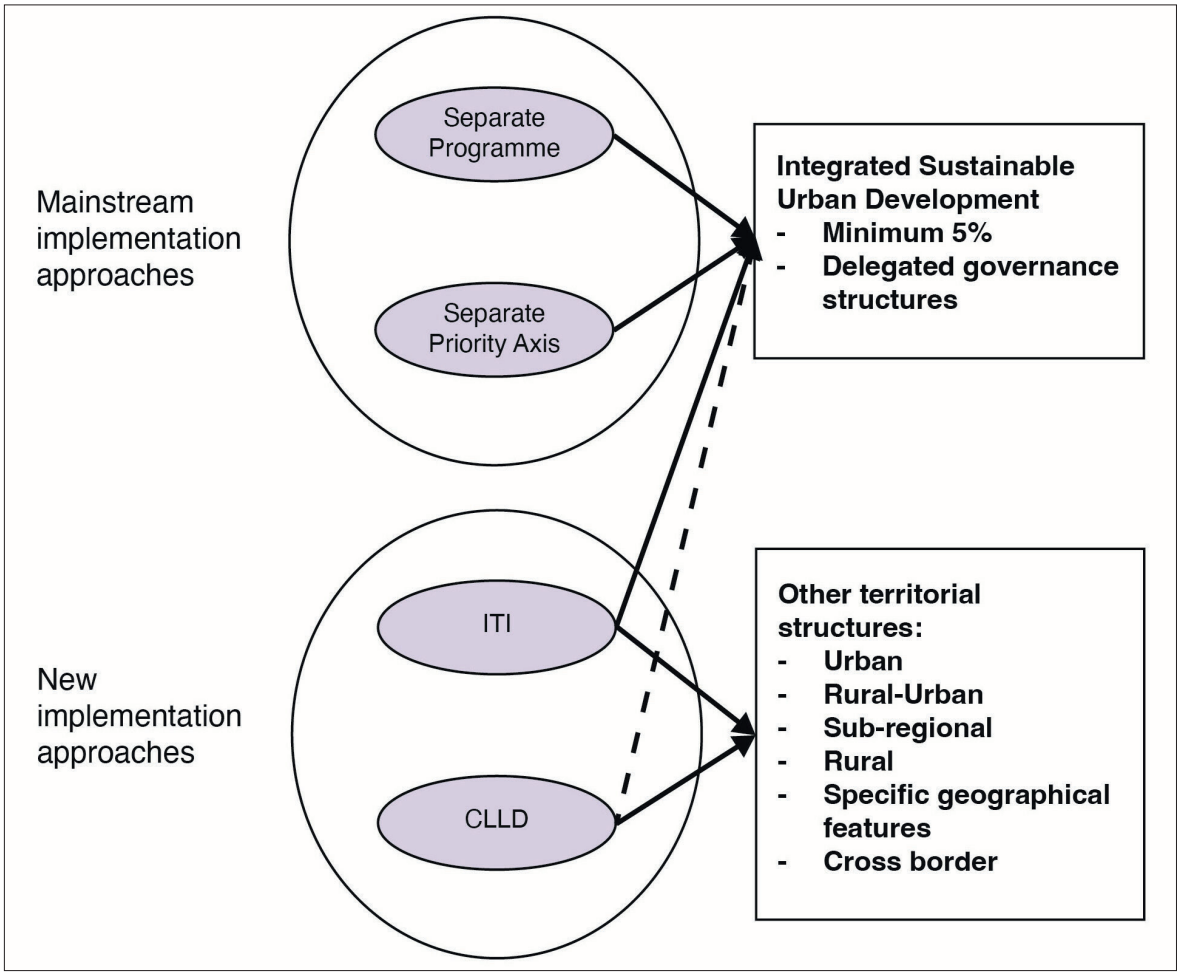
This enlargement of scope has followed suit in the evolution of the rules regulating the programming and implementation of the European Structural and Investment Funds (ESIF),

4. Furthermore, metropolitan areas are recognised for their potential contributions to various aspects of European development, including the promotion of urban-rural partnerships, as endorsed by the recent EC Communication on the long-term vision for rural areas (EC, 2021), and the post-pandemic recovery (Metropolis, 2020; Cotella and Vitale Brovarone, 2021, 2024; Cotella et al., 2023).

which have been progressively tailored to address the diverse needs of metropolitan areas (van der Zwet et al., 2014) (Figure 2). During the 2014-2020 programming period, at least 5% of the European Regional Development Fund (ERDF) allocation was dedicated to sustainable urban development strategies, encompassing projects targeting urban mobility, community regeneration, research and innovation, climate resilience, digitalisation, and entrepreneurship. Also, the European Social Fund (ESF) supported employment-related initiatives at a metropolitan scale, while the European Agricultural Fund for Rural Development (EAFRD) and the European Maritime and Fisheries Fund (EMFF) provided supplementary backing for metropolitan development policies (see Harrison & Heley, 2015 and Angheluta & Stanciu, 2020, respectively). Notably, a number of new mechanisms such as Integrated Territorial Investments (ITI) and Community-Led Local Developments (CLLD) have been introduced to enhance flexibility in ESIF allocations, facilitating the implementation of metropolitan development strategies that integrated resources from different funds and mobilise different segments of the local communities towards a more inclusive growth (Tosics, 2016; Servillo, 2019).

The Commission's 2021-2027 programming period and the Next Generation EU initiative that accompany the latter further amplify the urban dimension of cohesion policy by

Figure 2. EU cohesion policy mechanisms aimed at functional spaces



Source: van der Zwet et al., 2014

earmarking 8% of the ERDF allocation for sustainable urban development investments. Moreover, the reconfiguration of ESIF into five policy objectives aims to streamline their management and facilitate their integrated use through ITI and CLLD[5]. Whereas this integration effort seeks to empower administrative levels and stimulate the formulation of tailored territorial development strategies that address local needs effectively (Fioretti et al., 2020), it is important to stress that the adoption of suitable metropolitan governance structures and multi-scalar institutional arrangements capable of capitalising on these opportunities in the different countries remains a challenge, as most metropolitan areas still lack the necessary tools, jurisdiction and funding to fully embrace their role (ESPON, 2021; Cotella, 2024).

4.The rise of domestic metropolitan governance

While FUAs serve as valuable tools for comparing socio-economic and spatial trends, they also constitute useful guiding frameworks for the public authority in planning infrastructure, transportation, housing, education facilities etc. As a matter of fact, the acknowledgement that the inherent complexity of metropolitan areas necessitates adequate policies and instruments to address the integration of different urban functions and the collaboration between core city authorities and surrounding municipalities have numerous institutional experimentations throughout Europe. Municipalities have joined forces in the development of strategic visions and plans to tackle those challenges that transcend the boundaries of the core city alone (Kübler & Heinelt, 2002; Healey, 2010; Albrechts et al., 2017; Malý J., 2018). While these metropolitan actions are often based on informal inter-municipal cooperation that evolves over time and in response to the issues at stake, more formal institutional structures have also emerged to facilitate strategic planning and policy coordination across local governments.

Overall, metropolitan governance models and approaches vary widely in terms of institutionalisation, distribution of powers, scope of action and actors involved (Tomàs, 2016; Zimmermann et al., 2020; Cotella et al., 2024), reflecting the unique nature of cooperation in each metropolitan area as well as the characteristics of the different spatial governance and planning systems across Europe and their evolutionary paths (ESPON, 2018; Berisha et al., 2021; Nadin et al., 2024). Projects such as ESPON SPIMA and ESPON METRO have sought to analyse and evaluate the role of formalised metropolitan institutions in territorial governance and spatial planning, distinguishing between strategic spatial planning, statutory planning activities, and collaborative planning. Assessing the roles of these governance aspects provides insights into the dynamics of spatial planning processes at the metropolitan level (ESPON, 2018; 2021).

Comparing institutional arrangements and spatial planning instruments to the functional dimensions of metropolitan areas adds complexity to the picture (Albrechts et al., 2017) and recent studies have underscored the interpretive and administrative hurdles in adapting tra-

5. This is particularly true when it comes to OP5 ‘Making Europe closer to citizens’ that allows for the consolidation of bottom-up coalitions of actors in rural areas and the joint preparation of place-based strategies aimed at local development.

ditional spatial planning practices to urbanisation trends transcending single administrative authorities, leading to the emergence of "soft spaces with fuzzy boundaries" characterised by fluid and process-oriented policy approaches (Allmendinger et al., 2015; Salet et al., 2015; Zimmermann et al., 2020). While metropolitan institutional structures and governance practices often favour core-centric urban models, leaving peripheral areas in a dependent position, some research suggests that fragmented metropolitan governance leads to lower productivity compared to areas with legally established metropolitan governance bodies (EP, 2019; Casavola et al., 2024a). This governance dilemma often impedes the effective resolution of issues such as spatial fragmentation, uneven development, and social disparities (Janssen-Jansen & Hutton, 2011). Addressing these challenges hinges on identifying the appropriate 'problem owner(s)' capable of grappling with the metropolitan conundrum at the right scale and with suitable instruments to navigate the evolving metropolitan landscape, challenges, and dynamics (ESPON, 2018). Understanding the functional, political, and representational relations within a given metropolitan area is crucial before taking action (Salet et al., 2015); in other words, as argued by the authors of the Handbook on Sustainable Urban Development Strategies (Fioretti et al., 2020), to match needs, challenges, and opportunities for development with the appropriate spatial scale and territorial context remains a crucial matter.

Given the aforementioned factors, it is interesting to provide an overview of whether and how the various European countries have embraced through time some sort of metropolitan governance. An initial exploration of the existing approaches can be derived from the data compiled within the ESPON COMPASS project's national reports, in so doing revealing a rather heterogeneous landscape including (Figure 3):

i. Countries characterised by rather limited urbanisation, that did not embark on metropolitan governance (Malta, Cyprus, Estonia, Lithuania, Slovenia, Slovakia, Liechtenstein, Iceland and Norway)
ii. Countries whose administrative system is suitable to manage metropolitan dynamics (i.e. large local administrative units in Bulgaria and Sweden and the relatively small provinces and cantons in the Netherlands and Switzerland)
iii. Monocentric countries dominated by the capital region, hence approaching metropolitan governance as an exceptional matter (Austria, Croatia, Denmark, Greece, Hungary, Ireland, Latvia, Luxembourg).
iv. Countries that, due to their federal or quasi-federal nature, have developed exceptional approaches (the cases of Brussels Capital Region in Belgium and Barcelona in Spain).
v. Countries that have embraced policy-based metropolitan governance, often inspired by the New EU cohesion policy mechanisms (Czech Republic, Finland, Romania and Poland).
vi. Countries that have introduced dedicated metropolitan governance institutions (France, Germany, Italy, Portugal and the United Kingdom).

In the remainder of the paper, by means of selected case studies, additional light will be shed on how these approaches to metropolitan governance have been consolidated through time and what instruments they use.

Figure 3. Metropolitan governance approaches in Europe



Source: authors' own elaboration.

5.Some insights from the European metropolitan governance and planning landscape

Drawing on the evidence gathered in the context of the ESPON METRO project, it is possible to shed further light on the above approaches to metropolitan governance and planning, and in particular to those countries that have undertaken some attempt to tackle the emerging metropolisation dynamics (i.e. categories iii to vi). This is done through the analysis of nine metropolitan contexts, located in eight different EU countries[6]: Riga Metropolitan Area (group iii); Barcelona Metropolitan Area and Brussels Capital Region (group iv); Brno Metropolitan Area and Metropolitan Area of Gdańsk-Gdynia-Sopot (group v); Metropolitan Cities of Turin and Florence, Lisbon Metropolitan Area and Metropole de Lyon (group vi). The main focus has been on the nature of the adopted governance models, their competencies and the instruments they adopt.

5.1.Institutionalisation process and governance model

While some of the cases under investigation feature robust institutions, often formalised after an initial phase of informal cooperation, others are at the early stages of their met-

6. The presented information is based on experiences and practices identifiable in the nine territories and have been developed in connection with the stakeholders engaged in the ESPON METRO project.

ro- politan collaboration journey (Table 1). Whereas this often depends on the nature of the metropolitan functional phenomena, it is also a consequence of the institutional frameworks at both national and regional levels within which these metropolitan areas are embedded.

In more detail, most metropolitan areas are formally recogniszed within their respective countries' administrative frameworks (Barcelona, Brussels, Florence, Lisbon, Lyon, Turin). However, significant differences exist among them in terms of competencies and governance models. For instance, the Metropolitan Cities of Turin and Florence are governed by the same national law, which established Metropolitan Cities as second-level institutions, supplanting the former Provincial authorities. Despite this institutional similarity, they have distinct histories of metropolitan cooperation, in Florence evolving from bottom-up voluntary initiatives, whereas in Turin it has been inspired by national and regional decrees and plans[7].

Table 1. Status and origin of metropolitan cooperation in the case study areas

Metropolitan area	Status	Origin	Initiation
Metropolitan City of Turin	Formal (metro unit)	Institutional	Top-down
Barcelona Metropolitan Area	Formal (metro unit)	Institutional	Top-down
Lisbon Metropolitan Area	Formal (metro unit)	Institutional	Top-down
Brno Metropolitan Area	Semi-formal (ITI)	Policy-based	Mixed
Gdansk-Gdynia-Sopot Metropolitan Area	Formal (ITI)	Policy-based	Bottom-up
Metropolitan City of Florence	Formal (metro unit)	Institutional	Top-down
Lyon Metropolitan Area	Formal (metro unit)	Institutional	Bottom-up
Brussels Capital Region	Formal (metro unit)	Institutional	Top-down
Riga Metropolitan Area	Informal (in transition)	Voluntary → Institutional	Bottom-up

Source: ESPON, 2021

Also Barcelona and Lisbon metropolitan areas are formally recognised within their respective countries' administrative hierarchies. However, they are the result of more peculiar paths of institutionalisation. The Metropolitan Area of Barcelona comprises the city of Barcelona and 35 surrounding municipalities and is the only formal metropolitan government in the Spanish context. It was constituted by the Catalan Parliament in 2010, after a rather long history of metropolitan cooperation that started in the 1970s and continued in the 1980s through various political struggles between the regional and the local authorities. As the Italian Metropolitan Cities, also the Barcelona Metropolitan Area is a second-level institution and its main source of legitimacy lies in its ability to manage

7. The governance environments of the two metropolitan cities differ significantly also due to geographical, political, and organisational factors. The metropolitan city of Turin encompasses a highly fragmented environment, with power and competences dispersed among various (public and private) entities across a vast and diverse territory comprising 312 municipalities. This territory ranges from the densely populated urban agglomeration surrounding the capital city to remote rural and mountainous municipalities extending to the French border (Casavola et al., 2024b). In contrast, the metropolitan city of Florence includes only 42 municipalities and has a population just exceeding one million inhabitants.

and effectively provide public goods and services. Lisbon Metropolitan Area was formally established in 1991 and recently framed within a new legal configuration that instituted 21 inter-municipal communities and the two metropolitan areas of Lisbon and Oporto. It is ruled by a Metropolitan Council composed of the mayors of its 18 municipalities, and features a Strategic Council for Metropolitan Development, representing public and private institutions and organisations. The devolution of powers to local authorities and the formation of inter-municipal entities was intended to adequate the country administrative system to the principles of subsidiarity, complementarity and the protection of the rights and interests of citizens[8].

Lyon Metropolitan Area is the result of a bottom-up institutionalisation process that has been acknowledged in 2014 through a national law instituting metropolitan governments for large cities, as the last step of an inter-municipal integration process that lasted for more than five decades. The three largest French cities (Paris, Marseille and Lyon) are now characterised by their own metropolitan arrangements, positioned at the interface between the State and local authorities. However, in the case of Paris and Marseille, these institutions were created top-down, while *Métropole de Lyon* was instituted through an agreement between the Mayor of Lyon and the President of the Rhône General Council. The Brussels Capital Region is characterised by a strong institutional recognition, that dates back to the federalisation process that occurred in Belgium in the 1990s. Since then, the country has featured three regional governments (Flanders, Wallonia and Brussels) that are competent in domains such as territorial and economic development, and three communities (Flemish, French and German), that are responsible for culture-related issues. Among the three regions, Brussels is specific because of its bilingual status and its urban configuration. Whereas the 19 municipalities that compose it do not include any relevant suburban area, its functional area is nowadays much larger and extends in Flanders and Wallonia. As a consequence, effective metropolitan cooperation is challenged by the complex institutional framework and its misfit with the actual functional phenomena[9].

Brno and Gdansk-Gdynia-Sopot metropolitan areas are not formally recognised within their countries' administrative structures, and their role is functional to the management of EU cohesion policy instruments. In the Czech Republic, metropolitan cooperation has been pursued only since 2014, as a consequence of the introduction of an ITI in the framework of the cohesion policy. Within this context, the Brno Metropolitan Area was formed in 2014 as a policy-based cooperation aggregating 167 municipalities (184 in the programming period 2021-27) that range from a dense urban core to small industrial towns and rural areas. In March 2020, the ITI Steering Committee approved the establishment of a horizontal working group to address cross-cutting metropolitan issues and to stimulate further institutionalisation beyond the scope of the ITI. On its hand, the Metropolitan Area of Gdansk-Gdynia-Sopot (MAG) Association was legally established in 2011 as a voluntary agreement between

8. However, the coexistence with the overlapping regional authority that is a *de facto* central government outpost in charge of the programming and management of ESIF raises a number of questions in relation to the actual metropolitan competences.
9. In 2011, the institution of a 'metropolitan community' including all municipalities of Brussels and of the Walloon and Flemish Brabant provinces was planned by the sixth state reform, aiming at building consensus concerning trans-regional development matters, but no agreement between the three regions has been reached in this direction so far.

25 local and county governments[10], as a result of a process that started in the 1990s. The association combined two previously established cooperation networks, respectively pivoted around Gdansk and Gdynia, as a response to the growing need for intermunicipal coordination. Also in this case, the EU cohesion policy contributed to the consolidation of the cooperation through the introduction of an ITI for which the MAG Association has acted as Intermediate Body responsible for implementation. The Association mainly works through the meetings of committees that discuss different themes of mutual interest, e.g. joint purchase of goods and services or the preparation of development plans covering several local authorities. Importantly, it is also responsible for the preparation of metropolitan strategic development and the management of some of the projects included in the latter.

Finally, Metropolitan governance in the Riga area is still informal and only began with the decision to produce an Action Plan for the Development of the Riga Metropolitan Area, approved in January 2020. However, municipalities have been engaging in cooperation activities since 1996, the most notable example being the establishment of the Riga Planning Region at the end of 2006, as a derived public entity ruled by the Latvian Regional Development Law and joining 30 municipalities[11]. The Riga Planning Region is responsible for regional development planning, coordination, cooperation of local governments and other public administration institutions and networking among planning specialists. At the same time, it is also one of the main initiators and coordinators of cooperation activities in the Riga Metropolitan Area.

5.2.Metropolitan Policy and planning instruments

All the areas under scrutiny feature some sort of policy or planning instrument aimed at addressing metropolitan dynamics, that are however highly heterogeneous in terms of scope, nature and function (Table 2).

The level of competencies and the number of policy and planning instruments seem to directly depend on the level of institutionalisation of metropolitan governance in each context. More in detail, Barcelona, Florence, Lyon and Turin are characterised by a similar scope of competencies and instruments, dealing with spatial development, transport and mobility, waste management, climate and energy. The Barcelona Metropolitan Area also develops plans aimed at internationalisation and international cooperation. The competencies of the Lisbon Metropolitan Area were reinforced in 2018 when the latter also became the metropolitan transport authority. In Brussels, despite the virtual absence of metropolitan governance, the strategy adopted by the Brussels-Capital Region in 2018 concerning its territorial development could be used as a basis upon which to conceive and further stimulate metropolitan cooperation activities that exceed BCR boundaries and involve municipalities located in the neighbouring regions of Flanders and Wallonia. Moreover, a number of instruments exist, that have been developed in the framework of the existing cooperation initiatives.

10. A number that through time grew up to 58 units.
11. It is important to highlight that, as a result of the recent administrative reform, the number of municipalities in the countries decreased from 119 to 43, and the planning regions were re-perimetred. As a consequence, the number of municipalities of the Riga Planning Region decreased considerably (from 30 to 9), and so did its area of competence.

Table 2. Policy and planning instruments developed in the case study areas

Metropolitan area	Main instruments
Metropolitan City of Turin	• Strategic Metropolitan Plan • Metropolitan General and Coordination Spatial Plan • Metropolitan Sustainable Urban Mobility Plan • Metropolitan Agenda for Sustainable Development
Barcelona Metropolitan Area	• Metropolitan Action Plan • Metropolitan Urban Master Plan • Metropolitan Urban Mobility Plan • Metropolitan Programme for Prevention and Management of Resour- • Climate and Energy Plan • Internationalisation Plan • International Cooperation Plan • Action plan for sustainable food 2020-2023 • Metropolitan plan to support municipal social policies 2020-2023
Lisbon Metropolitan Area	• Lisbon Regional Strategy 2030 (with CCDR LVT[12]) • Management of ROP and NOP measures (ITI) • Metropolitan Sustainable Urban Mobility Action Plan • Metropolitan Plan for Adaptation to Climate Change (PMAAC AML) • Fare Reduction Support Programme in Public Transport (PART)
Brno Metropolitan Area	• Integrated Development Strategy of the Brno Metropolitan Area for the Application of the ITI
Gdansk-Gdynia-Sopot Metropolitan Area	• Strategy 2030 (general) • ITI Strategy 2020 • Transport and mobility strategy 2030 • Low emission Plan • Spatial development plan 2030
Metropolitan City of Florence	• Strategic Metropolitan Plan • Metropolitan General and Coordination Spatial Plan • Metropolitan Sustainable Urban Mobility Plan
Lyon Metropolitan Area	• Local Plan for Urbanism and Housing (PLU-H) • Territorial Coherence Plan (SCoT – spatial and strategic relevance) • Territorial Climate Air and Energy Plan (PCAET)
Brussels Capital Region	• Regional Sustainable Development Plan (PRDD) • Good Move Plan • TOP Noordrand strategy
Riga Metropolitan Area	• Action Plan for the Development of the Riga Metropolitan Area

Source: ESPON, 2021.

12. *Comissão de Coordenação e Desenvolvimento Regional de Lisboa e Vale do Tejo* - Lisbon Regional Coordination and Development Commission

Although in Brno and in Gdansk-Gdynia-Sopot metropolitan areas the activity of the policy-based cooperation is mostly centred around the ITI they are responsible for, MAG is also responsible for the development of a number of other plans and strategies concerning metropolitan development, transport and mobility spatial development, etc. Finally, the Riga Metropolitan Area was formally instituted only in July 2021, and the Action Plan for the Development of the Metropolitan Area produced by the Riga Planning Region represents the only document that has been developed until now.

When looking more closely at strategic planning initiatives, most of the metropolitan areas have approved strategies concerning the future development goals and trajectories of their territory and the way they position within the broader regional, national and supranational frameworks. Examples of such documents are the Strategic Metropolitan Plan in Florence and Turin (that are statutory documents clearly prescribed by the law instituting Metropolitan Cities), the Lisbon Regional Strategy 2030, and the Territorial Coherence Plan (SCoT, which has a spatial and strategic relevance) in Lyon. Importantly, in the Brno and Gdansk-Gdynia-Sopot metropolitan areas an important role is played by the strategies for the development of the ITI, whereas in the framework of the latter, the ITI strategy is also accompanied by a separate 2030 Strategy that further details the metropolitan development goals. Besides detailing the main goals and priorities for metropolitan development, these strategic documents also catalyse horizontal and vertical coordination between different planning instruments and levels.

6. Concluding remarks

The contribution started from the assumption that metropolitan areas have become integral to the fabric of the European continent, playing a pivotal role in driving economic growth, fostering innovation, and promoting social development. With urbanisation on the rise globally, metropolitan regions have emerged as dynamic hubs of activity, attracting talent, investment, and resources, in turn serving as engines of prosperity and competitiveness while at the same raising increasing challenges related to governance, spatial planning, and social cohesion. More in detail, one of the primary challenges posed by the described metropolisation phenomena is the mismatch between the functional scale of urbanisation and the rigid administrative configuration that serves as a basis for the organisation of spatial governance and planning in various European countries. The rapid expansion and interconnectedness of metropolitan regions often transcend municipal, regional, and even national borders, rendering existing governance structures obsolete. As a result, policymakers are confronted with the tough task of navigating complex multi-level and multi-actor governance frameworks to address issues such as transportation, housing, environmental sustainability, and social inequality. The inability to effectively coordinate and integrate policies across various scales can lead to inefficiencies, disparities, and fragmentation within metropolitan areas, undermining their long-term viability and resilience.

In response to these challenges, the EU has recognised for some time the importance of metropolitan governance as an essential pillar of social, economic and territorial cohesion. Over the years, EU cohesion policy has evolved from a configuration privileging national

and regional governments as the main spending hubs (Cotella et al., 2021) to a multilevel one that takes the needs of functional territories into higher account. In this light, it is and CLLD represent a significant step towards promoting coordinated and holistic strategies for metropolitan development, allowing regions to tailor funding allocations to their specific needs and priorities. At the same time, by encouraging collaboration and partnership among local authorities, stakeholders, and civil society, these instruments facilitate the co-design and implementation of innovative solutions to complex urban and rural challenges.

Despite these efforts, however, the journey towards effective metropolitan governance remains fraught with obstacles and uncertainties. The complexity of metropolitan dynamics, coupled with the diversity of institutional arrangements and policy contexts across and within the different EU member states, poses significant hurdles to achieving coherence and alignment in metropolitan governance and makes it hard to emulate successful experiences. The different experiences discussed in the contributions show how, in the various countries, different paths towards, and approaches to metropolitan governance have been adopted, making it difficult to draw take stock of any generalisable lesson. In most cases, despite their significance for Europe's development, the collected evidence has shown how metropolitan authorities have yet to assume a primary role in the implementation of EU programmes and decisions on whether to use the new functional instruments and approaches typically fall under the purview of national and/or regional authorities. From an institutional standpoint (Hooghe & Marks, 2001; Borzel, 2020), this situation reflects the tensions inherent in multilevel governance, stemming from the divergent interests and priorities of various levels of government.

Despite this lack of common ground to build upon, a number of key considerations emerge from the discussed evidence, that may contribute to guiding future efforts aimed at strengthening metropolitan governance and cooperation within the European Union.

First and foremost, greater policy coherence and coordination across different levels of government is required, to ensure that urban policies and initiatives are aligned with broader strategic objectives and priorities. This requires fostering a culture of collaboration and shared responsibility among all stakeholders involved in metropolitan governance, including local authorities, regional governments, national agencies, and EU institutions. Secondly, there is a need to enhance the capacity of metropolitan authorities to effectively plan, manage, and govern complex urban systems. Investing in skills development, knowledge exchange, and institutional capacity-building can empower local leaders and practitioners to navigate the intricacies of metropolitan governance and effectively address the diverse needs and challenges of their communities. Thirdly, inclusive and participatory approaches to metropolitan governance shall be introduced, ensuring that the voices and perspectives of all stakeholders are taken into account in decision-making processes. Empowering local communities, civil society organisations, and grassroots initiatives can foster a sense of ownership and belonging within metropolitan areas, hence solving issues of legitimacy and accountability in the face of urban challenges.

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