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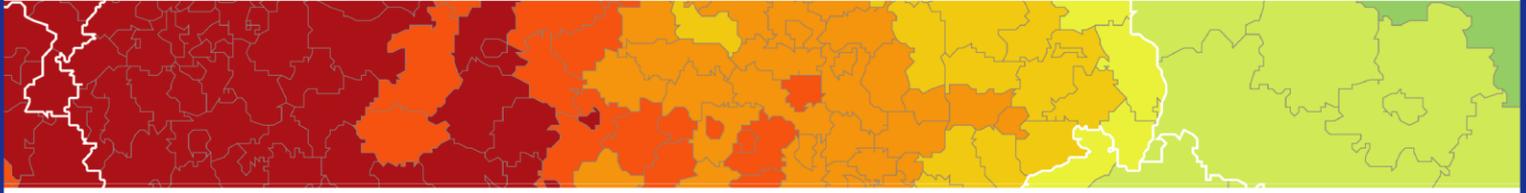
SPIMA – Spatial dynamics and strategic planning in metropolitan areas

Targeted Analysis
March 2018

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SPIMA – Spatial dynamics and strategic planning in metropolitan areas

Targeted Analysis

Annex 3 to Final Report
Figures, Maps and Tables
Version 5 March 2018

This targeted analysis activity is conducted within the framework of the ESPON 2020 Cooperation Programme, partly financed by the European Regional Development Fund.

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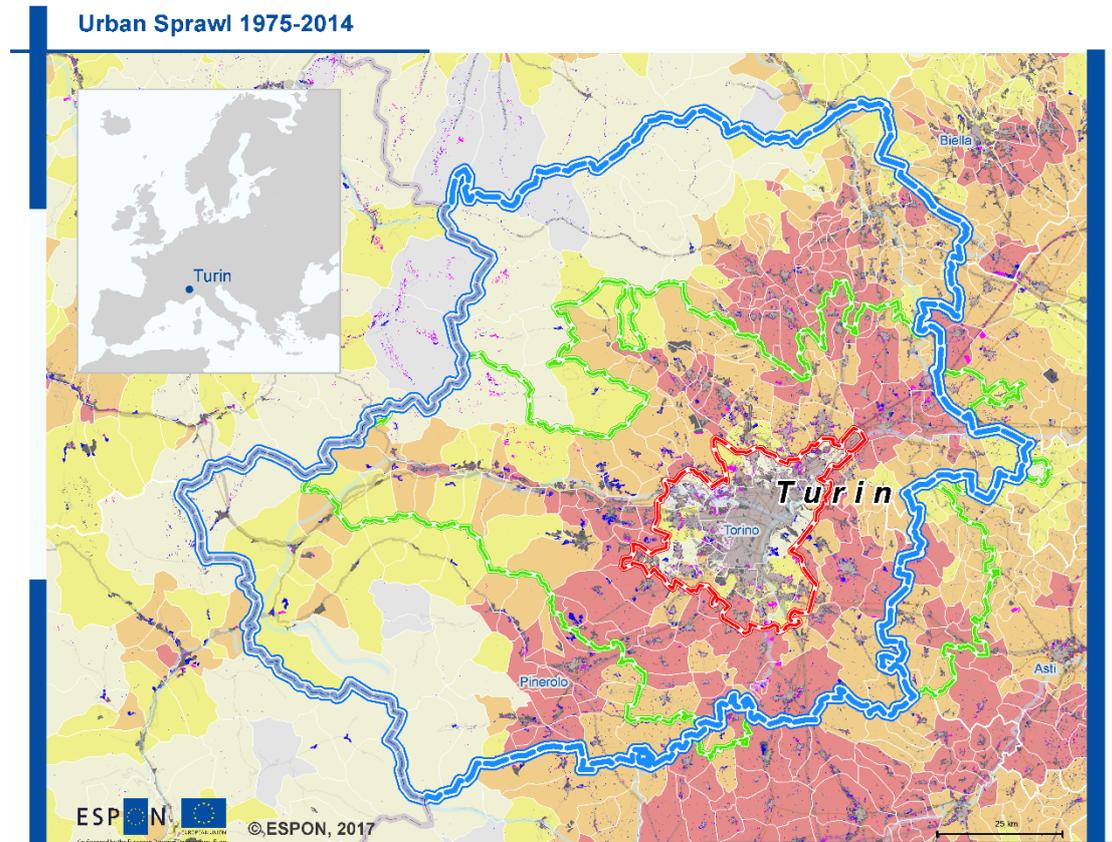
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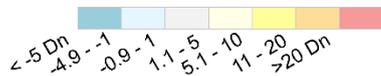
**SPIMA - Spatial dynamics and
strategic planning in metropolitan
areas**

2.7 Turin

Map 2.7 Urban sprawl in Turin MA (1990-2012)



Increase in Night Light Intensity 1992 - 2012



Territorial level: LAU2 (version 2011)
 Source: Geographical information system of the Commission (GISCO), 2017
 Origin of data: EUROSTAT, 2011
 © EuroGeographics for the administrative boundaries

GHS BUILT-UP Landsat and Sentinel-1 ~38m resolution
 (1975, 1990, 2000, 2014) & Corine Urban Land Cover
 (1990, 2000, 2006, 2012)

- non built-up area
- built up <1975
- 1976-1990
- 1991-2000
- 2001-2014

- MUA of the core city (ESPON 2013 Database)
- Metropolitan Development Area
- FUA of the core city (ESPON 2013 Database)
- National border
- Railroad
- Motorway
- Primary road
- Other road
- rivers

Source: Copernicus CORINE Land Cover (CLC 1990-2012); European Commission, Joint Research Centre (JRC); Columbia University, Center for International Earth Science Information Network - CIESIN (2015)

The map clearly illustrates that, due to the presence of the Alps in the north-west of Turin, the urbanization is mostly oriented to the south west region towards Moncalieri, Chieri, until Asti, and to the north-east towards Settimo Torinese, in the direction of Milan.

An exception concerns the expansion of the MA in north west direction, it is the recent case of Susa Valley, which connects the Pindemont region to France, where a new infrastructure corridor is under construction.

It results that just the 7.2% of the territory results urbanized (Table 1.1), against the 18.1% in average of the other analysed metropolis.

MDA and the FUA borders are delimiting the urban sprawl of Turin MA in the south and north-east direction from the opposite development of the other cities near the MA moving to Turin (e.g. Chiavasso). As it has been shown for Oslo, also Turin MDA is strongly divided in urban and natural area, showing two completely different situations included in the same border.

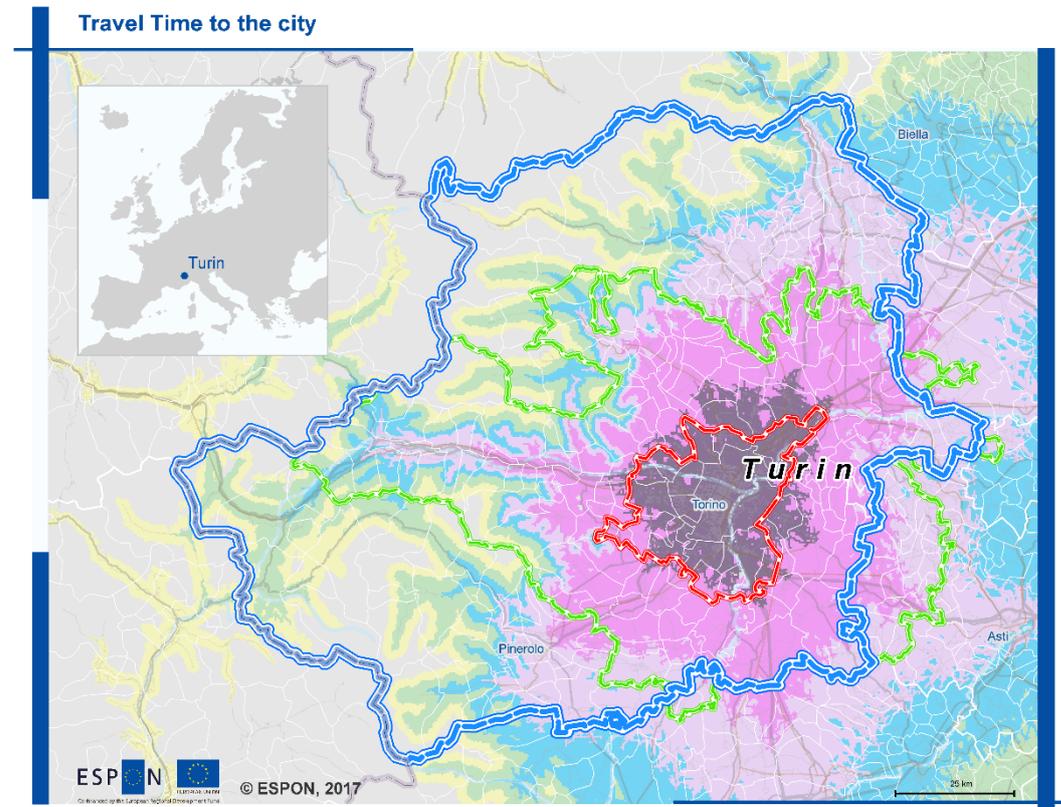
Concerning the nucleus of the MA, as it happens in Vienna and Prague, the MUA of Turin defines the core city of Turin (44.8% urbanised) and divides it from the most recent and intense sprawl outside its border. In terms of land use, the MUA of Turin results more similar to the other analysed ones, while MDA represents a particular case, which is mostly due to the inclusion of the mountainous area.

Figure 1.6, 1.4 and 1.2 demonstrate a shrink of the population density in Turin, which is mostly happening within the MUA; this confirms the above map illustrating the urban sprawl as mainly located outside the MUA border. The recent demographic trend might be linked to the economic recession of the past years (Turin MA has the lowest GDP relative growth of the considered cities), which lead Turin inhabitants to move outside the city centre.

The result is a constant migration and increase of population in the suburbs causing their urban expansion, which is accompanied by mobility and accessibility issues related to inefficiency of infrastructures.

3.7 Turin

Map 3.7 Travel time by car to the city centre in Turin MA



Tavel time by car to the city centre without congestion

Territorial level: LAU2 (version 2011)
 Source: Geographical information system of the Commission (GISCO), 2017
 Origin of data: EUROSTAT, 2011
 © EuroGeographics for the administrative boundaries

- <15 min
- 15-30
- 30-45
- 45-60 (1h)
- 1-1.5h
- 1.5-2h

- MUA of the core city (ESPON 2013 Database)
- Metropolitan Development Area (MDA)
- FUA of the core city (ESPON 2013 Database)
- National border
- Railroad
- Motorway
- Primary road
- Other road
- rivers

Source: authors' elaboration on ESPON Database (2013)

Turin MA, due to the morphology of its territory characterised by the Alps in the North West area, has an unbalanced accessibility which is mostly oriented towards the south east.

In fact, despite the recent sprawl towards the mountain area during the winter Olympic games in 2006, the accessibility of that zone is still low, due to the morphological issues and lack of further investments. The only exception is represented by the corridor in Susa valley connecting Turin with the French and, consequently with Lyon.

FUA border includes the area which better describes the accessibility of Turin, which is uniformly distributed around the city centre (even when distant from motorways), except for the alpine area.

In the south and north east of the MA, accessibility shows good values because of the nearby cities such as Chiavasso and Carmagnola acting as attractor poles for Turin infrastructures.

The MDA of Turin is oriented towards the Alpine zone and the eastern border represents an anomaly being particularly close to the MUA limit. For this reason, its border cannot be considered as effective as the FUA in describing the accessibility of the MA.

Turin city centre is accessible from the MUA borders within 15 minutes of travel time by car. Outside the limit, contrary to the current trends of the metropolitan cities, accessibility quickly decreases in correspondence of the most recent urban sprawl. Instead, in the north of the MUA, where sprawl is less intense, accessibility keeps having high values.

It might be concluded that the intensification of the built environment has not been accompanied with the right development of its infrastructures.

4 Tables interviews analysis

4.1 Key challenges

Table 4.1 Key challenges for metropolitan development identified by respondents per stakeholder area

Key challenges	Vienna	Zurich	Prague	Brussels	Brno	Oslo-Akershus	Turin	Terrassa	Lille	Lyon
Demographics										
Population growth	x	x	x	x	x	x		x		
Population decline							x			
Migration of population to suburban areas	x	x	x	x	x		x	x		
Spatial structure and development										
Suburbanization (urban sprawl)	x	x	x	x	x	x			x	x
Inefficient spatial planning process	x	x	x	x	x		x	x		x
Reallocation of businesses outside core area	x		x	x						
Sporadic sprawl due to lack of planning			x	x						
Pressure on land	x			x						
Missed opportunities for mutually beneficial developments between municipalities	x									
Need for multifunctional land use planning	x	x		x		x	x	x		x
Land price imbalances (i.e. suburbs - core city)	x		x		x					x
Achieving polycentric development		x				x	x			
Pressure from developers for urban sprawl			x		x					
Ensuring sustainable commuting patterns (dealing with free rider effect)	x		x		x					
Economy & finances										
Ensure affordable and good quality housing	x		x	x		x	x	x	x	x
Economic stagnation e.g. housing market							x		x	
Creating sustainable tourism opportunities		x					x	x	x	x
Taxation system does not support desired spatial development	x	x	x	x			x	x		x
Lack of funding for metropolitan development	x		x		x		x	x	x	x
Achieve economic growth and attractiveness	x			x			x	x	x	x
Social welfare										
Unequal job opportunities between different urban areas and among social groups			x	x			x		x	x
Deprived communities in inner city	x			x					x	
Increase in foreign population (inflow)	x			x			x			
Social segregation	x			x			x	x		x
Transport infrastructure										
Ensuring an efficient transport infrastructure, mobility and accessibility	x	x	x	x	x	x	x	x	x	x
Traffic congestion issues	x	x	x	x	x	x		x	x	x
Environment and quality of life										
Environmental quality				x			x	x	x	x
Regeneration of post-industrial areas			x				x	x		
Using local resources in sustainable way	x			x			x			x
Loss of agricultural land, agro-food resources			x		x			x	x	x
Conflicts of interest between urbanised areas and rural development context	x	x	x		x	x	x			
Nature and landscape preservation		x		x		x		x	x	x
Energy	x	x					x	x	x	x
Climate adaptation (floods risk etc.)	x		x		x		x	x	x	x
Institutional										
Lack of legitimacy and recognition of the MA	x	x	x	x	x	x	x			x
Reluctance of politicians to address MA issues, and constrains in election of MA political body	x	x	x	x	x		x	x	x	x
Need for multilevel collaboration	x	x	x	x	x	x	x	x	x	x

Key challenges	Vienna	Zurich	Prague	Brussels	Brno	Oslo-Akershus	Turin	Terrassa	Lille	Lyon
Achieving shared vision on strategic plans	x	x	x	x	x	x	x	x	x	x
Cumbersome or complex legal system		x	x	x				x		x
Fragmented administrative structures		x	x	x		x	x	x		x
Gap between strategic planning and implementation of metropolitan development	x	x		x	x	x	x			
Lack of leadership by regional and local governments for MA development	x		x		x					
Lack of understanding and/or commitment among municipalities on the mutual benefits of planning beyond their administrative borders.	x	x	x		x	x				
Lack of effective communication between too many small municipalities with administrative power	x	x	x		x					
Deal with inter-municipal/regional competition	x	x	x	x			x	x	x	
Internationalization of the MA relations							x		x	
Cultural										
Linguistic discrepancies between communities				x						
Accommodating multicultural communities	x			x			x			
Providing opportunities for the poorly educated				x			x			
Need for changing attitudes towards MA level of planning and development	x	x	x	x	x	x	x			
Cultural heritage	x	x					x	x	x	x
Total challenges identified										
Number of challenges per city	35	24	30	32	22	13	33	25	21	26
Percentage of total challenges per city	69	47	59	63	43	25	65	49	41	51

Source: Authors (2017)

4.2 Changes needed in the spatial planning practices

Table 4.2 Changes needed in spatial planning practices in order to meet the challenges of metropolitan development, as identified by respondents in each stakeholder area

Changes needed	Vienna	Zurich	Prague	Brussels	Brno	Oslo-Akershus	Turin	Terrassa	Lille	Lyon
Changes in the legal framework for planning										
Improve national spatial planning legislation and tools in terms of land consolidation and conservation for green spaces, recreation and agriculture areas		x								x
Change the spatial planning law to accommodate MA development issues			x		x			x		
Introduce rules for compliance of municipal land use plans with regional/inter-regional plans				x		x	x			
Regional authorities have to have power to override spatial plans of the municipalities					x					
Move municipal spatial planning to regional level				x						
Developing spatial plans at MA level					x					
Changes in the cooperation mechanisms										
Coordinate plans and decisions on spatial developments between different scales (region, municipality)	x		x	x	x	x	x	x	x	x
Establish financial incentives to support the cooperation of municipalities in spatial planning	x		x		x		x			x
Provide clear mechanisms for implementation of spatial planning strategies at the inter-regional level	x			x				x	x	
Provide a mechanism for involving municipalities in spatial planning at the MA level in order to prevent resistance and conflicts over land uses	x					x	x			x
Shared spatial planning between regions/districts	x	x		x	x					
Develop new tools to support the MA level of spatial planning (land funds, subsidies for housing, tax sharing methods, land acquisition and compensation)	x		x		x			x		
Establish regular communication and coordination between spatial planning departments			x				x			x
Understanding of the spatial plans among regions and municipalities						x			x	
Create pilot bottom-up projects to prove the effects of integrated planning and mutual cooperation	x		x	x	x					
Establish metropolitan knowledge-based organization to guide MA decisions by evidence				x						
Changes in the spatial planning approaches and practices										
Spatial planning needs to support the understanding of the territory's spatial dynamics, including limitations on growth, designation of areas for different functions	x		x	x	x	x	x	x	x	x
Changing attitudes of planners and other actors	x		x		x		x			x
Consider socio-economic and environmental impacts of developments on other regions/areas and beyond the borders of the city master plans	x		x	x	x					x
Establishing stronger spatial planning process at regional scale				x			x	x		
Link strategic plans at regional/inter-regional or MA level with a spatial plan at the same level to ensure actual implementation			x		x	x	x			
Change planning culture from a blueprint process to a visionary one which sets opportunities			x	x	x					
Have an overview of detailed zoning plans of all municipalities						x				x
Strengthen the capacity of the planners			x		x		x			
Make decisions on the MA delineation and planning								x		
Change old spatial planning approach from prohibiting-permitting approach and segregation of functions to integration of functions				x			x	x		
Consider reducing number of municipalities (amalgamation of	x		x							

administrative units) to optimize services and administration										
Total changes identified										
Number of changes identified per city	11	2	13	12	14	7	11	8	4	9
Percentage of total number of changes per city	41	7	48	44	52	26	41	30	15	33

Source: Authors

4.3 Following steps

Table 4.3 Following steps identified by respondents for enhancing an integrated planning approach and collaboration for metropolitan development in each stakeholder area

Following steps	Vienna	Zurich	Prague	Brussels	Brno	Oslo-Akershus	Turin	Terrassa	Lille	Lyon
Policy frameworks and law										
Involvement of national authorities to support MA development		x				x	x	x		
Set measurable targets at the EU level for MA development							x			
Make laws about MA body/mayoral elections				x		x	x	x	x	x
Develop and coordinate inter-regional public policies						x	x		x	x
Strategic plans and identity of the MA										
Have a developed strategic plan for the MA				x			x	x	x	x
Municipalities have to contribute to the strategic plan							x			
Improve implementation of current strategic plans				x		x			x	
Enhance recognition of the MA level of planning				x			x	x		
Achieve shared vision and goals		x		x			x	x	x	x
Enhance the identity of the MA and its purpose	x	x		x		x	x	x		x
Finances and funding opportunities										
Combine federal and regional support in investments; make agreements on finances, creating common financial tools	x			x			x	x		
Introduce financial stimuli to reward MA cooperation	x			x		x	x			
Use ITIs potential to boost first steps in MA planning			x		x					
Changes in the tax system	x		x							
Provide resources at MA level		x					x		x	x
Receive national funding (housing market)							x			
Access to European funding			x		x		x			
Spatial planning tools and practices										
Monitor the growth potential and opportunities, to identify places for growth (growth management approach)	x						x			
Exchange of data and surveys on how people live and behave, create common (MA-level) dataset			x	x					x	
Apply best practices and evidence-based knowledge				x			x			
More detailed planning in the framework of already existing planning possibilities (territorial studies, urban concepts)	x		x		x				x	
Collaboration process										
Start with smaller steps and pilot projects (bottom-up & top-down)	x			x	x		x	x		
Identify areas with the highest cooperation potential (e.g. transport, marketing) and fix large-scale projects	x				x					
Enhance communication between agencies at different planning levels in order to increase capacities (time, knowledge, resources)		x	x	x	x		x	x		x
Establish consultation bodies (e.g. boards, committees)				x		x				
Find common language between core city administration and other municipalities	x			x	x		x			
Create a common arena for discussions in an informal setting		x		x		x		x		x
Enhance collaboration between regional and municipal bodies	x	x		x		x	x	x	x	x
Organizations and governmental structures										
Establishing joint institutions/agencies at the MA level	x		x	x			x	x	x	x
Capacity building			x				x	x		x
Strengthen the legitimacy of the MA authorities							x	x		x
Strengthen the cooperation of municipalities (to create aggregates)	x		x	x	x	x	x	x	x	x

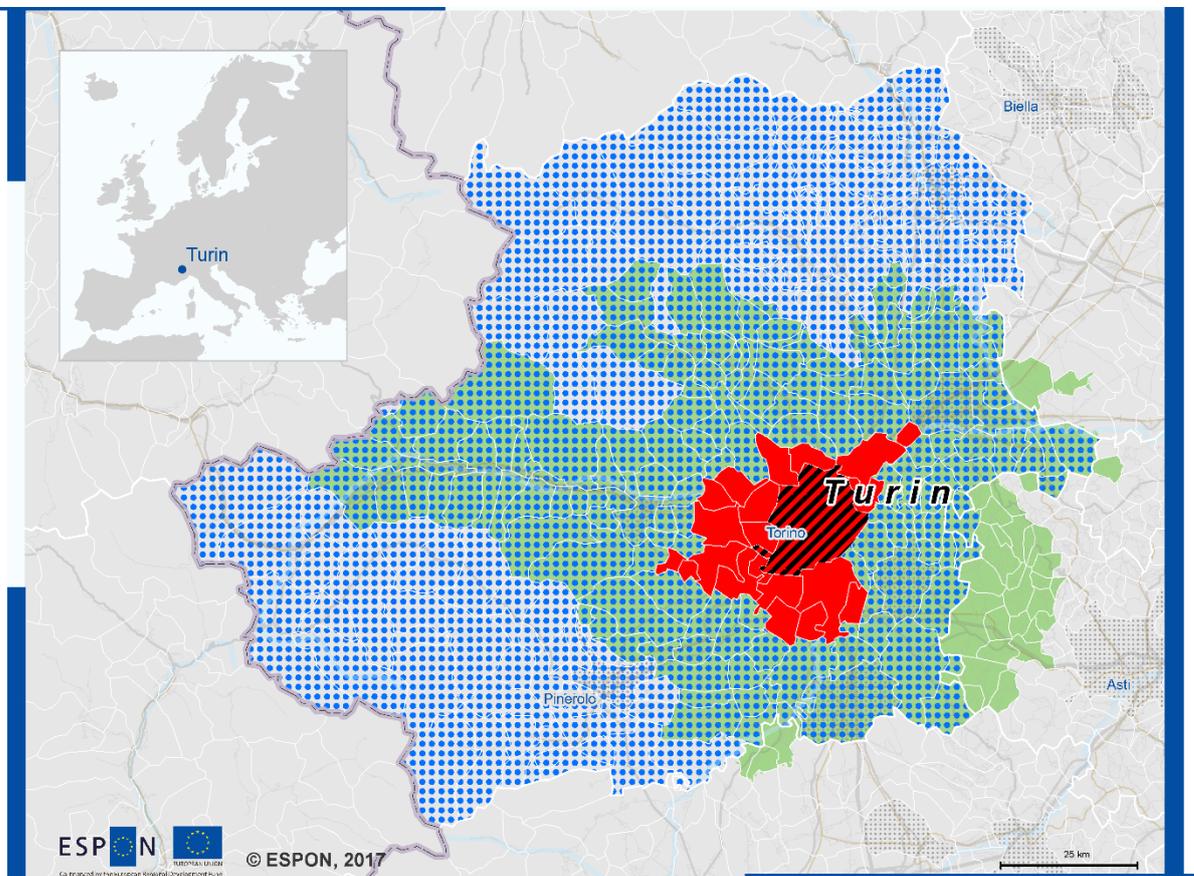
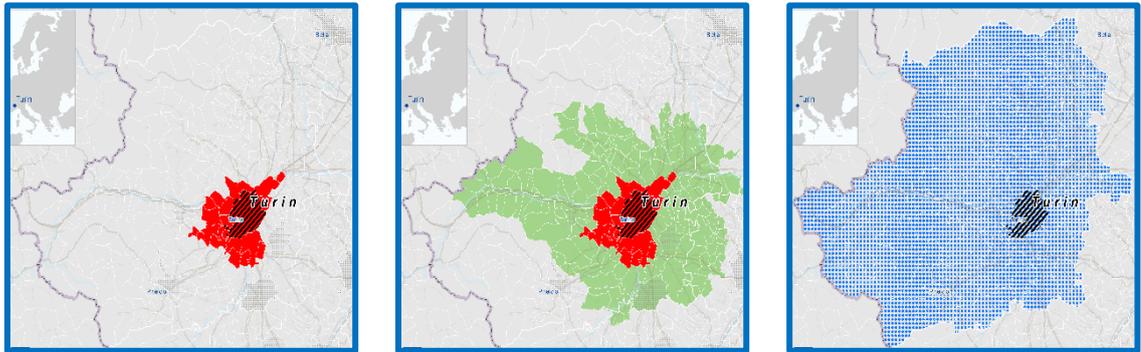
of municipalities as partners for bigger entities)										
Politics										
Establish political will and leadership	x	x	x	x			x	x	x	
Send clear messages to politicians				x		x	x	x		
Have an elected MA mayor							x	x		
Civil society and other actors										
Build awareness and involve citizens and NGOs				x			x	x	x	x
Involve private actors (businesses, trade unions, banks, industries)				x		x	x	x		x
Involve academics/universities							x	x		x
Total identified following steps										
Number of following steps per city	13	8	10	22	8	12	30	21	13	16
Percentage of total steps identified per city	34	21	26	58	21	32	79	55	34	42

Source: Authors

5.7 Turin

Map 5.7 Turin MDA

Delineation of MUA, FUA & MDA



-  Core city municipality
-  MUA of the core city (ESPON 2013 Database)
-  Surrounding MUA's (ESPON 2013 Database)
-  Metropolitan Development Area (MDA)
-  FUA of the core city (ESPON 2013 Database)
-  National border
-  Railroad
-  Motorway
-  Primary road
-  Other road
-  rivers

Territorial level: LAU2 (version 2011)
 Source: Geographical information system of the Commission (GISCO), 2017
 Origin of data: EUROSTAT, 2011
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If looking at the morphology of the territory, the case of Turin is similar to the one of Oslo: there is a clear and strong polarization between the urbanized area and the mountainous one.

In addition, the MDA border is based on the law, defining it as the border of the former province and it results unbalanced towards the Alpine zone in the North West, where urban development is extremely low due to geographical conditions. The same conclusions could be applied on the analysis of the accessibility of the MA, where it results that the FUA border describes better the spatial development and the accessibility of Turin MA.

References

ESPON (2013) ESPON Database. Available at: <http://database.espon.eu/db2/> (accessed October 2017).

ESPON (2009) OLAP cube v6. Available at: <http://database.espon.eu/db2/resource?idCat=21> (accessed October 2017).

Eurostat (2011) GEOSTAT. Available at: <http://ec.europa.eu/eurostat/web/gisco/geodata/reference-data/population-distribution-demography/geostat> (accessed October 2017).

Métropole Européenne de Lille (2017) Aménagement du territoire. Available at: <http://www.lillemetropole.fr/mel/services/amenagement-du-territoire.html> (accessed October 2017).

ESPON & Spiekermann & Wegener, Urban and Regional Research (S&W), (2015) TRACC - Transport accessibility at Regional/Local Scale and Patterns in Europe. Applied Research 2013/1/10; Final Report | Version 06/02/2015, Volume 2, TRACC Scientific Report

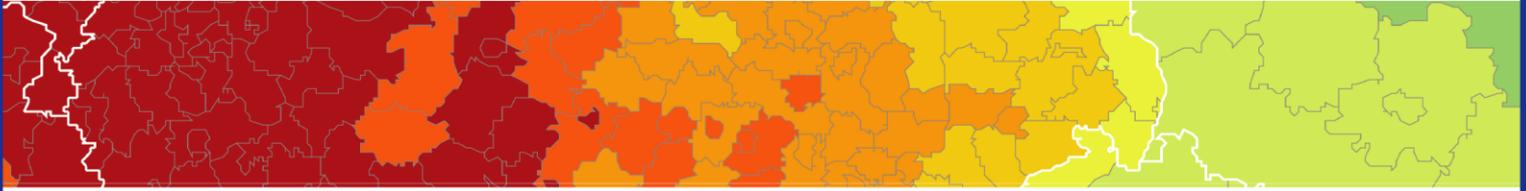
European Commission, Joint Research Centre (JRC); Columbia University, Center for International Earth Science Information Network - CIESIN (2015): GHS population grid, derived from GPW4, multitemporal (1975, 1990, 2000, 2015). European Commission, Joint Research Centre (JRC) [Dataset] PID: http://data.europa.eu/89h/jrc-ghsl-ghs_pop_gpww4_globe_r2015a
European Commission, Joint Research Centre (JRC); Columbia University, Center for International Earth Science Information Network - CIESIN (2015): GHS population grid, derived from GPW4, multitemporal (1975, 1990, 2000, 2015). European Commission, Joint Research Centre (JRC) [Dataset] PID: http://data.europa.eu/89h/jrc-ghsl-ghs_pop_gpww4_globe_r2015a

Milego, R., M. J. Ramos, F. Domingues, & C. Martínez (2014). OLAP technologies applied to the integration of geographic, thematic and socioeconomic data in the context of ESPON, Universitat Autònoma de Barcelona (UAB) Technical Report. 50p.; available at: <http://database.espon.eu/db2/resource?idCat=21>

Pesaresi, Martino; Ehrlich, Daniele; Florczyk, Aneta J.; Freire, Sergio; Julea, Andreea; Kemper, Thomas; Soille, Pierre; Syrris, Vasileios (2015): GHS built-up grid, derived from Landsat, multitemporal (1975, 1990, 2000, 2014). European Commission, Joint Research Centre (JRC) [Dataset] PID: http://data.europa.eu/89h/jrc-ghsl-ghs_built_ldsmt_globe_r2015b

UNEP-WCMC and IUCN (2017), Protected Planet: The World Database on Protected Areas (WDPA), November 2017, Cambridge, UK: UNEP-WCMC and IUCN. Available at: www.protectedplanet.net.

van Donkelaar, A., Martin R.V., Brauer M., Hsu N.C., Kahn R.A., Levy R.C., Lyapustin A., Sayer A.M. & Winker D.M.(2016). Global Estimates of Fine Particulate Matter using a Combined Geophysical-Statistical Method with Information from Satellites, Models, and Monitors. Environ Sci Technol. 2016 Apr 5;50(7):3762-72. doi: 10.1021/acs.est.5b05833. Epub 2016 Mar 24.



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7 Profile of the metropolitan area of Turin

7.1 Characteristics of the metropolitan area

7.1.1 Geography and demographics

The Metropolitan area of Turin, formally referred to as the Metropolitan City of Turin (MCT) is located in northwest of Italy, covering a territory of 6.827 km² (*Italian National Institute of Statistics* - ISTAT, 2016).

The territory is characterized by a rather fragmented landscape, 52% of which consists of mountains ridges. It is surrounded on the western and the northern fronts by the Alps and on the eastern front by the hills of Monferrato. It is located mainly on the western bank of the Po River, and on the other side with the border of France.

MCT is the largest provincial territory in Italy and the second largest in the Piedmont Region (after Cuneo). The area consist of consists of 316 municipalities

The distribution of the population on the territory is characterised by a higher confluence of inhabitants in the flat areas. By 2015 the population of the MCT is estimated to be approximately 2.2 million inhabitants (Istat, 2015). About 40% of the inhabitants live in the capital city of Turin. The population of the main city is about 890,000 (Istat, 2015) while the population of the urbanized area is estimated by Eurostat to be 1.7 million inhabitants. The population density of the metropolitan area is estimated at 334 inhabitants per km² while that of the capital city is about 6850 inhabitants per km². A key characteristic of the population distribution in the MCT is the small population sizes of the suburban municipalities. The vast majority of the suburban municipalities have fewer than 5000 inhabitants and many have fewer than 100 residents. There is a general population decline and a trend of migration from the core city to the suburban municipalities. The number of foreign immigrants has been increasing in recent years. The population of the municipality of Turin increased by a mere 0.3% in the year 2006, while the city's 'first ring' suburbs grew by 2.5% and its 'second ring' suburbs swelled by 10.2%, showing that suburbanization is continuing (IRES, 2007). Foreign immigrants have been moving into the city centre, compensating to some extent for the low birth rate and the outward flow of existing residents to the suburbs. Currently there are about 221,961 immigrants residing in the MCT. The metropolitan city of Turin as a whole gained up to 116,800 residents in the 15 years from 2001 to 2015.

7.1.2 Socio-economic development

Even though much of its political significance and importance had been lost by World War II, Turin became a major European crossroads for industry, commerce and trade, and is part of the famous 'industrial triangle' along with Milan and Genova. As of 2010, the city was ranked by GaWC as a Gamma World city. Turin is well known as the home of the Shroud of Turin, the football teams Juventus F.C. and Torino F.C., the headquarters of automobile manufacturers FIAT, Lancia and Alfa Romeo, and as host of the 2006 Winter Olympics.

The MCT is Italy's second largest exporting market (in terms of the value of exports) with a share of 5.2% of the national total. The GDP of MCT raised from 46 billion € in 2011 (ISTAT - Tagliacarne Institute, 2015) to 50 billion € of GDP in 2015 (Chamber of Commerce of Turin). Its industries include manufacturing and engineering; the production of confectionery and chocolate; and banking and telecommunications. There has also been growth in construction, tourism and service industries. There are about 232,000 businesses registered in the MCT area. These numbers represent just under 50% of all those in the Piedmont region and 4% of the Italian total. There were 21,987 foreign entrepreneurs, with the majority being non-EU. The difficulties that industry in Turin has faced include a long phase of industrial restructuring, a crisis in Fiat and the transfer of production to developing nations. The MA (Metropolitan City of Turin) is still heavily reliant on industry, with the automobile and metal-working and mechanical engineering industries forming the basis of the economy. The recovery of Fiat since 2005, which still employs 30,000 people in the Metropolitan city of Turin (Galasco, 2007), is playing a major role in the revival of the local economy.

Currently, there are new business and innovation programmes in development. Examples include the 'New Turin Economy Project', working to assist collaboration in the private technology sector, and public and private partnerships in establishing a medical centre for research and health care.

7.1.3 Strategic importance and history

Turin is the capital of the Piedmont region. Metropolitan development is a consequence of the urbanization of Turin city and its significance for northern Italian business and cultural activities. The high extension of the provincial territory, the different morphology and number of the municipalities has determined a historical, cultural and economic diversity of the territory.

The city has a rich culture and history. The Turin urban area served as a strategic frontier outpost during the middle Ages, a prized stronghold changing hands between some of Europe's great military leaders. Captured by the powerful dukes of Savoy in 1280, it became the capital of their expanding dominion through to the 19th century. Political stability and prosperity fuelled the demographic growth and economic diversification of the city. In 1997, part of the historical centre of Turin was inscribed in the World Heritage List. The city used to be a major European political centre and was Italy's first capital in 1861.

The Savoy footprint is the one which mostly defines the Turin identity and from which noble residences have been inherited from XII century to XIX century. In 1997, the residences of the royal house of Savoy in and around Turin was inscribed in the World Heritage List. Moreover, in March 2017 the Turin Hill and the Po river protected area was inscribed as a MAB Unesco.

There are also interesting examples of medieval villages such as Chieri (host of the Martini Museum of history of oenology); In Cavour, the magnificent Santa Maria Abbey hosts one of the oldest Romanesque crypt; Pinerolo is also a well-known municipality, named "Nice of Piedmont", with the National Museum of the Cavalry Army (which conserves uniforms and weapons from the 1500s to the Second World War) and the Gothic Church of St. Maurice on the hill, symbol of the city.

Turin currently hosts the University of Turin and the Turin Polytechnic University. In addition, the city is home to museums such as the Martini Museum of history and oenology and the Mole Antonelliana. Turin's attractions make it one of the world's top 250 tourist destinations and the tenth most visited city in Italy in 2008. The 2006 Winter Olympics contributed to Turin's attractiveness after a period of economic doldrums. The remnants of the tourist infrastructure built for the games, however, need to be revitalized in order to attract new tourism opportunities. In 2008, the Turin area was visited by 5.3 million tourists. There are several municipalities, such as Sestriere and Bardonecchia, which are famous for ski resorts.

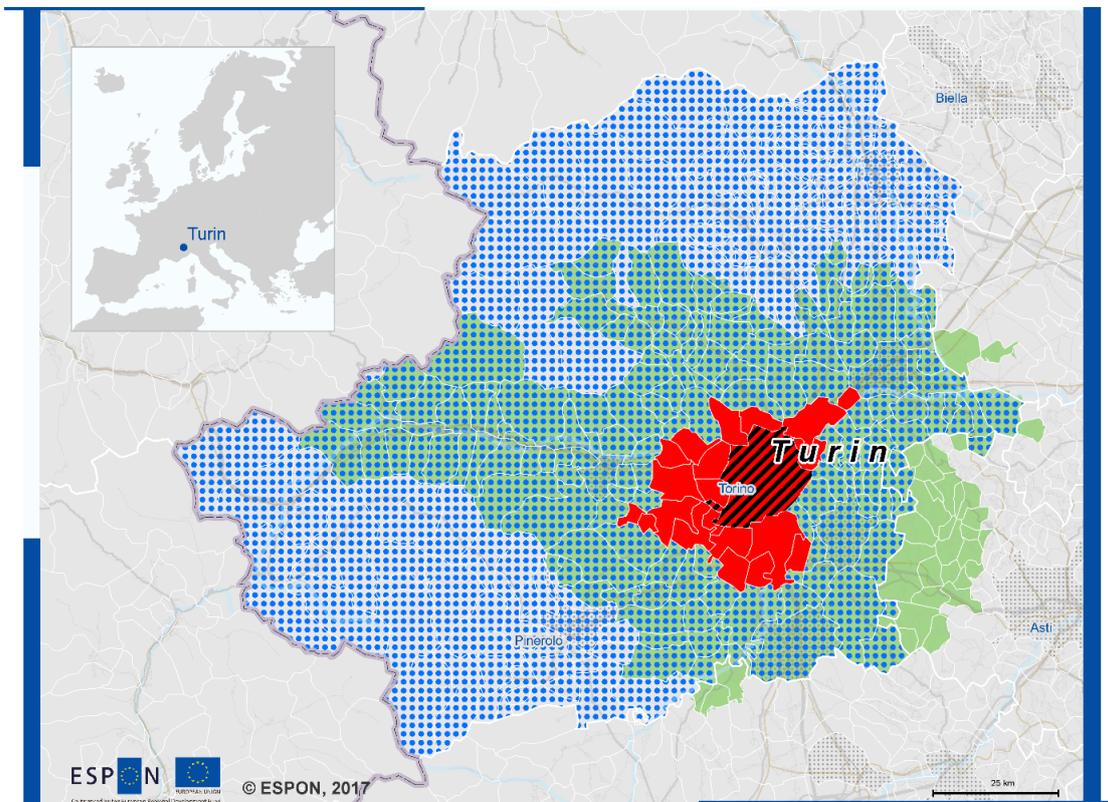
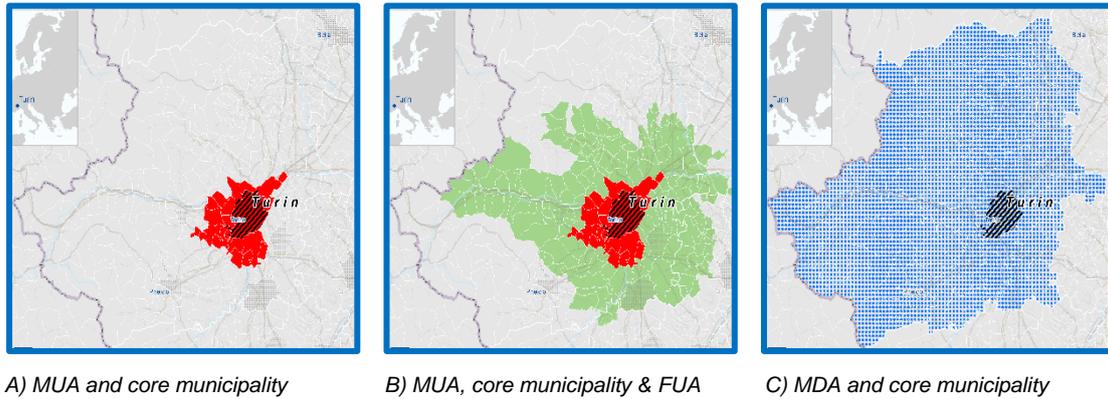
7.2 Spatial structure of the MCT (Metropolitan City of Turin)

7.2.1 Configuration of European FUAs & MUAs related to the MDA

As with the city of Oslo the MDA of Torino (the new "MCT area", see Map 7.1) stretches out further than the European FUA (ESPON, 2013), especially in northern and south-eastern direction. In southwest the MDA is relatively small compared to the FUA. While the area around the city of Chieri is part of the FUA based on commuting patterns, it is not part of the MDA (see 7.2.2). Both FUA and MDA are clearly polycentric with multiple MUAs inside and the MDA even encompasses multiple smaller FUA's. As in Oslo, the mountain areas of the MDA have a clearly low population density and large natural areas with occupation patterns limited to the valleys.

Map 7.1: Relation between FUAs, MUAs and the Metropolitan Development Area of Turin

Delineation of MUA, FUA & MDA



-  Core city municipality
-  MUA of the core city (ESPON 2013 Database)
-  Surrounding MUA's (ESPON 2013 Database)
-  Metropolitan Development Area (MDA)
-  FUA of the core city (ESPON 2013 Database)
-  National border
-  Railroad
-  Motorway
-  Primary road
-  Other road
-  rivers

Terrestrial level: LAU2 (version 2011)
 Source: Geographical information system of the Commission (GISCO), 2011
 Origin of data: EUROSTAT, 2011
 © EuroGeographics for the administrative boundaries

Source: authors (based on ESPON data, 2013)

7.2.2 The formation of the MA

Over the years various models have been considered for the delineation of the MCT. In 1954 the Inter-Territorial Plan (never implemented) proposed a scenario which included 24 municipalities. In 1972, the Decree of the President of the Regional Government proposed having the MCT include 53 municipalities. In 1991 the region of Piedmont proposed a model with 33 municipalities. In 2000, a model with 38 municipalities was introduced at the Metro Conference, where the first Turin Strategic Plan of the city of Turin was proposed. The MCT was formally established by the National Act no. 56 of 2014 which formulates in total ten metropolitan cities in Italy. Moreover in 2 of 5 Italian regions with special status (Sicilia and Sardegna) other 4 metropolitan cities were established. So, in total in Italy there are 14 metropolitan cities. In accordance with this law, on 1 January 2015 the MCT took the place of the former Province of Turin as a new administrative level. The area consists of 316 municipalities, including the capital city of Turin. The city of Turin is a key driver of urban development in the rest of the Metropolitan City of Turin.

The MCT is the largest in Italy, the fifth in population size and seventh in population density. The extension of the Turin core city to a metropolitan area of urban fluxes is aimed at maintaining the spatial dynamics of the territory. Despite the changing external and internal market forces, the geography of production and cultural activities in the neighbouring territories continue to be an important component of the Turin regional identity, albeit difficult in terms of functional and spatial integration. The spatial dynamics of the MCT are characterized by the following factors:

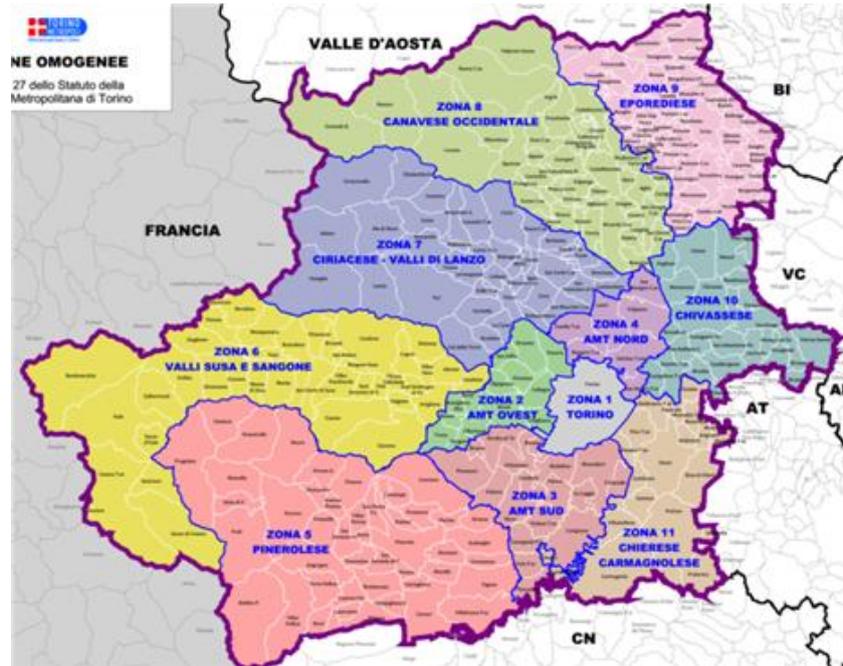
- sub-regional division based on homogeneity of different areas, the socio-economic conditions and identity (homogenous zones);
- strong spatially integrated areas, as in the case of proximity between districts and industrial areas;
- a certain degree of convergence between areas (spontaneous or imposed, e.g. by the old mountain communities, integrated territorial plans, unions of municipalities, consortia, etc.).

The new MCT area is envisioned as having a clear subdivision of spatial areas based on functionality. This subdivision aims to reduce local fragmentation between different smaller areas and achieve a more coherent spatial structure of functions and flows. Another advantage is related to achieving a more democratic representation of the different spatial areas within the large territory of the MCT.

As a result of a resolution by the Metropolitan Council of the City of Turin in April 2015, and in agreement with the national regulation, the MCT has been formally divided into 11 Homogeneous Zones (see map 7.2).

The formulation of these zones is the result of a complex analytical process, which considered many different boundaries and existing structures. These zones, however, do not comply with the OECD-EC typology of functional urban areas (FUAs).

Map 7.2: Homogeneous zones in the metropolitan city of Turin



(source: MCT Turin)

7.3 Governance of spatial planning

7.3.1 Institutional framework of metropolitan planning

The main goal of the MCT authority is to ensure sustainable development of the territory through planning at metropolitan-level. Such planning process is oriented toward ensuring social, economic and environmental objectives and network services, infrastructure and communication in the MCT territory. This goal is to be achieved by the coordination of the General urban plan (Piano Regolatore Generale Comunale –PRGC) covering 316 municipalities being part of the MCT territory.

The recently established MCT authority has a strategic planning role and a coordination function across the municipalities within the MCT and is responsible for the overall strategic development of the metropolitan territory.

While the municipal government could establish a coherent vision for the core city, the extension of this vision to the wider metropolitan region has been slower. National legislation from 1990 (law 142/1990) had aimed to promote the formation of metropolitan areas but lacked incentives for municipalities to give up their independence.

The former and currently ended initiative of a Metropolitan Conference in 2000, as proposed in the first strategic plan, led to the voluntary involvement of 38 municipalities in the Turin area. The Conference was designed to improve collaboration between municipalities through informal means, but its lack of formal powers (particularly its lack of a mandate for coordinating planning policy) proved a major stumbling block and meant it achieved little. In 2015 a formal mechanism for MCT planning was introduced by national law. This formal approach still needs to be implemented and prove its efficacy in being a coherent planning mechanism for the MCT. The formal reshaping of the provincial authorities into a metropolitan authority led to a need for reforms in this institution, including its jurisdictions, capacity and identity and the operational and political power assigned to it.

The planning system

The spatial planning process is embedded in a system with national, regional, metropolitan (formerly provincial) and municipal levels. In this system the regional authorities, the provinces and, if instituted, the metropolitan authority and the local authorities perform urban planning functions. The key instruments for implementing this planning process include:

- Regional level: the Regional Territorial Plan (PTR) and Regional Landscape Plan (PPR) formed by the Region, which considers the interests of the whole region;
- Metropolitan and provincial level: the Metropolitan General and Coordination Spatial Plan (PTGM) developed by the metropolitan authority and the Provincial Coordination Spatial Plan (PTCP) developed by the province authority.
- Sub-regional and/or sub-provincial level: for particular geographical areas or for the implementation of specific projects or complex policies: the Operational Territorial Projects (PTO), which considers specific sub-regional or sub-provincial areas which have special development interests.
- Municipal level: the General Urban Plan (PRG) developed by the 316 municipalities (included the Municipality of Turin).

Strategic planning

Strategic planning of the Municipality of Turin

The first strategic plan of Turin ("*Piano Strategico della città*"), and the first in Italy, was inspired by European models of strategic planning. The plan was developed in a complex process of consultations over a two-year period. The plan introduced the idea of integrated economic development, sets collaboratively determined objectives relating to the future of the city's economy, and aims to make the best possible use of available resources to achieve them (Kresl, 2007). The plan was used as the city's most important recovery tool. The development of the plan began in 1998, following the re-election of Mayor Castellani for a second five-year term. His administration was characterized by an unprecedented openness to new ideas and policy innovation, including learning from other cities' experiences via an active international networking programme. Inspired by the effectiveness of the strategic planning efforts of other European cities (Barcelona in particular), and galvanized by the severity of the economic and social crisis Turin faced, Castellani launched the city's own effort in 1998, making Turin the first Italian city to debate a strategic economic plan.

The deliberative process for formulating the strategic plan was, according to many local actors, if anything more important than the resulting document. The close-knit network of 57 local economic, social and political leaders which formed as a result proved important in implementing the plan, because of the ability to identify and assemble both the necessary actors and the sources of funding for each project. Through this process, municipal decision-making was opened up to civil society, enabling the municipality to draw on the expertise and resources of a wide range of actors: "The idea that underpins the strategic plan is that the local community can only gain maximum benefit through the combined action of public institutions and private enterprises. Accordingly, the strategic plan is nothing other than a framework for orienting the autonomous initiatives of a diverse range of actors, using a shared vision." (*Torino Internazionale*, 2007). The Municipality of Turin produced in total 3 Strategic Plans: the first one in the 2000, the second one in the 2006 and the last one in 2015.

Strategic Plan of the Metropolitan City of Turin

With the establishment of the MCT authority, preparation of the Metropolitan Strategic Plan (MSP)—commenced. In November 2015, the Metropolitan authority of Turin started the process for the preparation of the Metropolitan Strategic Plan based on a formally approved guidance document for the drafting of the plan. The draft document was presented to the Metropolitan Council and to the Majors of Municipalities Assembly in April 2016. On 5 June 2016, there was the election for the new mayor of the capital city of Turin who became automatically, by law, the mayor of the MCT. On the 1st January 2017, the process has been

restarted with the new political administration. The new document will be presented at the summer beginning to be approved by the end of the year.

The metropolitan strategic plan (MSP) sets the guidelines for metropolitan development for the whole territory. It aims to programme socio-economic and environmental development in the territory. It must also comply with the regional directives. The plan also outlines the key priorities, the resources and the time frame for implementation of the key strategic objectives. The MSP is mandatory and it has a three-year time limit while being updated annually. It has to be approved by the Metropolitan Council and the Mayors Assembly of the homogeneous zones.

The planning process is coordinated by the MCT authority, namely by the 'Office of the Plan' (the director is also the director of territorial planning, transport and civil protection). The Office of the Plan consists of a stable working group. There is an ongoing discussion about the most effective process for involving different stakeholders in consultations about the plan and how the plan should be related to other plans. After the adoption of the strategic plan, the organizational chart of the former provincial authority will be modified in line with its new jurisdictions and functions as a metropolitan authority.

Statutory planning

The mandatory strategic plan of the MCT is supplemented by two types of mandatory spatial plans, namely the metropolitan general spatial plan and the metropolitan Coordination Spatial Plan.

The metropolitan general spatial plan (PTMG) regulated by the National Act no. 56/2014) is the new spatial planning instrument introduced for the planning and management of the territory of metropolitan cities. This plan addresses communication facilities, service networks and infrastructure at the metropolitan scale and serves as the basis for the municipalities' plans. In accordance with the National Act no. 56/14, the key objectives of this plan are:

- Perform planning and governance the territory and the spatial structures including communication facilities, services and infrastructure networks
- Set objectives for the planning functions of the municipalities
- To coordinate the general urban plans
- Safeguard and enhance the environment

The plan is approved by the Metropolitan Council with due consideration of the opinion of the Mayors' Assembly of the homogenous zones and the opinion of the Metropolitan Conference.

General Urban Plan- Piano Regolatore Generale (PRGC)

Each of the 316 municipalities of the MCT is developing a General Urban plan. Those plans must be in compliance with the Metropolitan Spatial Plans. These plans are a key instrument in Italy, allowing municipalities to designate land uses for a ten-year period. It is the framework which makes physical transformation projects possible, and within which private developers and other agencies must operate.

Turin's Urban Plan, ratified in 1995, drove physical renewal through land use and infrastructure planning. Turin had no new General Urban Plan for over 45 years.

The local administration saw the General Urban plan as a way of achieving physical regeneration by re-zoning industrial land and thus encouraging private developers to revitalize these areas. To ensure the support and cooperation of the private and public sector bodies needed to deliver the transformation, the development of the plan was accompanied by extensive public relations work and consultation. In the 2017 the new political administration has started the revision of General Urban Plan.

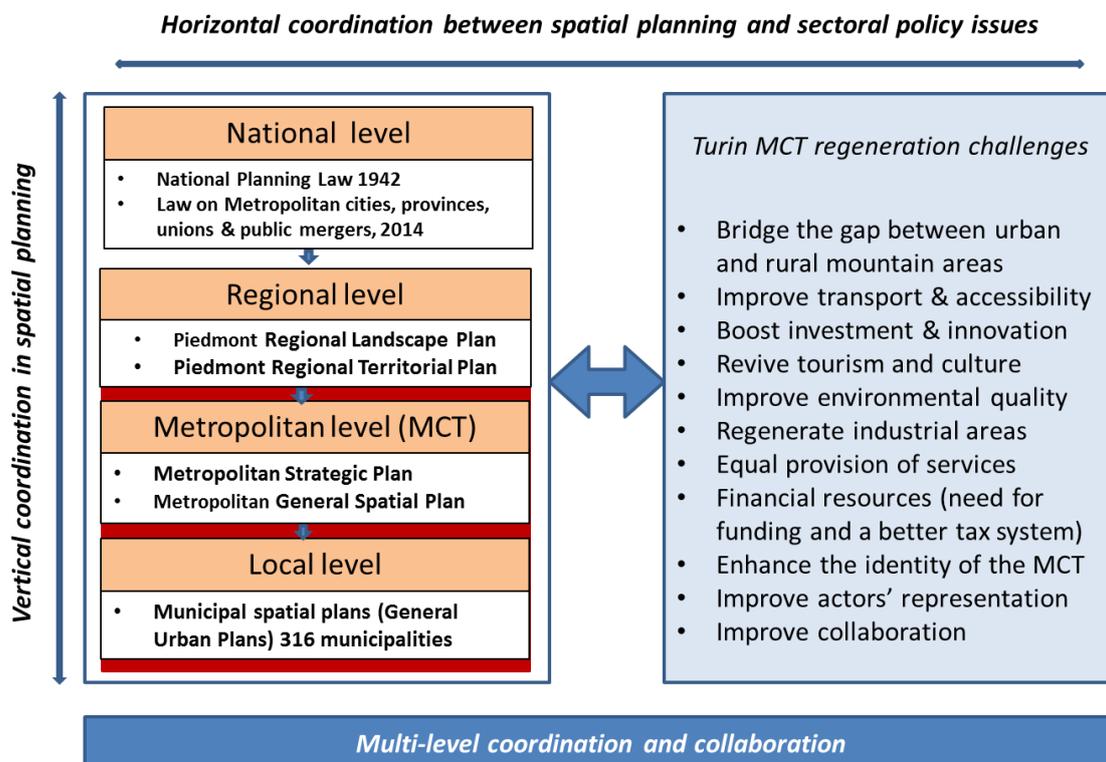
Collaborative planning

The collaborative process in pursuing metropolitan development until presently has not always been based on a systematic approach. However, there have been collaboration initiatives taking place by different actors, agencies and departments. The collaboration process has been taking place through the obligatory consultations between the Metropolitan Councils, Assembly of Mayors and Metropolitan Conference. In these legally based interactions, different plans are reviewed, approved and discussed with actors.

The coordination process at the level of the MCT requires clear relations and mechanisms of interaction between the different planning authorities. The entire process of collaboration between the key authorities of Metropolitan City of Turin, Piedmont Region and the Municipality of Turin, still has to be defined and is in process of deliberation. Particularly important issues with this regard are clear arrangements with regard to the process of shared decision making and balanced distribution of institutional and political power.

Figure 7.1 shows the administrative levels of planning and the challenges for the MCT.

Figure 7.1: Interaction between governmental levels and challenges for MCT development



Source: authors

7.4 Key spatial development challenges and incentives

There is not a very clear national urban policy in Italy, which often results in limited fiscal autonomy and tight budgets for the local authorities. Italian cities must therefore adopt an entrepreneurial do-it-yourself attitude to urban development and regeneration. Meanwhile, the decentralization-led reforms of the last decade introduced the direct election of mayors, which increased their powers and resources and gave them more responsibilities in planning.

Turin has to deal with its morphology and historical development, trying to connect its rural and alpine area to the city. Then, the city has to be transformed and rebalanced from an industrial area to a touristic and attractive one.

In this context, strong leadership, legitimacy and recognition of the metropolitan and local authorities appear to be critical for the success of Turin's regeneration process and the effectiveness of the new metropolitan development process. The key challenge in this is to introduce a regeneration strategy that is based on a flattening of hierarchies, cross-sector collaboration, and coordination of efforts between all 316 municipalities. Currently, new ways

of planning and innovative policy-making have been introduced with the spatial development of the newly established eleven homogenous zones of MCT. This fresh approach builds on an in-depth analysis of the local conditions and needs of the municipalities. The next step is for the metropolitan strategic plan to grow as a comprehensive and integrated approach to metropolitan planning and development, rather than being driven by political agendas alone. The new strategic plan needs to address the fundamental needs of the metropolitan community and provide solutions to key problems.

The Metropolitan city of Turin needs to build upon a locally-oriented, bottom-up approach to regeneration, rooted in strong cooperation between the new metropolitan authority, the local governments and local people. Political continuity is a key success factor that can ensure the commitment to a collaborative and integrated approach. The urban structure and environmental assets are attributes of the Turin metropolitan area that were extraneous during the industrial era and are now being revalued as assets on which to build its new post-industrial image. These attributes constitute core components of the city's appeal to the tourists and 'knowledge workers' that the area is trying to attract.

It is of key importance that Metropolitan city of Turin is recognized as the area operating in a new internationally competitive paradigm that requires a very different style of management from that of the industrial era. The local authorities need to be provided with sufficient capacity and resources to address the new strategic priorities of urban development in a wider perspective, outside the city and the region and across borders with other EU countries. Moreover, it is important to clarify the relationship between the municipality of Turin and the other 315 municipalities and the Metropolitan City of Turin in terms of power and authority.

The authorities of the Turin metropolitan city have to deal with a number of impediments currently influencing metropolitan development, including:

- The persistence of the economic crisis, causing the closure of productive areas and the loss of jobs in this sector
- The national economic policy which has introduced cuts in resources flow towards metropolitan cities and the withdrawal of a big part of its own economic revenue. The consequence is that the MCT authority is unable to perform its core functions and provide enough services to its citizens (e.g. provision of heating and maintenance of schools, street maintenance, etc.).
- Concerning the spatial development, Turin MA has received all the past industrial heritage which nowadays turned into abandoned post-industrial zones.
- The metropolitan city has problems with mobility and accessibility, especially in the rural areas because of the lack of efficiency of the infrastructures and, generally, of the yet unstable governance process. There is a political instability and insufficient administrative capacity to address all the challenges in the area, particularly these of transport, housing and environment.
- On the social side, there are number of issues that are occurring recently such as movement of population from the city to the marginal area due to housing prices and the low offer of jobs. On the contrary, a fast growth of immigrants moving in the city area and in its surrounding is taking place currently.

The problems above mentioned are less evident in the capital city, but they are very strong in the marginal and mountain territories.

Finally, concerning the incentives, the presence of a formal metropolitan body foresees an enhanced metropolitan governance process that can lead to a shared vision and as strategy. The preparation of a metropolitan strategy is in progress, however the distribution of competences for its implementation via the different levels of regional and local governments and spatial planning procedures still needs to be further clarified.

Another key incentive as seen by local actors is the involvement of the metropolitan area in European initiatives in order to exchange best practices and share of knowledge with other regional and local authorities.

Figure 7.2: The SOEI Matrix for MCT
(strategic objectives, opportunities, emergent problems and incentives)



Source: authors

References

Citta' Metropolitana di Torino (2015) Proposta del Consiglio Metropolitan no. 2. Available at: http://www.cittametropolitana.torino.it/cms/risorse/territorio/dwd/pianificazione_strategica/pdf/delib_approv_z_o_14_4_15.pdf (accessed October 2017).

Citta' Metropolitana di Torino (2015) Zone omogenee. Available at: <http://www.cittametropolitana.torino.it/cms/territorio-urbanistica/pianificazione-strategica/zone-omogenee> (accessed October 2017)

Citta' Metropolitana di Torino (2016) Territorio, pianificazione e urbanistica. Available at: <http://www.cittametropolitana.torino.it/cms/territorio-urbanistica/pianificazione-strategica/piano-strategico-metropolitano> (accessed October 2017).

ESPON (2013) Database. Available at: <http://database.espon.eu/db2/> (accessed September 2017).

ESPON (2013) *GEOSPECS -European Perspective on Specific Types of Territories*. ESPON and University of Geneva.

ESPON (2017) *SPIMA – Spatial dynamics and strategic planning in metropolitan areas, Annex 1 to Draft Final Report Profiles of the metropolitan areas*. ESPON.

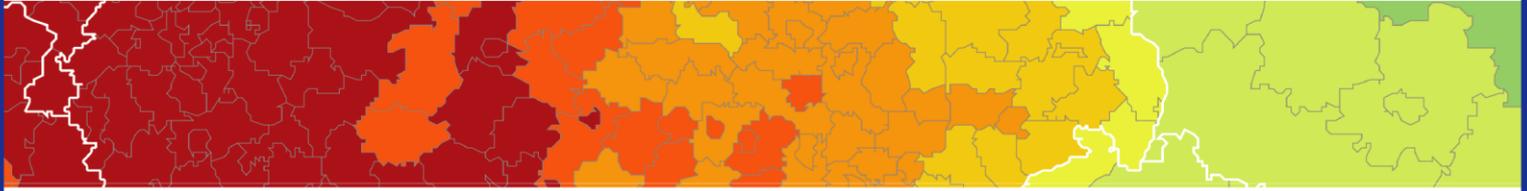
IRES (2007) Servizi e dati. Available at: <http://www.ires.piemonte.it/index.php/servizi-e-dati> (Accessed September 2017).

ISTAT (2015) Statistics. Available at: <http://www.istat.it/en/> (Accessed September 2017).

Statuto della città metropolitana di Torino (2015).

References

- Agence d'Urbanisme aire métropolitaine Lyonnaise (2016) *Lyon Métropole factfile*. Agence d'Urbanisme aire métropolitaine Lyonnaise.
- Agence d'urbanisme Lyon & Saint-Etienne (2013) *Le «Chapitre commune», Les Scot de l'aire métropolitaine lyonnaise*. Agence d'urbanisme Lyon & Saint-Etienne.
- Bright E & A, Coleman P R, and R, Amy N (2013) *LandScan 2012 Global Population Database*, Oak Ridge National Laboratory.
- Dijkstra L, Poelman H (2012). *Cities in Europe: the new OECD-EC definition*. European Commission.
- ESPON (2011) *ESPON 2013 database. Final report*. ESPON.
- ESPON (2013) Database. Available at: <http://database.espon.eu/db2/> (accessed September 2017).
- ESPON (2013) *GEOSPECS -European Perspective on Specific Types of Territories*. ESPON and University of Geneva.
- ESPON (2014) Database portal, Urban OLAP Cube, ESPON M4D. Available at: <http://database.espon.eu/db2/resource?idCat=21> (accessed October 2017).
- ESPON (2017) *Spatial dynamics strategic planning in metropolitan areas, Inception report*. ESPON.
- ESPON (2017) *SPIMA – Spatial dynamics and strategic planning in metropolitan areas, Annex 1 to Draft Final Report Profiles of the metropolitan areas*. ESPON.
- European Union, UN-Habitat (2016) *The state of European cities 2016: Cities leading the way to a better future*. London: PFD Media Group.
- Eurostat (2016) *Urban Europe. Statistics on cities, towns and suburbs*. Luxembourg: European Union.
- European Forum for Geography and Statistics, Geostat 3. Available at: <http://www.efgs.info/geostat/geostat-3/> (accessed October 2017).
- HibbardM, Freestone R and Sager T (2013) *Dialogues in Urban and Regional Planning, Issue 5*. Routledge Publisher.
- Kresl P, Letry D (2015) *Urban Competitiveness, Theory and Practice*, London and New York: Routledge.
- Loi MAPTAM (2014) De modernisation de l'action publique territoriale et d'affirmation des métropoles.
- OECD (2012) *Redefining "Urban": A New Way to Measure Metropolitan Areas*. 19 April 2011. DOI: 10.1787/9789264174108-en.
- OECD (2013) *Definition of Functional Urban Areas (FUA) for the OECD metropolitan database*. OECD.
- OECD (2017) *The Governance of Land Use in France Case studies of Clermont-Ferrand*. Paris: OECD.
- SPIMA stakeholder areas data base and Data request checklist (2017). Available at: <https://www.espon.eu/> (accessed October 2017).
- Wikipedia (2017) Métropole de Lyon. Available at: https://fr.wikipedia.org/wiki/M%C3%A9tropole_de_Lyon (accessed October 2017).
- Zanin C, Lamber N and Ysebaert R (2013) *Mapping guide-Cartography in ESPON 2013*. ESPON.



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Metropolitan area of Turin

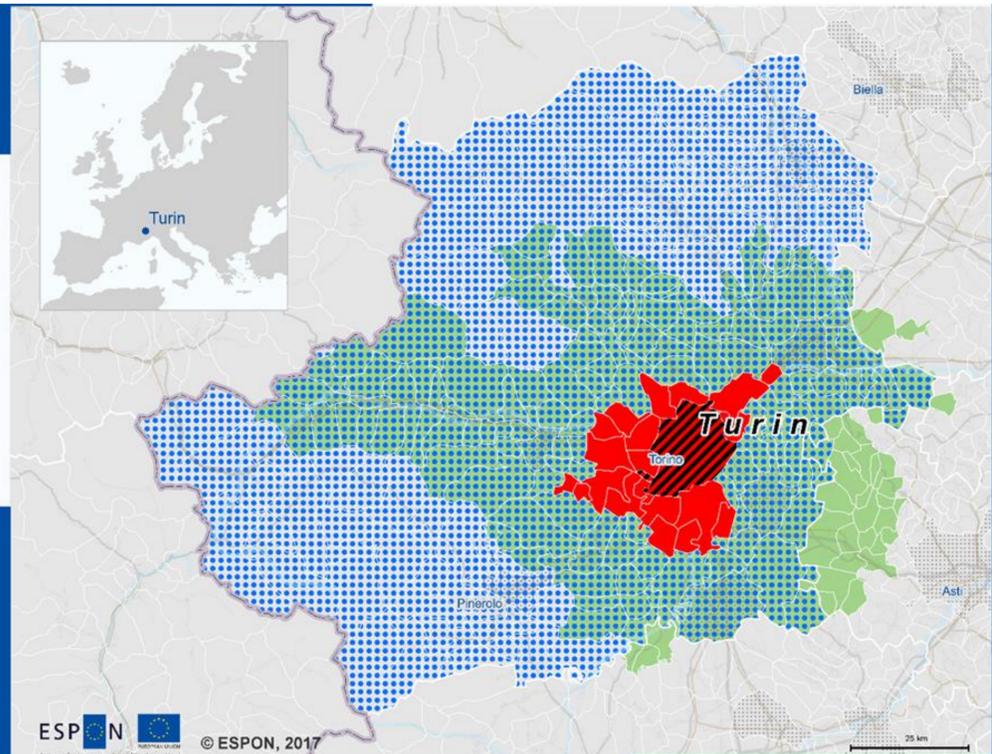
Spatial dynamics and strategic planning

The Metropolitan development of Turin

The metropolitan area of Turin represents the formal Metropolitan City of Turin. It is the largest area in Italy, the fourth in population size and seventh in population density. The extension of the core city to a metropolitan area of urban fluxes aims to support more balanced socio-economic development of the entire territory. Despite the changing external and internal market forces, the geography of production and cultural activities in the neighbouring territories continue to be an important component of the regional identity. Metropolitan development is a consequence of the urbanization of Turin city and its significance for northern Italian business and cultural activities. The extension of the provincial territory, the different morphology and number of the municipalities has determined a historical, cultural and economic diversity of the territory.

Metropolitan Development Area (MDA)

Map of the MDA of Turin



- Core city municipality
- MUA of the core city (ESPON 2013 Database)
- Surrounding MUA's (ESPON 2013 Database)
- Metropolitan Development Area (MDA)
- FUA of the core city (ESPON 2013 Database)
- National border
- Railroad
- Motorway
- Primary road
- Other road
- rivers

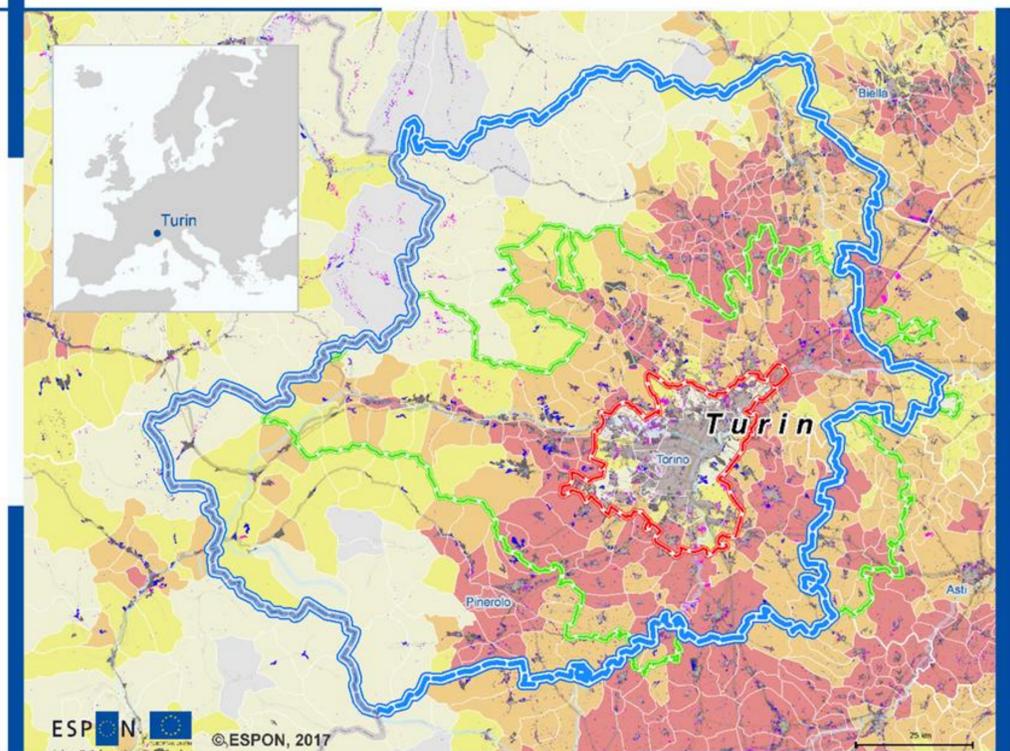
Territorial level: LAU2 (version 2011)
Source: Geographical information system of the Commission (GISCO), 2017
Origin of data: EUROSTAT, 2011
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Current spatial development challenges

- The key challenge of the MCT is to achieve a balanced urban development, while dealing with the fragmented morphology of the territory and connect its rural and alpine area to the city. Mobility and accessibility are key issues due to the need for efficient infrastructure.
- The core urban area of Turin needs transformation from an industrial to an attractive area with new opportunities for businesses, education and tourism.
- The metropolitan development needs to respond to the persistence of the economic crisis, causing the closure of productive areas and the loss of jobs.
- There is a need for dedicated financial resources for the metropolitan cities and a reduction of withdrawal of local revenues to the national government.
- Population dynamics need to be more balanced with regard to migration patterns between the core city and the rural areas with provision of housing and jobs.
- Introducing a urban regeneration strategy that is based on a flattening of hierarchies, cross-sector collaboration, and coordination of efforts between all 316 municipalities.

Map of the Urban Sprawl in MDA, FUA and MUA of Turin

Urban Sprawl 1975-2014



Increase in Night Light Intensity 1992 - 2012



Territorial level: LAU2 (version 2011)
Source: Geographical information system of the Commission (GISCO), 2017
Origin of data: EUROSTAT, 2011
© EuroGeographics for the administrative boundaries

- MUA of the core city (ESPON 2013 Database)
- Metropolitan Development Area
- FUA of the core city (ESPON 2013 Database)
- National border
- Railroad
- Motorway
- Primary road
- Other road
- rivers

- The Metropolitan development area of Turin, formally referred to as the Metropolitan City of Turin (MCT) is located in northwest of Italy, covering a territory of 6.827 km². It is characterized by a rather diversified landscape, 52% of which consists of mountain area.
- MCT is the largest provincial territory in Italy and the second largest in the Piedmont Region (after Cuneo).
- Since 2015 the MCT has been defined by law, and replaced the former Province of Turin, as the new administrative level.
- MCT consists of 316 municipalities, including the capital city of Turin. It is divided in 11 homogeneous zones defined by functionality and territorial criteria.
- The MDA is larger than the FUA especially in northern and south-eastern direction. In southwest the MDA is relatively small compared to the FUA.
- Both FUA and MDA are clearly polycentric with multiple MUAs inside and the MDA even encompasses multiple smaller FUA's.

Strategic priorities, opportunities and incentives

- The three year metropolitan strategic plan (MSP) aims to introduce an integrated approach to the socio-economic and environmental development of the territory. The plan outlines the key priorities, the resources and the time frame for implementation of strategic actions and projects among which are economic and environmental strategic priorities.
- The establishment of the territorial division in eleven homogenous zones presents a comprehensive planning approach that considers the local conditions, needs and opportunities in the 316 municipalities of the MCT.
- MSP and the metropolitan authority of Turin serve as key incentives in taking next steps in the implementation of the metropolitan strategic plan as a comprehensive and integrated approach to metropolitan planning.
- The involvement of the metropolitan authority in European initiatives and exchange best practices with other regional and local authorities is another incentive.

SOEI matrix of the Metropolitan city of Turin

Strategic priorities

- Environmental sustainability
- Transportation and mobility, accessibility
- Economic development
- Infrastructure, services and housing market
- Cooperation between 316 municipalities in the MCT area

Emergent problems

- Decrease in population
- Increase in foreign immigrants
- Post-industrial brownfield sites
- Decrease in house values
- Shrinking job market
- Air pollution
- Reduced traffic efficiency
- Insufficient accessibility to rural areas
- Market stagnation, unemployment
- Need for affordable housing (students)
- Insufficient capacity of public authorities
- Need for political continuity

Opportunities

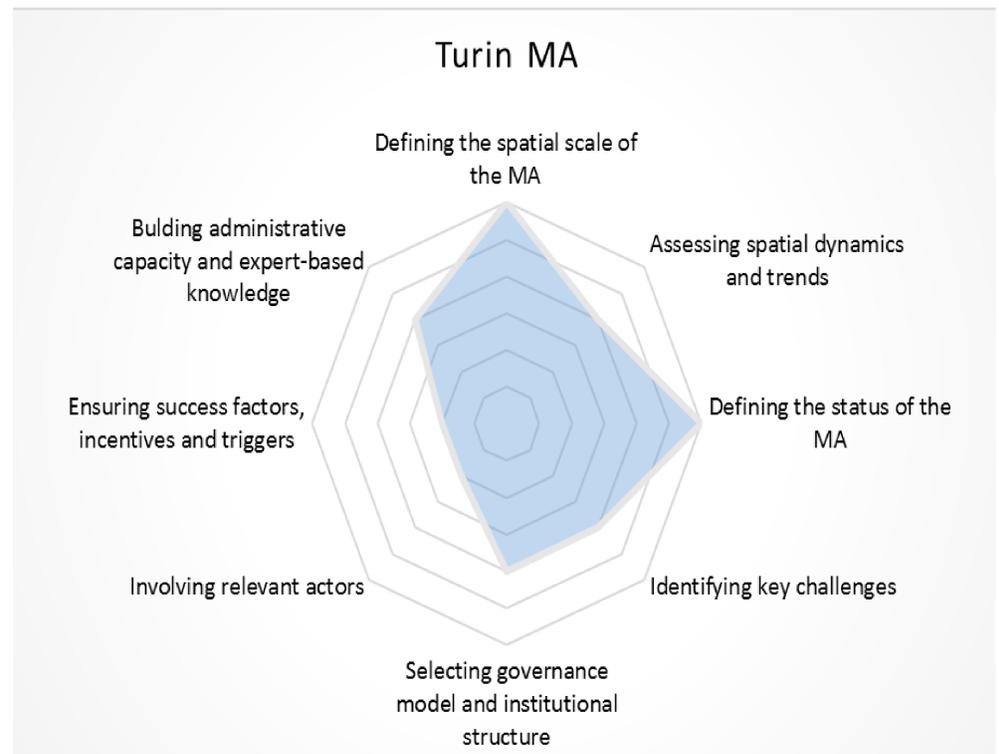
- Tourism and culture
- Green areas and landscapes
- Education: schools and universities
- Research and innovation investments
- Favourable businesses environment
- Favourable rural areas
- Proximity to the rest of Europe
- Local traditions
- New administrative framework

Incentives

- Legal framework for Metropolitan planning
- Authorised institutional body for Metropolitan planning
- Metropolitan Strategic plan
- Reshaped spatial structure in integrated homogeneous zones
- Availability of knowledge and expertise
- Involvement in European initiatives

Key recommendations and relevant policy tools

Progress in Metropolitan Planning Approach based on eight action areas



- In the implementation of a comprehensive metropolitan planning approach the MCT has achieved progress in the action areas related to the definition of the spatial scale of the area, and in the establishment of a clear status of the area (i.e. formal metropolitan area). Relative progress has been made as well as in the assessment of key urban trends in the MCT and in identification of its key challenges.
- The action areas that need to be further implemented are the involvement of relevant actors in the planning process, selection of the most suitable governance model, building the administrative capacity of the metropolitan authority and ensuring key success factors. Key issues to focus on in this process include:
 - Finalizing the strategic plan and setting up a clear governance process for its implementation.
 - Strong leadership, legitimacy of the metropolitan authority.
 - Building upon a locally-oriented, bottom-up approach rooted in strong cooperation between the new metropolitan authority, the local governments and communities.
 - Involving different stakeholders.
 - Clarification of the competences and shared responsibilities between the regional and local authorities.
- The recommended policy tools to be applied by the MCT in meeting its metropolitan development challenges are collaborative and coordinative policy tools.



References:

SPIMA final report <https://www.espon.eu/metropolitan-areas>