Making Europe Open and Polycentric

“An open Community of equals with common strong institutions”
_Treaty of Rome_ (1956)

“To seek Europe, is to make it!”
_Zygmunt Bauman, An Adventure called Europe_

EXECUTIVE SUMMARY

This document was produced by the “Scenarios and Vision for European Territory 2050” project (ET2050) of the ESPON Program. Updated information on ET2050 activities can be found at [www.et2050.eu](http://www.et2050.eu)
Presentation

- The purpose of this document is to discuss the future development of Europe. Alternative scenarios towards 2030 and 2050 are analysed, and a Vision for the European territory towards 2050, and political pathways to make it possible, are finally proposed.

- The document follows up a long tradition on prospective studies and policy documents in spatial development elaborated in Europe, in particular the ESDP (European Spatial Development Prospective, 1999), developed after the Europe 2000 and Europe 2000+ (DG VII, now DG REGIO, 1991, 1994).

Illustration 1 Representation of European territorial trends (Blue Banana, Brunet 1989) and representation of a Vision for a polycentric Europe (Bunch of grapes, by Kunzmann and Wegener, 1991)

- Recent European framework documents are taken as starting points: Europe 2020 Strategy, Green Paper on Territorial Cohesion, European Territorial Agenda 2020, Common Strategic Framework (CSF), ESIF 2014-2020 11 Thematic Objectives, as well as the roadmaps for Maritime Spatial Planning, Transport, Energy, and Resource Efficiency for 2050. Visions and territorial strategies defined at regional, national and trans-national scale in Europe, and neighbouring countries, were also considered, together with relevant European legislative documents, such as the Single Market Act II.

- A participatory process with ESPON Monitoring Committee members representing European Union countries and countries associated to the ESPON program was carried out in five scientific and policy-oriented workshops in Krakow (2011), Aalborg (2012), Paphos (2102), Dublin (2013) and Vilnius (2013).

- The European Parliament (Regional Development Committee - REGI), the Committee of the Regions (Commission for Territorial Cohesion - COTER) and the European Commission (DG Regional and Urban Policy - DG REGIO) were consulted; workshops and discussions were organized during 2013 and 2014 together with these institutions.

- Stakeholders and experts were consulted in a workshop celebrated by ESPON in Brussels (2013).
A Vision for the European Territory towards 2050

- **Territory still matters.** Europe is not a flat and empty space free from development constraints, but an old civilised territory made of hundreds of thousands of small towns and cities of all sizes, a predominantly man-made landscape, an extremely diversified mosaic of regions with different geographic characteristics and long memories behind.

- **2050 is almost here.** We live in a world of emerging economies, fast population growth and massive migrations towards large megalopolises, exponential increases of flows of information,
goods, energy and other resources. Hundreds of millions of people are moving from poverty to middle classes worldwide but, at the same time, absolute social and regional disparities grow also in the most developed world, also across European cities and regions. We face amazing technological prospects and major global environmental uncertainties. With increasing threats and opportunities, policy matters and political choices to be made nowadays will have a paramount importance to prepare a sufficiently satisfying future for all.

- **European visions for the future should not be territorially blind.** A Vision for the future of Europe needs to bring coherence to the fragmentation inherent to the actual administrative structure of Europe. Cross-border relations are still very much limited to those regions where always existed and European’s mental geographies remain heavily constrained by national narratives. Paradoxically, Europeans have become more mobile and social and economic relations between large cities across Europe and the rest of the world have increased exponentially in the latest twenty years.

- **The territorial dimension of European policies only begins to be developed.** The Cohesion Policy and the CAP have no yet the explicit political goals and targets that most other European policies have. Other sectors have developed policies with a more or less explicit territorial dimension such as Transport and Energy (e.g. with the Trans-European Networks), and Environment (e.g. with Natura2000).

- The policy aim of territorial visions, plans and studies is to contribute to give more coherence sectorial policies, as well as a provide for a more explicit territorial basis for the best allocation of European Structural and Cohesion Funds across territories and sectors.

- Even if each country, or region, have a different planning tradition and institutional framework to coordinate sectorial policies in their territories, and to deal with spatial development policies, there is a remarkable coincidence between by most National Spatial Plans, or Visions, in Europe favouring polycentric structures.

Illustration 3 Collection of territorial visions and plans (2014)

–most visions and plans included in the map are not normative.
Europe in the crisis aftermath. 2010-2030

1. The convergence process of the previous decade has been reversed with the Crisis. Southern countries, larger recipients of Cohesion and Structural Funds, have reduced their GDP during the crisis with very high official unemployment levels, especially among youngsters; at the same time, Central and Northern countries were stagnant or had small growth. Eastern European Countries have had different evolutions, some of them still growing at moderate level, like Poland, as well as Baltic countries, after carrying on drastic fiscal reforms.

2. The annual growth for Europe between 2010-2030 may be about around 1,90%\(^1\) in average if actual policies and technologies remain without significant changes, and the rest of the world follows a baseline trend. Growth in Europe is expected to be uneven territorially, with 44 regions grow less than 1% or even having negative growth over the whole period, mostly less developed Southern regions.

![Illustration 4 GDP Growth 2010-2030 according to MASST3 model for the Baseline Scenario](image)

3. The rise of emergent economies will result in a more multi-polar world, and companies in different European countries will take advantage of the growth of emerging markets differently based on their economic specialisation and historical links. The increase of exports to the rest of the world will make European foreign policy more difficult, since global national economic interest may diverge.

\(^1\) Forecast by MASST 3 model, Politecnico di Milano
4. The unemployment level in many European regions will keep driving salaries down in real terms at least for the next decade, and will also induce intra-European labour migrations towards more developed and aged regions, with higher salaries and better social welfare systems. More jobs could be created in Europe overall if the actual trend towards lower salaries continues for the next decade.

5. Ageing\(^2\) is and will be the most universal demographic trend across Europe, even if the scale of the phenomenon differs between countries and regions. Ageing will result on transformation of the provision of social services, such as health and long term care, for which demand may grow substantially. Silver economy will have to be absorbed into mainstream economic activities, both on regional and national levels.

6. New forms of sustainable tourism in areas such as education and training, health and leisure, cultural and business will emerge. Tourism will grow as much as middle classes grow worldwide. Many European cities and regions will become destinations for tourism and many cities and regions will have to be able to manage massive flows to avoid stereotyping their cultural and ecological assets.

7. Transport\(^3\) demand may be increasingly decoupled from economic growth at urban level and for short-distance mobility in most developed areas of Europe, but it is not likely for freight nor for passenger long-distance transport, particularly for intercontinental transport. Inefficiencies in the transport market inside Europe will gradually likely diminish because of the completion of the Single Transport Market.

8. Energy intensity will gradually decrease because of the more service oriented European economies, and the increased energy efficiency and savings. Carbon intensity (GHG emissions elasticity in relation to energy consumption) is expected to decrease due to improved technology, especially wind and solar sources.

9. Urbanization will increase often in the form of uncontrolled urban sprawl\(^4\). Main drivers for urbanisation are people migration from rural areas into cities and people using more residential space per capita. The crisis is inducing the relaxation of planning regulations. Conversion from agriculture to all other land uses is expected throughout Europe, with large changes from low productive lands to natural vegetation.

10. The impacts of Global warming are uneven in Europe, and also the response capacity is different, higher in the North and Centre of Europe (the most affluent regions) and lower in the East and in the South (the less affluent regions). Moreover, local characteristics, as for example the exposure of a region to natural hazards and the population density, are decisive for the vulnerability of a region.

Europe towards 2030: alternative scenarios

11. Alternative scenarios for the future development of Europe towards 2030 have been defined: “market based growth favouring large metropolis” (Scenario A), “public policies promoting secondary city networks” (Scenario B) and “public policies with more social and regional redistribution at European level” (Scenario C).

12. According to the forecast models applied, based on the assumptions for framework conditions and policies established, the B scenario is the most expansionary in terms of GDP (+2,30% yearly), followed by the A scenario (+2,20% yearly), and C achieves 1,80%. The higher expansion of growth in B can be explained by more efficient exploitation in this scenario of territorial capital elements, of local specificities, present in both large and second rank cities that allows local economies to achieve higher competitiveness.

\(^2\) Forecast by MULTIPOLES, IOM-CEFMR, Warsaw

\(^3\) Forecast by MOSAIC, Mcrit, Barcelona

\(^4\) Forecast by Metronamica, RIKS, Maastricht
Development based on second rank cities implies the existence of an integrated and equilibrated urban system, made of efficient second rank cities working with first rank cities in providing quality services and allowing the latter to avoid strong diseconomies of scale that can be of detriment to growth. The weak presence of equilibrated and efficient urban systems in the Eastern countries may explain why these countries register very similar growth rates between the A and B, being both the result of growth supported only by first rank cities.

13. The B scenario turns out to be the scenario in which at the same time the highest cohesion and the highest competitiveness are achieved, emphasising that the preconditions for development widely lie in a hugely differentiated and scattered endowment of “territorial capital”, made up of natural and artificial specificities, varied settlement structures, cognitive and relational assets at different degrees of complexity and development. All these elements – especially those that are not yet fully or creatively exploited – represent the assets and potentials on which any development strategy should rely.

14. The more detailed analysis for Cohesion countries in the East and South of the European Union reveals the structural unbalances of the fast economic development during the latest twenty years, and the difficulties these regions may have to catch-up the development level of central and northern European regions.

Europe towards 2050: Territorial Scenarios

15. The three scenarios developed for 2030 (A, B and C) have been redefined for 2050 in more explicit territorial terms. To deal with the increasing uncertainty of a longer time horizon, these three alternative territorial scenarios for 2050 are evaluated against different extreme framework socioeconomic and environmental conditions\(^5\). The purpose of the exercise is not predicting likely futures but assessing the alternative territorial strategies in terms of economic growth, regional disparities, land-use taken and the environmental impact because of transport activities, in energy and emissions. Next, the three territorial scenarios are defined:

16. The promotion and networking of European Metropoles towards 2050 (Territorial Scenario A) would involve the further development of capital and global metropolis, as well as existing global gateways. It follows to a large extent the Europe 2020 strategy of promoting global competitiveness of Europe by facilitating the economic development of the largest metropolitan areas of global importance in Europe, i.e. of the 76 Metropolitan European Growth Areas (MEGAs) defined in ESPON 1.1.1 (2005, 118).

17. The promotion and networking of cities towards 2050 (Territorial Scenario B) provides an image of the European territory in which economic and population growth, as well as most private and public investments, take place within national capitals and major regional capitals, and there is a geographic reorganization and specialization of global gateways. It follows the priority of the European Spatial Development Perspective (1999) and the two Territorial Agendas (2007; 2011) for balanced polycentric urban systems at the macro-regional or national scale for the 261 cities of European or national significance defined in ESPON 1.1.1 (2005, 114).

18. The promotion of small cities and less developed regions towards 2050 (Territorial Scenario C) provides an image of the European territory in which urban and rural territories form a mosaic of different regions and types of territories with identities nourished by local and regional governments able to cooperate in areas of common interest. This scenario involves a paradigm-shift and responds to the challenges of energy scarcity and climate change expressed in the Territorial Agenda 2020 (2011) by promoting small and medium-sized cities as centers of self-contained and economically resilient regions with more sustainable mobility patterns yet taking account of the necessary economies of scale of services of general interest and the prospects of an ageing society.

\(^5\) Forecast by SASI model, Spiekerman&Wegener, Dortmund
19. The results of the assessment carried out confirms that assuming productivity increases in the coming decades (because of both new technologies and better labour skills and organisation), as well as more resource efficiency avoiding transport and energy cost increases, redistributive policies at regional level (at the level of 0.4% EU GDP) will result in a significant reduction on disparity gaps while the overall growth is not affected. These results provide for the basis to define the European Vision.

20. The long-term average growth of Europe is not reduced by redistributive policies: Economic growth in the long run is not significantly affected by the promotion of any of the three strategies presented (A, B and C). Economic development mostly depends on technologic changes leading to increases in productivity, and public policies such as fiscal and monetary policy. Therefore towards 2050 scenarios A, B and C would result in a similar average economic growth for Europe as a whole, under the same framework conditions, meaning that, under these conditions, agglomeration economies will have in Europe a relatively minor role as growth driver.

21. Relative regional development gaps are significantly reduced by redistributive policies. Policies transferring resources into second tier cities and peripheral regions as defined in B and C scenarios are effective to reduce economic gaps without diminishing the overall economic growth of Europe, even if they are not above the current levels (0.4% of European GDP). A basic modelling assumption is that resources being transferred are allocated to services and infrastructures that effectively contribute to increase the productivity of the regions.

22. Absolute regional gaps will likely remain. Gaps are only reduced in relative terms; in absolute terms, the gap of nowadays hardly will be reduced unless much stronger redistributive policies (than the present 0.4% of European GDP) are applied.
23. **Polycentric territorial structures induce more balanced growth.** If polycentricity is measured by combining population size and economic growth distribution among the cities in a given region or country, then more polycentric structures provide for a better distributed growth in the long run. Where the most developed cities and regions within Europe cooperate as parts of a polycentric structure they add value and act as centres that contribute to the development of their wider regions. Polycentric territorial development policy should foster the territorial competitiveness of the EU territory.

24. **Land-use planning will face more pressing challenges.** Due to the attraction of the metropolitan areas, rural areas are not too much impacted by the expected land uptake if the (A) territorial scenario is applied. Also the development of high-rise buildings expected in this scenario will result in a densification of the urban areas and limit land uptake. The main threats of the large metropolitan regions are the diseconomies of scale, as well as a as large urban sprawl in the sub-urban environments of these metropoles, to be avoided by strict land-use regulation. Furthermore with a main focus on the metropolitan regions, there is a risk of depopulation of the countryside (abandonment of the less productive areas) and as a result good stewardship of the land. The main impacts of implementing the B strategy will be to balanced growth throughout Europe and the ability to keep cities land-use change manageable. Cities are expected to fulfil an important interaction with their hinterland and thus provide a balanced landscape in which both urban and rural areas can thrive. In the C strategy it is expected a bottom up approach to maintain the rural areas. Main benefit of Scenario C is the ability to maintain and protect valuable ecosystems, and enhance a vibrant hinterland. It is the scenario where most policy interventions in land-use management are required. Good stewardship of the land and cohesion are promoted through stimulating Less Favoured Areas. The main threat linked to the C strategy is an increasing fragmentation of the landscape due to less dense diffused developments throughout Europe.

**Territorial Vision: Making Europe Open and Polycentric**

25. **Openness** to the rest of the world and to the Neighboring countries is a necessary condition for all European cities and regions to take advantage of the development opportunities created by global growth and technologic progress. The long-term sustained development of the European territory is linked both to valorise and exploit endogenous assets and promoting a balanced developed as well as to remove internal borders, reinforcing co-development strategies with the Mediterranean and Eastern Neighbourhood, as well as further integrating European cities with the rest of the world. Making Europe Open requires to connect Europe globally and promoting co-development with Neighbouring regions.

26. **Polycentricity** is necessary to spread development opportunities across European cities and regions, promoting endogenous sustainable development, unleashing regional diversity and gradually diminishing regional disparities. A gradual evolution towards more polycentricity at all scales across Europe, sensitive to the geographic conditions of each territory, will achieve the best regional balance without diminishing the overall economic growth. Policies must be focused on city renewal, and networking, linking cities at both regional and global scale. Improving the sustainable management of resources in the requires from compact settlements, and smart cities. Making Europe Polycentric requires to unleash regional diversity and endogenous development as a mean to reduce regional disparities, to support a balanced urban structure and a sustainable management of natural and cultural resources.

27. **Making Europe Open and Polycentric** is the most convenient territorial strategy supporting the competitiveness, social cohesion and sustainability goals. The efficiency and quality of the European territory lies in networking cities of all sizes, from local to global level, as well as empowering people and local activities to valorise their own assets at European and global scale. The roadmap to make Europe smart, inclusive and sustainable, requires the European territory to become more open, and polycentric.
Pathways to make Europe Open and Polycentric

Pathways towards Connecting Europe Globally

The aim of the “Connecting Europe globally” policy-aim is providing efficient transport, energy and telecommunication networks to European cities and regions to make possible for them to valorise their own assets at European and at global scale.

28. The main political actions will be focused on completing the Single Market with the further liberalisation and harmonisation of the markets for network industries, internalising the environmental costs, supporting technological and management innovation as well as planning infrastructure extensions and progressing in the cooperation and integration with Neighbourhood Countries, North-America and the rest of the world.

29. The responsibility of the political actions lies mostly on European institutions and in international institutions (e.g. specialised United Nations agencies) as well as in large private corporations in the sectors involved. Local and regional institutions have the responsibility to develop consistent development strategies linked to their enhanced connectivity, as well as to assure the interconnections of local and regional networks with European and global networks.

30. In the short and medium-term, policies should favour the completion of the Single European Market, give more coherence to infrastructure planning at all scales and gradually remove the costs of non-Europe in the internal market for network industries. In the longer-term, policies should open-up European markets for network industries to global competition and internalise environmental costs as effective measures to enhance efficiency.
Pathways to promote co-development with Neighbouring regions

31. The aim of the “Promoting co-development with Neighbouring regions” policy-aim is further integrating Europe and Neighbouring countries, reducing the economic gap and valorising joint development opportunities.

32. The main political actions will be focused on enlarging the European Union, deepening the market integration of Neighbouring countries in general, linking and further developing transport, energy and telecommunication networks and giving priority to the integrated development of strategic cross-border areas.

33. The responsibility of the political actions lies mostly on European institutions and in international institutions (e.g. specialised United Nations agencies) as well as European countries and regions having borders with Neighbouring countries.

34. In the short and medium-term, policies should favour the gradual market integration, economic infrastructure investments and co-development plans for strategic cross-border zones. In the longer-term, policies should be addressed to deepening market integration and enlargement.

Pathways to unleashing regional diversity and endogenous development

35. The goal of “Making Europe regionally balanced” is to provide equivalent development opportunities among European regions. This entails taking appropriate positive discrimination steps towards less well-off regions.

36. To achieve this goal, main policy steps include the enhancement of the endogenous regional development potential, the improvement of regional infrastructure endowment, and the provision of an adequate level of services of general economic interest, especially in sparsely populated and less accessible areas. Targetted policy steps have to be successful to tackle issues faced by areas characterised by a specific permanent geographic or demographic handicap, such as islands, Arctic, remote (including ultraperipheral) or mountain areas.

37. The responsibility for policy action is shared between local/regional authorities and higher level authorities (i.e. member states and the EU). While mobilising all the relevant key-players in their respective region, the former have to conduct an on-going analysis of the challenges they face and their specific related needs. In line with the principles of the place-based approach, and account taken of the availability of financial means, the latter have to provide an appropriate framework to fund, supervise and adapt the local/regional development operations.

38. In the short and medium-term, Structural and Cohesion Funds have to be further reformed and better coordinated with Agricultural Funds to promote investments rising open endogenous development. In the longer term, cities and regions will develop integrated territorial development plans as a basis for intraregional cooperation and coordination of European sectorial policies.

Pathways to towards supporting a balanced urban structure

39. The main goal of the balanced urban structure is reinforcing secondary cities, all over the continent, as well as achieving a more networked development of the system of European cities, at regional and continental level, enhancing their worldwide influence.
40. **Main political actions** have to be focused on the promotion of a model of sustainable city reconciling prosperity, social welfare and environmental friendliness for each European city. City networking between metropolises and also between these and secondary cities, geared towards a synergetic model of sustainable economic development.

41. **The responsibility for policy action** lies primarily with local and regional authorities, including groupings of such authorities in metropolitan areas. National and EU authorities also have a critical role to play in their allocation of economic infrastructure investments.

42. **In the short and medium-term**, the urban dimension of the Cohesion policy is further developed including support to smart regeneration, including the renewing of neighbourhoods. **In the longer-term**, a consistent and formal system of cooperation between, and within, the European urban areas will beset up, involving metropolitan areas, cities/towns and their rural hinterland. The relevant policy steps are primarily taken at the level of functional areas, beyond administrative entities.

**Pathways to sustainable management of natural and cultural resources**

43. **The goal** is to protect and enhance natural assets and manage ecosystem services in a sustainable manner, both in more urbanised and less urbanised areas.

44. **Main political actions** that have to be taken are the reduction of uncontrolled urban sprawl and promotion of more compact urban development, with well-planned urban and peri-urban environments and good accessibility, minimising negative impacts of soil sealing or uncontrolled development in pristine natural areas causing habitat fragmentation, as well as the reduction of highly productive agricultural soils. Special attention should be given to the protection of land under urban stress in sensitive areas, such as on the borders of existing cities and in the coastal zones. The establishment of a network of green infrastructure with reforestation and the reclamation of agricultural land is necessary in both more and less densely settled and/or depopulating regions. Overall, land-use and territorial development measures are indispensable for mitigation and adaptation to Climate Change.

45. **The responsibility of the political actions** lies both with the European institutions and the local institutions. International collaboration in the management of ecosystem services, which include river basin management and flood control, air quality, carbon sequestration and food and bio-energy production.

46. **In the short and medium-term**, European Structural and Cohesion, as well as Agricultural Funds are reformed favouring landscape and ecologic planning and management, as well as promoting public investments to buy strategic land under urbanisation stress. **In the longer-term**, a Green Infrastructure Network is developed linking Nature 2000 areas together with areas protected for strategic purposes. Plans for Natural Protection and Management are adopted.

**A New Generation of European Cohesion Policies**

47. **A New Generation of Cohesion Policy is needed** to deal with the new challenges ahead. Structural and Cohesion Funds should be reformed following an stronger place-based approach, encouraging the development of integrated development plans in functional areas, empowering local and regional government to support more business-friendly environments and entrepreneurship. European funds have to be more sensitive to macro-economic cycles, as well as to the gradual opening of European markets to global competition. Structural and Cohesion Funds need to be better coordinated together with the Agricultural Fund for Rural Development (Pillar II, CAP). Transnational cross-border zones have to be promoted, such as the Baltic region, the Danubian region, the Black Sea, the Adriatic-Ionian region, the Alpine region, the West Mediterranean, as relevant geographic scales to define integrated spatial development policies.
48. **Solidarity funds** need to be created to support countries and regions facing higher costs because of the application of common policies, under conditionality rules. The main purpose of the Solidarity funds is the redistribution of **equalization funds** to compensate for extra-costs of implementing EU common priorities.

49. In the mid term, the challenge will entail drawing up an integrated strategy in the form of a Framework document applicable to the whole territory of the EU which would reconcile the objectives of territorial cohesion and competitiveness, and impose a set of territorial conditions on Community aid allocated to sectoral policies, incorporating territorial considerations into every stage of planning (diagnosis, choice of priorities, methods, monitoring, evaluation of results and impact). The spatial development integrated strategy would be an opportunity to better coordinate European policies, generating synergies among sectors, in particular European funds with explicit territorial dimension (Structural and Cohesion funds, Pillar II CAP), with infrastructure and market regulatory policies in transport (e.g. TETNs), energy (e.g. Electric Grid), or environmentally protected areas (e.g. Nature 2000). The macro-regional spheres of transnational cooperation constitute excellent laboratories for governance and could prefigure such a strategy: the example of the Baltic Sea region has much to teach us in this context. The aim goal is the optimal governance of structural funds for energy, transport, ICT and environment, matching decision and problem spaces.

50. **European Territorial Development may finally a European policy**, being a major issue for territorial governance, the coordination of sectorial policies and a more efficient allocation and management of European development funds. Acknowledging the diversity of the European territory and further customising policies and fund allocations will no be sufficient to face global development challenges and reduce the costs of administrative and sectoral fragmentation: there is a need for a shared strategic planning of the European territory, based on an overall vision of its future development to support the better coordination of European policies with regional development with local and regional spatial development plans. The aim is multi-level governance enabling territorial planning and cooperation.