

F. Europe 2030: First draft in direction of a proactive, roll-back scenario

Introduction

The roll-back scenario has a special status within the project, as it is a real 'political' scenario, or even a political 'vision'. As such it is not the result of 'pure' scientific work, but more the adaptation of the 'results' of the other scenarios to the needs of policy debate for the future of European territorial development. Today, this debate has found a leading principle in the notion of 'territorial cohesion', a concept defined only vaguely but which introduces the idea of thinking territorially about the state and evolution of Europe. It is this kind of thinking which should be the guiding thread throughout this scenario or vision.

Both the ESDP – at this stage still the main *territorial* policy document at European policy level – and the Lisbon/Gothenburg strategy – currently the main *general* policy document – have been built around the triangle of sustainability, although obviously with different accents. This triangle, composed of economic, social and environmental sustainability has to be understood as trans-scale, i.e. of relevance at the macro-scale across the entire ESPON space, at the meso-scale of the transnational cooperation areas and at the micro-scale of individual countries and regions. The aim of this proactive scenario is to present a harmonious combination of these three goals, including compromises where they are contradictory. Obviously, this might not be the only possible combination. However, the main aim of this document is not to show *the* one and only way, but to raise the issues and to provoke the debate on how Europe wants to evolve territorially in the future.

A major lesson learned from the baseline scenario and the two prospective roll-forward scenarios is that the challenges addressed by the current policies might not be the most, or at least not the only ones determinant for the future spatial configurations of Europe. Indeed, the following main challenges were identified:

- demographic challenge: ageing, a declining labour force and immigration
- accelerating globalisation
- a new energy paradigm
- accelerating climate change

Of these, only globalisation is somewhat addressed in the main policy debates and documents. Nevertheless, the other three will have a fundamental impact on Europe's regions and will, therefore, need to be addressed.

On the basis of a series of policy documents and in collaboration with the Monitoring Committee, the team has developed a list of options that currently define the policy goals at European level. We propose to use these policy goals as chapter headings for this scenario, to explore within each what Europe 'should' look like if these goals are fulfilled as much as possible in the next 25 years, and to identify the political path that might lead to this situation.

Prosperous, competitive and diversified economies

Territorial policies can only influence up to a certain extent the level of economic prosperity and competitiveness. By 2030, a number of evolutions in the global context have taken place which largely determine the competitiveness of the European economy. In order to maintain a prosperous, competitive and diversified economy in Europe, Europe has gained maximum advantages of the progress of internationalisation of the economy at world scale. Concretely, this means that Europe has definitely overcome its economic fragmentation and the related national egoisms with short-term view and that a large number of European world leaders have emerged in the fields of industry, services, energy and technological production. European enterprises are then

largely present on the other continents (especially Asia and Latin America), not only as suppliers, but also as managers and owners of a number of strategic sectors (for instance renewable energies, biotechnology, aeronautics, privatised services etc.).

Within Europe, the economic structure has considerably changed, compared with the early 2000s, with activities mainly in trade and service sectors, such as finance, research, and education, but also in high-level technologies, such as nuclear fusion and renewable energies, nano-technologies, transport, biotechnologies and materials. A large number of second-rank industrial activities with low or intermediate technology have disappeared.

The further harmonization of services, taxation and financial rules across Europe has provided for a fairly level playing field across the ESPON space, allowing access to capital at more homogeneous conditions than before. In those areas where market forces are not sufficient, public capital investment funds have been set up.

Economic constraints related to energy supply have been minimised, although they are significantly higher than in the early 2000s. Alternative technologies have been developed and the sector of renewables has been systematically promoted. Energy efficiency has been significantly increased in most sectors.

The free movement of people has been ensured, so that no more constraints and obstacles to migrations within the EU exist, except a number of remaining cultural differences which have however been alleviated.

Territorial policies allow the promotion of specific territorial and regional potentials, the diversity of which requires decentralised approaches which may depart from more global strategies. Endogenous resources are more systematically exploited and the development of niche productions more efficiently promoted. Territorial policies also contribute to minimise the impacts of evolutions which may have indirect detrimental economic effects, such as the impacts of climate change, of the changing energy paradigm, of population ageing.

A prerequisite for prosperity and competitiveness is also that high levels of productivity have been reached, combined with a sufficient amount of qualified labour force, despite the process of population ageing which has affected most regional labour markets in Europe. Stronger, but selective immigration has been necessary, accompanied by efficient integration policies.

In such a context, the European territory has changed, compared with the situation in the early 2000s. Differences in GDP/cap and incomes/cap are smaller than in 2005, with Eastern European countries and other remaining poor peripheral regions closer to the European mean.

Even though the pentagon is still the economic heart of Europe, other dynamic areas have developed, representing global integration zones which provide the critical mass necessary to provoke agglomeration economies and thus attract global-level investments. These are the South of the Scandinavian countries and the Baltic states, the triangle Dresden, Vienna and Budapest and the South of France in combination with Catalonia. These areas have high-quality transport (notably HST) links between their main metropolitan areas. Ireland has achieved to maintain a buoyant and robust economy, despite its problems of peripherality and accessibility.

Economic activities are more concentrated on wider metropolitan areas, including their rural surroundings. The freedom of movement has favoured migrations. This has led to stronger concentration of population in the different global integration zones, but migration still has been limited as the immaterial economy and new communication systems have offered many opportunities for work in less central areas. Also through the existence of several high-level integration zones, the movements are more dispersed. Europe has acknowledged its role as an immigration area and has received every year an important number of legal migrants. These

migrants have access to the same education and training programs available to European citizens, accompanied by language classes.

Rural areas are also quite different from what they were in the early 2000s. A significant number of them has benefited from the residential economy resulting from the inflow of retirees. The most fertile ones are intensely used for the production food and of energy crops. Environmental impacts are mitigated by strict regulations and controls. Other rural areas have been left to nature in order to create large biodiversity reserves, often available for 'soft' recreation. Most public services are available online, but those that imply a personal contact have been decentralised in a flexible way (e.g. post and administrative services offered in local stores).

The number of international air transport hubs has increased slightly, now including (in addition to London, Frankfurt, Paris, Amsterdam and Madrid) Warsaw, Vienna/Bratislava, Stockholm and Barcelona. These hubs are directly linked via HST to the other metropolitan areas in their respective macro-regions. These cities are also the entry points of international telecommunication networks and thus play a major role as gateway cities between Europe and the rest of the world.

What is needed to make this possible ?

a) General policies:

- support to the creation of European world leaders in industry, technology and services;
- significant public and private investment in education and training (including mainstream school system);
- support to increasing the employment rate of the European population;
- policy of selective, but substantial immigration;
- active integration policies for immigrants and groups originating from immigrant families
- significant public and private investments in new technologies, research and R&D, but also in other productivity-enhancing measures (organisational, IT-use, etc)
- strong political push at global level for minimal social standards (EU exports its social model, instead of importing the US model)
- proactive energy policy to make European economy less dependant on imports

b) Territorial policies:

- identification and promotion of the territorial potentials of European regions
- particular support policies at European level for certain technology clusters in specific locations (implying a European-level governance of industrial policies)
- decentralisation of public high-level education
- infrastructural support to the development of new global integration zones
- development of transport links to peripheral areas that are less dependent on oil (i.e. railroad)
- development of human capital in new global integration zones (language, area-specific training, etc.)
- diversification of touristic offer and other economic activities in areas subject to heavy impacts of climate change (mountains, coasts)

Innovative knowledge society

Europe's economy in 2030 is largely based on knowledge creation, adaptation, diffusion, etc. Its strength is the high level of education and skills and its citizens' capacity for cultural adaptation, thus serving as an intermediary between the large more mono-cultural blocks such as China and NAFTA.

European research centres or specialised technology clusters of excellence exist in the different integration zones. They are supported by a high level of public and private investments.

Information created in each of them is rapidly diffused and transferred to other European regions through active public policies, linking in universities and enterprises. Much of this is done via intensive and imaginative use of ICT, wireless broadband communication (combining telephone, television, internet, etc) access being available at very affordable cost across the entire territory, just like electricity or roads. The use of these ICT tools is generalised in all different sectors of economic, administrative and private life.

A significant effort is made to transform innovation and new knowledge into products (manufacturing industries, technological products) in the context of European enterprises.

Individual careers and life-choices are accompanied by an important offer of easily accessible and affordable continuous learning opportunities, combining a heavy use of long-distance technologies with very personalised tutorship in which experienced members of society transmit their knowledge and experience.

The intensive use of decentralised material production facilities, such as personal or neighbourhood fabricators, allows a partial decoupling of economic growth and production from transport.

What is needed to make this possible ?

a) General policies

- significant public and private investment in education and training (including mainstream school system), including important levels of scientific and technological training
- significant public and private investments in new technologies, research and R&D
- significant support to the transformation of new technologies and knowledge into tradeable products

b) Territorial policies

- decentralisation of public high-level education
- complete territorial coverage of affordable broadband wireless communication networks
- deliberate localisation policies at European level for certain technology and research clusters

Sustainable transport

The impact of the new energy paradigm on transport systems is strong. While new technologies have emerged (hybrid car engines, fuel cell engines), dependence upon oil is not eliminated and new patterns of production and settlement organisation limit the intensity and length of transport flows. The rapid move towards a more immaterial economy has reduced the flows of manufactured products, especially those from heavy and low-technology industries. As already mentioned, the intensive use of decentralised material production facilities, such as personal or neighbourhood fabricators, allows a partial decoupling of economic growth and production from transport. This is accompanied by the existence of an extensive network of high-speed public transport infrastructures across the territory, and cheap and frequent local public transport both in metropolitan and in rural areas, as well as the intensive use of ICT in work, education and leisure. Many individual trips are done in public transport systems, also because the combination of energy prices and pricing/taxation systems creates prohibitive barriers to 'unnecessary' individual trips by car.

Even though the transport system is dominated by the main links between metropolitan areas, strong secondary networks link the intermediate spaces. Frequent inter-modal links for freight have been developed. Inland waterways play a particular role here, too. Important maritime links exist for freight, with railway connecting the ports to the hinterland. Cost has made long-haul road transport quite prohibitive, and so most trucks are used for local distribution.

All through the transport network, national boundaries are inexistent as transport technologies are harmonized and border controls abandoned.

What is needed to make this possible ?

a) General policies

- support to technological development in the transport sector to reduce the dependence on oil as well as emissions
- taxation and pricing policies

b) Territorial policies

- complete territorial coverage of affordable broadband wireless communication networks
- important investments in public transport networks, both long and short distance
- investments in multi-modal platforms in strategic locations
- better coordination between the development of settlements and that on transport infrastructures and services

Balanced distribution of population, wealth, cities, etc.

Some areas in Europe have much lower population densities than 20 years ago. These areas are used as biodiversity reserves, many of them covered with more or less natural forests, or used for intensive industrial agriculture or large-scale wind energy production.

The proportion of population living in cities has risen, especially in the Eastern countries. Small and medium-sized towns play the role of decentralised administrative and service centres, linked to the more rural areas by public transport systems and to the larger metropolitan areas by fast railway or bus connections.

In most areas birth rates are at replacement level, and sufficient child care is available to allow parents to work. In some of the areas with an ageing population, specific services are provided such as flexible, semi-public transport, home deliveries, etc, all supported by high-accessibility ICT. But public policies also favour the arrival of younger people, including immigrants, in these areas in forms of communal inter-generational living forms, semi-self-sufficiency, etc, establishing local integrated residential economies. This allows to counter-balance some of the metropolitisation tendencies in terms of population development.

Tax and social security systems are harmonized across Europe, which even provides for a universal European citizenship with harmonized and integrated administrative procedures.

What is needed to make this possible ?

a) General policies

- harmonization of tax and social security systems
- public provision of child care provision
- development of special services and technologies for the elderly

b) Territorial policies

- important investments in public transport networks, both long and short distance
- support to new forms of rural living and working, taking into account the specific territorial potentials of each region

Sustainable settlement structure

Even though urban sprawl continues in certain high-density, dynamic areas, it is more linked to resource availability and public transport networks. Strict urban planning and land use control forces developers to integrate their projects into more global strategies. Intra-urban spaces are managed proactively by public authorities and thus empty areas are rapidly reused before they become derelict.

This urban management takes place in an integrated way between the city and its surroundings, often through common decision bodies and sometimes including fiscal redistribution between the work and residential areas.

What is needed to make this possible ?

a) General policies

- legal framework for active and strict land use planning, implementation and control
- fiscal redistribution mechanisms

b) Territorial policies

- active planning, taking into account transport and energy resources
- public intervention on land markets in order to be able to influence spatial developments
- creation of integrated forms of governance for metropolitan areas comprising both the city and its surroundings

Sustainable use of energy

The new energy paradigm has profoundly modified attitudes toward energy use. Energy efficiency both in industry, but also importantly in housing and construction, has led to lower energy footprints per capita. This is accompanied by savings accomplished through a proactive planning of energy-saving organisation of space: mix of functions allows less transport needs, densification, especially around public transport nodes, allows higher energy and resource efficiency, etc. Generally, citizens use more public transportation systems both for convenience and for cost reasons.

Even though non-renewables still dominate in terms of energy production, the proportion of renewables has significantly risen, notably in the form of very decentralised systems linked to individual houses (wood, solar energy, etc). Europe is world leader in alternative energy technologies and exports its products world-wide. It is also at the forefront of the very promising first steps of nuclear fusion.

What is needed to make this possible ?

a) General policies

- support to technological development and use of alternative energy systems
- support to technological development in the transport sector to reduce the dependence on oil as well as emissions
- support to the implementation of energy efficiency measures and further technological development
- taxation and pricing policies in transport

b) Territorial policies

- proactive use of planning instruments to support energy efficiency
- important investments in public transport networks, both long and short distance
- local combined heating/electricity production on neighbourhood level using renewables

Socially inclusive society and space

Differences in income and wealth are not as strong as they were in 2005, especially because the convergence of the Eastern countries. Generally gradients are lower, both because of a better development of local potentials in the poorer areas, but also because of fiscal redistribution mechanisms which compensate the inner-city working areas for their loss in terms of residential taxation.

Housing and housing prices are not so much a problem for poorer households because of the wide availability of differentiated and affordable housing. For the lower segments of the market, social housing plays an important role, and is increasingly integrated into existing urban fabric creating social mixtures. This also allows to avoid too strong centrifugal pressure leading to urban sprawl, as households are no longer obliged to move far outside of the city to find affordable housing. This also facilitates the provision of services to the population.

Proactive education and employment policies have allowed a better integration of immigrants and other marginalised groups, thus reducing the tendency to urban ghettoisation. This is reinforced by the diversified and more integrated localisation of social housing.

At a different scale, free movement of all citizens in combination with the existence of more common EU-level policies for employment and social welfare has led to a stronger intermingling of European cultures and a more integrated European society. Locally, this also reduces the tendencies for socio-cultural groups to segregate.

What is needed to make this possible ?

a) General policies

- free movement of all EU residents
- EU-level harmonization of policies for employment and welfare
- significant public and private investment in education and training (including mainstream school system & language education)
- (spatial) fiscal redistribution mechanisms

b) Territorial policies

- active public housing and housing market policies

Healthy environment and hazard prevention

The loss of population in some areas has actually been a positive evolution in terms of biodiversity. More natural landscapes exist now than 25 years ago. It is still, however, difficult to interlink these landscapes across the entire territory because of new transport links, especially high-speed rail links. Some of the most environmentally sensitive areas, such as mountains, marine environments, coasts, wetlands, forests and landscapes are managed in an integrated way, combining the questions of environment with those of regional development.

Organic farm goods have become more popular in Europe and some of the products and innovative techniques are even exported to the rest of the world. Even for intensive food and energy crops some new techniques allow less use of fertilizers and pesticides, thus reducing the pressure on soils.

The reduction in traffic and the new transport technologies have led to a significant reduction in air pollution, even in some of the denser areas of the pentagon. The same goes for water pollution where new filtering and efficiency technologies have led to some advances. Europe is a world leader in these environmental technologies.

Climate change has severe impacts on the climate. Extreme events are numerous. Even though they claim their victims and economic costs, the hazards are alleviated through a series of adaptation and prevention measures.

What is needed to make this possible ?

a) General policies

- support to technological development in the transport sector to reduce the dependence on oil as well as emissions
- support to technological development in the protection of water and water efficiency

b) Territorial policies

- important investments in public transport networks, both long and short distance
- integrated management of 'abandoned' and environmental sensitive areas
- continuation of interlinking of biodiversity reserves (implying more transregional common governance of these reserves and links)
- exact evaluation of local and regional climate hazards and investment in adaptation measures

Diversified cultural heritage and identities

European culture is homogenizing, through the migratory movements, trade, common cultural references and other exchanges. However, Europe many examples of local cultural heritage and landscapes have been preserved and even enhanced in view of touristic activities. The continent has positioned itself even more as a prime destination for short-term vacations of North-American and Asian tourists, showcasing its rich history, including the historical urban ensembles. At the same time, the generalised use of international architectural contests for significant new buildings allows to ensure an ever-continuing exploration of new architectural forms, also enhancing the attractiveness of European cities.

What is needed to make this possible ?

a) General policies

- common policy of presentation of Europe as a tourist destination

b) Territorial policies

- careful management of existing cultural heritage, avoiding over-exploitation
- generalised use of architectural contests for important buildings

Territorially oriented governance

Awareness has risen that regions are very diverse and, therefore, need very different approaches to their challenges and potentials. This has led to more multi-sectoral territorial approaches of governance, under the general heading 'regional development'. At the same time, policy making has become more a dialogue between different levels, than a unidirectional imposition of ideas. The more wide-spread use of the (decentralised) open method of coordination is helpful in this aspect.

This also implies the better integration of territorial implications in the policy making process of main policies. Common strategic territorial objectives allow a clearer vision and implementation of such territorial aspects.

A lot of towns and regions are integrated into national and transnational networks that allow them to reach critical mass in relevant areas (use of shared resources, promotion, etc) and to manage

the growing mobility of the population. The use of territorial impact assessment methodologies and of expert groups for evaluation of projects and policies at all levels has become generalised.

What is needed to make this possible ?

a) General policies

- generalised use of the open method of coordination at different scales (including intra-national)
- common spatial strategies

b) Territorial policies

- (regional) institutions allowing the coordination of policies across levels and sectors