

Cities making competitive and liveable Europe

**Discussion Paper on urban
development during
Finland's EU Presidency**

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Table of contents

Introduction: Cities make European goals reality	4
Veijo Kavonius, Deputy Director General, Ministry of the Interior, Finland	
Regional policy, urban areas and innovation: A policy review	9
Douglas Yuill, Professor and Heidi Vironen, Researcher, European Policies Research Centre at University of Strathclyde	
Transforming universities as Triple Helix catalysts: Towards European innovation areas	20
Henry Etzkowitz, Professor, Newcastle University, Business School Chair, Management of Innovation, Creativity and Enterprise	
Liveable cities – the soft side of urban policy	30
Antti Karisto, Professor, University of Helsinki, Department of Social Policy	
Rising urban network in Europe	39
Perttu Vartiainen, Rector, University of Joensuu Janne Antikainen, Senior Researcher, Ministry of the Interior, Finland	

Introduction:

Cities make European goals reality

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It has been increasingly acknowledged that cities are the key players in competitive economy, in particular when it comes to knowledge-based growth and creating new prosperity. Similarly, Europe's goals to be a highly competitive area, stated in the Lisbon targets, are widely accepted. Since these goals were highlighted in the re-launch, increasingly crucial questions appear: how to best translate European goals into local measures to create drivers for true European and its cities' competitiveness? By other words, what kind of practical actions are needed?

Urban regions have a central position in delivering and strengthening competitiveness. Cities have actually three roles: they are places for good-quality living which has a non-denied value in itself. Cities are also important nodal points of growth in their regions and thus have impact on balanced regional development in different parts of Europe. From national point of view urban network can be - in fact - a tool to keep up and strengthen the regional community structure of a whole country. Thirdly, cities strongly contribute to the competitive edge of the whole Europe. It could also be claimed that city regions have a responsibility to contribute to success. Many European cities are already players in the global economy and a large number have a potential for that.

Knowledge economy underlines the importance of cities in a new way. When the comparative advantage of places was earlier a matter of risen productivity, it is now increasingly dependent on the ability to innovate.

Urban regions have attributes needed for innovation. They can provide a critical mass of knowledge institutions, companies and suppliers as well as attractive, diverse and exciting environment and service variety for living. Innovation in many cases presupposes a creative milieu, a dense environment of knowledge workers and their networks. Productivity is more than before up to the effective utilization of enhancing local innovation environment and innovative capacity.

Stressing the economic role of cities encapsulates the idea that new sources of growth will increase the prosperity and welfare of the city regions. It is, however, crucially important to note that economic growth alone is insufficient in safeguarding social cohesion within a number of European cities. Persistent and innovative means to reinforce social functionality, inclusion and liveability have to be developed, especially in larger cities. Policies for the environment and urban renewals remain important part of urban development. These elements have a fundamental position in the wellbeing of the residents in urban areas. When looking at integrated urban policy as a whole, there is also a firm and increasing place for these in liveability ingredients as element of overall dynamism of the cities.

Europe has wide-ranging knowledge on urban issues

Europe has genuine social capital with regard to urban policy thinking. This has been accumulated by different

forum for European co-operation. The European Union as well as efforts of different successful presidencies have brought value for the development of the European cities. Two close former Presidencies, the Netherlands and the United Kingdom raised a series of important issues into urban agenda.

The Rotterdam Agenda agreed in 2004 defined in a fine way the threefold nature of urban policy. The agenda required that the economic, social and environmental quality of urban areas should be in balance. This Urban Acquis also stated that cities must be liveable, places of choice and they need to have cultural identity. In addition, the role of governance mechanisms as well as partnership in urban regions was highlighted as part of successful policies for urban areas.

One of the novelties that the Dutch Presidency raised was knowledge economy. It was recognized that cities make a contribution to the development of the knowledge economy and this way have an impact on the economic success in Europe. Similarly, it was seen that various tailor-made approaches are needed in the urban economic policy.

Integrated urban policy was further elaborated by Bristol Accord in 2005, which in more detailed manner defined the key characteristics of “sustainable communities”. In the economic angle of urban policy, thriving communities described a flourishing local economy of cities or other communities. Active, inclusive and safe, well served and fair communities referred to the social angle of urban policy whereas environmentally sensitive, well designed and built and well connected communities referred to environmental angle. Lastly, ingredient of well-run communities was described to stress the importance of governance mechanisms of urban and other communities. Bristol Accord also highlighted the improvement of generic skills in developing sustainable communities.

European Commission’s working document “Cohesion Policy and Cities” in 2005 also captured in a comprehensive fashion the cornerstones of urban development. Communication that followed the working document gave orientation on how to make use of European resources on urban policy with a view to achieving Lisbon objectives. According to the communication a selection of themes was targeted in urban areas of European countries. The suggestions concerned namely attractiveness, innovation, entrepreneurship and the knowledge economy, job creation and employment and disparities within cities. Finally, suggestions on urban governance mechanisms and financing of urban renewal were given. Commission’s communication also contributed to the idea of developing a unique polycentric structure of large, small and medium-sized cities in Europe.

Commission’s communication contributed to the mainstreaming of the urban dimension in EU Structural Fund Programmes by adopting the communication into the Strategic Guidelines. A topical issue is to follow-up how the urban dimension takes place in the different European countries and also within the Commission.

Parallel European agenda with urban policy co-operation is Territorial Agenda, which is under preparation. It will be agreed in Leipzig Informal Ministerial Meeting in 2007, accompanied by conclusions on urban agenda. Territorial Agenda has links to urban agenda and mutual complementarity between these two agendas can be found.

Major challenges of cities remain the same

As the conclusions of the Rotterdam meeting put it, the conditions and challenges of European cities vary largely. Therefore, not any single model for urban policy

can be formulated and “one size fits all” solutions should be avoided. Instead, policies need to be tailor-made. Governments still appear to have a need to go to this direction: to diversify urban policy according to the needs and potentials of different kind of urban regions.

However, different countries have come to realize that challenges surrounding us with regard to cities and urban areas are in many ways similar. The traditional urban paradox still describes urban problems and challenges. Well-being and basic quality of life in urban areas are still not fully achieved. Meaningful inclusion should constantly be put into attention and new means to achieve a socially functioning city should be found. Already the Rotterdam meeting acknowledged that European social model needs to be modernized by innovative solutions in this field. One of the keys for this might lie in the ability to combine competitiveness, social cohesion and welfare. This may emphasize – in addition to the national policies - the role of urban areas to find a right mix of cohesion and competitiveness.

Rotterdam also defined five major challenges with respect to cities’ role in knowledge economy. According to these, a better integration between different policies should be created, European centres of excellence should be developed, mutual co-operation between universities and companies should be fostered, urban networks should contribute more to the knowledge economy and, finally, the impacts of knowledge economy should reach out to all groups in society.

Suggestions on how to refine European ideas by the Finnish Presidency

During the EU Presidency, some suggestions are being brought into discussion on how to further refine European urban policies by firmly building on the

guidelines of the former presidencies. The main goal is to strengthen the competitiveness of urban regions. Competitiveness is a broad concept and encircles at least three important dimensions. The competitiveness of city regions is dependent to a great extent on the following dimensions.

Innovative capacity of cities is in focus when building urban competitiveness

Economic performance of cities is increasingly dependent on not just its ability to increase productivity but more and more to create innovations which have the potential to build new and more productive economic basis for the whole city-region. In this discussion paper, **Douglas Yuill** gives an overview on how strongly innovation is right now shown as a part of the urban development measures in particular under the umbrella of regional development. Boosting smaller-scale local economy inside the city is a necessary but not always a sufficient measure to guarantee prosperity for an urban region. Innovative capacity of a city depends on close interaction between institutions of knowledge, such as universities, research institutions and businesses, but also and importantly, public development actors. This so-called Triple Helix type of co-operation is illustrated in **Henry Etzkowitz’s** article. Although innovation is often considered as spontaneous thing, it can be identified in place and into conscious measures.

Interplay to create innovations between three key parties also provides an example of how the partnerships of urban development policy evolve. Whereas traditional partnerships of urban policy have been built between public players, associations and local companies in order to facilitate jobs, another look might now be taken into partnerships between universities, research institutions and companies in order to create

new innovations and to commercialize these to services and products.

When taking a more distant look to cities, one can say that innovative capacity and orientation to growth may also work as a driver for regional economic success and contribute to a balanced regional development at the same time. It is namely polycentric urban network approach by which Finland, among some other countries, aims at interconnecting the objectives of the Lisbon strategy and relatively balanced regional pattern in a pragmatic fashion. **Janne Antikainen** and **Perttu Vartiainen** have explored the idea of the multi-centric development in their article by reflecting the emergence of polycentric urban network at European level to recent Finnish experiences. Polycentric approach has some mutual co-orientation with Territorial Agenda. These common surfaces lie in the recognition of polycentric urban development and networking regional clusters.

Liveability of cities and urban regions has even further increased in importance

Although a city in a competitive edge creates wealth for the city and its citizens, there must still be place for liveability. Not only creative and new means, but also actions powerful enough to increase social inclusion are needed. Among these, a stimulation of economic activity in disadvantaged urban areas should be encouraged.

Another significant viewpoint supplements the well-being of cities: it is also a question about the character and atmosphere of the city as **Antti Karisto** puts it in his article. The idea of cities as places of choice and cultural identity was highlighted already in Rotterdam. Karisto illustrates that the attractiveness in the environments of everyday life in urban areas is one of the

keys to a liveable city. Similarly, attractiveness is also a competition factor. Well-being is a result of everyday life in its various forms, the individual character of the city as well as a combination of individuality and community spirit. Further on, this kind of city provides places for all groups: from seniors and young people to small children.

City as an environmentally sensitive entity is also a part of the liveability. Urban areas should be attractive in terms of clean environment, limited pollution and congestion. At the same time cities and communities should have a firm role in contributing broader environmental sustainability in Europe, climate change issues at the forefront.

Finally, urban liveability creates dynamism for the local environment. There is both cultural and economical dynamism. This is why liveability also means attractiveness, both for citizens to live and companies to operate in a city. Assets of well-being can bring comparative advantage, in particular, for medium-sized and smaller cities.

Governance is a profound element of competitive urban region

A third dimension of competitiveness is the governance of an urban region. Governance radically expands the area of traditional management by means of administration. Governance in urban regions stresses the ability to build networks of different stakeholders. Good governance calls for a sound orchestration by numerous actors. Therefore, it can be claimed that governance is about management by information instead of rules and thus emphasizes the importance of leadership abilities. Building strategic capacity is one of the key aims of good governance. In addition, the fact that cities' economic boundaries differ from administrative ones makes governance even more important. A dimension that is not always noted is the vertical interplay

between local/regional stakeholders on one hand and national policies on the other.

One of the important issues of governance is that cities, city-regions and regions are complementary. Urban policies should work at different levels: Firstly, at inner-city areas where diversified development can be recognized and secondly, at a city-region level where a functional economic urban region is being made. When emphasizing the significance of the economic angle of urban policies, a functional city-region becomes increasingly a target of urban development policy. When thinking of social and environmental development, inner-city level remains in many cases as main target of policies. City-region approach can, however, enrich these angles in terms of overall attractiveness of the whole urban region. In addition, recognition should be made on how the region surrounding the core area gains leverage effects of the city-region.

The interaction between the central and regional level is important. Especially, this is the case when speaking about developing the innovative capacity and economic strengths of the urban regions. The development of this central-regional linkage will likely be increasingly essential part of governments' urban policies.

Shared knowledge requests for continuing exchange of experiences

This discussion paper, which is drawn up for the Finland's EU Presidency, approaches urban policy from four different points of view. The overall theme is to form a detailed picture of the elements of a competitive city. The competitiveness of urban areas must be seen as a broad condition that intertwines each and every pillar of urban development. Writers' ideas are their own and therefore not binding. Nevertheless, they provide a solid background and orientation for discussion.

Europe is currently in the face of urban challenges that vary but in essence remain the same. European countries have been vanguards in defining innovative means for urban policies and have also put a great effort on shared capitalisation of urban knowledge. The Finnish Ministry of the Interior wishes this discussion paper stimulates discussion on urban policies in Europe both in the Senior Official's Meeting in Lappeenranta and further on in the coming future. We wish it can provide a set of ideas to be looked at more in depth. Hopefully this contribution can also strengthen the continuity between Presidencies on the field of urban issues and, especially, give support to the coming Presidencies.

Regional policy, urban areas and innovation: a policy review

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Introduction

Over the past two decades, the nature of regional policy has been changing, with a growing stress on urban and innovation initiatives. Looking back to the early 1990s, national regional policy in Europe was predominantly aid-based and spatially-targeted, directed mainly at supporting investment in designated problem regions. More recently, regional policy has broadened its scope, becoming in most countries a primarily programme-based policy which operates in all regions and which aims to enhance the contribution of regions to productivity, growth and competitiveness. In this context, urban areas are increasingly seen as a relevant focus for regional policy, helping to drive forward economic development in the regions whilst also providing a basis for ensuring that surrounding areas are more effectively connected to growth processes.

The aim of this paper is to review recent regional policy developments across the EU and Norway in order to identify the extent to which they have an urban component and, in particular, the degree to which they promote innovation in an urban context.¹ In reviewing the growing role of urban and related innovation initiatives

in regional policy, this paper is in three further sections. Section 2 provides an overview of current regional policy objectives in the Member States and Norway, concentrating particularly on the extent to which they have an explicit urban orientation, but also considering those which relate implicitly to cities because of their innovation focus. The review concentrates mainly on the EU15 and Norway, though reference is also made to the EU10 Member States as appropriate. Section 3 then considers those urban and related innovation measures which are currently part of the national regional policies of the countries under review or are being considered for the next policy period. A final section draws together some conclusions.²

Urban-related regional policy goals

Focusing initially on the EU15 Member States and Norway, countries can be allocated to one of three broad groups with respect to the urban orientation of their regional policy objectives: those where there is an explicit urban component to the goals set for regional policy; those where the objectives of regional policy do not have a specific urban aspect but where other

¹ It should be noted that the paper is purely a policy review based on recent policy legislation and other policy documents, supplemented by interviews with government officials. The paper does not review the extensive academic literature on regional policy, urban areas and innovation. The geographical coverage reflects research undertaken for EPRC's EoRPA Regional Policy Research Consortium from which the country information is largely drawn. Thanks are due to colleagues at EPRC for the provision of this information.

² In addition to the regional policies covered in this review, there are, of course, also specific urban policies in many Member States. Although these have traditionally tended to have a physical and social rather than an economic orientation, the economic component of such policies has also been on the increase in a range of countries – including Germany, Sweden and the United Kingdom. The point is also worth making that physical and even social measures can be important in releasing the economic potential of cities in their regions.

policy objectives (in particular relating to the growth and competitiveness agenda) suggest that urban areas are likely to play a core policy role; and those where there is no significant urban orientation to the goals of regional policy.

Finland fits clearly into the first group. Under the current Regional Development Act (602/2002)³ and the Government Decision of January 2004 which sets down the present government's regional policy aims, three broad regional policy goals are stressed: to strengthen competitiveness in the regions; to safeguard the service structure throughout the country; and to achieve a balanced regional structure. The first and last objectives give urban areas - and more general concerns about the territorial structure of the country - an important place within Finnish regional policy. Other sparsely-populated Nordic countries also see a significant role for urban centres in the achievement of regional development goals. In **Norway**, for instance, a June 2006 White Paper⁴ lays down three general objectives for regional policy: to provide equal living conditions across the country; to maintain trends in settlement patterns; and to focus on and develop regional strengths. These broad objectives are translated into five more specific goals, the last two of which have an explicit urban element: to make small towns attractive places to live and work; and to make medium-sized cities attractive alternatives to large cities. In **Sweden**, the explicit urban component to regional policy is less strong. The overall objective of the regional development policy introduced in a 2001 Government Bill is to have "well functioning and sustainable local labour market regions with an acceptable level of service in all parts of the country".⁵

The stress on labour market regions means that, in addition to small towns and cities, there is also a focus on rural and coastal areas; on the other hand, the reference to sustainability and to acceptable levels of service provision mirrors the Finnish and Norwegian concern for a balanced and sustainable territorial structure.

Elsewhere in the EU15, urban-oriented regional policy objectives are generally less explicit. One possible exception is **Ireland** where the National Development Plan (NDP) 2000-06 highlights the need to "achieve more balanced regional development" and where there is a particular stress on the economic development role of key towns and cities with the necessary scale of infrastructure and services to enhance economic development. Looking forward to the 2007-13 period, the development of the knowledge economy, innovation and boosting competitiveness in designated regional "gateways" are expected to be key themes of the updated NDP, with a continuing commitment to achieving better balance in regional development in line with the template provided by the 2002 National Spatial Strategy (NSS).⁶

In most other countries, the weight given to urban areas within regional policy objectives tends to be more implicit, part of the broader policy goal of developing regional strengths and improving regional productivity and competitiveness. Thus, in **France**, for instance, a new approach to spatial policy, introduced in 2002, highlighted five main policy objectives: to encourage the international orientation of regions (enhancing the role of large towns); to involve all parts of the country in national development (especially rural areas); to use regional development to contribute to wealth creation (through, for instance, new **pôles de compétitivité**,

³ Ministry of the Interior, **Regional Development Act (602/2002)**, 1 January 2003

⁴ St.meld.nr.21 (2005-2006) **Hjarte for heile landet: Om distrikts- og regionalpolitikken**

⁵ Government Bill 2001/02:4, A policy for growth and viability throughout Sweden

⁶ Department of Finance, Presentation by Minister for Finance to Joint Oireachtas Committee on Finance and the Public Service on NDP 2007-2013, 14 June 2006.

competitiveness poles); to correct regional inequalities through promoting equality of opportunity (rather than equity); and to revise the relationship between central and local government. The role of cities as growth motors has since been progressed through the promotion of metropolitan cooperation⁷ and a subsequent complementary approach to medium-sized towns and cities.

The overall goal of regional policy in **the Netherlands**, as set out in the 2004 White Paper **Peaks in the Delta**,⁸ is “to stimulate economic growth in all regions by exploiting region-specific opportunities of national significance” – that is, regional strengths which are in line with national priorities. Although there is no explicit focus on cities, their importance from a policy perspective is obvious from the national priorities highlighted in **Peaks in the Delta**: developing high quality industrial estates, investing in Schiphol airport and the port of Rotterdam, enhancing accessibility to prime urban centres and growth points, developing internationally-competitive innovation “hot-spots”, and utilising cities and urban networks as the driving force behind economic development. Cities are thus seen as playing an important role in what has become an opportunity-focused regional policy in the Netherlands.

In the **United Kingdom**, the main goals and principles of regional policy are set out in the 2003 consultation document, **A Modern Regional Policy for the United Kingdom**.⁹ The aim of policy is that all parts of the country should achieve their full potential in order to maximise national economic performance. To

facilitate this, the policy focus is both on enabling leadership so that national, regional and local institutions can exploit indigenous strengths and potential, and on tackling market failures through reforms targeted at the key drivers of productivity, growth and employment. In this context, urban economic development has been given increased weight as a means of strengthening the spatial dimension of the productivity agenda. In this context, urban policy has itself moved up the UK policy agenda in recent years. An important 2000 White Paper¹⁰ set out the key policy objectives: to give people more power in shaping their futures; to facilitate attractive and well-kept towns and cities; to strive towards more environmentally-sustainable living; to promote a culture of enterprise, innovation and investment through urban development and training programmes; and to improve service delivery across a range of urban policies. Policy progress has since been analysed,¹¹ culminating in a recent joint Treasury, ODPM and DTI paper which highlighted the importance of cities to regional growth in England.¹²

Moving further along the policy spectrum, in most of the remaining EU15 countries, there has also been an increasing regional policy focus on growth and competitiveness issues but with little or no urban dimension to policy objectives. Thus, in **Denmark**, the May 2003 White Paper¹³ and subsequent 2005 Business Development Act continued the long-standing policy emphasis on maximising the contribution of every region to national growth but, at the same time, introduced a

⁷ CIADT of December 2003, with subsequent selection rounds in February and June 2005.

⁸ Ministry of Economic Affairs, **Peaks in the Delta: Regional Economic Perspective**, The Hague, July 2004 (Ministerie van Economische Zaken, **Pieken in de Delta: Gebiedsgerichte Economische Perspectieven**, The Hague, July 2004).

⁹ The Treasury, the Department of Trade and Industry and the Office of the Deputy Prime Minister **A Modern Regional Policy for the United Kingdom**, 2003

¹⁰ Department of Environment, Transport and the Regions, **Our Towns and Cities: The Future - Delivering an Urban Renaissance**, 2000

¹¹ See ODPM, **State of the English Cities (Urban Research Summary 21)**, 7 March 2006

¹² Treasury, ODPM and DTI, **Devolving decision making 3 – Meeting the regional economic challenge: The importance of cities to regional growth**, 22 March 2006

¹³ Regeringen, **Den regionale vækststrategi, København: Økonomi- og erhvervsministeriet**, 2003

degree of preferential treatment for peripheral areas (reflecting concerns about demographic balance).

In **Austria**, the traditional regional policy concern has been with promoting regional innovation and this remains the core regional policy goal. In line with the Lisbon priorities, the policy emphasis is on strengthening regional competitiveness and fostering an innovation culture all over the country.

In **Germany**, the prime objective of regional policy is to address the main disadvantages faced by structurally-weak areas.¹⁴ The main regional problem remains the structural economic divide between the old and the new **Länder**. There is no explicit urban component to the objectives of the joint Federal-**Land Gemeinschaftsaufgabe** (GA) which provides the policy framework for active German regional policy. On the other hand, and as in a number of other countries, there is an urban dimension to the policy instruments of the GA in that they are targeted at designated problem regions which, in the German context, are often centred on urban areas with high levels of unemployment.

In **Italy**, economic dualism is acknowledged to lie at the heart of the regional problem. The constitutional commitment to “substantial equality” (Article 3 of the Italian post-war constitution) ensures that there is a major policy focus on the **Mezzogiorno** (the South). However, the policy response also recognises the importance of enhancing regional growth and competitiveness, not least as part of the process of aligning EU and national regional policy goals. While there is, at present, no urban component to Italian regional policy, there are some indications that the development of urban

areas may become more central in the 2007-13 regional development strategy.¹⁵

None of the remaining EU15 countries – Belgium, Luxembourg, Greece, Portugal and Spain – incorporates any significant urban aspect to the stated goals of regional policy, though urban regeneration is an important (though distinct) policy area in Wallonia. In the three Cohesion countries, the policy focus is very much on improving national competitiveness; urban issues are not given an explicit emphasis in the regional policy context, though they are obviously addressed by other areas of policy. For instance, the Programme for Investment in Priority Infrastructure in Portugal has a significant budgetary allocation for cities.

In the EU10 Member States, domestic regional policy tends to be subservient to EU Cohesion policy which generally involves far more funding and plays a much more central regional development role. As implemented in the EU10 Member States, EU Cohesion policy tends to have three main concerns: to invest in basic infrastructure, to develop human capital and to promote innovation. In practice, much of the innovation component of policy (and, indeed, much of the infrastructure spending) is concentrated on major urban areas, and in particular on capital cities. This is discussed further in the next section.

Urban and related innovation initiatives under regional policy

The aim of this section is to indicate the types of regional policy initiative which are being introduced in support of the regional development role of urban areas. Such

¹⁴ This reflects the constitutional commitment to the “establishment of equal living conditions throughout the federal territory”. Alongside active regional policy, there is a major fiscal equalisation system (Finanzausgleich) involving both vertical transfers of tax revenues from the federal government to the Länder and local authorities and horizontal transfers between the Länder. There is also a Solidarity Pact (Solidarpakt) which allocates funds to the new Länder for capital spending.

¹⁵ The competitiveness and attractiveness of cities and urban systems is one of ten priorities highlighted under the draft Italian National Strategic Reference Framework (NSRF), April 2006.

measures, on the one hand, tend to reflect the growth and competitiveness agenda and the increasing weight attached to cities as motors of economic development. On the other hand, they arise out of the growing emphasis on territorial cohesion in a number of countries, with towns and cities seen as key building blocks in achieving a balanced and sustainable regional structure.

In a first group of countries, a clear set of urban-related initiatives can be identified (though often accompanied by other measures targeted specifically at rural and other areas).

In **France**, for instance, urban areas are supported through several initiatives which vary in scale and scope: the “**politique de la ville**” mainly targets urban zones in difficulty whereas other instruments were developed to counterbalance the dominant role of the Paris region and, to a lesser extent, the regional capitals.

The December 2003 CIADT¹⁶ set out a five-pronged strategy to improve the European importance of French cities and to stimulate their potential as motors of regional development. This included: reinforcing their economic influence; strengthening their higher education and research activities; supporting their cultural and artistic influences through infrastructure provision; continuing the policy of transferring public sector jobs from Paris; and improving transport access. This has been followed up by the selection of 15 **métropoles** on which to concentrate support. More recently, the French government has stressed the importance of medium-sized cities in economic development. The March 2006 CIACT reinforced this approach.¹⁷ Medium-sized cities are seen to play a significant role in transferring the

dynamics of the global metropolitan areas to the rest of the national territory, in particular in the suburban and rural environment.

The recently-introduced **pôles de compétitivité** are considered as a key innovation to reinforce the attractiveness and competitiveness of the French regions. Their aim is to concentrate efforts in a collaborative way in order to achieve excellence at a national and international level. The initiative has provided a new impulse to the cluster approach and more specifically to the “local productive systems” which operate on a smaller scale but have the potential to contribute to the general dynamism of the economy. The first **pôles de compétitivité** were selected in July 2005. They bring together training centres and public or private research institutes in specific locations and aim, on the basis of partnership, to generate synergies around innovative projects.¹⁸ The July 2005 CIADT selected 67 poles, six of which were regarded as of international rank, with ten others having the potential to join this group. The remainder are national in focus. The chosen poles have to develop projects which comply with four main conditions: they must involve the creation of new goods and/or products with high value added and quality jobs; they must exhibit strong growth potential internationally; they must be based on sound partnership; and they must reflect an efficient strategy, with clear objectives and means.

Of course, the point has to be made that, alongside these urban-oriented policies, there are also a range of spatial policy measures targeted at rural, coastal and mountainous zones. By way of example, the so-called “zones of rural development” have recently been re-

¹⁶ Comité interministériel d'aménagement et de développement du territoire - Interministerial Committee for Regional Policy

¹⁷ From October 2005 the CIADT became the CIACT, Comité interministériel d'aménagement et de compétitivité des territoires, following the change of name of DATAR to DIACT

¹⁸ DATAR Rapport d'activité 2005, 2006, p.13.

newed and rural excellence poles, which aim to stimulate entrepreneurship and innovation in rural areas (the rural equivalent of competitiveness poles), were introduced at the July 2005 CIADT. They are currently in the process of being selected and established.

In **the Netherlands**, the economic component of urban policy has, in recent years, become more closely associated with regional policy; the improved economic performance of the major cities since the mid 1990s has meant that they have come to be viewed as one of the key drivers of Dutch regional development. Over the 2002-03 period, the Ministry of Economic Affairs undertook an exercise under which the 30 major cities were asked to prepare proposals relating to their future economic climate, space for physical development and promotional activities. Building on this, each city subsequently developed a multi-year economic development plan. The government signed covenants with the 30 cities in February 2005 in relation to programmes for the 2005-10 period. These covenants focused mainly on physical investment and social integration/security but also included specific economic components, directed in particular towards industrial estates, new firm formation, innovation and tourism.

Of even more significance in a regional policy context is the July 2004 spatial policy White Paper, **Peaks in the Delta** which, as mentioned earlier, set down the Dutch government's economic development priorities in the regions. Rather than have a theme-based approach to policy (investment aid, industrial estates, big city support, tourism assistance etc), there has been a move to geographic, programme-based policymaking. To this end, the regional policy division within the Ministry of Economic Affairs has been re-organised along regional rather than functional lines and a single pot budget has been established to support regional projects which

are in line with national policy priorities. Such projects obviously build on regional strengths which, in most regions, are centred on urban areas. For instance, in the northern Randstad, the emphasis is on developing international services and related activities based around Schiphol airport; in the east, the stress is on utilising specialised knowledge-based services located in the main university towns; and, in the south-east, the goal is to create a world class technology region, based on Eindhoven and neighbouring areas. More recently, each of the six Dutch regions has set up a Programme Commission to develop a coherent programme for the region, providing a framework against which subsequent project proposals can be prioritised.

In **Finland**, the main urban-oriented regional policy initiatives are the Centre of Expertise Programme, which aims to strengthen the research and knowledge base in the main urban areas, and the Regional Centre Development Programme, which helps to support small and medium-sized urban centres and create networks between them. There are, in addition, other regional policy programmes directed towards rural and island areas.

The Centre of Expertise Programme is designed to bring together local, regional and national resources to create internationally-competitive expertise in key fields. For each Centre of Expertise, the programme aims to pool the resources of the regional administration, cities and municipalities, universities and research institutes, science parks and companies in relation to particular regional strengths and knowledge specialisation. During the current programme phase (2000-06), there are 22 Centres of Expertise covering 45 fields of expertise. Although the focus is on centres, the influence of the programme is not limited to city-regions but, in a number of instances, extends more broadly across

the region. The programme will be continued into the next policy phase, albeit in a more concentrated form (fewer centres), with more emphasis on cooperation and networking activities, an enhanced international focus and stronger links to national innovation policy.

The Regional Centre Development Programme aims to support the development of a network of regional centres beyond the five main urban areas (Helsinki, Oulu, Tampere, Turku-Salo and Jyväskylä). The focus is on strengthening the competitiveness of regional centres and promoting cooperation in the regions between municipalities and the public and private sectors. The goal of the programme is to enhance regional dynamism by intensifying joint business and service policies, promoting their coherence and encouraging networking. In addition, the regional centres are encouraged to cooperate with surrounding rural areas to help safeguard services.

In **Norway**, there have been two recent regional policy White Papers. The first, introduced by a Conservative Government in May 2005, emphasised innovation, regional growth, small and medium-sized cities and an all-country perspective. Following a change of government in September 2005, the new Centre-Left coalition introduced a June 2006 White Paper which aimed to strengthen the position of rural, sparsely-populated municipalities. However, the Centre of Expertise programme put forward by the previous government was retained and will begin in autumn 2006. The programme is designed for small and medium-sized cities which have a mix of skills to allow them to compete internationally with respect to certain products. Its aim is to help regional industrial and knowledge clusters cooperate more intensively and develop relevant strategies.

The programme is to be run by the business sector, but must involve binding co-operation agreements with a regional R&D cluster. Following a first call for tenders in November 2005, six proposals were chosen in April 2006 from 24 submissions. Up to ten centres may ultimately be selected.

In addition to these specific urban-related regional policy initiatives, there are indications in a second group of countries that an urban component to regional policy is developing, partly because of the increasing stress on the growth and competitiveness agenda but also, in some countries, due to the more regionally-driven approach to regional policymaking.

In **Italy**, there are currently no specific urban initiatives within national regional policy though a number of interventions to develop and/or regenerate cities can be found in EU regional programmes. In the next policy phase, the indications are that there will be more focus on the economic development role of urban areas. The government which was elected in April 2006 has just had its Economic and Financial Programming Document (DPEF) approved for the 2007-11 period.¹⁹ A brief chapter on the **Mezzogiorno** outlines a development strategy based on four over-arching goals: the development of knowledge networks; increasing quality of life, security and social inclusion; strengthening productive clusters (**filiere**), services and competition; and internationalisation and modernisation. These objectives are linked to those in the draft National Strategic Reference Framework which provides an overview of future Cohesion policy priorities; as already noted, the draft NSRF has, as one of its priorities, the competitiveness and attractiveness of cities and urban systems.

¹⁹ Documento di Programmazione Economico-Finanziaria per gli anni 2007-11 presented by the President of the Council of Ministers Prof. Romano Prodi and by the Minister for Economy and Finances Tommaso Padoa Schioppa, Approved by the Council of Ministries on 7 July 2006

In **Sweden**, the increased emphasis on an all-country approach to regional policy has enhanced the role of cities in regional development; increasing the economic development significance of city-regions is viewed as beneficial “not just for the cities themselves but also for their hinterlands”.²⁰ Related, there have been efforts to move urban policy away from purely social issues and towards providing urban regions with good conditions for long-term growth. On the other hand, there are currently no specific regional policy initiatives with an explicit innovation/urban orientation; instead, such measures tend to fall within the scope of innovation policy. The Government Agency for Innovation Systems (VINNOVA) delivers a number of relevant programmes, including various centre-of-excellence and cluster-related initiatives such as the VINNVÅXT programme.

In the **United Kingdom**, urban policy initiatives have traditionally been regarded as a specialised form of regeneration policy targeting deprived areas in cities. However, following on from the 2000 urban policy White Paper,²¹ they are now being seen not only in social but also in economic development terms. As already mentioned, a recent joint Treasury, ODPM and DTI paper²² builds on a major academic review of the economic performance of English cities²³ to underline the contribution that cities can make as drivers of economic growth. Related to this, urban issues are becoming more prominent in emerging approaches to regional development. A regional strategic framework has emerged to deliver and implement urban measures following the establishment of new regional agencies (the English RDAs) and partnership arrangements. The alignment of urban

and regional policy objectives has been reflected in the Government’s involvement in the **Core Cities** project which also brings together city councils, RDAs and regional Government Offices. The project has developed an action plan, which aims to benchmark urban competitiveness, strengthen productivity and support urban renaissance in England’s major regional cities, as the essential foundation for progressive improvements in the performance of all regions.

In **Ireland**, the stress placed by both the National Development Plan and the National Spatial Strategy on the economic development role of key towns and cities - the development “gateways” - has already been noted. In addition to communications infrastructure, business and technology parks have been established as a catalyst for development, including international flagship parks in gateway locations. In addition, the two main development agencies (IDA-Ireland and Enterprise Ireland) are increasing the provision of ‘soft’ support for business, including with respect to university-industry collaboration and broader knowledge-sharing and networking initiatives.

In countries such as Denmark, Austria and Germany, the urban component to national regional policy is less explicit²⁴ but there have been a number of innovation-oriented developments which relate mainly to urban areas. In **Denmark**, six priority areas were identified under the 2005 Business Development Act, four of which relate to urban-oriented drivers of economic growth (innovation, ICT, entrepreneurship and human resources). The remaining two (tourism and the development of peripheral areas) reflect concerns

²⁰ 2005 Swedish Budget Statement

²¹ Department of Environment, Transport and the Regions, *Our Towns and Cities: The Future - Delivering an Urban Renaissance*, 2000

²² Treasury, ODPM and DTI, *Devolving decision making 3 – Meeting the regional economic challenge: The importance of cities to regional growth*, 22 March 2006

²³ ODPM, *State of the English Cities (Urban Research Summary 21)*, 7 March 2006

²⁴ Though in both Germany and Austria, Land-level interventions often have an urban orientation

about the persistent underperformance of the designated “outer” areas. In **Austria**, regional policy very much responds to the legislative framework established by the EU – the Regional Aid Guidelines and the Structural Funds. The increased stress on the renewed Lisbon agenda and the elimination of micro-zoning under the Structural Funds seems likely to see more emphasis in future on initiatives which promote regional strengths. In the draft NSRF,²⁵ four future priorities are identified: laying the regional foundations for an innovation- and knowledge-based economy; developing attractive regions and business locations; increasing the adaptability and qualifications of the workforce; and promoting territorial and especially cross-border cooperation. Finally, in **Germany**, an innovation-oriented GA instrument, “Cooperation networks and cluster management”, was introduced in January 2005, though it remains a relatively low-key measure. In addition, the National Strategic Reference Framework states that Germany will modernise the economic basis of urban development. Sustainable urban development is one of three horizontal priorities under the NSRF. Beyond this, urban policy itself is taking on more of an economic orientation. In developing deprived urban areas, a number of aspects are highlighted: the role of urban improvement strategies as an instrument of integrated urban policy; the need to strengthen the local economy and improve labour market policy in the context of sustainable urban policy; and the importance of proactive policies relating to education and training.

Turning to the EU10 Member States, notwithstanding the problems faced by their lagging regions, urban

areas and innovation have increasingly emerged as policy priorities. Certainly, many of the economic development strategies which are in preparation have an explicit urban/innovation dimension. In **Poland**, for instance, there is an increasing focus on the competitiveness of cities and the quality of infrastructure linking these centres as nodes of development. This is reflected in emerging national strategies, such as the National Strategic Reference Framework (NSRF), which is being prepared in parallel to the formulation of a new National Regional Development Strategy (NSRR) and a Concept of National Spatial Planning (KPZK). These documents note the need for regional policy to distinguish between metropolitan, urban and rural areas. Emphasis is being placed on the classification of metropolitan areas²⁶ as potential growth poles for the national economy due to their recognised role in contributing to national competitiveness.²⁷ At the same time, a strategic choice has been made to create a special programme to support the development of potential metropolitan areas in the poorer eastern regions.

In **Slovakia**, the government is committed to concentrating on a limited number of urban areas which act as centres of economic activity and partly also as focus points for the development of surrounding micro-regions (suburbs and rural centres). Further, the city of Bratislava acts as an engine of development for the rest of the country.²⁸ The country’s current Community Support Framework (CSF) promotes a growth pole approach, focusing particularly on Bratislava/Nitra/Trnava, Banská Bystrica/Zvolen, and Košice/Prešov. Beyond

²⁵ STRAT.AT, October 2005

²⁶ These are identified as areas around Warsaw, Kraków, Poznań, Wrocław, Trójmiasto, Katowice agglomeration, Szczecin, Łódź and Bydgoszcz

²⁷ NDP 2007-2013 p. 104

²⁸ Ministerstvo výstavby a regionálneho rozvoja Slovenskej republiky, Národný rozvojový plán, Dodatok, June 2003, p. 61

these developments, investment is also being directed towards improving linkages between growth poles and their surrounding areas.

In **Czech Republic**, current urban-related policies under the Structural Funds mainly concern the Prague region. Looking to the future, this focus will continue under the Regional Competitiveness and Employment programme. In addition, as part of the Convergence programmes, more focus will be placed on strengthening the role of towns as the drivers of regional growth and development. The National Strategic Reference Framework contains a general commitment to promote balanced regional development through the development of towns and cities.

Finally, in **Hungary**, the current National Development Concept (NDC) is based around a growth pole strategy, with Budapest as a centre and other large towns listed as growth poles (Gyr, Pecs, Szeged, Debrecen, Miskolc and the linked axes of Szkesfera and Vcszprem). The strategy to develop the Budapest area is couched in terms of strengthening R&D and high-tech activities and building on its comparative advantages such as access to highly qualified labour.

Conclusions

The aim of this paper has been to review recent regional policy developments across the EU and Norway to identify the extent to which they have an urban component and, in particular, the degree to which they promote innovation in an urban context.

The review of regional policy objectives (Section 2) has made clear that relatively few countries have an explicit urban component to their regional policy goals. The main exceptions are the Nordic countries, where there are regional policy concerns about developing and supporting a balanced regional structure, with broadly

uniform levels of service provision across the country. At the same time, all the Nordic countries are also now following a regionally-grounded growth and competitiveness agenda under their regional policies.

In a second group of countries, growth and competitiveness objectives have been increasing the stress placed on urban areas from a regional development perspective. In Ireland, policy recognises that infrastructure and related economic development services must be at an internationally-competitive level in key locations if regions are to be attractive internationally. In France, there is a strategy in place to improve the European importance of French cities and promote their potential as motors of regional development. In the Netherlands, the **Peaks in the Delta** approach has much enhanced the emphasis put on cities and urban networks as the driving force behind economic development. And in the United Kingdom, the weight now placed on improving productivity, growth and employment through regionally-derived strategies has increased the regional policy focus on the economic potential of urban areas.

More generally, the shift of regional policy away from an aid-based concentration on investment promotion in narrowly-defined problem regions and towards the regionally-driven development of growth, competitiveness and productivity in all parts of the country has seen urban areas gaining in policy prominence. This has also been the case in the EU10 Member States where, as just noted, there is a strategic focus in a range of countries on the economic development role of urban areas in general and capital cities in particular.

The discussion of urban and related innovation initiatives under regional policy (Section 3) has highlighted a number of clear urban-related measures – the French strategy to enhance the potential for cities to act as

motors of regional development and the recently-introduced competitiveness poles, the Dutch focus on the economic development role of urban areas and the strong urban orientation of the **Peaks in the Delta** approach, the Centre of Expertise and Regional Development programmes in Finland, and the new Norwegian Centre of Expertise programme. In addition, examples have been provided of how the growth and competitiveness agenda is increasing the focus on the economic development role of urban areas – in Italy, Sweden, the United Kingdom and Ireland, amongst others, as well as in a range of EU10 Member States. As mentioned at the outset, the economic component of urban policy is also increasing in a range of countries.

Of course, these various developments need to be set in context. In particular, it is of note that a number of the regional policy initiatives do not involve very significant budgets when set alongside traditional regional policy measures (e.g. regional aids). In addition, the enhanced regional policy focus on urban areas does not necessarily imply a reduced emphasis on other spatial problems (or opportunities). Many of those countries which have introduced specific urban-related measures under regional policy (e.g. Finland, France, Norway) also

have specific spatial policy initiatives directed at rural (and other) areas. Moreover, the focus on urban areas is often accompanied by measures which aim to spread economic development benefits more widely by improving the connections between urban areas and their hinterlands. Further, under regional policy, sensitivities remain as to where budgetary flows go (in relation to the perceived severity of regional problems). While a growing number of countries are adopting an all-region growth and competitiveness approach to regional policy – and while this is also being promoted under EU Cohesion policy – the geographical spread of the benefits of policy remains a contentious issue.

On the other hand, the increasing policy emphasis on the growth and competitiveness agenda (both domestically and at the EU level), combined with a sensitivity in a number of countries to issues associated with territorial balance, has seen a growing regional policy stress on urban- and associated innovation-oriented measures. The focus on the development potential of cities and their hinterlands – and the development of policy instruments to tap that potential – has been a significant new regional policy trend in recent years, and one that seems bound to grow in importance.

Transforming universities as Triple Helix catalysts: Towards European innovation areas

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Introduction

The triple helix thesis posits an enhanced role for the university in a knowledge-based society. Government and industry have been the major institutional spheres of industrial society since the 18th century. In contemporary post-industrial society, the special features of the university endow it with potential to become a key actor in regional innovation. A case study of the recent experience of Jyväskylä in central Finland exemplifies the enhanced role of academic institutions in regional development. The triple helix model of regional innovation consists of knowledge, consensus and innovation spaces in which the “raw materials” for innovation are aggregated; collaborative arrangements are worked out to develop initiatives and organizational initiatives are invented to realise objectives. A Triple Helix strategy of linking city regions into broader knowledge-based conurbations provides a potential to make Europe competitive with the most successful innovation areas in United States.

The Lisbon Agenda’s objective is to make Europe a world leader in innovation and economic growth. The measures proposed to attain this goal include increasing R&D spend to 3% of GDP, networking R&D resources through the creation of European Research Areas and stimulating basic research through the founding of the European Science Foundation. In addition to declining industrial areas and those lacking infrastructure for development, the Four Motors of Europe (Baden-Würt-

temberg, Catalunya, Rhône-Alpes and Lombardy) have also slowed. Nevertheless, Europe possesses the ingredients for knowledge-based economic growth in universities like the Karolinska Institute and city regions such as Leuven. Even the so-called European Paradox of relatively high R&D spend with relatively little resulting economic development is an indicator of potential. What is lacking is a strategy to draw these resources together, creating large numbers of entrepreneurial universities as engines of economic development and linking city regions into broader high-tech conurbations with the potential to challenge Silicon Valley.

The Triple Helix thesis

How can a rising tide of economic development be generated that is strong enough to float all boats? The triple helix thesis is that knowledge-based economic development is created through bottom-up, top-down and lateral initiatives among universities, industry and government. When a sphere is missing, another may fill the gap. Universities may assist firm-formation; government provides venture capital. Government and the industry were the leading actors from the 18th century until quite recently. Formerly a supporting actor, providing trained persons and research, the university is now a leading actor in knowledge-based societies, utilizing its special features, such as flowthrough of human capital. Universities are especially important in stimulating development in regions where science-based industry is weak.

The premise of the triple helix regional innovation model is that the conditions for high-tech economic growth are not spontaneous creations; rather they can be identified and put in place by explicit measures. As regions formulate knowledge-based innovation strategies, the constellations of actors and their relative importance in the local political economy is transformed. With knowledge assuming increased significance as a factor of production, in both high-technology and older manufacturing industries, the traditional elements of land, labour and capital are reduced in importance. This has various political consequences, including the increased significance of knowledge-producing institutions such as universities in regional growth coalitions.

The heart of the triple helix thesis is the transformative role of the university in society.

A university is embedded in a relationship web that imports and exports “best practices” as a natural by-product of academic practice. For example, ideas for Science Parks and the formation of bio-technology firms at Chalmers University in Gothenburg and the University of Helsinki came from professors who were sabbatical visitors at Stanford and returned home imbued with the intention of introducing an entrepreneurial model into their universities. The university’s transition from a secondary to a primary institution in knowledge-based societies is based on its ability to develop new techno-economic paradigms and tease out technological and economic implications from research. An entrepreneurial academic strategy includes:

- a. the ability to control strategic direction, physical infrastructure, fund raise and tap into alumni and public support (Goddard, 2004);
- b. focusing on fields with conjoint theoretical and practical potential (Zucker and Darby,)

c. technology transfer to close the gap between invention and innovation. (Owen-Smith and Powell, 2001).

A university is fundamentally an educational institution, but the academic framework by its very nature is a protean structure that provides early warning, assessment and entrepreneurship capabilities as a by-product of its institutional design. Universities are important to regions not only for their technological knowledge base but also for their special generative, reproductive and renewal capabilities. Generative capabilities include the production of new knowledge and the creation of new firms and industries from that knowledge base; reproduction is education and training and renewal may include re-training to circulate people and resources from older declining areas into newly emerging fields.

The role of the university in innovation and economic and social development has only recently moved to the forefront of policy attention in Europe, inspired by several decades of major firms and new industries emerging from entrepreneurial universities in the US. The research university is increasingly looked to as the basis for high tech spin-offs even as the teaching university allows access to knowledge at the edge of the research frontier for infusion into firms and other organisations through knowledge transfer activities and the human capital flow of graduates. The upgrading of teaching into research and entrepreneurial universities and of intermediary transfer institutions into universities thus becomes a key regional development strategy.

The first principle of knowledge-based development is to strengthen regional academic capacity. A European example of this is Barcelona where the Catalan Ministry of Industry funds university research facilities, adding to the efforts of the Ministry of Education, through

science park projects. The second principle is to initiate a process to capitalise knowledge, both in a forward linear fashion of translating research with economic potential into firms and jobs and in a reverse linear mode of using knowledge to solve problems in existing firms. The third principle is to network city regions into broader high-tech conurbations, like Scottish Enterprise's linking of Scotland's academic institutions to make them competitive with major US universities.

Defining spaces in innovation environment

Within specific local contexts universities, governments, and industry are learning to encourage technological innovation through the development of loosely-coupled reciprocal relationships and joint undertakings. For this to happen a region must have some science and technology institutions and have invented or obtained other necessary kinds of innovation-supporting instruments, such as investment mechanisms and leadership to promote new initiatives. As this transition takes place, the traditional meaning of 'region' is transformed. These efforts may start as isolated initiatives, not directly connected to regional innovation. A university may initially become involved in firm-formation simply to maximize revenue from technology transfer. However, as it becomes aware of the regional implications of its efforts it may then take a broader view of its role.

Regions can be assisted in designing and assessing efforts for knowledge-based economic and social development by integrating regional analysis with science and technology policy. To this end a set of concepts has been developed to capture the knowledge-based regional innovation process as it occurs in a series of three spaces (knowledge, consensus and

innovation spaces) that overlap and cross-fertilize each other. Knowledge spaces provide the building blocks for technological development; consensus spaces denote the process of getting relevant actors to work together and innovation spaces are an organizational invention to enhance the innovation process. Regional innovation is a non-linear process that may start from any of the three spaces and subsequently move to the others.

The knowledge space: Concentrations of related R&D activities in a local area that have been identified as a precursor to knowledge-based regional economic development (Casas, et al. 2000).

The consensus space: is a venue that brings together persons from different organizational backgrounds and perspectives (academic, public, private) to generate new ideas and strategies

The innovation space: Realizing the goals articulated in the Consensus space typically takes place by creating a new organizational mechanism to fill gaps in the regional innovation environment. The new mechanism is typically a hybrid organization, synthesizing elements from different institutional spheres.

The process of filling gaps in a regional innovation environment may start with the knowledge space, move to the consensus space and then to the innovation spaces in a linear fashion or start from one of the other spaces and proceed non-linearly in different regional circumstances. For example, it is expected that less research-intensive regions will focus on building social capital in the consensus space in order to upgrade their knowledge space; older industrial regions with a high level of R&D resources will focus on the innovation space to develop specific initiatives. These efforts will be more or less successful depending upon the centrifugal and centripetal forces in the region, drawing relevant actors together or keeping them apart.

Knowledge-based Regional Economic Development

Stage of development

Creation of a knowledge space

Creation of a consensus space

Creation of an innovation space

Characteristics

Focus on “regional innovation environments” where different actors work to improve local conditions for innovation by concentrating related R&D activities and other relevant operations

Ideas and strategies are generated in a “triple helix” of multiple reciprocal relationships among institutional sectors (academic, public, private)

Attempts at realizing the goals articulated in the previous phase; establishing and/or attracting public and private venture capital (combination of capital, technical knowledge and business knowledge) is central

Negotiating the Transition from Consensus to Innovation Space: Having representatives of the triple helix together in the New England Council during the 1930's provided an audience for Karl Compton, the president of MIT for his thesis of firm formation from academic research as an economic development strategy (Etzkowitz, 2002). Including actors from these various backgrounds in the strategy review and formulation process provided access to the resources required to implement the eventual plan. The Council's analysis of regional gaps and strengths led to a focus on academic research as a source of new firms; business schools and financial institutions as partners to invent the venture capital firm.

A New York effort during the 1990's led by the New York Academy of Sciences lacked a protagonist with sufficient credibility to generate a common vision. It was initially supported by the Federal Reserve Bank of New York but when the bank withdrew from an active role, leadership reverted to the Academy, which was unable to retain business support. The Academy eventually

abandoned the project and reverted to its traditional remit of facilitating interaction across university boundaries and among members of academic disciplines.

The Regional Innovation Organizer (RIO)

Who shall assume a leadership role in resolving innovation crises at the regional level is a frequently asked question even in countries with strong regional governments. Since governmental boundaries often do not coincide with economic districts, there can be a leadership vacuum. A company or university that takes the lead in recruiting partners and managing interaction among a group of firms in a region may fill this gap. Organizations from a variety of institutional spheres can assume such leadership roles or, of course, participate as members in the resulting collectivity. An organization that takes the lead in enunciating a development goal and coordinating cooperation among a group of organizations to carry it out is a Regional Innovation Organizer (RIO). Together they act as a collective entrepreneur. In

addition to the position of universities as main Regional Innovation Organizers, a city can also play a role in innovation. In particular in countries where cities' or municipalities' positions are established, the role of city as a local orchestrator of innovation may sometimes be significant. A respected firm or industry association may also take the lead.

Although the triple helix implies a common format of innovation, the path to the triple helix begins from two opposing standpoints: (1) a statist model of government controlling academia and industry and (2) a laissez faire model, with industry, academia and government separate and apart from each other, interacting only modestly across strong boundaries. There is a movement from either starting point toward a third alternative of each institutional sphere maintaining its special features and unique identity while also taking the role of the other.

Different Starting Points; Common Goal

Regions may be viewed as "thick" or "thin" depending upon the presence or absence of innovation support structures, whether informal or formal. Thus, whether it makes sense for a region to create new organizational mechanisms depends upon whether firm-formation is already taking place, for example supported by a network of angel investors, or requires a formal support structure, such as an incubator facility, to take off. A region that is rich in business development requisites such as venture capital and an entrepreneurial culture may not have to develop explicit organizational mechanisms. On the other hand, a region that is lacking knowledge-based economic development activity may find it useful to develop an incubator or science park, in association with a university, to foster regional development.

An entrepreneurial university is able to search out the potential of emerging technological paradigms that

are the ultimate basis of creative and self-renewing regions. Personal relations often play a crucial role. When the Karlskrona Rönneby region of Sweden lost much of its military-related industry in recent decades and failed to persuade central government to encourage a large firm to locate production facilities in the region, a high-tech strategy was sought by the region's leadership. Drawing upon personal contacts, the Swedish chair of the Computer Science Department at Stanford advised a focus on software rather than hardware. A small technical school, Blekinge College and software incubator "Soft Centre" were established that became the source of the region's economic renewal.

A Triple Helix Region ideally includes a university that is broad enough in its remit to be at the forefront of several areas of advanced science and technology, only some of which have short-term potential for application. If a university is too narrowly focused, it will lack the ability to develop alternative knowledge-based sources of economic development. Although urban regions "... specialized in advanced services, creative industries or innovative manufacturing sectors may emerge as successful knowledge cities" (Windén, 2005), regions with an entrepreneurial university have a competitive advantage. Regions lacking such a university may fall behind in international competitiveness while even small regions like Karlskrona may move rapidly ahead.

Learning regions are more oriented to low-tech than to high-tech; to government-industry relations rather than to university-industry relations (Hofmaier, 2001). The learning region emphasizes building upon existing assets rather than creating new ones. It emphasizes close relations between firms and customers as the basis for innovation. Universities in a learning region can be expected to focus on traditional university-industry relations such as preparation of trained human

capital and informal relationships such as consultation, whereas in triple helix regions the focus will be on new roles such as firm-formation and formal structures such as transfer offices. A learning region may have a high level of research capacity but it is likely to exist in isolation from the industrial sphere.

Urban regions face greater difficulties in fostering high-tech development than suburban regions due to the greater presence of existing interests, with alternative priorities for use of land and other resources (O'Mara, 2004). In highly-developed urban areas, the cost of land becomes a barrier or at least an additional cost. With notable exceptions such as Recife and Turku, most successful Science Parks, like Research Triangle in North Carolina, have been suburban developments, leasing inexpensive land to firms.

However, it is increasingly recognized that a dense urban infrastructure provides a natural support base to nurture start-ups. Older science parks, like Stockholm's Kista, infill residential and commercial development to re-create lively city cores and found new universities to create the platform for knowledge-based firms. Providing an interesting urban environment and an attractive place to live appears to be growing in importance.

The Jyväskylä Entrepreneurial Academic Transition²⁹

The leadership of the University of Jyväskylä in Finland expects that its "...future development will be different than the classical research University" even as it retains the basic values of freedom and autonomy, typical of old academic Institutions and traditional ways of thinking. It is expected that "... our researchers will connect in many ways to practical programs, accepting the challenge... to work in innovation." Of

course, the University is a recent graduate to the world of classical higher education. To this date many of its most highly-rated programmes reflect its origins as a teacher-training institution. The university has successfully built new areas of excellence, without losing its old ones. Indeed, these traditional applied disciplines have been enhanced in the process of academic upgrading to incorporate a basic research focus. (University of Jyväskylä, 2005.)

Intermediator policies, quite common in many countries, prepare the way for an entrepreneurial academic transition, developing entrepreneurial and technology transfer capabilities, typically in Science Parks that can be later be internalized. Thus, in Finland and elsewhere, intermediators can be seen as an important stage of development before the appearance of a more entrepreneurial university itself. At the regional level, structural change in central Finland from the late 80's has been a strong underlying driving force in encouraging cooperation among municipal authorities, universities and industry. With businesses closing down in the centre of city, with the public sector shrinking and a 25% unemployment rate; the region's leadership was open to new ideas. Professor Eero Peltola of Jyväskylä University is credited as the intellectual source and a former mayor of Jyväskylä is recognized for his inspiration. A project team was formed representing academia, business and municipalities – the regional triple helix.

The University of Jyväskylä is at the cusp of a transition to an "entrepreneurial university". At present initiatives in this direction are primarily related to the university developing its research capacities, with individual initiatives linking to external resources to realize the economic development potential of research and education. Capabilities for technology transfer and

²⁹ This section draws upon interviews conducted for an OECD sponsored regional report.

incubation exist, either formally outside of the university in the Science Park and Venture Cup Competition, or informally within the university through the initiatives of students, faculty members and deans. The broader issue is to involve faculty members who are less committed, uninterested or neutral and even opposed to commercialization of research. A debate needs to be

initiated in the university and among its constituencies regarding the local definition of the 3rd mission, i.e. the societal impact of university.

Early mover faculty members provide exemplars of firm-formation for their peers and role models for their students. Whether faculty members or students, once they become actively interested in commercialization of

Innovation environments benefiting Skype and Google

Why is Skype now a subsidiary of a Silicon Valley mega-firm rather than on its way to becoming a mega-firm itself? Four recent university graduates in Tallinn developed the Skype Internet telephony platform, assisted by the Turku Science Park and London financial interests (Etzkowitz, 2006). They exceeded comparable systems developed in the US, for example, by Net-to-Phone, a Bell Laboratories/IBM spin-off. Skype was recently sold to eBay for 2 billion USD. Although Skype is certainly a great success it may also be viewed as an exemplification of the European incapacity, to date, to generate large firms from new technological platforms such as the World Wide Web, invented by Berners-Lee at CERN. The regional innovation environment in which Skype was created was insufficient to supply it with the necessary ingredients for independent growth. Some of these gaps were filled by drawing upon resources from the Turku Science Park in Finland and the London financial hub, but key elements were still lacking, such as a cluster of related "co-opetitive" firms and a corps of experienced serial entrepreneurs capable of creating an independent mega-firm.

Google, a firm that emerged at roughly the same time as Skype, had the advantage of location in the Silicon Valley "ecosystem," a supportive environment for translating ideas into businesses. In addition to venture firms themselves, the ecosystem includes successful entrepreneurs, representing start-up management expertise, banks and the financial arms of large corporations as sources of co-financing, university professors and technology transfer offices as sources of new technologies for firms and law firms as gatekeepers between entrepreneurs and investment opportunities. Despite the absence of some of these elements in Tallinn, it was possible to access them from elsewhere. Nevertheless, Skype was drawn into the web of Silicon Valley, perhaps an inevitable development given Europe's lack of a comparable high-tech ecosystem? This paper suggests a triple helix strategy to overcome persisting gaps in innovative capacity by networking city regions and creating European Innovation Areas (EIA's) such as Hadrian's Valley in north England and Scotland.

research, they typically link up with the Science Park, an organization with professional innovation capabilities in the region.

Indeed, the Science Park is in touch with and knowledgeable about those faculty members who are actively involved in commercialization of their research. It is typically students of these professors who will be the ones who appear on the Science Park's doorstep seeking assistance with projects. Thus, there is already in place an organizational mechanism for supporting technology transfer and firm formation, even before explicit university capabilities are available.

Making a Triple Helix Region

An innovative region has the capacity to regenerate itself, moving to a new technological paradigm as an earlier one is exhausted (Etzkowitz and Klofsten, 2005). As regions seek a self-reinforcing dynamic of knowledge-based transformation, new relationships are established across boundaries, creating hybrid organizations such as technology centres and virtual incubators. Regional coalitions, high tech councils and the renewal of local scientific societies are among the emerging formats. These integrating entities go beyond the activities of traditional boundary-spanning mechanisms such as technology transfer offices that arrange interaction across delimited boundaries. Encouraging the establishment and extension of the activities of both these older (boundary-spanning) and newer (integrative) linkage mechanisms are part of a regional knowledge-based economic and social development organizational strategy.

European high-tech development efforts typically focus on the city region. Thus, the UK's Chancellor of the Exchequer has designated 6 cities in the re-developing north of England as "Science Cities". A label can help or

hinder; it may precede or follow high-tech development. What is important is to genuinely invest in those cities which have been labelled. A technology journalist called the California semi-conductor industry Silicon Valley in the early 1970's, a name that has been generalized to cover a broadening high-tech region. A North Carolina government-business coalition in the 1950's, taking three universities as points, called a projected high-tech area a Research Triangle. Political clout relocated some 2nd rank national research facilities and R&D units of corporations were attracted next.

A label by itself does not create a high-tech region but the wrong label can engender opposition and hinder co-operation. The Copenhagen/Skåne (Southern Sweden) cross-border region was originally to be called Greater Copenhagen but this was abandoned in the face of Swedish opposition. A branding process came up with Öresund, a neutral name, with a bridge project icon, that Danes and Swedes could rally around. Newcastle, a city region designated as a "Science City" competes for support from the Regional Development Agency with Sunderland, a neighbouring town with its own high-tech ambitions. Competition among relatively small city regions makes it difficult aggregate the resources necessary to create a high-tech region. In North-East UK problems are exacerbated by lack of a regional government, universities that have tended to compete more than they co-operate and a business sector that has barely recovered its previous level of employment from the industrial era.

Although creating high-tech city regions is a difficult enough task, more ambitious efforts are required to make Europe internationally competitive. For example, Newcastle Science City should be supported as a building block of a larger project with the potential to replicate the scale of Silicon Valley from different

technological platforms. Basic nodes of this “Hadrian’s Valley” area might include Glasgow, Edinburgh, Newcastle, Durham and York. Adapting the Canadian Centres of Excellence model, across geographically-dispersed universities, could create sufficient academic “critical mass” to engender self-sustaining high-tech growth. To conserve green space and promote interaction, Hadrian’s Valley should be linked by upgraded rail services, like the “mag-lev” line linking Shanghai and its airport that is currently being extended to a broader region.

Conclusion: Emerging European Innovation Areas

The **capitalization of knowledge** supersedes the classic resources of land, labour and capital as the primary resource for economic development. Science is **polyvalently** amenable to multiple uses simultaneously, i.e. findings can be published and patented. Such possibilities were identified in the origins of modern science in 17th century England by Robert Hooke, Secretary of the Royal Society (Merton, 1933). They were initially realized in the creation of the chemical dye industry in Germany in the 19th Century from research conducted in England. Later on, they have become the centrepiece of cluster development strategies in brownfield sites such as Leuven and York, as well as in greenfield sites like Cambridge, UK, and Stony Brook, Long Island.

Europe needs to develop credible competitors to other successful innovation ecosystems like Silicon Valley. Networking research resources across broad geographical regions is a first step towards creating European Innovation Areas, transcending individual city regions like Leuven and York. Noteworthy as these successes are, they lack the scale to become self-sustaining by generating new industries and independent large firms that become a “planet” drawing start-ups

and other firms into their orbit. Even when a city region like Newcastle generates a successful large software firm, it lacks the ability to sustain the application firms that might otherwise locate in its wake.

Bottom-up efforts could be strengthened by providing opportunities for them to attain greater critical mass, regionally, nationally and internationally. This goal could be achieved by encouraging connections between various national initiatives, such as Centres of Expertise, national graduate schools, and support offered by other regional or European programmes. Such an overlay strategy could complete a virtuous circle of innovation that currently has significant gaps. In the United Kingdom, Hadrian’s Wall, the Roman barrier between England and Scotland should be transformed into Hadrian’s Valley, the metaphor for a “cross border region”, linking Scotland and North-East England much as Öresund links Copenhagen and Skåne (southern Sweden).

The linking strategies developed by Scottish Enterprise need to be extended to the developing Science Cities of North-East England, like Newcastle and York, to create a critical mass of high-tech development. The European paradigm for spatial and regional development is based on linking city regions, through communications infrastructure and high-speed rail transport. This is in contrast to US post-war suburbanization that encouraged an inter-state highway system that was originally intended to link major metropolises but which became the progenitor of “edge cities” that are outmoded in an era in which a petrol-based auto-culture is unsustainable. Even California recognizes this eventuality with a plan to construct high speed rail linking the state’s urban and suburban regions.

A high rate of national R&D spend is a necessary condition for long-term technological and economic

success. An entrepreneurial academic development strategy provides the sufficient condition to realise the potential that is created by that base. Adapting the former policy without following through with the latter strategy is the source of the so-called European Paradox which is by no means peculiar to Europe. Even Stanford University operates at only a relatively small percentage of its entrepreneurial capacity since it relies on a relatively small group of serial entrepreneurs embedded in the Silicon Valley ecosystem. This innovation area largely eschews the organizational mechanisms

such as incubators and direct assistance with firm formation required to take advantage of the inventions of less entrepreneurially-oriented faculty.

This condition is remediable by a networked regional development policy to establish European Innovation Areas across Europe. Only the creation of a fully-fledged set of inter-linked entrepreneurial universities and city regions, combining formal and informal mechanisms, will realise the Lisbon Agenda. Anything less will perpetuate the paradox of high scientific output coupled with insufficient economic return.

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Liveable cities - the soft side of urban policy

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Urban welfare is an issue that is understood in many different ways. The predominant view is that as long as the economic operating requirements are met, welfare will take care of itself. The thinking is that the unhindered operation of the market and the success of companies generate jobs, income and growth-stimulating demand for goods and services. As synergy hubs cities are centres for added value. The well-being of the economy is a priority that also generates welfare for cities and their residents.

But does it? This question must be asked during a period of growth without an increase in jobs. The recession of the 1990s hit the Finns particularly hard, and its traces have not disappeared from people's lives as quickly as they have disappeared from the book keeping of the national economy. Furthermore, in the economic way of thinking, the definition of welfare is very narrow: it really does just refer to standard of living.

In social policy, welfare is taken to mean security, and the successful management of risks and social problems. The welfare state or the welfare society is taken to be the key generator of welfare, and the maintenance of welfare is not seen as the surplus product of a competitive economy, but as a requirement for it.

However, either welfare state model or the market model should not be given a monopoly in defining urban welfare. There are several other viewpoints: for some welfare means aesthetic highlights and contemplative enjoyment, for others it means health and health pro-

moting behaviour. In addition to the public and private sectors, welfare is generated by the third sector and civil society, but again, they view welfare slightly differently: as spirit of unity, participation and a meaningful life, as social interaction, etc.

In this article I will argue that a city's liveability, quality of life of the residents and their satisfaction with everyday life are important aspects of welfare. There is no doubt that the economic success of cities is important. However, viewing cities purely as growth machines, economic operators and facilitators of economic functions is an inadequate basis for urban policy in Europe. Urban policy cannot be based purely on making the economy more efficient and facilitating the relevant infrastructure to do so, it must also have a place for the softer infrastructure of urban life.

Structure and identity

Cities compete with one another over companies, jobs, residents and the souls of travellers. Satisfaction with everyday life is beginning to emerge as one weapon in this competition. Perhaps something is lost if it, too, has to be seen as a competitive tool, when it has inherent value in itself. But it is also a competitive tool and viewing it as such may provide us with a wider perspective on urban policy.

Quality of life and urban liveability are more than just a lack of problems. The cities of Northern Europe are relatively free of pollution, one does not have to

spend time in traffic jams or use respirators, nor fear terrorist attacks or drug-related violence. But this is not good enough, if, at the same time, cities are considered boring and aesthetically dull places where nothing ever happens. If traffic is problematic and public utility services do not work, the entire basis of modern city life falters. But even if such issues did not exist, the quality of life would not necessarily be particularly high, nor the city immensely attractive. Actual satisfaction with everyday life is generated by different kinds of factors: freedom and variety in everyday life, the individual character of the city, the successful combining of individuality and community spirit.

Fred Inglis (2000) mentions Cairo as a city with a strong identity but a weak structure. Singapore has a distinct structure, but a thin identity. Dutch architectural theorist Rem Koolhaas is fascinated by cities with a thin identity. He describes Atlanta as a model contemporary city precisely because it lacks character and identity. It is a blank sheet without traditional beauty, a city centre or community spirit (Iyer 2001, 210-211). An attitude this cool is luckily rare. Usually city-dwellers want to feel at home and do not like blank sheets. On the contrary, they want to get a grip on a place and mark it as theirs one way or another. A city must have both an identity and a well-operating structure.

Good city spaces get used

A simple but sound measure of the quality of a city's public spaces is how much those spaces are used. Based on his long-established collection of photographic material, American William Whyte (1988) drew conclusions on how a city's public spaces attract people. He noticed that one and the same space, for example a park, can be used in very different ways — in fact, the uses of a city space should always be discussed in

the plural. Even a passive and hurried use of an urban space can be rewarding for a busy city-dweller. As an example Whyte mentions Paley Park, a 'pocket park' in New York City, which most residents pass without stopping, but their heads still turn and their expressions relax. A similar effect can be caused by a public work of art, a street event, or an important building or space (Crawhurst & Lennard 1995). Sometimes a city space is only recognised as important when it is under some kind of threat.

The use of a city's public spaces is linked not only to satisfaction but also to security. The recently deceased American urban researcher Jane Jacobs (1961) made the important observation that a sense of security comes from other people, from the fact that city spaces are used and not left empty. For example the oversized market places of Finnish cities are deserted in the evenings; public space is under-used because there are not enough people to go round.

It is not possible to fully plan a city's identity and use of public space. In the centre of Helsinki — around the railway station, the Parliament building, Finlandia Hall and the Opera House — there is empty space, where infill building has been planned for years. At the same time, the residents happily use the shores of Töölönlahti bay as they are.

Rehabilitation of streets

Streets are meant for moving around, and are often not valued for anything else. In cultural interpretations the street refers to the danger posed by masses of people, and 'ending up on the street' refers to the bad life. The boulevards of Paris provide a classic example of how urban planning was used for protection from internal hazards that threatened political order. Baron Haussmann designed them so that if the common people

started revolting, the guns would have a direct line of fire.

Similarly, in the Finnish garden or forest city ideology, the streets and yards of stone cities represented space where the bad life thrived. The father of Finnish garden city Tapiola, Heikki von Hertzen (1946) famously warned about them. Such street-hostile views culminated in the famous La Ville Radieuse plan by Le Corbusier, in which the death of the street was the objective (see Raban 1988, 24-25).

It is time to overturn this death sentence and rehabilitate the street life we have learned to envy during our travels to cities that teem with life. After all, the street does have another interpretation in Western city culture: it is not only the scene of movement and restlessness, but also of freedom, wandering and choices, “the only valid field of experience”, as the ideologist of Surrealism Andre Breton puts it (Jukes 1991, xi).

Slow and fast – two models of urban life

One gets in touch with a city by moving within it. Experiences about places are affected by the way and speed in which we move. When moving fast from one place to another, the concrete feel of a place is lost. When moving slowly, a place remains a place. One experiences them with multiple senses, they become part of the body’s memory and are charged with positive, long-term and nostalgic emotional energy. A city’s identity can be strengthened by maximising people’s opportunities for such haptic spatial experiences. Urban development that is primarily based on the use of cars threatens to destroy the character of cities. This can also happen through an excessive spatial division of labour, the complete separation of accommodation, work, shopping and leisure time from each other.

Modern society swears by speed, but moving slowly is also on the increase, for example through cycling and walking. This is the counterweight to an ever more hectic everyday life. As soon as one does not have to move on foot, the opportunity to do just so becomes valuable. In Helsinki, an increasing number of people are bragging about walking to work. A particular target of envy are those people, whose route to work passes through the forest-like central park at the heart of the city, or along the sea shore. These neo-walkers are busy people, who you would think do not have time to move slowly, but for them the walk to work is one way to make their everyday life more enjoyable and aesthetic. Besides, the more we save time, the more expensive it gets, and therefore spending time feels so good. City people tolerate multiple stimuli and enjoy speed, but the more hectic life becomes, the more important it is for them to occasionally get rid of the “tyranny of the moment” (Hylland Eriksen 2001).

In the cities, two opposite models for life exist, the aesthetics of slowness and speed. For example, eating in the city is not only rapid gobbling (fast food), but also committed and social eating (slow food). While a well-operating city structure speeds up different everyday functions, there is also wellbeing that is based on slowness.

The Finns enjoy a slow life style at their summer cottages. Summer cottages represent the realm of freedom for them. The watches are put away, simple and “natural” life style is celebrated. In cities, the Finns have learned to compete by conspicuous consumption, but at the cottage, the competition is more about lack of consumption, being natural and being local. Any sign of luxury is carefully hidden. The comfort of cottage life lies in its alleged lack of comfort. (Kari 2006.)

Summer cottages exist in another time and place. They are in the country-side, but their cultural location is somewhere between the city and the countryside. Just by existing they soften the urban-rural dichotomy between the city and the countryside. The importance of leisure time housing is growing everywhere, but in Finland it is exceptionally common to own a second dwelling, usually a summer cottage (Reijo & Juntto 2002, 64). Approximately every fourth household owns a cottage, and it is estimated that every third person in Finland has access to a cottage (Melasniemi-Uutela 2004, 146-147). Unlike Southern Europe, in Finland a second dwelling is not necessarily a sign of particular wealth. Many Finns who have moved from the countryside to the city have a cottage in their previous home district. The cottage may not have much trade value, but its emotional value is high. In a rapidly urbanising country, summer cottages represent continuity and remaining local, they are a bridge to the world that used to be — before structural change, globalisation and cultural fragmentation (Karisto 2006).

The city and growing old

The concept of the flâneur popularized by Charles Baudelaire is at the very heart of modern urban culture. To idle around, to sit down and to contemplate the crowds going by is a basic urban pastime, the value of which is gradually being realized even on the fringes of Europe. Street cafés, which have finally appeared in Finland too, are more than just a trend, they are a sign of change in urban culture. They bring new sheltered space to the inside of city blocks, and people may well sit down for a coffee even if the temperature is below zero. The young city dweller's habit of wandering on the street holding a cup of coffee in one hand and a mobile phone in the other is a sort of merging of the aesthetics of the slow and of the fast.

Flâneur conjures up an image of a young dandy, but the unhurried promenade, the interest in the public urban space and the aesthetics of the slow are also pursued by the elderly and are on the increase due to the ageing of the population. Walking for fitness is also favoured by the elderly in particular.

The proportions of age groups are almost reversed in European cities. In some southern European countries such as Italy, Spain and Portugal, the percentage of the elderly in the population is high at the moment. But it is in Finland that the change in ageing is the fastest because of the exceptionally large cohort of the Baby Boomers (Karisto 2005). Because the spatial preferences of people of different ages are somewhat different, this will probably be translated into an increased appreciation of city centres and of public spaces in general. However, the age effect may be inhibited by the generation effect. Finland became urbanized at a late date, and the majority of the adult population in cities are immigrants from the countryside, and as such mentally 'forest city' residents rather than 'city centre' residents (Ilmonen 2002). However, the generations of city centre residents are on their way, and this, together with the age effect, is likely to mean that the now threatened local shops and services in city centres will enjoy an unprecedented new boom.

There has been discussion in urban research on the struggle for the urban space between social groups and also between genders. Moreover, a similar struggle is being waged between age groups. Adolescents and young adults are no longer allowed a monopoly on public urban space and urban culture. The end result, one hopes, will be an urban space that is not as segregated by age as it is now.

Whereas use of urban space in southern Europe is often conspicuously segregated by gender, in the

north it is segregated by age. There are many places where there is a perceived if not formal upper age limit. A study conducted in the Lahti area showed that one third of elderly residents feel that there are not enough places in their town where people of their age can drop in and meet one another. In rural areas surrounding the town, the percentage of such respondents is even larger, but the use of space is not as sharply segregated by age (Karisto et al. 2003, 50).

There is public debate on how child-friendly urban environments are, but surprisingly little discussion on what city centres have to offer the elderly. One of the hallmarks of a good city is that it is available to and usable by people of all ages, with functions and amenities for all. A city itself, after all, consists of physical strata of different ages. An urban environment has the patina of age, and even wear and tear is of cultural importance. This point was almost forgotten in the decades of Modernist fervour when new things were considered by definition more valuable than old things.

Social capital, aesthetics and liveability

The significance of social capital to wellbeing has come up in many studies, an example of which is a study on differences in health between the Swedish-speaking minority population of Finland and the Finnish-speaking population. The study showed that differences in health can be traced back to differences in social capital. The Swedish-speakers have a much closer community life. A life with close social contacts, hobbies and leisure activities is a healthy life (Hyyppä 2002). In Sweden, Benson Konlaan (2001) conducted a population study concerning the impact of cultural participation on health, with the influence of factors explaining both of these statistically eliminated. The findings showed that the perceived state of health of those who participated

in cultural events rarely was poorer, and their risk of death during the monitoring period was higher than that of those who participated actively in such events.

No study has been conducted on the impact of the aesthetic properties of the living environment on health and the quality of life. To be sure, this would be very difficult to study, as it is impossible to imagine how all the factors contributing to this could be standardized. Besides, people move about a lot, and few people have lifelong experience of a single environment.

This is not to say that there is no impact. It is highly unlikely that the high life expectancy of people in Mediterranean countries can be explained by a healthy diet and low climate stress alone. It must be of some importance that people are rooted in their villages and cities, where the public space is an important collective resource and amenity for them. People live in readily identifiable places which are pleasing to the eye and of which they are proud.

Joseph Brodsky has said that anyone who lives in St Petersburg for a long time cannot avoid assuming the sense of proportion and harmony built into it. Brodsky himself had a hard time in the city and was driven into exile, but St Petersburg had a lifelong cohesive effect on him. It must be said, however, that it requires the sensitivity of a poet to regard a Russian urban environment as cohesive or healthy. Life expectancy in Russia has plunged at a rate unprecedented in history. Reasons cited for this include alcoholism and the new social inequality, and there is some justification for both. The living environment and the liveability of cities may have some effect too. According to Mati Heidmets, former Rector of the University of Tallinn, 60 per cent of the residents of the former Soviet Union lived in exactly identical city suburbs which had been constructed with no regard whatsoever for cultural differences. This

was never questioned during the Soviet regime, since it was the very epitome and achievement of the classless society. But in post-Communist cities, the low-amenity living environment is probably seen as being in violent contrast to new expectations focusing on individuality and the quality of life.

Everyday life becoming to an aesthetic experience is a prevailing trend, but urban aesthetics is a complex issue. Beauty is in the eye of the beholder, and the way urban spaces differ cannot be defined through any unambiguous concept of beauty but rather through how they communicate with people. There are spaces that are considered both ugly and beautiful, both good and bad — but which leave no one unaffected.

Spaces and places

The above discussion addressed spaces and places without making a clear distinction between them. A place is an identifiable and individual space with significance for people. A space, by contrast, is an unmarked no man's land, which is largely devoid of emotional possession, memories and meaning. Marc Augé (1995) uses the term 'non-place' instead of space. He claims that our 'supermodern' society is full of non-places, meaning anonymous and abstract spaces which fulfil their functions well enough but in which people's experience of the environment is eroded. His examples of non-places are extreme: luxury hotels, airports, refugee camps. People are placed in some of these by force, while to others they go voluntarily to have a good time. In non-places, everything is controlled, and there are no negative surprises, but on the other hand all human experiences of joy are also somehow pre-programmed. It is a virtual reality which packages experiences and truncates human curiosity. Disneyland and McDonalds are, for the pessimist critics, models of what spaces are

becoming and what kind of Mickey Mouse land we are living in: a simplified, sanitized and seamless environment (e.g. Sorkin 1994; Zukin 1992). Even the places where we seek experiences tend to standardize these experiences and numb the emotions, say the critics.

Although the claims made by scholars such as George Ritzer (1998; Ritzer & Liska 1997) that everything is becoming 'McDonaldized' are exaggerated and underestimate the meanings imposed by people themselves, there is something to be said for the thesis that the urban environment is becoming one-dimensional. Augé (1995) predicts that we will be spending an increasing amount of time in non-places and that our lives will become poorer as a result. This is a trend that should not be accelerated in urban policy by any means.

Alberto Magnaghi (2005) from Italy associates the impoverishment of the public space with the evolution of metropolises. He feels that small, or perhaps medium, is beautiful. Indeed, the advantages of urbanization do not increase in a linear manner as the city grows. There are threshold levels where it becomes possible to maintain a certain type of city function or where certain adverse effects begin to increase. Helsinki likes to present itself as a 'pocket-size metropolis', a city with the benefits of a metropolis but without the disadvantages. It may well be that medium-sized cities are the best placed to achieve the territoriality and sustainability called for by Magnaghi: quality of environment, quality of life, reinforced local identity, community and participative democracy. A large number of European cities are of medium size, and it would certainly be in their interests for the benefits of medium-sized cities to be studied.

Suburbs built from the 1960s to the 1980s are often considered impersonal places, or pure spaces. Fortunately, however, people are adept at shaping places even out of spaces whose identity is negligible, to mark

out territory for themselves. An urban area that is at the bottom of the statistics on socioeconomic conditions is not necessarily a basket case in the eyes of its residents. According to some Finnish studies, people tend to view the future of their own residential area more positively than that of the city as a whole. (Seppänen 2001; Haapola et al. 2006, 9-11). It would seem that the much-maligned city suburbs have finally begun to develop an identity of their own. They are being referred to by proper names, they have cultural identities, they are protagonists in novels, poems and films, and they are even an object for nostalgia. This is probably due to the fact that the first generation to be born in the suburbs is now reaching adulthood. There are generational differences in how a city is viewed.

Diversity and segregation in the city

It is of great importance to the liveability of cities to what extent and in what manner their districts are diversified. Diversity in itself is not a problem. On the contrary, differences in the external appearance and life of city districts are important for identity-building. What is problematic is the translation of diversification into inequality and undesirable segregation in which a city is divided into sharply differing areas on the basis of the socioeconomic makeup and ethnic background of their populations.

In a segregated city, negative district images contribute to the perception of reality. If a city district is branded a bad place to live, those who can move away and are replaced by people from 'lower classes' and, as the saying goes, "there goes the neighbourhood". Indifference spreads, and the district becomes physically and socially decrepit. Its reputation goes from bad to worse, selective migration accelerates, and the vicious circle spins. This is by and large the segregation spiral as depicted in the literature (e.g. Musterd & Ostendorf 1998 and 2005).

In Finland too, it has long been predicted that segregation will increase as structural changes in the economy progress and as the welfare state deteriorates. The Helsinki area has been studied from this point of view. However, no such extensive local concentration of the poorly-off has occurred, nor the sort of collapse predicted by the theory. If anything, the people who are poorly off are dotted about here and there in the urban structure and there is a concentration of minor scale (Kortteinen & Vaattovaara 2003). This has been ascribed to general social policy and also to the principle adopted in urban planning of social mixing, i.e. creating both owner-occupied and rental dwellings in all new housing districts.

Manuel Castells and Pekka Himanen (2001) consider Helsinki a city where an innovative information economy and the welfare state tradition enjoy a happy coexistence. However, there are clear signs of an 'urban exodus' (Kesteloot 2003) of the well-off. Highly paid ICT employees are occupying the western reaches of the Helsinki metropolitan area, outside the city of Helsinki itself. By comparison, those who are educated and rich in cultural capital but not so well off financially tend to favour the city centre of Helsinki (Kortteinen et al. 2005). The force behind the recent wave of segregation is thus a selective migration of people who are particularly well off; in Belgium, this began decades ago (Kesteloot 1998).

A recent Finnish study (Ruoppila 2006) shows that a new EU city, Tallinn, is showing signs of segregation. Its level is low, as in the cities of eastern Europe in general, but it is threatening to grow in the absence of social policy and urban policy mechanisms to prevent the reflection of increasing income differentials in the city space.

The opening of this article observed that urban wellbeing is a highly complex matter, and its causal

background is understood in many different ways. Different interpretations always capture something essential of the whole; therefore, urban policy must be pluralistic and diverse. It should accommodate innovation and expertise policy that contributes to the economic success of cities, strategic land use planning,

prevention of segregation and strengthening of social inclusion. Here it has been argued that also the 'soft side' of urban policy — managing the living environment, the comfort of everyday life, the cityscape and liveability — is important.

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Rising urban network in Europe¹

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Introduction

Urban centres are drivers of competence- and knowledge-led economic growth. High-level expertise, stable and reliable operational conditions for business, a creative environment and well-functioning services form the basis of competitiveness. Cities are the main engines of national growth as they concentrate economic activity, notably private sector services and various large-scale activities. Concentration of population, labour, foreign direct investment, corporate decision-making, knowledge and innovation in metropolitan areas is substantial. However, many European metropolitan areas are relatively small and lack the critical mass to be competitive with global cities in the long term. Some metropolitan areas are increasingly at risk of losing the lead in some key areas, such as innovation in high-tech sectors, to cities in China and South Asia. Globalisation is increasing economic competition between cities and makes them more vulnerable to external shocks and economic restructuring (OECD 2005).

As the Commission staff working paper (Cohesion policy and cities: the urban contribution to growth and jobs in the regions 2005) states, Europe is characterised by a unique polycentric structure of large, midsize and small cities. To become effective, the network of metropolitan regions has to be linked with small and medium-sized cities and urban areas. Both elements together – the large metropolitan regions with European

and global importance and the smaller cities and urban areas which play an important role in their national contexts – form the backbone of a polycentric European urban system. Europe needs diverse urban regions. Diversity is needed also at the urban system and urban network levels. By European standards urban regions in, for example, north-eastern Europe (Finland, Sweden, Estonia, Latvia and Lithuania) are small with long distances separating them. However, such small and specialised urban regions possess the prerequisites for success. Through the urban network everyone's expertise and strengths are efficiently brought into play. Instead of concentration, horizontal cooperation among cities allows them to better identify their comparative advantages, their specialization needs regarding goods and services, and their complementarities (OECD 2005). Through the special expertise of businesses in their region, they are genuine operators in global networks.

The concept of polycentricity of settlement structures originated as an empirical concept in the 1930s. Central-place theory (first formulated by Walter Christaller in 1933) explained hierarchical decentralisation of cities by the fact that different goods and services command service areas of different size. (ESPON 2005.) The modern breakthrough of this idea on the European scale took place with the ESDP (1999) and the Third Cohesion Report (EC 2004), both sharing the “balanced polycentric urban system” as an explicit

¹ Antikainen, J. & Vartiainen, P. (2006): Patchwork of Urban Regions - Structures and Policies in Support of Polycentricity. In Eskelinen, H. & Hirvonen, T. (eds.), *Positioning Finland in a European Space*. Edita Publishing Oy, Helsinki. (Forthcoming in November 2006).

political aim. The Territorial State and Perspectives of the European Union Document (Towards a Stronger European Territorial Cohesion in the Light of the Lisbon and Gothenburg Ambitions) gives a good springboard for taking polycentricity and the Lisbon strategy further. In this way urban regions play a fundamental role in knowledge- and competence-based regional development and in the implementation of the European-wide Lisbon strategy. Economic and academic relations, such as networks of business and universities, are internationalising day by day. The critical question is how quickly the third part of the “triple-helix” (for more on the concept see Etzkowitz in this publication) – that is the public sector actors – are internationalising in their actions.

Case Finland

In Finland the Centre of Expertise Programme strengthens networks between urban regions nationally and internationally. R&D and innovation transfer in Finnish urban regions is fostered by the Centres of Expertise Programme, and the wider bases of competence and innovation in urban regions are strengthened with the Regional Centre Programme, both of which are special government programmes launched under the Regional Development Act. The objective is the establishment of a network of regional centres covering every region/province towards the development of the strengths, specialisation and cooperation of urban regions.

For an effective polycentric policy, it is essential that the characteristics of urban regions are explicitly analysed and their special requirements mapped out. The national urban system of Finland was framed in the Urban Network Study 1998, which was initiated by the first permanent National Committee for Urban Policy (Vartiainen and Antikainen 1998) and updated in 2001

(Antikainen 2001a, see also 2001b) and in 2006 (Ministry of the Interior 2006). The main goal of this study was to identify regions that have a wider significance in the national urban system. This was accomplished by grading an urban region’s significance at the national level by using statistical criteria and by studying their versatility and functional specialisation (see Figure 1).

Furthermore, the urban network studies are used to categorise urban regions and the dynamics of urban systems. Based on their similarities, urban regions have been categorised into five main groups (Categories A-E in Figure 1). The strong trend towards concentration that took place in the latter half of the 1990s in Finland has evened out: now there are a number of medium-sized urban regions amongst the “winners”, and disparities in development trends have decreased. Also small and medium-sized urban regions as well as rural areas with good access to the large urban areas in southern and western Finland have gained population. (OECD 2005.) According to their development between 2002 and 2004, Finnish urban regions can be grouped into three different categories: strongly developing regions and mainly large university centres; gradually developing regional centres (other diversified university and medium-sized urban regions); and declining peripheral and small industrial centres.

In addition, in 2003 the Ministry of the Interior published Profiles of Regional Centres (Aluekeskukset – koko kuva) and in 2004 Growth of Urban Regions (Kaupunkiseutujen kasvun aika). The profiles included quantitative information about regional centres and benchmarking within a national context. The Growth of Urban Regions publication was a national version of the Urban Audit, where themes and variables were derived from the European framework. This enabled benchmarking at an international level. Furthermore, qualitative

Versatility

- many-sided (7)
- 6
- 5
- 4
- 3
- 2
- one-sided (1)
- Regional centre, not urban region

Development 2000-2003

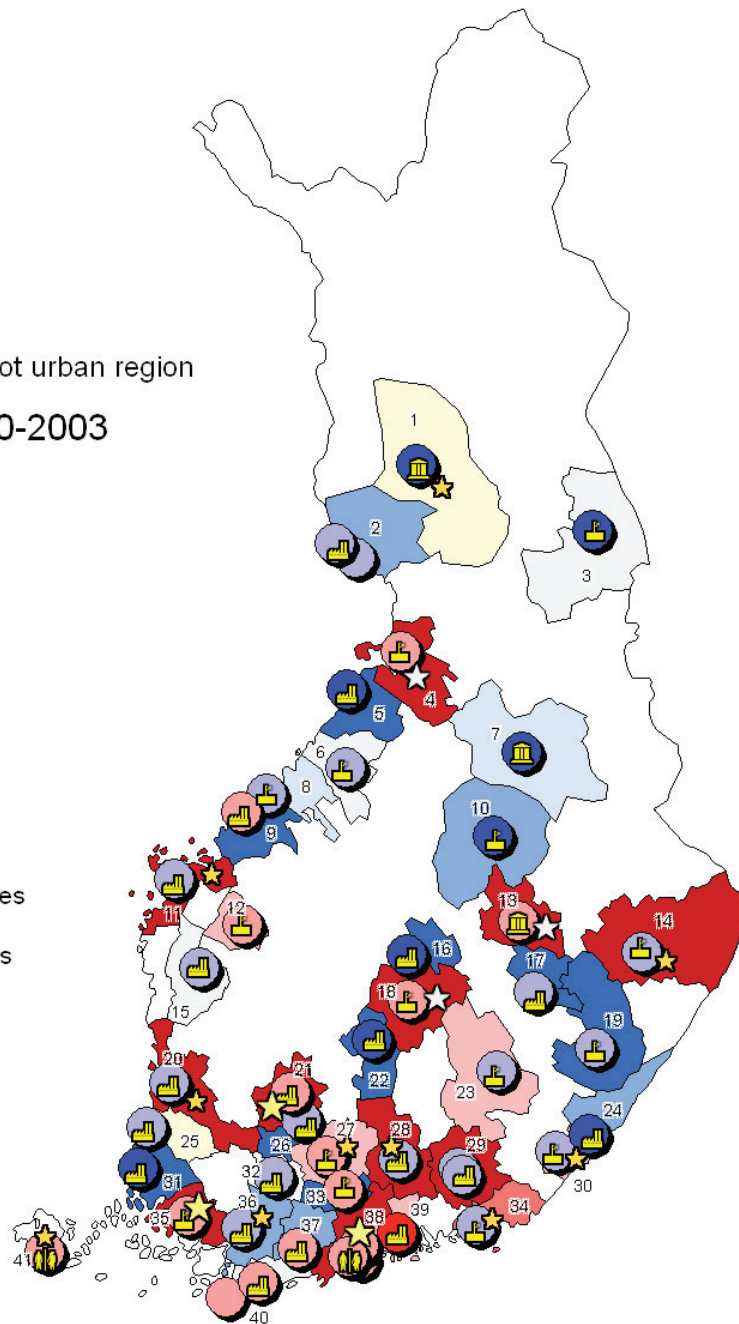
- Excellent
- Good
- Satisfactory
- Poor

Functional specialisation

- Diversified
- Industrial
- Private sector services
- Public sector services

Conditions for development

- ★ Excellent
- ☆ Good
- ☆ Satisfactory



1 Rovaniemi	9 Pietarsaari	17 Varkaus	25 Rauma	33 Riihimäki
2 Kemi-Tornio	10 Iisalmi	18 Jyväskylä	26 Valkeakoski	34 Kotka
3 Kuusamo	11 Vaasa	19 Savonlinna	27 Hämeenlinna	35 Turku
4 Oulu	12 Seinäjoki	20 Pori	28 Lahti	36 Salo
5 Raahе	13 Kuopio	21 Tampere	29 Kouvola	37 Lohja
6 Ylivieska	14 Joensuu	22 Jämsä	30 Lappeenranta	38 Helsinki
7 Kajaani	15 Kauhajoki	23 Mikkeli	31 Uusikaupunki	39 Porvoo
8 Kokkola	16 Äänekoski	24 Imatra	32 Forssa	40 Tammiisaari
				41 Mariehamn

Figure 1. Categories of urban regions in Finland.

description was further developed, focusing on good living conditions and environments in Finnish urban regions.

Both the Centre of Expertise Programme are due to be reformed in 2007. The new concept of the Centre of Expertise Programme is based on areas of expertise in 6 to 12 selected, internationally competitive clusters. Between 2007 and 2013 the Centre of Expertise Programme will focus on 1) Internationality in R&D and business activities, 2) Boosting the growth of knowledge-intensive companies, and 3) Linking the CoE Programme more closely to national innovation policies. As a result, the number of supported clusters is dropping dramatically (from 45 to 6–12). At least two urban regions must share the same interest, and as a result networking between urban regions will be a definitive criterion. The role of the Regional Centre Programme will be to build a wider basis for knowledge- and competence-based development, to raise the attractiveness of urban regions and to strengthen organising capacity in urban regions. Also this programme will have a strong national networking function.

Who is interested in making Europe more polycentric - and how?

Supporting polycentricity is a widely accepted starting point in development policies throughout Europe. Such policy has two goals: competitiveness and regional cohesion. On the one hand, polycentricity is promoting regional competitiveness by concentration and agglomeration of activities and division of labour, and on the other hand it is promoting territorial balance by spreading these growth centres geographically also to areas lagging behind. Of all 29 countries studied in ESPON, 18 are explicitly promoting polycentricity, while only 3 countries do not mention or consider polycentricity in any aspect in their development policies. Polycentricity is supported by a variety of

policies, although orientation is still rather sector-oriented. Competitiveness is a policy target – but not necessarily explicitly in terms of polycentricity – in 19 countries and cohesion in 13 countries. Altogether 11 countries have both competitiveness and cohesion as policy goals. (Zonneveld et al 2005 and ESPON 2005.)

Although a widely accepted principle in European and national discourses alike, polycentricity is based on sectoral national policies. In most European countries, for example in Belgium, Germany, Portugal, Spain and Sweden, urban policy is focused on the challenges of large urban regions (cf. Yuill 2005, Kuokkanen 2005). Growth-oriented urban policies are still marginal in European countries. Finland, the Netherlands and Norway could be mentioned as nations implementing this kind of policy and in Sweden the VINNVÄXT programme has been close to the Dutch model. In Finland, France, Norway and the Netherlands the role of small and medium-sized urban regions has been emphasised.

In Finland innovation policies have been connected more strongly and directly with regional development than in many other European countries. The Centre of Expertise Programme was a national social innovation introduced in the early 1990s, without any prior connection to EU policies. So it was natural for Finnish authorities to actively promote polycentricity in the ESDP process of the late 1990s. In the Regional Centre Programme polycentricity is an explicit aim and can be interpreted as building polycentricity as understood in the ESDP, although the programme is run by the Ministry of the Interior instead of the Ministry of the Environment, where spatial planning questions are usually dealt with.

Located at the fringe of Europe, Nordic countries pursue urban policies different from core-continental urban policies due to the difference in community structure. In countries with relatively small urban agglomerations and

long distances between them, polycentricity is primarily a strategic concept between urban regions, whereas in heavily-urbanised areas of Europe the approach features more physical applications to planning within urban regions.

Up to this day, the notion of balanced development among the urban regions has referred, in Finland, to a polycentric urban system which also covers the more remote areas. On the basis of international comparisons it can be claimed that a functioning informational economy requires a certain functional concentration (Ottaviano and Pinelli, 2004), although the spatial form and the degree of this concentration as well as the minimum size and number of competitive regions within a given urban system is an open-ended concept.

The role of national players has changed during past years: they are now more and more a part of the 'bottom' of the bottom-up development process, instead of being top-down dictators or part of the 'up' in the bottom-up process. In other words, instead of a hollowing out of the nation state (as the situation was characterised in 1990s, see for example Jessop 1994), it currently can be generalised that national players have a major strategic role in facilitating networks.

In some countries internal competition between regions and a policy of favouring regions lagging behind is turning the focus away from a more serious challenge: cities are not competitive in comparison to Asian or American cities, and there are only limited possibilities for regions that are undergoing – or are in danger of entering – structural change to make their functions more knowledge- and competence-oriented.

The emerging challenge is to institutionalise networks, and this links to the challenge of coordination and providing a framework for joint development work at the international (European), national and regional levels. The main criticism concerns the effectiveness of decision-mak-

ing and co-operation procedures between administrative branches attempting to support an integrated, overall view of regional development. In particular, the various development projects of many different administrative branches, implemented at the level of urban regions, need to be coordinated at an adequately high political and government level. Keywords for successful implementation are development and networking strategies, policy reforms and cooperation, and network management. This calls for good governance and organisational capacity. Overall, urban regions are good platforms for development measures.

Finland is stepping up to a new phase in facilitating networks by renewing their urban policy tools. In 2006 urban regions submitted their applications to the new Centre of Expertise Programme. New activity in networking was already taking place during the application period. Actual results will be seen in the future. The next phase is to actively network urban regions internationally. Thus, in knowledge-, innovation- and competence-based regional development the focus should be on growth-oriented European and national urban policies, but not at the cost of social and environmental aspects.

Cities and regions are localising and anchoring the Lisbon strategy into place. A stronger partnership between local, regional, national and transnational bodies is required. Bottom-up processes should be facilitated by state and transnational players. There is a need for local and regional innovation strategies. Genuine European clusters are needed, but cluster and innovation policies are still very national by nature. European and national regional policies, especially structural funds, should support innovation policies as proposed in the Aho Group Report *Creating an Innovative Europe*. In other words, innovation policies should be connected more strongly and directly with regional development policies that recognise the vital role of cities.

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