

Economic policies and strategies in Toulouse

How to enhance the city's competitiveness

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Economic policies and strategies in Toulouse

How to enhance the city's competitiveness

ACRE report 10.11

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Accommodating Creative Knowledge – Competitiveness of European Metropolitan
Regions within the Enlarged Union

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ACRE

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Table of contents

- Executive summary 1**
- 1 General introduction 3**
- 2 Theoretical background and methodology 5**
 - 2.1 Refinement of ACRE theoretical framework..... 6
 - 2.1.1 Revisiting Florida’s thesis on the mobility of the creative class and the role of ‘soft factors’ 6
 - 2.1.2 Some elements for the debate on urban competitiveness 8
 - 2.2 Governance approaches and methodology 10
 - 2.2.1 The diversity of governance concepts and theoretical approaches 10
 - 2.2.2 Governance in creative and knowledge industries..... 11
 - 2.2.3 The difficulty of conducting comparative studies..... 11
 - 2.2.4 Defining a common ground for comparative work..... 13
 - 2.2.5 Methodological approach in the city of Toulouse 13
- 3 Context, policies and strategies in Toulouse 17**
 - 3.1 Characteristics of the urban economy 17
 - 3.1.1 Main strengths of Toulouse’s economy 17
 - 3.1.2 State of creative and knowledge sectors in the UAT 19
 - 3.1.3 Main attraction factors for creative and knowledge employees, managers and TNMs 21
 - 3.2 Analysis of economic policies and strategies 22
 - 3.2.1 Policies to promote knowledge-intensive activities 22
 - 3.2.2 Policies to promote cultural activities and creative industries 24
 - 3.2.3 Means and embeddedness in broader urban development strategies 27
 - 3.2.4 Vision for the future, Toulouse in 2030 29
- 4 Analysis of institutional structure and governance arrangements in Toulouse 31**
 - 4.1 Key stakeholders in economic development policy at metropolitan level..... 31
 - 4.1.1 A primary stakeholder: The national state 31
 - 4.1.2 An increasingly present stakeholder: the région 32
 - 4.1.3 Local authorities: municipalities and intercommunal structures 33
 - 4.1.4 Other types of stakeholders: Private firms, associations..... 35
 - 4.2 Types of interactions between stakeholders..... 36
- 5 Critical evaluation of policies and strategies 39**
 - 5.1 Debates surrounding current policies and strategies 39
 - 5.2 Confrontation with the results of the previous surveys..... 42
- 6 Conclusion and discussion..... 45**
- References 47**
- Appendix 51**
- List of acronyms 59**

EXECUTIVE SUMMARY

This report focuses on policies and strategies that are led to enhance Toulouse's economic competitiveness. It aims in particular to highlight the importance given to creative and knowledge intensive industries to strengthen local economic growth. This study follows up a series of quantitative and qualitative surveys that have been conducted within the ACRE programme from 2007 to 2009 among different target groups working in creative or knowledge sectors: employees and graduates, managers and trans-national migrants (TNMs).

Section 2 of the report first shows how the ACRE analytical framework has been refined over the course of the work. The empirical results prompt to refute Florida's thesis on the mobility of people composing the 'creative class' and on the drivers behind their decision to live in a city. In most of the case studies of the ACRE programme, the surveyed indeed tend to live and work in the region where they were born and have studied. Furthermore, *hard factors* such as employment opportunities or size of the city accounts much more than *soft factors* like the region's climate or openness in the decision of the respondents to settle at a certain place. These statements can be used as first elements to fulfill the debate about urban competitiveness and policy issues.

Section 3 reminds the characteristics of Toulouse's economy before analysing policies and strategies that are led to enhance economic competitiveness. The city's dynamic is based on its competences in aeronautics, space and on-board systems. For a few years, it also relies on the development of the health and life sciences related sectors. A highly educated population and a consistent local skills system based on electronics enable to relatively withstand the effects of the economic crisis. In terms of image, Toulouse appears more as a city of knowledge and technological innovation than as a creative city in terms of art, culture and other creative industries. Empirical surveys confirm the marginal position of these sectors in the local economic fabric.

This situation largely results from policies that are being led for a few decades and pursued recently. Most of the actions are indeed oriented towards enhancement of the existing strengths and promotion of synergies between research, higher education and industries (*Pôle de compétitivité*, Cluster for Higher Education and Research - PRES, Plan Campus...). Economic policies result mainly in important investments in *hard factors*, especially business parks, transport system and housing. In terms of culture and creative industries, most of the policies aim at creating large-scale facilities matching the size of the city and diversifying the supply of cultural activities. There is also a will to structure the training supply in the fields of culture and arts and to promote scientific and technical culture. One part of the strategy for the future of Toulouse, besides increasing its international visibility, consists in better integrating various sectoral policies, especially environment and culture into broader urban development.

Section 4 analyses institutional structure and governance arrangements in Toulouse. It presents the stakeholders that play a role in the metropolitan decision-making process in the

area of economic development. The state, the *région*, the local authorities (communal and intercommunal structures) as well as private and associative stakeholders are involved in different strategies and policies with specific competences, roles and financial resources.

The city is characterised by a long cooperation process between industrial, scientific and institutional partners. The implementation of the Aerospace *Pôle de Compétitivité* is one example showing the growing importance of large aeronautics and space sector groups within public private partnerships. Although actions in the field of culture cannot be compared with what has been done for knowledge intensive industries in Toulouse, the involvement of higher education and research establishment seems to be a key for successful policy aiming to promote creative industries.

Section 5 consists of a critical evaluation based on debates that surround current policies and strategies and on results of the empirical surveys conducted during earlier phases of the investigation. Recent press articles have been explored and semi-structured interviews have been conducted with representatives and experts who have in charge of the implementation of policies, or who can account for the functioning of the urban government system. A major weakness identified by interviewees and the media relates to the general lack of daring of the city. Despite the healthy local economic context and the real attractiveness of the city, the risks of lagging behind are pointed out by many stakeholders. This is consistent with the opinion of the different target groups of creative of knowledge workers interviewed recently in Toulouse within the ACRE programme.

1 GENERAL INTRODUCTION

The aim of this report is to analyse economic policies and strategies that are currently implemented in the Urban Area of Toulouse (UAT)¹. One particular objective is to highlight the role of knowledge intensive and creative industries² to enhance urban competitiveness.

The UAT enjoys one of the fastest growing demography in France and benefits from a favourable economic environment. It has for instance accommodated almost 20,000 extra inhabitants since the 1990s and around 8,000 net private jobs per year over the last six years. The weight of knowledge intensive industries rose above the share of creative and cultural activities. Indeed Toulouse's development has been essentially *knowledge driven* and led to a specialisation in high technologies, especially aeronautics, space, electronics and biotechnologies.

Current economic policies mainly focus on the enhancement of existing strengths and on the promotion of synergies between research, higher education and industries (*Pôle de compétitivité, PRES, Plan Campus...*). Main investments are dedicated to the development of *hard factors*, especially business parks, transport system and housing. Specific initiatives such as business incubators are promoted as they have proved to be efficient and profit making. For a few years, politicians have become aware that lagging behind in terms of culture and creative industries might be detrimental to Toulouse's economic growth and attractiveness in the long term. One major goal is to adapt facilities to the growing size of the city and to diversify the supply of cultural activities. The municipality has the will to support two creative sectors in particular: design and animation movie. The strategy consists mainly in structuring the training supply in the fields of culture and arts, and to promote scientific and technical culture.

One global challenge for the future Toulouse relates to the improvement of its international visibility and to the better integration of various sectoral policies, especially environment and culture into broader urban development. This could partly be achieved through a better cooperation between the main territorial stakeholders, especially the main intercommunal structures (Greater Toulouse, Inter-communal Syndicate for Planning and Developing the

¹ An 'Urban Area' is defined as a set of communes (municipalities) situated on an unbroken and enclave-free tract of land, comprising an 'urban pole' and rural or urban communes (periurban ring), in which at least 40 per cent of the resident working population work in the pole or in the communes linked to the pole. In 1999, there were 354 urban areas in metropolitan France (as against 361 in 1990).

² Within the ACRE Programme *creative industries* include Advertising ; Architecture ; Arts/antiques trade; Crafts, Design ; Designer fashion ; Video, film, music and photography ; Music and the visual and performing arts; Publishing; Computer games, software, electronic publishing ; Radio and TV. *Knowledge activities* refer to Information Communication Technology (adapted from OECD definition) ; Finances, Law and other business services; and R&D and higher education. These categories are based on NACE (Nomenclature statistique des activités économiques dans la Communauté européenne) rev. 1.

Côteaux and the Vallée de l'Hers - SICOVAL and Muretain) (see Appendix for a description of the local government system in France). These institutions tend to develop their own economic policies and communication strategies, which is counter-productive and tend to blur Toulouse's image outside.

The lack of ambition and the image of 'a spoiled child' come up quite often in the discourses about Toulouse and its economic development. This idea relates to the fact that the city did not experience industrial revolution and was favoured by the state's decision to locate aeronautical and space activities in the city in the 1960s. Political leaders are not really used to fight to attract businesses on their ground, but they are able to grasp opportunities. The city is also characterised by a long cooperation process between industrial, scientific and institutional partners and this has influenced positively the implementation of the *Pôles de Compétitivité*.

The report is structured as follows. A theoretical and methodological section (2) reminds the ACRE analytical framework and shows how it has been refined over the course of the work. In particular, the relative sedentarity of creative knowledge workers in the cities studied in Europe and the marginal role of soft factors in their decision to settle in a city prompt to formulate new hypotheses in terms of policies to enhance urban competitiveness. Section 3 is dedicated to the analysis of policies and strategies in Toulouse and to the specific role of knowledge-intensive and cultural - creative industries. Section 4 analyses institutional structure and governance arrangements in Toulouse. Section 5 consists in a critical evaluation based on debates that surround current policies and strategies and on results of the empirical surveys led within the ACRE programme from June 2007 to September 2009. Section 6 concludes mainly by putting in relation these observations with the supposed conditions for being a successful creative knowledge city and indicates some perspectives for Toulouse. Methodology used for the writing of this report is based on the exploration of policy documents, press articles and semi-structured interviews with representatives or experts who are either in charge of the implementation of policies or who can account for the functioning of the urban government system.

2 THEORETICAL BACKGROUND AND METHODOLOGY¹

The conceptual and theoretical framework underlying the ACRE programme was presented in length in the WP1 (Musterd et al., 2007). It is based on a critical review of literature on the role of creativity and knowledge in present and future economic development and the conditions for a successful development as a ‘creative knowledge region’. This review of literature, which has also pointed at gaps in knowledge, has framed the analysis of each case study in the following WPs, and has been refined over the course of the work.

A number of key questions have been raised in relation with this conceptual and analytical framework. They are addressed throughout this report and will in particular guide the analysis of policies and strategies, which includes the analysis of policy documents and interviews with stakeholders.

Key questions to be taken into consideration in the analysis of policies and strategies include the following ones:

- What is the role of creativity, innovation and knowledge in the metropolitan economic development strategies and visions in each case study?
- To what extent do local and regional governments in the case study regions want to build on existing regional strengths, and to what extent do they look for new strengths with regard to economic specialisations?
- What are the different types of policy approach adopted in different cities (e.g. promoting cultural quarters/infrastructures in the physical sense; or promoting creative industries in their industrial sector sense)?
- What is the role of ‘soft’ location factors in metropolitan economic development strategies when compared to the more traditional, ‘hard’ location factors?
- Do the metropolitan economic development strategies specifically address the conditions for attracting an international skilled labour force?
- Which regional geographic and administrative scale is the most relevant for regional competitiveness when aiming for ‘creative knowledge regions’? Should there be a focus on core city development or on the metropolitan regional level?
- To what extent can we speak of an integrated regional strategy, and on what geographic and administrative scale level?
- To what extent are the economic development strategies and visions embedded in broader urban development strategies and visions? Are economic development policies connected to

¹ This section has been written by the ACRE Toulouse team (Hélène Martin-Brelot, Elisabeth Peyroux, Denis Eckert, University of Toulouse), with help from the Leipzig team (Bastian Lange, Leibniz Institute of Regional Geography). The section is common to all ACRE reports within Work Package 10.

regional spatial development policies, housing market policies and/or policies to attract and cater for the desired 'talent pool'?

- How and to what extent do existing policies and strategies take into consideration issues of social cohesion and social integration?

The answers to these questions are informed by the refinement of the ACRE theoretical framework.

2.1 Refinement of ACRE theoretical framework

The WP1 has acknowledged that many authors have come to the conclusion that 'creativity plays an outstanding role in urban and regional development' and recognised '*the increasing coming together and co-mingling of technological innovation, cultural creativity and governance as the driving force of urban development in the 21st century*' (Musterd et al., 2007: 6). In relation to urban competitiveness theories, at least two important interrelated ideas – mostly supported by R. Florida – have been explored. The first one suggests that policies should concentrate on their attractiveness towards individuals rather than towards companies. As a consequence, cities should strive to improve urban atmosphere – e.g. increase openness, tolerance – and pay much less attention to hard classical location factors.

The ACRE analytical framework has been refined over the course of the work. In light of the ACRE empirical results, we are now able to revisit Florida's thesis on the mobility of people composing the 'creative class' and on the drivers that lie behind their decision to live in a city (2.1.1). Statements about the difference between hard and soft factors, creative and knowledge workers and above all the relatively trivial expectations of the respondents are used as first elements to fulfill the debate about urban competitiveness and policies (2.1.2).

2.1.1 *Revisiting Florida's thesis on the mobility of the creative class and the role of 'soft factors'*

One objective of the ACRE programme was to test R. Florida's hypothesis on the mobility of highly skilled creative knowledge workers. According to the author of the '*Rise of the creative class*' (2001), these people would be increasingly attracted by places combining high levels of technology, talent and tolerance. In other words, the classical 'hard' location factors would lose importance compared to the increasingly prized 'soft' location factors. The latter relate to the global atmosphere of the city such as the openness, the cultural and ethnic diversity.

Each of the three surveys conducted from 2007 to 2009 among the target groups of employees, managers and transnational migrants aimed at answering the following questions:

- What are the main drivers behind their decision to locate in the city where they currently live?
- What is the relative weight of hard and soft location factors in their decision-making process?

It appeared quickly that reasons related to what we called the **'personal trajectory'** and reasons linked to classical factors such as **employment** or studies opportunities were highly significant to explain the surveyed people's choice to settle at a particular place. Soft factors seemed to weakly influence their decision.

By compiling the results of the first quantitative survey conducted among employees in the 13 participant cities, we indeed found out that 55 per cent of the respondents were born in the city or metropolitan region where they currently live. The place where higher education has been achieved seems to play an even more important role in their location choice, as 63.6 per cent of the sampled employees obtained their highest degree locally, ie. in the city or metropolitan region where they now reside.

Taking into account this 'personal trajectory factor' – measured by the places of birth and studies of the surveyed – allowed us to give more insight to the issue of the attractiveness of a city. We could indeed differentiate the people who already had an anterior link with the city and those who had none. Considered as 'creative migrants', the latter only represent 25 per cent of the sample. For them as for the rest of the sample, **the job-related hard factors, play the most dominant role in the selection of a place of residence.**

Soft factors only play a very marginal role to attract creative knowledge workers to a city, as only nine per cent of the people coming from outside the region cite this type of reason in a first position. They seem however important to retain them on the long term. Indeed soft factors tend to have more importance if respondents are living in the city for more than one year. As an opposite the role of hard factors is continuously decreasing with the time spent in the city. This result implies that hard factors work more as a reason for mobility (why coming), whereas soft factors are more the reason to stay (why not leaving the city).

Qualitative surveys among managers and employers in creative and knowledge industries confirmed the major role of hard factors, especially the availability of a skilled labour pool, which is often correlated to the presence of higher education institutions in the region. Access to clients and supporting services is also crucial and depends on the size of the city as well as on an efficient transport system. Entrepreneurs also insisted on the quality of the working environment and their professional networks for succeeding in their business.

The presence of universities and higher education institutions constitutes the major attraction factor for transnational migrants. Employment opportunities come up as an important reason to settle in the city. The drivers behind the decision to stay also relate to personal links (friends, family). We could also notice the relative importance of a strong image of the city as centre of creativity (Milan, Barcelona...) or centre of technology (Toulouse, Helsinki...).

These first outcomes thus do not confirm R. Florida's hypothesis of a highly mobile 'creative class'. On the contrary, the highly skilled creative and knowledge workers surveyed within the ACRE programme tend to have a rather sedentary way of life. And, whenever they move, their mobility is rather driven by classical hard factor, most of the time related to employment. Our results rather confirm those of Storper and Scott (2009: 161): *'most migrants – unless they enjoy a private income or are able to capitalise on some purely personal talent that can be practiced anywhere – are unlikely to be able to significant*

numbers from one location to another unless relevant employment opportunities are actually or potentially available.'

2.1.2 Some elements for the debate on urban competitiveness

According to our results, the size of the city, the quantity and quality of transport infrastructures, and above all the studies and job opportunities act as a significant driver behind the decision to settle in a certain region. The respondents are also heavily tied to their native and family environment or to the place where they have studied and built their social networks. On the other hand, soft factors are clearly not influential to directly attract creative and knowledge individuals – employees, entrepreneurs and transnational migrants – in a city. However this does not mean that they have no importance at all for the surveyed, especially to retain them on the long term. Several observations related to the 'quality of life' can be drawn from the empirical results and put into relation with current debates on urban competitiveness.

❖ Evaluating hard and soft factors...

First attempts of comparison between the 13 cities show a strong heterogeneity of the results, which can be explained by the differences of local conditions. In general, dissatisfactions are clearly expressed on what refers to material aspects of the city such as dwelling, transports, cleanliness of the streets etc. This can be put into relation with the crucial issue of the development pathway of each city, which is one of the dimensions to be taken into account for a typology. Conditions for success seem different in cities with a strong or a discontinued path. We could indeed notice a lower satisfaction with facilities and urban infrastructures in general among people living in ex-socialist cities of Sofia, Riga, Budapest and Poznan. But the situation also differs according to the level of infrastructure and the position of the city as a national or regional capital. The size of the city also has to be thoroughly considered in the way that it might offer more potential personal relations. Along this line, the presence of strong universities well integrated into the city's life appears to play a major role as pre-condition to the formation of further social networks. Let's also mention that a positive evaluation on one or several aspects of the city's environment does not necessary mean that the surveyed are not worried about the evolution of the city. In Munich for instance, the transport system and a large number of urban facilities and services are judged very efficient but the surveyed tend to be pessimistic on the city's future in general.

Soft factors seem to be much more difficult to evaluate than hard factors. Here it is important to distinguish between different types of soft factors. On the one hand there are conditions which policies cannot do anything, which relates to the natural assets of the city such as its location in a favourable natural environment or the sunny climate it enjoys or not. On the other hand, there are factors like openness and tolerance that can be more or less easily promoted or improved on the long term by the mean of political decision.

❖ *No specific expectations of the 'creative class'?*

The fact that the surveyed's concerns do not differ much from those of the rest of the population is one important statement that we can draw from the empirical results. This contradicts again R. Florida's on the idea of specific needs of a specific 'creative class'. For instance, worries about the availability of jobs and affordable housing are pregnant in most of the surveyed cities. Concerns about the efficiency of the urban transport system and the related issues of traffic congestion and air pollution, but also safety issues are important for a large part of the respondents. Moreover the above underlined role of soft factors as *retention* factors tend to confirm that policies should not only focus on the attractiveness of the city for a 'creative class' coming from outside but should be oriented towards inhabitants who already live and work in the city.

This leads to consider the complex issue of urban policies and the integration of various, often contradictory objectives such as the need to increase competitiveness, tackle social exclusion and preserve environmental resources.

The risks associated to policies focusing on economic excellence relate to the growth of social and spatial disparities within urban areas. This is one of the critics made to Florida's theory (Malanga, 2004; Peck, 2005; Scott, 2006). The elitism associated with the concept of 'creative class' also tend to live down the debate about social polarisation associated with economic restructuring. For instance, Thanki and Jefferys (2007) describe the informalised labour market of the media industries in London and show how the need for personal contacts to find work and the precariousness of the workforce have reinforced the dominance of the industry by a white middle-class elite.

❖ *The issue of scale*

The 'competitiveness-cohesion' binary, which is at the heart of the current debates about policies, has been scrutinised in a recent book in relation with a European research project running between 2004 and 2007 (COST² Action A26). The authors insist on the rescaling process that has gone hand in hand with globalisation – characterised by open markets, removal of barriers for trade, investments and migration of labour. Cities have become 'key territory for current capitalism' and 'place competition has become a key driver of spatial and urban policy'. At the same time, cities and regions are forced to redefine their objectives, their means, their institutions and their positions as socio-political units (Ache et al., 2008: 7).

The new meanings of the local and regional systems have been pointed out in a context of globalisation and it has been concluded that this should not be regarded as separated from global processes (Musterd et al., 2007). The analysis highlights the need to take into account the city, the city-region and the wider regional scale, both in geographic and in political-administrative terms, as well as the need to consider '*smaller areas (sometimes neighbourhoods with specific characteristics) which either do or do not fit the requirements*

² COST is an intergovernmental framework for European Co-operation in the field of Scientific and Technical Research.

of residents and firms and thus demonstrate dynamic economic transformation or fail to do so' (Ibid: 30).

The new importance of cities and regions in the global economy and the re-scaling process it entails let the neighbourhood appear as a new object of attention. One of our results relates to the idea that if soft factors do not influence people's choice to settle in a particular city, they might determine why they choose a certain district within an urban area (Martin-Brelot et al., 2010). This idea could at last be put into relation with the differences we found between creative and knowledge workers. The first ones seem to be more demanding in terms of cultural offer and social environment and the second ones more sensitive to hard factors. This has probably implications for policy makers who wish to favour a certain type of industries or individuals. Particularly in terms of scale, interventions on neighbourhoods might be more adapted to the needs of creative people, whereas strategies at the metropolitan and / or regional level might better suit a strategy targeting the development of knowledge intensive activities.

On the basis of the outcomes of this analysis and the surveys that have been carried out in the previous Work Packages, as well as on the basis of the synthesis reports which have been written, current policies and strategies are confronted with actual dynamics in the regions involved. Attention is paid in particular to the institutional dimension and the role of organisations (governments, trade associations, large companies, universities, citizen movements, etc.) and the mode of governance in a comparative perspective.

2.2 Governance approaches and methodology

The purpose of this sub-section is not to review in detail the different governance approaches and methods but to highlight key issues regarding comparative studies and identify a common ground for a comparative analysis of case studies.

The nature and scope of this research phase should be taken into consideration: it primarily involves a policy documents analysis, a study of governance arrangements in the field of economic development as well as interviews of stakeholders. The research mainly relies on existing knowledge and expertise of the topic under consideration and on previous research conducted by the researchers on every case study.

2.2.1 The diversity of governance concepts and theoretical approaches

Over the past decades a number of theories and approaches have been developed within what has been referred to as a shift of paradigm from government to governance. Prominent urban governance approaches include the American 'growth-machine' and 'urban regime' theories (and the related notion of 'urban growth coalitions') (Stone, 1993; Stone, 1989; Elkin, 1987; Stoker, 1995). Those approaches rely on the notion of 'policy networks' which is based on the (contentious) assumption that political processes are not controlled by state actors alone and that governing increasingly depends on the interaction of public and private actors (Davies, 2002). Policy network analysis has been described as '*attempts to explain policy development*

by examining networks of actors concerned with a given policy problem, across the public and private sectors and throughout different levels of governance' (Mikkelsen, 2006: 17-18). Whilst all analyses use the network as unit of analysis several approaches have been developed (Ibid.). The term 'policy network' can also be understood as '*as a generic label that embraces different forms of relations between state actors and private actors*' (Kriesi et al., 2006: 341).

2.2.2 Governance in creative and knowledge industries

Despite their very different production conditions and marketing structures, the cultural and creative industries display characteristic features that are reflected in specific forms of governance. Micro-companies and/or project-based structures with a large portion of freelancers dominate. Some rare sub-areas are heavily dependent on state funds (theatres, even film industry). As a whole, the cultural economy is a high-risk area with extreme fluctuations in market success. Besides, creative industries lack organisational basis and industry associations that could serve as negotiation partners. In these particular conditions, traditional 'top-down' governance approaches seem hardly adequate. Establishing leadership in structurally unstable situations requires a more flexible, less hierarchical approach. Attention should be paid to intermediaries such as 'culturepreneurs' (Lange, 2007) or 'creativity brokers' (Bilton and Leary, 2002) that can mediate between agencies and creative industries.

The knowledge industries are far more institutionalised and rely on growth coalitions that often associate public agencies, big businesses and industry associations. Furthermore, long established policies and structures are critical (Hall, 2004). These sectors are less flexible, characterised by a strong inertia. Emerging spin-off companies and spillover effects are far from exceptional. The importance of educational assets in a given city for the progressive development of knowledge-intensive industries makes them more dependent on the support of public structures; top-down governance approaches are much more frequent (and might be more relevant) in that area than in that of the creative and cultural industries.

2.2.3 The difficulty of conducting comparative studies

The comparative study of policies and strategies raises a number of theoretical and methodological issues that have been summarised as follow within the context of a study of two German and two U.S. cities³: '*an over-dominance of deductive approaches, the lack of explicit methodological guidelines and the less than rigorous application of what has become a multitude of overlapping theoretical concepts*' (Gissendanner, 2003: 3).

Whereas it is acknowledged that deductive studies make a valuable contribution to theory building, it is also pointed out that the use of different concepts for qualitative descriptions inhibits case comparisons. In addition prominent urban governance approaches such as the

³ This study aimed at analysing the different ways in which cities responded to de-industrialisation and at exploring why some would respond in a relatively more strategic fashion.

'growth-machine' and 'urban regime' theories in particular are said to provide few explicit methodological guidelines and the authors that applied them do not usually specify the methodology they use, which also makes the comparison difficult⁴. Finally, the concepts used by the researchers may differ from the one originally defined in the source texts (*Ibid.*).

According to some scholars the dominant urban governance approaches present some shortcomings as well. The urban regime theory has been criticised in a number of aspects: its focus on political management and arrangements of internal governance coalitions and its failure to move beyond 'middle-level abstractions'; its tendency to overlook the role of higher level governments; a rigid and static conceptualisation of the division of labour between state and the market and the subsequent underestimation of the potential role played by the local state and community-based organisations in capital accumulation; as well as a narrow vision of the private sector that does not take into consideration small businesses as increasingly vital actors in the post-industrial era (Imbroscio, 1998; Gissendanner, 2003). Other criticisms of the urban regime theory underline the fact that it does not take into consideration the discursive dimension of partnerships and the power relationships (this is particularly relevant in urban regeneration policies, see Atkinson, 1999). The 'growth machine' approach has been criticised for its emphasis on the business communities and land use decision-making. Scholars also argue that the efficacy of local political structures and formal politics is not adequately considered and that the connections between the local state and the national state are neglected (Fox Gotham, 2000). Both approaches have been criticised for their underestimation of local political conflicts.

The relevance of approaches in term of 'policy networks' in the context of European cities has also been critically explored (see Davies for an analysis of the inadequacy of the term 'governing by networks' to describe the politics of urban regeneration in the UK). The debates revolve around the role and influence of public actors, in particular the national state, in sub-national affairs. The relative prevalence and power of 'autonomous governing networks' in different political systems is also put into question (Davies, 2002).

Following these shortcomings some authors have called for a more inductive approach that requires qualitative methods '*that better uncover structural details of governance networks in ways that are less dependent on particular general concepts or on a logic of data selection that is independent from particular cases. Case study data must also be presented in ways that ease comparison*' (Gissendanner, 2003: 6).

We propose to adopt such an inductive approach in order to describe and analyse simple structural aspects of networks through a set of common questions.

⁴ In addition to the fact that these theories are based on the U.S experience and context and do not necessarily fit the European ones.

2.2.4 *Defining a common ground for comparative work*

Again, we have chosen to present a set of common questions to be answered in every case study rather than a single theoretical approach (see Appendix: Elements to address the types of interactions between stakeholders). A broad definition of ‘policy network’ is proposed (see the same appendix). This set of common questions builds on various analyses of networks that have been developed to analyse European policies (Kriesi et al., 2006; Peterson and Bomberg, 1999; Peterson, 2003; Rhodes, 1990, 1997).

The aim of this analysis is to identify and describe networks structures and functioning, including:

- The stakeholders involved in the definition and implementation of economic development policy, including identifying who is the most influential.
- The nature of their interactions.
- How and to what extent the structure and functioning of coalitions and networks ‘may explain policy choice, democraticness, strategicness, openness to new policy ideas, effectiveness, and so on’ (Gissendanner, 2003: 15).

2.2.5 *Methodological approach in the city of Toulouse*

Two main approaches were applied in this work package. Firstly we consulted experts on urban and economic development and on cultural questions. Secondly relevant literature and policy documents have been studied.

❖ *Interviews of experts*

A guideline has been created in order to interview some representatives or experts who are either in charge of the implementation of policies or who can account for the functioning of the urban government system. It contains the main topics we wanted to discuss with them:

- **Introduction:** Places of birth and studies; Previous experiences...
- **Description of the organisation:** When and why was it created? Who took the initiative? How many people work here? What is the budget and where does the money come from?
- **Evaluation of the city region:** What do you perceive as the most relevant strengths and weaknesses of the metropolitan region with respect to national/international competitiveness?
- **What is made until now and currently to enhance competitiveness?** Do your actions focus more on the city (centre) or do they encompass a wider area (agglomeration)? Or only specific neighbourhoods?
- **Is there a strategy to attract/retain creative and/or knowledge-intensive industries and workers?** Do strategies specifically address the conditions for attracting a national / international skilled labour force?
- **Hard factors:** Equipments, decision to locate a building or services at a certain location
- **Clusters:** Specific places to develop specific sectors

- **Soft factors:** Promote the image of a neighbourhood / the city / another scale
- **Networks:** Associations, clubs, mediators
- **Size:** Is there a specific focus on large, medium or small companies?
- **Embeddness:** Are there strategic links between the issue of economic development and other themes (housing market policies, culture, environment)? How is it done?
- **Polarisation:** How is the issue of social polarisation dealt with? What are the main social issues that you personally consider planners or policy makers need to take on board when implementing these policies (cf. risk of social polarisation, uneven development across the city or the metropolitan area)?
- If creative people are 'not so mobile' and attached to their personal environment and networks, what does it imply in terms of policies?
- **Partnership:** With whom and how do you cooperate? Who do you help directly and indirectly? Public partners? Private partners? Others (association, cities, region...)? Role of national and supranational EU-based policies? With whom do you NOT cooperate? Why?
- **Other possible questions:** What impedes your action? What does make it easier? How does the issue of the economic crisis impact policies and strategies? To which model in France, Europe or abroad do you refer to implement policies and strategies?

The interviews have proven highly helpful to understand the existing (or not to existing) policies to develop creative and knowledge economy in the UAT.

Table 2.1 - Interviewed experts

Code	Institution	Responsibilities
Exp1	Urban Community of Toulouse	Director of the Urban development Commission
Exp2	Urban Community of Toulouse	Director of the Economic development Commission
Exp3	Municipality of Toulouse	Town Councillor in charge of performing arts
Exp4	Municipality of Pinsaguel	Mayor
Exp5	Mixed Syndicate in charge of Studies of the Toulouse Agglomeration - SMEAT	Vice-president
Exp6	Regional Council, Regional association for the development of information society	Vice-president
Exp7	Regional Council, Cultural affairs	Director of service
Exp8	Association promoting digital economy	Member

❖ *Analysis of relevant literature and policy documents*

Beside the usual literature on creative and knowledge development and on governance issues, the particularity of this work package was also to explore newspapers and press comments. The idea was to assess the image given by the media of Toulouse and its current evolution but also to highlight debates and controversies that surround policies and strategies in terms of economic competitiveness.

Policy documents were analysed in order to disclose potential strategies concerning the creative and knowledge sectors. The selected documents are the following:

- the web site of the Urban Community of the Greater Toulouse and in particular all the pages dedicated to the current actions for local economic development (LED),
- the Plan Campus or **Opération Campus** of the Cluster for Higher Education and Research (PRES University of Toulouse). This is a project initiated and partly funded by the Ministry for Higher Education and Research whose objective is to contribute to the emergence of 10 *Pôles universitaires d'excellence* (University centres of excellence) at international level.⁵
- the Cultural Project of the municipality of Toulouse (*Le projet culturel pour Toulouse 2009-2014*).
- the 'Vision for Toulouse' of the municipality of Toulouse (*La Fabrique urbaine – The Urban Fabric*).

We also took into account and consulted complementary documents relating to urban development at the scale of the UAT or beyond this level, such as the '*Référentiel métropolitain*' (metropolitan frame of reference) written by the Agency for the Urban Area of Toulouse (AUAT, 2008) and particularly the website of the SMEAT. This joint association was created in 1991 to think about all the aspects – economic, social, urban, environmental – of the future development of the Tolosan agglomeration. It is in charge of the elaboration of the federative scheme of the territory (SCOT, Scheme for the Territorial Coherence). Its perimeter has extended since its creation and it now comprises 117 communes (900,000 inhabitants) corresponding to seven intercommunal structures and 22 single communes. The reflection led by the SMEAT (Map A1 in appendix) refers to the UAT (342 communes), defined as a statistical unit by INSEE since 1996 and which takes into account the employment area. Since 2006, a 'Charter for the Urban Area' adopted by the majority of the affected mayors defines for the first time the framework and the method for establishing a spatial planning scheme at the scale of the Urban Area.

⁵ The metropolitan area such as defined by the AUAT includes the UAT and the agglomerations of neighbouring middle-sized cities such as Montauban, Albi, Castres-Mazamet, Foix, Pamiers, Saint-Gaudens and Auch.

❖ ⁶*Confrontation with empirical results*

The previous work package (WP8, see Martin-Brelot et al., 2010a) has been mainly used to confront policies and strategies with results of the empirical surveys conducted between 2007 and 2009 in Toulouse among the following target groups of people working in creative and knowledge industries: employees and graduates, managers, trans-national migrants (See Martin-Brelot et al., 2010a).

This synthesis report compared the different spatial orientations of the target groups and the differences between them in terms of the relative weight they give to the various factors regarded to be relevant to them. The integration resulted in an understanding of the strong and weak points of the region regarding its capacity to accommodate creative knowledge.

⁶ An 'Urban Area' is defined as a set of communes (municipalities) situated on an unbroken and enclave-free tract of land, comprising an 'urban pole' and rural or urban communes (periurban ring), in which at least 40 per cent of the resident working population work in the pole or in the communes linked to the pole. In 1999, there were 354 urban areas in metropolitan France (as against 361 in 1990).

3 CONTEXT, POLICIES AND STRATEGIES IN TOULOUSE

3.1 Characteristics of the urban economy

Toulouse has been benefiting from an important population growth and a dynamic economy for a few decades. The city's strengths rely mainly on its specialisation in high technologies – aeronautics, space and biotechnologies. **A highly educated population and a consistent local skills system based on electronics** enable the city to relatively withstand the effects of the economic crisis. As a consequence, the share of knowledge-intensive industries rises above creative and cultural activities that remain marginal in the local economic fabric. Toulouse appears more as a city of knowledge and technological innovation than as a creative city in terms of art, culture and other creative industries. This has come up in the empirical surveys led from 2007 to 2009 within the ACRE programme.

3.1.1 *Main strengths of Toulouse's economy*

❖ *A growing city*

The city of Toulouse (437,000 inhabitants in 2006) is the driving force of an important and sprawling urban area (342 communes, 1.1 million inhabitants, around 4,000 km²).

The UAT enjoys the highest net migration in France, with 20,000 extra inhabitants per year since the 1990s (the annual growth rate of the UAT has even increased in the 1999-2007 period, reaching 1.9 per cent compared to 1.6 per cent between 1990 and 1999). The newcomers are rather young: considering the reference person, 65 per cent of the new households are under 30 years old and one third of them are students, living mostly alone. The Toulouse newcomers also have higher education levels than those settling in the rest of the region. Half of them have studied at least two years after the A-Level or are top executives. A majority of them (70 per cent) comes from outside the Midi-Pyrénées region. Excluding the students, one household out of two has moved for professional reasons. This confirms the position of Toulouse as a major pole in France (after Paris and Lyon) for research, education and employment opportunities (Desbordes et al., 2005).

The city's critical size is a major factor of attractiveness. It allows companies in some sectors to gather and become numerous enough to prompt other firms to settle in the urban area.

❖ *A dynamic economy*

The structure of the economy shows the predominance of services (79 per cent of the working population) compared with industry (20 per cent) and a residual agriculture. Around 75,000 companies were located in the Urban Area in 2004. The growth of the number of establishments relates mainly to the building sector (+10.2 per cent between 2002 and 2004), and the services (+9 per cent), especially business services, real estate activities, health and social work. The Information, Communication and Technology (ICT) sectors (computer industry, electronics and telecommunications) have also developed strongly in recent years, providing nearly 30,000 jobs (9.4 per cent of the total working population of the urban area) in 2004 (AUAT, 2008). In terms of industrial employment, aeronautics and space building provide the metropolitan area with 17,500 direct jobs. South-East of Toulouse, 7,500 people work in the local chemistry-pharmacy-biotechnology sector. A large number of sub-contractors are linked to these main activities. The UAT also has one of the highest proportions of highly qualified jobs in France. It is notably highly specialised in research activities. High-tech industries are mostly concentrated in specialised technological parks, often close to the main higher education and research centres.

These sectors have until now relatively withstood the consequences of the economic crisis. In the aerospace industry, despite some difficulties, the order book for aircrafts is full for the next five years, and the satellite sector is going well.

❖ *A highly educated population and a real scientific potential*

The agglomeration is characterised by a high proportion of highly educated people. Twenty-six per cent of the population aged above 15 have completed degrees in higher education (INSEE 1999) and the city ranks third in France, after Paris and Lyon, for the number of students (113,000 in 2007). The city has 3 universities, 12 engineering schools and several technical institutes. On the whole, 280 public research units are to be found in the UAT and its surroundings. With 5,900 researchers in the public sector and 6,800 researchers in the private sector, the Midi-Pyrénées region reaches the Île-de-France's level in terms of the number of researchers as a proportion of total salaried staff (14 per 1,000 inhabitants compared with 7.7 per 1,000 inhabitants in metropolitan France) (Agence de Développement de la région Midi-Pyrénées, 2006). Research activities are structured around three *Pôles de compétitivité* or 'competitive clusters' (see 3.2.1): *Aerospace Valley* for aeronautics and space activities, *Cancer-Bio-Santé* for medical, pharmaceutical and biotechnology research, and *Agrimip Innovation* for the development of agriculture and agribusiness sectors.

❖ *A 'local skills system' based on electronics that spares the city the risks of a 'single sector dominance'*

Since the 1960s Toulouse has been successful in transforming its structure to a high-tech economy specialised in aeronautics, space, electronics and ICT activities.

The notion of 'local skills system' (Grossetti et al., 2006) is used to characterise an economic specialisation which relies much more on types of skill – in Toulouse namely in electronics and computing – than on the manufacturing of a specific product. For instance, digital technology allows sub-contractors to work indifferently for aeronautical or automobile construction. This has been demonstrated by Zuliani (2008) with the case of on-board systems. Based on the production of software and calculators, on-board systems are integrated into various types of machine (aircraft, space vessels, automobiles, rockets, satellites, mobile phones, rail traction systems...), and thus apply to what are initially quite different activities.

This puts into perspective the issue of the single sector dominance, although the reliance on the performance of one large multinational company, Airbus, creates some worry in an uncertain and changing global economy. Furthermore, the city more recently started to develop a second local skills system based on biotechnologies and health. Important activity within these fields results from the spread of local university laboratories (developed in the 1970s) and are boosted by two large pharmaceutical companies, SANOFI and Pierre Fabre.

3.1.2 *State of creative and knowledge sectors in the UAT*

Tables 3.1 and 3.2 shows the evolution between 1994 and 2004 of the number of establishments and employees in creative sectors in the private sector in the UAT (UNEDIC 1994-2004)¹. The growth of architecture and engineering activities is closely linked to the economic specialisation of Toulouse and relates to the engineering activities driven by aerospace activities: in 2004 the number of employees in the engineering and technical consultancy was about tenfold the number of employees in architecture itself. The growth of the sector of computer games, software and electronic publishing is also related to the economic specialisation of Toulouse. The relative growth of radio and TV is linked to the strengthening of local establishments of national channels and networks. While advertising ranks third according to the number of employees in the private sector in 2004 it has been declining over the past ten years. The early 1990s had seen the rise of companies budgets dedicated to advertising but it stopped in 1995 and has remained erratic since then in the Midi-Pyrénées region. The restructuring of advertising groups might explain this evolution. In addition one has to point out that advertising remains highly concentrated in Paris. As in other

¹ UNEDIC only provides data on *private salaried staff*, thus excluding the following categories of working population: employees from state (ministries and external services) and other public administrations (regional and local government), employees from administrative institutions (such as Bank of France, National Printing Office, etc.), employees from public industrial and commercial institutions depending on state (national firms, firms with a mixed economy), employees from embassies, foreign consulates and international organisations, etc.

Data do not include intermittent workers in the sectors of cinema, audiovisual and visual and performing arts (a common status in France) as well as state employees under a secondment arrangement in the private sector. They do not include self-employed and independent workers. The UNEDIC does not provide data on craft and design.

cities in France the share of employment in this sector outside Paris represents about 1 per cent of total employment. A large number of local establishments belong to national companies whose headquarters are based in Ile-de-France (INSEE, CRCI, 2004).

According to the UNEDIC data all knowledge-intensive sectors have grown over the past ten years, in particular ITC and law and other business services (Table 3.1 and 3.2).

Table 3.1 - Overview of the growth of the number of establishments and employees in creative sectors in the private sector in the Urban Area of Toulouse (1994-2004)

	1994		2004		1994-2004			
	Nr of establishments	Nr of employees	Nr of establishments	Nr of employees	Evolution of the nr of establishments	Evolution of the nr of employees	Growth of the nr of establishments (%)	Growth of the nr employees (%)
Creative sectors								
Architecture and engineering activities	464	4,676	794	11,351	+330	+6,675	+71.12	+142.75
Computer games, software, electronic publishing	154	2,181	291	4,880	+137	+2,699	+88.96	+123.75
Advertising	171	3,000	208	2,332	+37	-668	+21.64	-22.27
Publishing	92	1,855	106	1,789	+14	-66	+15.22	-3.56
Art/antiques trades	180	622	299	1,561	+119	+939	+66.11	+150.96
Music and the visual and performing arts	240	1,055	323	1,465	+83	+410	+34.58	+38.86
Video, film, music and photography	106	752	113	1,069	+14	+509	+13.21	+67.69
Designer fashion	121	2,331	88	1,111	-33	-1,220	-27.27	-52.34
Radio and TV	19	194	25	441	+6	+247	+31.58	+127.32
Craft	-	-	-	-	-	-	-	-
Design	-	-	-	-	-	-	-	-

Source: UNEDIC

Table 3.2 - Overview of the growth of the number of establishments and employees in the knowledge-intensive sectors in the private sector in the Urban Area of Toulouse (1994-2004)

	1994		2004		1994-2004			
	Nr of Establishments	Nr of Emplo yees	Nr of establishments	Nr of Emplo yees	Evolution of the nr of establishments	Evolution of the nr of employees	Growth of the nr of establishments (%)	Growth of the nr employees (%)
Knowledge-intensive sectors								
Law and other business services	1,259	13,924	1,900	32,691	641	18,767	+50.91	+134.78
ICT	393	10,312	508	19,897	115	9,585	+54.00	+212.00
Finances	708	7,304	854	8,630	146	1,326	+20.62	+18.15
R&D and higher education	74	2,042	100	3,124	26	1,082	+35.14	+52.99

Source: UNEDIC

The UAT counts 504,757 jobs (Insee, 2006). In terms of professions and socio-professional categories, the UAT is mostly composed of intermediate white-collar professionals (28.4%), office workers (26%) and executives and higher intellectual professions (23.3%).

3.1.3 Main attraction factors for creative and knowledge employees, managers and TNMs

Next table (Table 3.3) shows differences between the three target groups in terms of the relative weight they give to the various factors (for a detailed presentation of the sampling process and each target group, see WP8 report).

Table 3.3 - Main hard and soft factors influencing decision-making of target groups

		Hard factors		Soft factors		Personal attachment	
		Attraction	Retention	Attraction	Retention	Attraction	Retention
Employees	creative	Job		Proximity to natural environment + Open minded and tolerant		Family + Studies	
	knowledge	Job		Weather		Born here + Studied here	
	graduates	Job		Overall friendliness of the city		Studies	
Managers	creative	Size of the city	-	Overall friendliness of the city, weather	Weather, Quality of life	Born here	
	knowledge	Size of the city	Business opportunities	Weather		Spouse	
Trans-national Migrants (TNMs)	creative	Studies	-	Overall friendliness		Social networks	Family
	knowledge	Studies and Job	Job, Size of the city		Tolerance	-	Family

As far as ‘hard factors’ are concerned, **job** is clearly the main attraction factor to the city of Toulouse for **employees and graduates**. **The size of the city** – ie. related to the size of the market and business opportunities is the main attraction factor for the **managers**. **Studies opportunities** are overwhelming in the decision of **transnational migrants** to move to the city.

In terms of ‘soft factors’, the **overall friendliness of the city** is generally appreciated by workers in the creative industries. The **quality of life** is one important retention factor cited by the managers of the creative industries, which might compensate the weaknesses of Toulouse in terms of business opportunities in their sectors. Foreign knowledge workers mention the **tolerance** as a retention factor, which suggests that they feel well integrated in the Tolosan metropolis.

Among the different types of ‘trajectory factors’, **being born** in the region is the main attraction factor for creative managers, whereas knowledge workers cite the presence of their spouse as a reason to come in Toulouse. **Social networks built during the studies** are important for employees and graduates whatever the sector. Retention factors can be identified only in the target group of transnational migrants, who clearly cite the **family** as a

main reason to remain settled in Toulouse. **An important attraction factor for creative foreign workers is the presence of acquaintances in the city.**

3.2 Analysis of economic policies and strategies

Toulouse is the second regional agglomeration after Lyon in terms of economic attractiveness. The regional metropolis has concentrated about 85 million Euros of foreign direct investment (FDI) since 2003 (Ernst & Young, 2009). Besides it has accommodated 8,000 net private jobs per year over the last six years. All sectors taken together, the UAT had already registered more than 100,000 extra jobs between 1999 and 2006.

Policies that support this dynamic mainly consist in enhancing the existing strengths of the city in the knowledge-intensive sectors. Policies that aim at developing the cultural sectors in Toulouse particularly strive to catch up and create facilities and events that match the size of the city. **In general, whatever the economic sector, policies are largely oriented towards the strengthening of the higher education and research system.** Economic policies result mainly in important investments in *hard factors*, especially business parks, transport system and housing. This is part of the strategy for the future Toulouse, besides increasing its international visibility, to better integrate various sectoral policies, especially environment and culture into broader urban development.

3.2.1 Policies to promote knowledge-intensive activities

Economic competitiveness in Toulouse is closely related to the support and the development of knowledge-intensive industries. The city's development path is based on a strong local scientific potential developed since the beginning of the 20th century (See Peyroux et al., 2007 – WP2 report and Martin-Brelot et al., 2010a - WP8 report for details on the city's industrial trajectory). Policies have been constantly focusing on education and the location of universities, higher education establishments and research institutions, which have created a broad knowledge base. Today, the UAT polarises 85 per cent of the metropolitan area's² higher metropolitan employment, especially in the research and the computer sectors (executives, engineers) (AUAT, 2008: 41).

In terms of knowledge-intensive industries, current policies mainly aim at consolidating existing strengths in aeronautics, space and airborne systems on the one hand and supporting the diversification of the local economic fabric through the development of biotechnology and life science sectors on the other hand.

² In 1999, 1,300,000 inhabitants live in the urban metropolitan area composed of the urban areas of Toulouse, Montauban, Albi, Castres, Mazamet, Pamiers, Foix, Saint-Gaudens, and Auch.

❖ *Consolidating existing strengths in Aeronautics, Space and Airborne Systems*

The *Pôle de Compétitivité* ‘Aéronautique, Espace et Systèmes Embarqués’ (Aeronautics, Space and Airborne Systems) is a *competitiveness cluster* created in 2005, which stretches over Aquitaine and Midi-Pyrénées regions. It includes aeronautics and space activities, computer industry and electronics for airborne systems (transport, mobile phones, medical implants). It is supported by an association named ‘Aerospace Valley’ which has 620 industrial and institutional partners. Headed by the director of Airbus France (Toulouse), the managing board comprises 33 members, representing the different sectors and territories in Midi-Pyrénées and Aquitaine regions. The objective is to increase the competitive advantages of both regions in these sectors, but the UAT will benefit from the potential economies of agglomeration (WP2 Peyroux et al, 2007).

❖ *Supporting the diversification of the local economic fabric: biotechnology and life science*

The second cluster, called *Cancer-Bio-Santé*, is dedicated to the medical, pharmaceutical and biotechnology research. In these sectors the institutional impulse primarily comes from local public authorities. The UAT keeps a dominant position within the region. The president of the Community of Agglomeration (CA) of Greater Toulouse, a well-known cardiologist who was also Minister for Health at that time, initiated a ‘Canceropole’ project in 2003 with the support of the medical milieu and pharmaceutical laboratories. This project, focusing on medical, pharmaceutical and biotechnology research dedicated to cancer treatment, was motivated by the need to redevelop the site of the AZF (*AZote Fertilisant*) chemistry firm destroyed by an explosion in 2001. This project created the opportunity to combine LED activities with national industrial policies. During this period of time the state was launching the Plan for Cancer and had designated seven sites in France, including Toulouse, where research and development activities would be concentrated. The granting of the *Pôle de Compétitivité* label ‘Cancer Bio Health’ in part of the Haute-Garonne *département* and the Tarn *département* has complemented the Canceropole initiative. The objective is to support existing laboratories and contribute to the structuring of the Canceropole.

❖ *Strengthening the higher education and research system*

Consistent with the Toulouse’s trajectory, most of the recent actions led to enhance the city’s competitiveness are actually oriented towards the promotion of synergies between research, higher education and industries. As already indicated, the *Pôles de compétitivité* (Competitive clusters) aim at consolidating Toulouse’s competences in aeronautics, space and on-board systems (Aerospace Valley) and also in health and life sciences related sectors (Cancer Bio Santé). Besides a series of policies and measures have been implemented over the past years to create more synergies and cooperation within the scientific milieu and to support a higher international visibility.

Following national reforms in the higher education system, in particular the 2006 Law of Orientation and Programming of Research (‘Pact for Research’) the creation of the *PRES*

Toulouse aims at federating a number of universities and institutes in sciences, health, human and social sciences and at coordinating the activities related to the PhD training (with the creation of single doctorate under the label 'University of Toulouse') and the management of equipment and infrastructures. The creation of a digital university is also planned. The creation of networks of scientific excellence (advanced thematic research network – RTRA) such as 'Toulouse Economic Sciences School' and 'Sciences and Techniques for Aeronautics and Space' has been financed by the State. They aim at supporting closer relationships between stakeholders within the scientific milieu and at increasing the attractiveness of the French higher education and research system.

❖ *Creating favourable conditions for business: networking and connecting the sectors*

'Experience shows that it is more relevant to use existing strengths than to try and attract companies from outside' (Exp1). Anyway, no direct financial support is given and no tool really exists to prompt firms to settle in the agglomeration. The current Director of economic development and employment of the Urban Community explains that his job rather consists in animating sectors and *'promoting convergences'*. He gives the example of the LAAS (Laboratory of Analysis and Architecture of Systems) which works in the field of nanotechnologies on a process that can be applied either in the sector of health or aeronautics. *'Logics of research irrigate both Pôles de compétitivité'* (Exp2).

'Although there is no public claim about soft factors in the policies, they are indirectly taken into account in the practice' (Exp1). Aerospace Campus is considered as a project that brings people with the same concerns closer together and that provides them with a favourable environment and good working conditions. The proximity of firms that can have different types of activity within clusters or business incubators (*pépinières d'entreprises*) is acknowledged as very efficient in Toulouse. The surface dedicated to business incubators has been multiplied by six within the last five years (from 3000 to 18 000 m²).

3.2.2 *Policies to promote cultural activities and creative industries*

In Toulouse the budget for culture in 2009 amounts to over 115 million Euros. Money is mainly used for the functioning of establishments, such as the Théâtre du Capitole (ballet, opera, orchestra), which receives 33 millions, out of which 20 millions are used to finance salaries. Once subsidies have been distributed to usual cultural establishments, only around 11 millions remain to really achieve the cultural policy, ie. to support associations whose projects correspond to the city's cultural policy.

In terms of culture and creative industries, most of the policies engaged recently were driven by the ambition of making Toulouse a 'European Capital of Culture' in 2013³. In particular, policies aimed at creating large-scale facilities matching the size of the city and diversifying

³ In September 2009, Marseille-Provence has been selected to become European Capital in 2013.

the supply of cultural activities. There is also a will to structure the training supply in the fields of culture and arts and to promote scientific and technical culture.

❖ *Creating large-scale cultural facilities with the aim to attract a large audience*

The low-level cultural equipment in Toulouse has been acknowledged by different observers. The year 2000 demonstrated the willingness of the municipality to develop a cultural infrastructure more suitable for a large city such as Toulouse (it had remained limited compared with cities of similar size). An adaptable concert hall (le Zénith) with almost 10,000 seats was constructed as well as a museum for contemporary art (Les Abattoirs) and a large-scale national theatre (le TNT).

In the early 2000s promotion of cultural events, which was also left behind in Toulouse compared with other cities, formed part of cultural policy. Three large-scale festivals were initiated: the *Rio Loco* Festival (formerly known as *Festival Garonne*) in the field of music, the *Printemps de Septembre* Festival in the field of visual arts, and a reading festival, the *Marathon des Mots*. The last two festivals were not initiated at local level: the *Printemps de Septembre* already existed in Cahors, the *Marathon des Mots* is a private initiative.

From the 2000s on suburban municipalities have also promoted policies that go beyond a close-at-hand supply and shown a renewed interest in creativity (Sibertin-Blanc, 2004b). Thus the commune of Blagnac (20,000 inhabitants) stands as a relevant example of such policy with a large concert hall (*Odysud*). Colomiers (32,000 inhabitants) has created two festivals (a comics festival and a biennial iberic music festival) with a large audience within the region itself. Other examples of cultural initiatives include a Cuban music festival in Castanet, a street show and a programme targeted at youths in Ramonville.

❖ *Diversifying the supply: from traditional to emergent culture*

Until the late 1990s cultural supply in Toulouse was considered as extremely classical (opera, classical orchestra of the Capitole, fine arts museum). The national and international reputation of the *Orchestre National du Capitole*, has been established over the years and the Orchestra now stands as the showpiece of cultural policy in Toulouse.

There has been a widening of cultural areas of intervention and a diversification of sectors, in particular towards new musical types or circus art. This included support to previously neglected private or community structures such as La Grainerie, a nationally known organisation in the field of art circus, L'Usine, a nationally and internationally known organisation for scenery and streets art, or Mix'art Myrys, a self-managed association of various art groups. In 2004, a municipal department of 'Urban Cultures' has been established in Toulouse with the objective of supporting creation and diffusion of emerging culture.

New infrastructure and equipments and the emergence of new cultural places have therefore strengthened local cultural life. Cinematographic facilities are a relevant example of interventions designed to enhance metropolitan functions in the central city of Toulouse. The Departmental Observatory for business equipment in Haute-Garonne has been engaged in a

project designed to diversify the supply and development of high standard infrastructure (Observatoire départemental de l'équipement commercial de la Haute-Garonne, 2005).

❖ *Structuring cultural and artistic training courses*

A major challenge for the future development of artistic professions relates to the structuration of the training supply, which is currently too much scattered in Toulouse. One action consists in increasing the influence of the School for fine Arts by creating a graduate school and developing a research pole (from September 2009) within the Bachelor's-Master's-Doctorate (LMD – *Licence-Master-Doctorat*) process. Another policy targets education and vocational training in the field of theatre as well as the professionalisation of young actors and directors. This is partly achieved in 2009 by the opening of a drama class within the regional conservatoire which until now only provided trainings in music and dance. There is also a will to valorise and develop modern and electroacoustic music besides classical orchestra music. The objective of these initiatives is clearly to enable artists to become professionals and to retain them in the city after their studies. This support of the municipality towards training is then narrowly associated to projects of creation and diffusion in relation with the city of Toulouse.

❖ *Promoting scientific and technical culture*

The cultural policy includes the promotion of the scientific and technical culture. In 2009 the City Council launched a new festival ('La Novela', a knowledge and art festival), which associates both fields of science and art. Many events and meetings are organised around four themes among which the digital city and the image. The aim of Toulouse is to catch up and become a hot-spot for scientific culture at the national and international levels and to include scientific culture among culture itself. This is not the first attempt as between 1986 and 1996, was organised in Toulouse, every two years, a huge exhibition 'FAUST' (Forum des Arts et Technologies du Futur) which was an International Market of Technologies for Creativity and Innovation and aimed to mix new technologies and art.

The promotion of the scientific and technical culture will also be achieved through the creation of a 'Science neighbourhood' (*Quartier des sciences*) (see below), the organisation of 'an international week of innovation' and the development of digital projects within the city (data digitalisation, creation of collaborative Internet platform, etc.).

❖ *Supporting the development of creative industries: audiovisual and design*

The municipality has the will to support the development of creative industries, in particular animation movie and design. This policy is essentially and directly related to the enhancement and the structuration of artistic training (see above).

3.2.3 Means and embeddedness in broader urban development strategies

The instruments and mechanisms to achieve policies described above are mainly related to the creation of large business parks, like **Aéroconstellation** (260 ha) entirely dedicated to aeronautical activities, **Aerospace Campus** (40 ha) for the space sector and **Cancéropole** (220 ha) for health and biotechnology. However policies dedicated to the enhancement of Toulouse's economic competitiveness are not disconnected from other sectoral policies linked to urban development such as housing, retailing, transports, and environment.

Aéroconstellation, located in the northwestern part of the agglomeration, includes two ZAC (Concerted Action Zone)⁴: Andromède with 3,700 housing units and public infrastructure stretching over 210 hectares in the municipalities of Beauzelle and Blagnac, and the ZAC Monge-Croix du Sud in Cornebarrieu (850 housing units over 57 hectares). Andromède is served by the line E of the Tramway. A major part of the area is dedicated to the dwelling (37 ha) completed by offices, shops and public facilities (25 ha). An important part is composed of green spaces crossing the area from east to west and it also integrates a leisure park (Pinot) as well as cultural public infrastructure. This project will be presented for the label 'ecological neighbourhood' of the Ministry for Environment and Sustainable Development. The programme costs 156 million Euros and is financed by the CA of Toulouse (20,5 million Euros), the Mixed Syndicate for Public Transport (SMTC) the Regional Council, Sivom Blagnac Constellation, and Conseil général.

Aerospace Campus is a large-scale campus project dedicated to higher education and research in aeronautics and space technologies. It will be built on the former Air France workshops (Montaudran south-east of Toulouse) and will enable to redefine and valorise the southeastern entry of Toulouse. 1,000 researchers (from the National Office for Aeronautical Studies and Research - ONERA, the National Centre for Scientific Research - CNRS, and the National Centre for Spatial Studies - CNES) are expected to work on the campus. The operation includes 193,700 m² of offices, laboratories, research sites, dwelling for researchers and students (1,500 housing units should be constructed), collective services, facilities and retail trades, in order to transform this campus area into a real place to live. It aims at being the international symbol of the Tolosan metropolis' competences in aeronautics and space. The building and the commercialisation will start in 2011.

Cancéropole is a complex dedicated to biotechnology for both firms and researchers. It is constructed on the former site of the AZF chemistry firm (area of Langlade), destroyed by an explosion in 2001. The project includes a 300,000 m² real estate programme, a 30 ha public park and over 100 ha of green spaces. An expected 4,000 jobs will be located.

The Pierre Potier centre (5000 m²) which accommodates a business incubator and public laboratories has already been delivered since 2009 and two other buildings are being achieved: Pierre Fabre and Sanofi-Aventis private laboratories; the university clinic for cancer (delivered in 2012). The upgrading of the Langlade site takes place within a wider urban

⁴ Implemented from the 1970s onwards ZAC are designated areas within which the local authorities decide to finance public infrastructures (potable water, sanitation, streets, schools, housing schemes) with the aim of developing the land and handing it over to public or private users.

renewal policy of the south of Toulouse. In addition to the redevelopment of the main roads leading to the area, priority is given to public transport (busses and direct connection to both metro lines) and bicycle lanes, especially inside the public park.

The integration of these 'competitiveness areas' within broader urban development projects is part of the *Plan Campus*, which consists in a 527 million Euros endowment from the national state dedicated to the renewal of university real estate (Mairie de Toulouse, nov 2009, n°5).

The '**Science neighbourhood**' (Quartier des sciences) includes three sites that could be redeveloped within the city centre (see Map A2 in appendix): the Allées Jules Guesdes next to the Natural Science Museum should accommodate on a 10,000 m² site the headquarter of the PRES and many facilities dedicated to the organisation of scientific events, including exhibition hall, restaurants and bookshops; in the Rue des 36 Ponts will be constructed a housing for researchers (Cité internationale des chercheurs); the Prison Saint-Michel (former central jailhouse) might become a centre for artists, engineers and scientists in order to strengthen the links between them.

In the south-western part of the city, a large part of the *University 2–Le Mirail* (Human and Social Sciences) will be renovated. This intervention is meant to be narrowly associated with the 'Great Project for the City' (GPV), a major operation launched in 2002 to transform deprived neighbourhoods that surrounds the campus through demolition, reconstruction, rehabilitation and residential growth.

Since September 2009 the centre for contemporary arts (CIAM) dedicated to the diffusion, experimentation and research in performing and visual arts (*La Fabrique culturelle*, 3000 m²) is settled at the entry of the university site.

Another project concerns the creation of a 'House of Image' (*La maison de l'Image*), which is currently under concertation and will also take place within the GPV in the neighbourhood of La Reynerie, close to the University 2-Le Mirail. This equipment should become a place dedicated to image with auditoriums and exhibition halls, film production workshops, projections, conferences. A special attention is paid to the **animation movie** and the place should accommodate Tolosan companies and associations specialised in this field.

The combination of both urban planning and university projects is also visible in the south-eastern part of the city (Map A3 in appendix). Currently this part of the agglomeration which is one of the most dynamic in terms of economic activity suffers from very insufficient transport connections. This has been underlined by creative employees in our surveys (WP5, WP7, WP8). A project associating different means of public and private transport (South-East multimodal liaison - *LSME*) is planned in order to improve the circulation between different neighbourhoods and communes (Ramonville, Saint-Orens, Quint-Fonsegrives). The project insists on the development of soft transport system (walk, cycle, collective transport) especially when drawing level with the Aerospace Campus site, the scientific complex of Rangueil and the University Paul Sabatier.

3.2.4 *Vision for the future, Toulouse in 2030*

During 2009, the municipality launched consultation workshops about urban projects for the **Greater Toulouse 2030** (Mairie de Toulouse, AUAT, 2009b). This has been done firstly with professionals (architects, urban planners, real estate developers) and secondly with inhabitants. The idea is to consider in their globality the consistent development of five ‘territories’: the *metropolis*, the *campus city*, the *cultural city*, the *renewed city* and the *water-city*. These ideas actually relate to a twofold strategy, one linked to the enhancement of the international dimension of the city and its influence outside its border; the second one is linked to the internal development. Like many cities, Toulouse deals with the tension between competitiveness and social cohesion. It has also to deal with environmental issues.

❖ *International dimension*

The enhancement of the international visibility of Toulouse still mainly focuses on the infrastructures dedicated to higher education and research, in particular through the ‘*Toulouse Campus*’ plan.

The cultural policy also acknowledges the need to strengthen the international dimension of Toulouse and to reinforce cooperation with European countries. Toulouse intends to integrate the network of creative cities initiated by UNESCO.

Many of the following actions described below also contribute directly or indirectly to re-up the image of the city at the international and national level.

❖ *An efficient transport system*

The development of the transport system to improve accessibility at the national level is acknowledged as a priority. Many of our interviewees especially the managers and entrepreneurs in the creative industries have deplored the lack of high speed train and direct connection by train to Paris. The ‘*metropolis*’ implies to think about the integration of a future high speed train station (planned for 2017). There is also a reflection about the connection to airports and to different sites such as the exhibition park and business parks.

This issue of intraurban transport is a priority of the Urban community of the Greater Toulouse and 80 million Euros should be devoted in the next few years to improve the system of public transport (Mairie de Toulouse, 2009a: 8).

❖ *Controlling urban sprawl*

The ‘*renewed city*’ plans the restructuring of the neighbourhoods and reflects the search for a better urban balance. The aim is to ‘build’ Toulouse on itself’ after many years of urban sprawl, by using the urban areas that have to be restructured. The main areas concerned are the northern entry of Toulouse, the left side of the Garonne river with the development of an ecological neighbourhood (Cartoucherie). The deprived areas should be integrated and better connected to the adjacent territories. The area of the main train station (Matabiau) is supposed to be restructured and transformed into a large business centre.

❖ *Actions to preserve environment*

In addition to new regulations neighbourhoods and local authorities take voluntary initiatives. The City of Toulouse has set up an Observatory of Environment since 2004 and launched its own Territorial Climat Plan in 2009. It made a commitment to reduce its energy consumption and its greenhouse gas emissions (Mairie de Toulouse, 2008a). A rising numbers of local authorities have elaborated an Agenda 21 as well as action plans to promote a sustainable environment. A number of neighbourhoods have also integrated environmental concerns into their specifications.

The '*water city*' aims at giving value to the numerous water-based and green areas that are present in Toulouse and to the Garonne river and the 'Canal du Midi' which are two major waterways. Besides the city has developed an ambitious plan aiming at developing the revegetation of the urban territory, at providing a maximum number of inhabitants with a pedestrian access to public green spaces and at promoting an uninterrupted network of paths between the neighbourhoods and the large public parks. The policies of the city also include measures to protect the local fauna and flora that are mainly linked to the hydrographic network (AUAT, 2008a).

❖ *Culture and solidarity*

The role of culture in urban and social development is described in a document written by the municipality of Toulouse in 2008: the *Cultural project for Toulouse 2009-2014*. It puts emphasis on 'a solidarity metropolis' with an 'equitable cultural policy' entrenched in the city's life and close to the citizens. Projects include the rehabilitation or the construction of new proximity infrastructures, in particular in the suburbs, a financial and material support to artists, in particular promoting cultural plurality and interculturality.

A reflection is currently led to include the cultural sector as a competence of the Urban Community (25 communes). The intercommunal structure is already pursuing a strategy aimed at structuring the stakeholders and the territory towards a 'metropolis of convergences'. In particular eight proximity territorial centres (*pôles de proximité*) have been created to respond to the needs of inhabitants and enterprises.

4 ANALYSIS OF INSTITUTIONAL STRUCTURE AND GOVERNANCE ARRANGEMENTS IN TOULOUSE

4.1 Key stakeholders in economic development policy at metropolitan level

This section presents the stakeholders that play a role in the metropolitan decision-making process in the area of economic development. In Toulouse, the state, the *région*, the local authorities (communal and intercommunal structures) as well as private and associative stakeholders are involved in different strategies and policies with specific competences, roles and financial resources.

4.1.1 A primary stakeholder: The national state

The state has played a dominant role in strengthening aeronautical activities in Toulouse after 1945. Local scientific leaders also played a significant part in this choice by pleading, as soon as in the 1950s, for the transfer of the National School of Aeronautics, which was followed by the transfer of the National Higher School for Aeronautical Engineering (1961) and the National School of Civil Aviation (1968). The city has benefited from the decentralisation policies implemented by the state from the 1960s onwards to balance territorial inequalities at national scale. 70 per cent of activities created in the agglomeration of Toulouse during the 1960s were initiated by the state and derived directly or indirectly from its authority (Jaillet, Estèbe, 1999). Despite decentralisation laws of 1982-1983 the state has maintained a specific role in the management of local matters through the process of contractualisation. The French state has repositioned in a function of instituting the bargaining between a great variety of stakeholders (Epstein, 2009: 132). More recently national agencies (e.g. ANRU – national agency for urban renewal) play a major role in the allocation of financial resources to territorial projects.

Most of the recent policies implemented in Toulouse such as the *Pôles de compétitivité*¹, the Research and Teaching Pole Toulouse (PRES) and more recently the ‘Plan Campus’, are national State’s policies which are implemented at the local level. Toulouse’s economy directly benefits from the ‘*Grand emprunt national*’ (government bond), a national policy implemented from 2010 on aiming at strengthening the firms’ productivity, innovation and competitiveness. The state will dedicate 35 billion Euros credits on four targeted profit-making sectors: higher education, training and research (19 billion Euros); Industry and Small

¹ From 2005 on, the ‘competitiveness clusters’ (*Pôles de compétitivité*) constitute a strategy developed by the State and implemented by DATAR to support technological innovation. It comprises a large geographical perimeter where firms and research and education units are engaged in a partnership, in order to promote common technological projects.

and Medium Enterprises (SMEs) (6.5 billion Euros); sustainable development (5 billion Euros) and digital economy (4.5 billion Euros).

4.1.2 An increasingly present stakeholder: the région

❖ *Knowledge*

The Midi-Pyrénées *Région* implements a policy based on technology transfer and support to innovative firms. This policy takes place within contractual agreements between the regional authority (Regional Council of Midi-Pyrénées) and the State. Interventions are therefore conducted through state institutions: DRIRE (Regional Department for Research, Industry and Environment), OSEO-ANVAR (National Agency for the Development of Research)². This is seen as a mutualisation of resources between state and region (Scott and Zuliani, 2006). Regional representatives of state institutions have therefore become service providers in consulting and loans suppliers mainly for technological SMEs.

Since 1970 Midi-Pyrénées region has developed an institutional framework to support scientific research and technological development. This includes several initiatives such as the support of fundamental and applied research, the promotion of information technology, especially high-speed Internet networks and the support to high technology start-ups:

- CRRDT (Regional Consultative Committee for Research and Technological Development) targeted to fundamental and applied research.
- ARDESI (Regional Agency for the Development of the Information Society), created in the 1980s to support and promote information technology in the region (high-speed Internet networks between aerospace firms and main research laboratories specialising in computer industry and systems (Toulouse Research Institute on Computer Science - IRIT, LAAS). This takes place within the framework of PARSII (*Programmes d'Action Régionale pour la Société de l'Information*) mainly targeted to communication networks and innovative services.
- Other regional public institutions (Association for the Development of Teaching Economy and Research in Midi-Pyrénées – ADERMIP, Regional Technological Research Networks - 3RT, Miditech) have long worked independently and separately towards technology transfer for innovative firms in ITC.
- *Incubateur Midi-Pyrénées* aims at supporting the creation of innovative firms out of research laboratories through specific funding (*'fonds d'amorçage de Midi-Pyrénées'*).
- *Agence Midi-Pyrénées Expansion* manages scientific monitoring and supports activity development in several fields (ICT, biotechnology, aeronautics)
- AVAMIP (Regional Agency for the Development of Research) provides support to high technology start-ups created through industrial valorisation of technological innovation (incubator).

² Anvar (also called 'Agence française de l'innovation') was created in 1968 as a state agency for improving the transfer of scientific research results to business. It was transformed into a private company in 2005 and is now part of the OSEO Group, together with BDPME (Development Bank for SME's).

To avoid the risk of overlapping of competences the Regional Council has recently created an ARI (Regional Innovation Agency) in charge of coordinating regional policy in technology transfer and support to technological innovation (2006).

❖ *Culture*

Midi-Pyrénées Région is more and more involved in culture through a territorial approach to cultural policy (cultural development schemes). These schemes are supported by state decentralised institutions, which are involved in coordination, consulting, and expertise and research.

Since decentralisation local authorities have gained competences in cultural field: budgets of departments and regions increased by a multiple of five during the 1980s. Funds from all territorial authorities are higher than state funds (50.3 per cent compared to 49.7 per cent). The Midi-Pyrénées Région is involved in several partnerships to support projects in diverse fields. However it supports primarily the actions of diffusion and the festivals. This institution has a low budget (20 million Euros yearly for the culture) which limits its actions.

4.1.3 *Local authorities: municipalities and intercommunal structures*

Communes which are not part of an intercommunal structure within urban area keep their competence in terms of economic development. For other communes, this competence is transferred at the intercommunal level, ie. the CA or the Urban Community for the Greater Toulouse.

‘When you consider the importance of competences transferred at the intercommunal level, the mayors’ power is largely debased.’ (mayor of one commune in the CA of Le Muretain)

Furthermore, whatever the level it comes from, the decision to settle new economic activities has to be consistent with the federative schemes of the territory (SCOT, Schéma de Cohérence Territoriale).

❖ *The intercommunal structures in the UAT*

The rapid growth of the Tolosan periphery, political tensions as well as the repartition of activities and business taxes have led to a fragmentation of the urban area. This has consequences on the repartition of economic activities. Three major intercommunal structures (SICOVAL, Urban Community of Greater Toulouse, Muretain) tend to pursue their own economic policy (Table 4.1), which creates rivalries in the urban area (Map A1 in appendix). In 1992, the District of Toulouse counted 12 communes. It was in charge of economic development, housing, environment and fire control system. It was transformed into a CA (*Communauté d’Agglomération*) in 2001 (counting 23 then 25 communes from 2003 on) with the following competences: development of the ZAE (zone of economic activity), transports, sewage system, city planning, recreation parks, roads.

In January 2009, the CA became an *Urban Community*, with the same perimeter but new competences and budget. These extra competences are public roads and cleanliness, supply of drinking water, waste management and town-planning. Economic development which was already a competence of the CA remains at the Urban Community level. With the shift from a CA to a Urban Community, the budget of the Greater Toulouse has increased by 175 million Euros to reach 668 millions Euros in 2009 (this corresponds to a growth from 449 to 873 Euros per inhabitant).

Created in the 1970s, the SICOVAL in the southeast was the first intercommunal structure to engage in town planning and economic development with the aim of developing a technological park near the university of sciences (Labège Technopole). The organisation centred around a dynamic commercial and technological park and including residential towns, with an over-representation of engineers, technicians, executives and independent professionals.

Unlike the Urban Community of Greater Toulouse which includes the wealthiest towns and has a large concentration of industrial establishments, in particular in the aeronautics, space, electronic and even biotechnology and pharmacy sectors, the CA of Le Muretain is characterised by the presence of large commercial areas and many low added value enterprises.

The national law on inter-communality (Simplification and Reinforcement of Inter-communal Cooperation) of June 1999 and the law on Solidarity and Urban Renewal of December 2000 have changed the institutional and governance framework.

Table 4.1 - Overview of main inter-communal structures and local policies for improving competitiveness

Inter-communal structures	Description	Examples of policies and interventions
The Urban Community of Greater Toulouse	- 25 communes - 36,643 ha - 700,000 inhabitants	- Creation of business park specialising in aeronautics (aeroconstellation) - Creation of Free Urban Zones - Support to universities
The Community of Agglomeration (CA) of SICOVAL	- 36 communes in the south-east of UAT - 25,000 ha - 68,000 inhabitants	- Creation of a technology cluster: Technopole Toulouse South-East – with four business parks (Labège-Innopole, the Parc du Canal, Agrobiopole and the Vallée de l'Hers) - Support to firm creation and firm establishment through international networking (the International Association of Science Parks - IASP, a worldwide network of science and technology parks) - Creation of firm nurseries (Prologue and Prologue biotech) - Creation of a Congress Hall 'Diagora' and organisation of economic events
The Community of Agglomeration of Le Muretain	- 14 communes - 18,200 ha - 65,000 inhabitants	- Project of the ZAC Porte des Pyrénées (planned for 2010) targeted to leisure and cultural activities

4.1.4 Other types of stakeholders: Private firms, associations

Private firms and their representative structures as the Chamber for Commerce and Industry of Toulouse aim at promoting business development and at coordinating information. Various clubs of high technology firms were created.

The association '*la Mêlée numérique*' created in 2001 is an example of private collective action. It aims at supporting the development of occupations and activities involving numbers (high speed network, Internet development, computer consulting). A wide range of private and public stakeholders including the Région Midi-Pyrénées supports it. Actions are based on information circulation and concerted decisions between firms and decision-makers. There are also supportive initiatives towards 'start up' (creation of '*Cercle numérique*') in addition to support of clusters of firms (*grappes d'entreprises*) and a project associating stakeholders in digital economy (*Alliance Numérique*).

Cooperation between scientific research in information technologies and industrial business has intensified since the late 1990s with the foundation of IERSET (*Institut Européen de Recherche sur les Systèmes Embarqués et leurs Technologies*). It was initiated by Siemens (automobile supplier in charge of airborne system and circuits) and the local authorities. IERSET (that became Ampère in 2006) includes industrial leading firms, research centres (ONERA, LAAS) and local and national firms specialising in computer activities. This interface structure aimed at setting up and managing cooperation projects.

❖ Culture

Associations and firms are also engaged in culture. Festivals are mostly organised by associations which often receive public subsidies.

Private patronage is an ancient phenomenon but corporate patronage is more recent and less developed than in the United States or Germany. An appropriate legal framework has been established (1987 and 2002 laws) and corporate patronage is increasing. Many large companies in France have promoted cultural activities through the creation of foundations and actions in heritage conservation (Electricité de France - EDF, BNP-Paribas, Vinci Group)³.

The explosion of the chemistry firm in Toulouse in 2001 had an impact on the development of infrastructures and on cultural life in general, in particular in reducing private or community initiatives (Sibertin-Blanc, 2004a).

Private investors also tend to favour activities with a high level of visibility. As a consequence they rather support events (festivals, concerts, etc.) or projects related to the art/technology thematic. The Club des entreprises (businesses club) of Toulouse took part to the project Toulouse 2013 European Capital of Culture but this has been only temporary.

³ www.diplomatie.gouv.fr

4.2 Types of interactions between stakeholders

The city is characterised by a long cooperation process between industrial, scientific and institutional partners. The implementation of the Aerospace *Pôle de Compétitivité* illustrates the growing importance of large aeronautics and space sector groups within public private partnerships. Public stakeholders and local institutional structures have legitimated the implementation of the project by providing a constant support. Although actions in the field of culture cannot be compared with what has been done for knowledge-intensive industries in Toulouse, the involvement of higher education and research establishment seems to be a key for successful policy aiming to promote creative industries.

❖ *Knowledge intensive sector: the example of Aeroconstellation*⁴

The achievement of the *Aeroconstellation* project illustrates the efficiency of partnership between private and public local, regional and national stakeholders and the affirmation of a consensus when dealing with significant projects in terms of wealth and job creation.

Municipalities in the northwestern part of Toulouse (*Etablissement Public de Coopération Intercommunale* - SIVOM Constellation) have made 370 hectares available to the project by transferring activities and by using expropriation procedures. The site is located northwest of Toulouse next to the airport and extends over three municipalities.

The establishment of the A380 assembly line has resulted in bridge building between the main institutional stakeholders at various scales (urban, departmental, regional). The state played a key intermediary role while the Airbus firm took the lead in mobilising its partners for the project implementation. The development of the A380 site over more than 300 ha and its integration into the urban area would not have been possible without the interventions of all local stakeholders: this includes the CA of Greater Toulouse, which was the contractor, the Regional Council and the Haute-Garonne Département, and the Chambre for Commerce and Industry. The achievement of the Aeroconstellation project demonstrates the pragmatic character of policies to improve competitiveness when confronted with key industrial investment for the local productive system. It also illustrates consensus among public and private local, regional and national stakeholders when dealing with significant projects in terms of wealth and job creation. The Airbus firm and the industrial aeronautics milieu are well integrated into the local administrative apparatus and the local economic sphere. This helps to strengthen their dominant role.

❖ *Various arrangements in the creative and cultural sectors*

The city of Toulouse is currently the main stakeholder dealing with cultural issues and their link with creative industries and economic development. In the document called '*The cultural project for Toulouse 2009-2014*', the municipality introduces the term 'Creative Toulouse' (*Toulouse Créative*), especially about the creation of an international week for innovation

⁴ Text adapted from J.M. Zuliani (Peyroux et al., 2007).

each autumn. The development of creative industries is considered from different points of view:

- structuring of a ‘cinema neighbourhood’ gathering the film library (cinémathèque), the ABC cinema, the école supérieure d’audiovisuel (ESAV) and a high school (Saint-Sernin). The objective is also to strengthen the office for accommodation of film shooting in Toulouse.
- prompting the settlement of cultural business incubators, which completely lacks until now.
- at last creating a label ‘Toulouse up’ to support innovative projects especially in their communication; the municipality plans to engage partnerships with other local authorities and with association of entrepreneurs.

Most of these projects include the collaboration of different stakeholders and most of the cultural establishments have mixed or crossed funding (*financements croisés*), involving several institutions. Several types of collaboration can be identified:

- the traditional collaboration between public territorial institutions.
It is essential in the implementation of large scale projects such as the “Cité des Arts” on the site of the La Grave Hospital which inserts within a wider urban project called ‘l’Arc culturel Garonne’ next to the river. The historical buildings of the former hospital should be transformed into a multidisciplinary equipment dedicated to the accommodation and residence of artists. This project involves the State, the Region, the Urban Community of Toulouse, the Département and the municipality of Toulouse.
- the collaboration between scientific establishments and other partners.
Before starting to support some sectors, an important preliminary work is done to organise and strengthen the corresponding education and training supply. Several stakeholders - particularly the University and the Région, which is in charge of professional trainings - are then strongly prompted to get involved in these projects. It concerns different types of arts: theatre, circus, photography, music and dance.

The municipality plans to support the development of design activities. This implies the will to acknowledge and improve the artistic professional training. Thus the project involves:

- the University, which provides students with artistic trainings,
- the School of Fine Arts and the municipality since the school still has a municipal legal status,
- the European Union, as local designers take part to European projects,
- entrepreneurs from these sectors,
- intercommunal structures such as the Urban Community of the Greater Toulouse which has financed the ‘Fabrique Culturelle’ (see 3.2.2), a site where activities related to street furniture could be developed.

5 CRITICAL EVALUATION OF POLICIES AND STRATEGIES

5.1 Debates surrounding current policies and strategies

This section draws from recent press articles and semi-structured interviews conducted with representatives or experts who are either in charge of the implementation of policies or who can account for the functioning of the urban government system. A major weakness identified by interviewees and the media relates to the general **lack of daring** of the city. Despite the healthy local economic context and the real attractiveness of the city, the risks of lagging behind are pointed out by many stakeholders.

❖ *Economy: What goes wrong in Toulouse?*

In a recent issue (February 2010) the monthly magazine ‘*Toulouse Mag*’ draws up the list of large structuring equipments that are going away from the city, mostly at the benefit of Bordeaux.

- the headquarter of France 3 Sud Ouest in the context of the restructuring of France Télévision (a package of four national TV channels), the former 13 regional directions are replaced by four ‘governance poles’ and Bordeaux has been chosen to host the headquarter of the South-West direction.
- the site for the maintenance of aircrafts and helicopter of the French army will also be located in the Bordeaux region.
- one of the largest factories of photovoltaic panels in France will be established near Bordeaux whereas Midi-Pyrénées region expected to win the tender from the American firm First Solar and EDF.
- the future headquarter of Galileo (European navigation system) was expected to settle on the Aerocampus site (see 3.2.3) but the European commission decided to take back the project to industrial firms that were not able to agree (*La Dépêche*, 11/01/2010)

Although the workings should start in 2013 (and end in 2018), the absence of a high-speed train line remains an enormous disadvantage of Toulouse compared to other regional metropolises in France like Marseille, Bordeaux or Montpellier. The isolation from Paris is increasingly pointed out as it might seriously jeopardise the city’s further economic development. This also has a bad influence on the image of Toulouse and creates incomprehension regarding the contradiction between this stagnation and the rapid and demographic growth.

❖ No need to develop an offensive local strategy to attract businesses?

'The city has an enormous potential but does not exploit it enough' (...) 'We have not known how to learn solidarities and collective work' (T. Viala, lawyer in charge of Toulouse Pôle Position - Toulouse Mag, n° 92, 2010).

The lack of ambition and the image of 'a spoiled child' come up quite often in the discourses about Toulouse and its economic development. This idea relates to the fact the city never had to recover from heavy war destructions or environmental damage and painful socio-economic restructuring from the industrial revolution like northern cities in France. Furthermore, due to the state's decision to locate aeronautical and space activities in Toulouse in the 1960s but also to natural assets, the city's leaders have not been used to fight to attract businesses on their ground. This might explain why today there is a weak anticipation regarding key competences in the future, such as creative industries or sustainable development.

Some eloquent figures corroborate this idea: the direction for economic development and employment of the Urban Community of Greater Toulouse employs only 10 persons. Comparatively, similar services employ over 100 persons in Lyon and Marseille, and they count about 50 employees in cities like Rennes, Nantes, Bordeaux or Strasbourg.

'Historically it were not worth intervening in the field of economic development, as it worked very well by itself'. 'There is tradition of non-intervention and this is an official position, which has more to do with good sense than with a pure liberal ideology' (Exp2, Urban Community).

Furthermore businesses tend to settle spontaneously, especially in the most central parts of the agglomeration (Greater Toulouse). *'The firms are used to make their own way when they settle in the UAT and they practically never ask for financial help' (Exp2, Urban Community).*

The explosion of the chemical plant AZF is the dramatic event in 2001 that created instability and many expectations from the Tolosan population. As a consequence local politicians have been motivated to handle the economic issue. At that time the president of the CA of Greater Toulouse was also Minister for Health and the 'Canceropole' project created the opportunity to combine LED activities with national industrial policies.

Local stakeholders have learnt to work collectively for a few years: *'they have become more intelligent for themselves and for the community' (Exp2, Urban Community)* and the city is recognised to know how to grasp opportunities offered by the state, such as the Pôles de compétitivité. However, excepted the Canceropole example, local leaders in Toulouse have practically never been in demand for help from Paris. Even today, *'we do not have any intermediary, no one makes political lobbying at the national level' (T. Viala, lawyer in charge of Toulouse Pôle Position).* This observation is completed by the person in charge of the question of nanotechnologies (Alain Costes) who recognises that *'what is done in Toulouse is not well known in Paris' (Toulouse Mag, n° 92, 2010).*

❖ *The international dimension*

For the director of economic development of Greater Toulouse, although Toulouse's economy is very much internationalised, the city is not international at all, which could remind the autonomous functioning and neutral behaviour of Switzerland. For instance, there are no international bookshop or cinema, and international newspapers are currently very difficult to find despite the important proportion of foreigners in the city. Yet the lack of strong international dimension of the city constitutes a threat if one considers the increasing impact of globalisation (international competition, pressure on quality, deadlines, prices). Toulouse universities are relatively bad positioned in international rankings and the accommodation level of foreign students appears lower than the ones observed at the national level (AUAT, 2008). Research structures tend to be dispersed and this diminishes the visibility of the metropolitan scientific pole.

The set of mind of the Tolosans is widely put forward to explain this situation. Not only 'historical' inhabitants who have a 'sepia' vision of their city, but also new comers, who have '*bought a promise that can not be changed*', are to be blamed for this stagnation (Exp2). '*Toulouse is a welcoming city but it does not integrate people*'. Compared to Marseille where Comorian migrants arrived 15 years ago are already on the municipal electoral lists, there are no Spanish names among Toulouse's local councillors although the city claims its Spanish identity (Exp2).

The director of urban and sustainable development of Greater Toulouse (Exp1) underlines the 'village mentality', which is a real weakness of the Tolosans who '*hardly look farther than their own borders*'. In terms of business real estate, Toulouse presents few business centres and lack upscale sites matching international standards.

❖ *Limits of the organisation at the metropolitan scale*

Many interviewees refer to the general individualism that dominates in the urban area and point out in particular the inability of the various intercommunal structures (Grand Toulouse, SICOVAL, Muretain) to show a unified image of the territory outside.

Attempts of coordination are initiated through the creation of joint structures like the SMEAT (Map A1 in appendix) or through political constraints like the SCOT (see 4.1). The objective of the SCOT is twofold: controlling and limiting urban sprawl on the one hand, building a consistent development in the fields of dwelling, urbanism and transport.

However '*whereas a governance in the field of economy is surely being built at the scale of the Greater Toulouse, no such kind of governance exists currently at the scale of the urban area*' (Exp5).

❖ *Conciliating competitiveness and social cohesion*

Most of the interviewees have pointed out different contradictions in the current policies and strategies led in Toulouse. One of them concerns the balance to be found between a policy that aims at concentrating and enhancing visibility of the centre and the will to reach a more equitable development all over the agglomeration. Thus the person in charge of cultural

affairs points out the necessity to respond to the needs of some artists to locate in the centre and at the same time to match the objectives of solidarity.

The director of economic development of the Greater Toulouse puts into question the idea of a necessary 'balance' of the urban development. For him, mixing is not always a good choice. *'If one should create and develop employment in the deprived neighbourhoods (within the GPV - 'Great Project for the City'), one should also do this in La Côte Pavée, which is a wealthy residential area of Toulouse.'* 'The logic of the link between economic development and social cohesion should be broken'.

5.2 Confrontation with the results of the previous surveys

Strong and weak points of city regions regarding different location factors and according to the different target groups have been identified (see Matrix 2 of the WP8 in Martin-Brelot et al., 2010a). **To sum up, the city is much more adapted to knowledge workers than to creative workers.** Our results show an imbalance between engineers or scientists on the one hand and people working in the fields of human sciences, art or culture on the other hand. Their relationship to work as well as their working conditions can widely differ. Furthermore their opinion regarding the city and their use of urban facilities and services are also quite different.

The weight of the UAT appears clearly weak in the audiovisual activities. This is mostly due to the domination of Paris which is exceptionally strong in the field of contents production¹. However the city is not very dynamic in the video sector compared to other metropolises in France.

Workers in the creative sectors clearly deplore the low level of job offers and career opportunities. Other critics relate mainly to soft factors, especially the **cultural milieu** in broader sense that should largely be dynamised. The image of the city is an important element for people coming from abroad and judged negatively by those working in the creative industries. The reputation of the city has no real positive effect on their profession, unlike the knowledge workers. This observation goes along with the judgement on the lack of professional contacts in their creative and cultural fields. It can also be put into relation with the observation made by this entrepreneur and investor about the exclusive local social networks and the 'clique' effect in the many sectors of the Tolosan economy (*Touléco*, n°1, 2009):

'When I arrived in 2002, I spent six months to try and understand the functioning of the local economy...' (In the United States), I felt myself much more supported to launch a company. Here difficulties overtake the idea of business, this is heavy frame of mind for an entrepreneur.'

¹ For instance, 74.5 per cent of cinema picture and video production activities gather in Île-de-France; 62 per cent of motion picture, video and television programme production activities are settled in the *départments* of Paris and Hauts-de-Seine (INSEE 2008).

'I went away from Toulouse when I realised that you absolutely need to be part of a network to be able to work. This is a kind of 'barony'. Even if the product is good, a person will have all the difficulties to make a breakthrough.'

Creative employees who have often lived in the city longer than the transnational migrants pay more attention to the Toulouse's **architecture**, which they consider as not attractive enough. Along the same line, the 'complex of the red brick'² is underlined in the press articles cited above.

Regarding 'hard factors', the weaknesses of Toulouse for managers rely essentially on the lack of high speed trains, which impedes **accessibility at the national level**. The taxation system is also a problem for them, but this refers more to the national law context. For all the employees, **transports in the city** are not developed and efficient enough.

Qualitative surveys among managers and transnational migrants allowed us to address the issue of the **image of the city**, which is crucial in the debate about urban competitiveness and attractiveness. A major criticism made by managers of audiovisual and web design sectors to local leaders refers to their **scepticism towards emergent, small and flexible businesses** related to arts and entertainment. When asking companies covering the image consultancy sector what stimulates or slows down their creativity, the answers are related to money and budgets, but also, and even more, to the lack of ambition of their clients and the city in general. For some managers, 'Toulouse slugs' compared to other cities like Barcelona for instance.

² The red brick mansions constructed by the rich merchants during the 15th century gave Toulouse its name of 'The Pink City'.

6 CONCLUSION AND DISCUSSION

To conclude this report, Toulouse can be evaluated by considering different types of conditions of success for creating or stimulating creative knowledge metropolises. Whereas the city is not known as national or international political and economic decision making centre, it has several essential - though not sufficient - assets such as good financial and organisational resources. The city also benefits from an active innovation and technology policy. **In general, whatever the economic sector, policies are largely oriented towards the strengthening of the higher education and research system.**

In terms of leadership and governance structure, it is too early to assess the changing of political orientation since the municipal election of 2007, especially in the fields of artistic and cultural influence of the city. However one major challenge consists in bringing together the strategies of the different intercommunal structures (in particular Greater Toulouse, Sicoval and Muretain) to reach consistent urban development at the scale of the metropolitan region.

Based on past experiences, political and economic leaders who have been encountered in Toulouse think there is no use to try to attract large companies from Île-de-France or foreign countries anymore. They have come to the conclusion that this kind of strategy was very demanding and often not much rewarding as most of these companies are likely to relocate elsewhere especially in a context of globalisation. The example of the company Freescale, a subsidiary of Motorola¹ settled in Toulouse at the end of the 1960s, illustrates this situation. Freescale was a kind of model of integration between research and industry since in 1985, the first university-business laboratory specialised in power electronics and chemical sensor was created. In 1995 the company received important public support (12,9 million Euros). However Freescale just cut its Télécom² subsidiary which represented 236 jobs and the company also plans to stop the manufacturing part of the plant of semiconductor components, which is equivalent to 821 jobs. Another firm can be mentioned along the same line: Storage Tek, specialised in the storage of computer data which settled in 1993 in Toulouse and received 7.3 million Euros from the municipality of Toulouse, the Conseil général of Haute-Garonne (*Département*) and the Regional council of Midi-Pyrénées but never reached the 356 jobs expected at such an extent that the company now has to partly give the grant's money back.

The model of large technopolitan specialised business areas at the periphery of the city also seems to be outdated. New areas that are being developed currently often try to mix dwelling, trade, education establishments, research and businesses.

¹ Originally founded as the Galvin Manufacturing Corporation in 1928, Motorola is a leading company in wireless, broadband and automotive communications technologies and embedded electronic products.

² France Télécom is the main telecommunication company in France.

In the future, political and economic initiatives will rather have to aim at:

- trying to retain talents. Our surveys have shown that this strategy was working well in the attractive sectors of aeronautics and space but also when the training supply is adapted to the job opportunities that exist locally. This proves the potential benefit of structuring education sectors.
- Increasing the levels of organisation of the cultural sector and better estimating the economic dimension of cultural sector. Many artists from the advanced sectors are still leaving the region and managers in the advertising and audio-visual sectors in particular need to have a second office in Paris to be recognised.
- Supporting any initiatives that can ease the arrival or the spontaneous creation of companies, especially business incubators which allow young entrepreneurs to start their business with few means and to confront themselves with the others' experience.
- Promoting the gathering of companies around the same interest, which does not necessarily mean the same speciality, in order to develop synergies.
- Making the crossing of competences – for instance between different sectors – easier. For instance in Toulouse, the LAAS (Laboratory of Analysis and Architecture of Systems) works in the field of nanotechnologies on a process that can be applied either in the sector of health or aeronautics
- Taking into consideration the transport issue before achieving the urbanisation of an area. Our surveys have shown that large peripheral business parks dedicated to knowledge -intensive and creative sectors were very badly served with collective public transport (e.g. Labège, Blagnac...).
- Creating employment areas that match the needs of new entrepreneurs especially in the creative and cultural sectors. For instance, interviewed managers in the web design often complained about the difficulty to find offices adapted to the small size of the company.
- Trying to better connect economic and territorial issues, which is not always done currently. This mostly relates to the lack of solidarity between the different communal and intercommunal structures within the UAT.
- Talking with one voice. There is currently no single representation of the urban area, each institution (Greater Toulouse, SICOVAL, Muretain) exhibiting its own promotion of the territory. This is detrimental to the image of Toulouse and difficult to understand from outside.

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1 The three tiers of local government in France

The *communes* (about 36,000 entities)

The commune is the lowest tier of the administrative structure. There are many more communes in France than in the other EU countries. The term '*commune*' applies to *all municipalities* whatever their size – 80 per cent of them have fewer than 1,000 residents. Mergers are extremely rare, as both residents and local councillors often retain a strong sense of identity with their communes. This situation has led the government to encourage communes to group together in various forms of associations (*Communautés urbaines* or *Communautés d'agglomération*, *Syndicats intercommunaux*, *pays*, etc.), through several laws (1992, 1999, 2000).

Like the department and region, the commune has a deliberative or decision-making body (*Conseil municipal*, the municipal council) and an executive (the Mayor), elected by the municipal council. The Mayor is both the commune's elected authority and the State's representative in it. The number of municipal councillors is proportional to the population. Municipal councillors are elected for six years by direct universal suffrage. The commune's powers cover activities that affect its inhabitants' daily lives. Its economic and social duties were limited for a long time to granting aid for job creation and helping needy families but have been broadened to enable it to play an important economic and social role.

Intercommunal structures

The complex pattern of local administration, with a high level of fragmentation, gave birth to an intense process of local cooperation.

There are two types of intercommunal structures:

- Those without fiscal power (traditional syndicates of communes). Communes gather and contribute financially to the syndicate, but the syndicate cannot levy its own taxes. Communes can leave the syndicate at any time. Syndicates can be set up for a particular purpose (typically: waste management) or to deal with several matters. These structures without fiscal power are on a declining trend.
- Structures with fiscal power. The law voted under the Minister Chevènement (1999) distinguishes three such structures: the Community of Communes (*Communauté de communes*), primarily targeted at rural communes; the Community of Agglomeration (*Communauté d'agglomération*), targeted at towns and middle-sized cities and their suburbs; and the Urban Community (*Communauté urbaine*), targeted at larger cities and their suburbs. These three structures are given varying levels of fiscal power. The Community of Agglomeration and the Urban Community have most fiscal power as they levy the local tax on corporations (business tax or *taxe professionnelle*) in their own name instead of those of

the communes. The communities also manage some services previously performed by the communes. Communities of Communes have a more limited set of competences and the communes are more autonomous. The Urban Communities perform more tasks on behalf of the communes. Government allocates money to the communities based on their population, thus providing an incentive for the communes to team up and form communities. Urban Communities receive the largest amount of money per inhabitant.

The départements (96 entities in metropolitan France)

There are 100 departments in France, 96 in metropolitan France and four overseas (Martinique, Guadeloupe, Réunion and French Guyana). Established in 1789, the *Département* has played a prominent role in the country's administrative and geographical organisation. The *Département* in its present form has essentially competence in health and social services, rural capital works, departmental roads, and the capital expenditure and running costs of colleges (1st level high schools).

The law of 2 March 1982 conferred executive authority for the department on the chairman of the general council. The *Conseil général* (general council) is the department's decision-making organ. It is made up of general councillors elected for a six-year term, who elect a *Président* (chairman) also for a six-year term. The last wave of decentralisation (2004-2007) launched by Prime Minister Raffarin led to the rise of the competences of *Départements*, who are now in particular in charge of a considerable share of local, regional and transregional roads. A significant number of former state civil servants have lately become part of the *Départements'* staff.

The *Préfets*: For almost 200 years (1800 to 1982), Prefects held the executive power in the departments, but the law of March 1982 modified their powers. Appointed by the government, the Prefect is still the sole person empowered to act on the State's behalf in the department. Prefects represents the Prime Minister and all the members of the government, has authority over the State's external services in the *Département* and ensures the administrative supervision of all local authorities.

The régions

France has 26 regions, 22 in metropolitan France and four overseas. Created in 1955 to provide a framework for regional and town planning, the region became a local authority in 1982. Its main spheres of competence are planning, regional town and country planning, economic development, vocational training, and the building, equipment and running costs of 2nd level high schools (*lycées*).

The decision-making organ is the *Conseil régional* (regional council) whose members are elected for six years. They are assisted by an economic and social committee, which is a consultative assembly. The *Président de Région* (regional council chairman), elected by the *Conseillers régionaux* (councillors), is the region's executive authority. His/hers responsibilities are identical with those of the general council chairman in the areas within the region's sphere of competence (*Source: based on Swift, Kervella, 2003*)

The resources of local government bodies come from direct rates and taxes (29.4 per cent), state funding (29.3 per cent), indirect rates and taxes (22.2 per cent), loans (10.5 per cent), and other resources (8.6 per cent) (Marconis, 2006).

After 20 years of decentralisation 60 per cent of public spending comes from the state and 40 per cent from the local authorities. The share of the communes and their groupings is greatest (56 per cent), followed by departments (33 per cent) and the regions (11 per cent).

2 Elements to address the ‘Types of interactions between stakeholders’

The analysis of governance arrangements is based on the concept of ‘policy networks’:

- It refers to a cluster of actors concerned with a given policy problem, across the public and private sectors and throughout different levels of governance; those actors have an interest, or ‘stake’ in a given policy sector
- It implies some forms of cooperative agreements, whether formal or informal, between public officials and a wide range of non state actors

What are the *characteristics* of this policy network involved in economic development policies and strategies?

- Is it based on coalitions of actors or on single actors? (For instance the metropolitan authority alone or a partnership between this authority and the private sector or between the national state and the local authority?)

What is the *distribution of power*?

- What are the organisations and/or individuals who wield the greatest influence over political decision at present time (in the definition of current strategies)?
- Is power concentrated in the hands of one dominant actor or coalition of actors, or is it shared between actors or coalitions of actors?
For instance: do business actors and their interests dominate local networks or are strategies and policies driven by public stakeholders?
- What are the resources these persons use to wield influence (political, organisational, financial resources)?
- How has this distribution of power evolved over the past 20 years?

What is the *stability of the network membership*?

- Do the same actors tend to dominate decision-making over time or is membership fluid and dependent on the specific policy issue under discussion?
- Do different constellations of actors emerge around different policies and projects?
- Is coalition membership extended or static? (Importance of timing and exit of the members in conjunction with the timing of policy making)

What is the *network's relative insularity*?

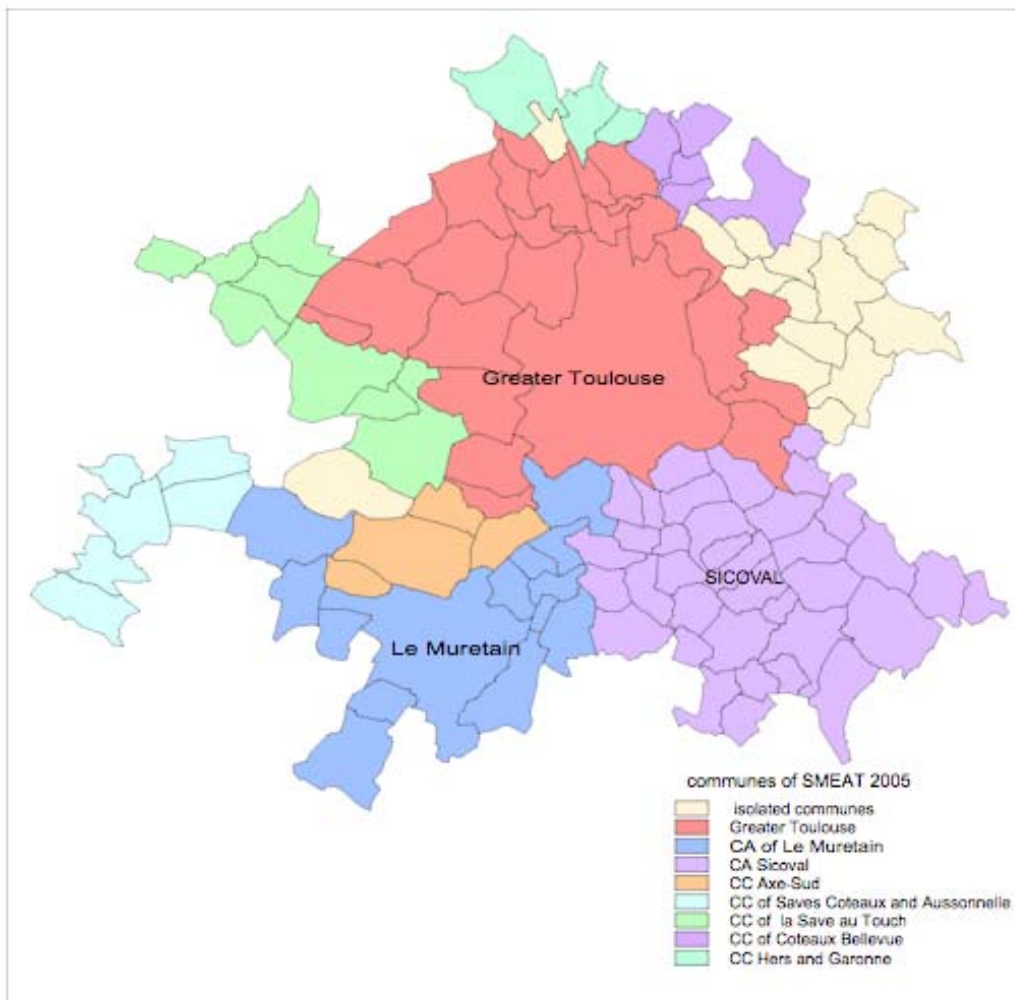
Does the network exclude outsiders or is it highly permeable by a variety of actors with different objectives?

What are the *modes of interactions* within this policy network?

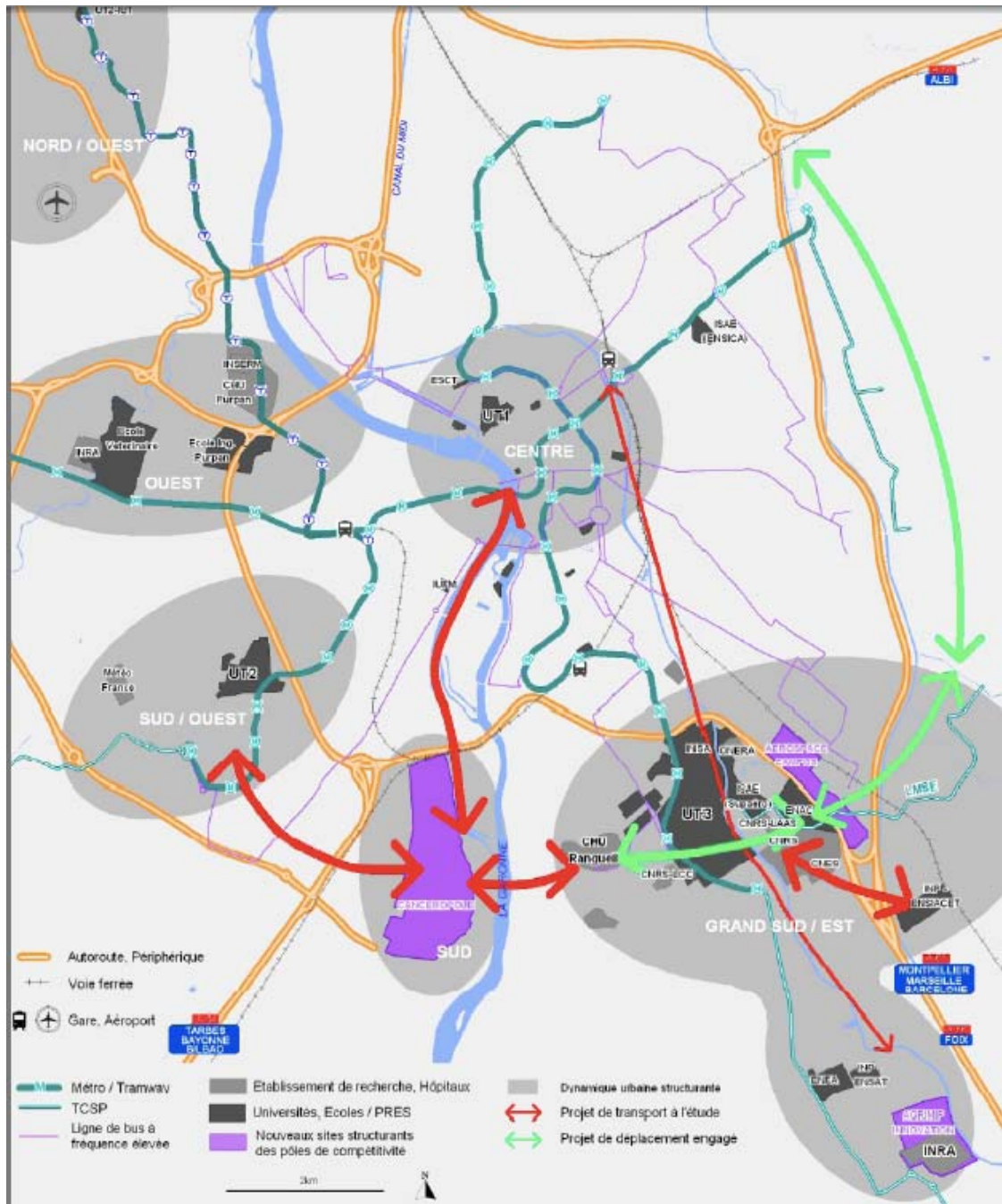
- Are there formal or informal modes of cooperation and interaction?
- What are the types of contractual agreements (public private partnerships?)
- What is the degree and nature of cooperation among actors and actors coalitions? (predominance of) conflict/ competition, (predominance of) bargaining¹ and/or (predominance of) co-operation?
- Do network members depend heavily on each other for valued resources such as money, expertise and legitimacy or are most actors self-sufficient and thus relatively independent of one another?

¹ Bargaining constitutes an intermediary or ambivalent type of interaction that is characterised by both conflict/competition and co-operation.

Map A1 - The main intercommunal structures of the SMEAT (Mixed Syndicate in charge of Studies of the Toulouse Agglomeration) - 2005



Map A3 – Integration of ‘Toulouse Campus’ in the urban projects



Source: University of Toulouse (2009)

LIST OF ACRONYMS

3RT	Réseaux Régionaux de Recherche Technologique	Regional Technological Research Networks
ADERMIP	Association pour le Développement de l'Enseignement de l'Economie et des Recherches en Midi-Pyrénées	Association for the Development of Teaching Economy and Research in Midi-Pyrénées
ANVAR	Agence Nationale de Valorisation de la Recherche	National Agency for the Development of Research
ANRU	Agence Nationale pour la Rénovation Urbaine	National Agency for Urban Renewal
ARDESI	Agence Regionale pour le Développement de la Société de l'Information	Regional Agency for the Development of the Information Society
ARI	Agence Régionale de l'Innovation	Regional Innovation Agency
AUAT	Agence d'Urbanisme de l'Aire Urbaine de Toulouse	Toulouse Town Planning Agency
AVAMIP	Agence Régionale de Valorisation de la Recherche	Regional Agency for the Development of Research
AZF	AZote Fertilisants	Chemistry firm
BDPME	Banque du Développement des PME	SMEs Development Bank
CA	Communauté d'Agglomération	Community of Agglomeration
CCRRDT	Comité Consultatif Régional pour la Recherche et le Développement Technologique	Regional Consultative Committee for Research and Technological Development
CNES	Centre National d'Etudes Spatiales	National Centre for Spatial Studies
CNRS	Centre National de la Recherche Scientifique	National Centre for Scientific Research
CRCI	Chambre Régionale de Commerce et d'Industrie	Regional Chamber for Commerce and Industry
DATAR	Délégation à l' Aménagement du Territoire et à l'Action Régionale	Delegation for Regional Planning and Action
DIACT	Délégation à l'Aménagement et à la Compétitivité des Territoires (ex-DATAR)	Delegation for Regional Planning and Enhancing Competitiveness
DIV	Délégation Interministérielle à la Ville	Interministry Delegation for the City
DRIRE	Direction Régionale de l'Industrie de la Recherche et de l'Environnement	Regional Department for Research, Industry and Environment
EDF	Electricité de France	Electricity of France
ESAV	Ecole supérieure d'audiovisuel	High School for Audiovisual
GPV	Grand Projet de Ville	Great Project of the City
IASP	-	International Association of Science Parks
ICT	Technologie de l'Information et de la Communication (TIC)	Information Communication Technology
IERSSET	Institut Européen de Recherche sur les Systèmes Embarqués et leurs Technologies	European Research Institute on Airborne Systems
INSEE	Institut National de la Statistique et des Etudes Economiques	National Statistical Institute
IRIT	Institut de Recherche en Informatique de Toulouse	Toulouse Research Institute on Computer Science
LAAS	Laboratoire d'Analyse et d'Architecture des Systèmes	Laboratory for Automatics and System Analyses
LED	-	Local Economic Development
NACE	Nomenclature statistique des activités économiques dans la Communauté européenne	Statistical Classification of Economic Activities <i>in the</i> European Community

ONERA	Office National d'Etudes et Recherches Aérospatiales	National Office for Aeronautical Studies and Research
PARSI	Programme d'Action Régionale pour la Société de l'Information	Regional Action Programme for the Information Society
R&D	-	Recherche & Développement
PRES	Pôle de recherche et d'enseignement supérieur	Toulouse Research and Teaching Pole
SCOT	Schéma de Cohérence territoriale	Scheme for the Territorial Coherence
SICOVAL	Syndicat Intercommunal pour l'Aménagement et le Développement des Côteaux et de la Vallée de l'Hers	Local Authority Joint Board/Inter-communal Syndicate for Planning and Developing the Côteaux and the Vallée de l'Hers
SIVOM	Syndicat Intercommunal à Vocations Multiples	Multipurpose Inter-Communal Syndicate
SMEs	-	Small and Medium Enterprises
SMEAT	Syndicat mixte d'études de l'agglomération toulousaine	Mixed Syndicate in charge of Studies of the Toulouse Agglomeration
SMTC	Syndicat Mixte des Transports en Commun	Mixed Syndicate for Public Transport
TGV	Train à Grande Vitesse	Great Speed Train
TNMs	Migrants transnationaux	Trans-national migrants
TNT	Théâtre National de Toulouse	National Theatre of Toulouse
UAT	Aire Urbaine de Toulouse	Urban Area of Toulouse
UNEDIC	Union nationale interprofessionnelle pour l'emploi dans l'industrie et le commerce	National Union Interprofessional for Employment in Industry and Trade
ZAC	Zones d'Aménagement Concertée	Concerted Action Zone
ZAE	Zone d'Activités Economiques	Zone of Economic Activities