

THE UNIVERSITY OF HULL

TeleCities: A New Geography of Governance? An Institutional, Relational
and Scalar Analysis of a Transnational Network

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by

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Abstract

In recent years there has been a steady rise in the amount of cities engaging in collaborative transnational networking. Perceived as a valid response to the threats of globalisation and the internationalisation of the economy, cities have formulated partnerships that transcend the remit of their locality enabling them a new mobility. Predominantly focused at the European scale, individual cities are establishing transnational networks that aim to harness and aggregate isolated pockets of power into a powerful cohesive institutional identity that allow them a collective voice and a potential degree of influence within European governance structures.

Using the TeleCities network as an empirical focus, this thesis aims to explore the spatial implications within this potential 'new geography of governance'. To do this theories of institutionalism, reflexivity and scale are used to construct an analytical framework that explores the implications and processes of transnational networking. This is then applied to a three way case study methodology that aims to examine the process and attributes of transnational networking from a multi-scalar perspective.

In doing so, the thesis provides a theoretical and empirical contextualisation to the origins, functionality and relationality of a transnational network and its ability to link actors and processes at different spatial scales.

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Chapter 1: Introduction: aims and objectives

1.1 Introduction

Societal and economic change over the last thirty years has led to a sea change in the role of local government. The transition from Fordism to post-Fordism, the (supposed) declining influence of the nation state and the emergence of a new localism has witnessed the transition away from *local government* as the dominant singular authoritative voice of the region to *local governance*, a mode now dependent on a multitude of actors and partnerships at a variety of scales. Aided by the rapid proliferation of information and communication technologies, local scale coalitions are now able to formulate a wide range of partnerships overcoming the constraints traditionally associated with geographical distance.

In line with the growing internationalisation of the economy, cities are now engaging in a wide variety of partnerships that transcend the remit of their locality. To enable this shift from the local to the European scale, a variety of dispersed localities are establishing transnational networks that aim to harness and aggregate isolated pockets of power into a powerful cohesive institutional identity that allow them a collective voice and influence at the European level.

Using the TeleCities network as an empirical focus, this research aims to conceptualise the process of a dispersed community's formulation into a separate cohesive institutional

identity. Furthermore it seeks to assess the functionality of a transnational network and its intermediary capacity in providing the local a platform within the globalisation milieu.

To provide a contextual and conceptual background to the work, this introduction is structured as follows; firstly it provides a brief description of the TeleCities network. This is then followed by the research questions this thesis aims to answer. Finally a brief description of the subsequent chapters within this thesis is given.

1.2 TeleCities

Much of the success of local authorities branching into Europe can be placed upon their collaborative ventures through transnational networking (Carter, 1997). The origins of TeleCities lie within the intercity network of Eurocities with their remit of promoting urban initiatives with particular relevance to cities. In 1993, 13 members of Eurocities met to form a sister network that specially sought to target the role of cities within the context of telematics, responding to the rise in policy documentation coming out of Europe relating to the Information Society. The TeleCities Network was formally launched in 1994, under the auspices of that original meeting through the “Declaration of Manchester” which set out the intended purpose of the network, these were to:

“promote the exchanges of experience (and) examine the issues related to the development of harmonised info-structures or telematics networks and services across Europe which will serve both the development of local industrial and service sectors, local society and citizens” (TeleCities, 1993).

Since then the network has grown considerably and it now stands as an independent network made up of some 120 European cities². The organisation consists of an elected steering committee, consisting of 14 members including an elected President and Vice President. The network is then divided into a series of working groups (consisting of TeleCities members). The intention of the working groups are to:

“Share experiences and practices amongst member cities: Transform these experiences into ideas, guidelines and recommendations to influence European policies: Accomplish a range of surveys to provide knowledge of the different issues using the 120 member-cities as a source of information: Set up common projects” (TeleCities, 2003, internet).

This is then supplemented through pilot projects sponsored by the European Commission. In this capacity TeleCities members often work in partnership with other external partners. Examples have included DALI (Delivery Access to Local Information Services); EDC (European Digital Cities); and PACE (Public Administration in e-Commerce in Europe. This collectivisation of local authorities with its narrow thematic focus is seen to offer the local scale a degree of influence and bargaining within European governance structures:

“Cities are now beginning to be able to influence the development of policy by European institutions through networks like TeleCities. This is the first time that local authorities have had a direct input into this policy arena as well as being able to (at least) try and represent the views of wider user and community interests” (Carter, 1997, p149).

² A list of the network’s current members is included in Appendix A.

In organisational terms TeleCities holds four conferences a year, each hosted by a different member city. The conferences centre around themes developed by one of the working groups. Day one concentrates on invited policy makers and academics presenting papers of specific interest to members. Day two is dedicated to the progression of the various TeleCities working groups. Between TeleCities events, members are informed of progress through the dissemination of news briefings via email, the collation of information on the TeleCities website, which include a series of open discussion web forums, and of course the ongoing interrelations via electronic communication instigated at initial TeleCities meetings that are needed for the continuation of ongoing projects. In particular the electronic networking capacity of new technologies is seen as the prime means of developing new ways of thinking and working for dispersed geographical communities committed to the same ideals:

“The ability of small scale initiatives in cities and regions to use the advantages of the technologies, to use cyberspace, to create communication and activity networks free from the usual spatial and temporal constraints is a crucial element in providing a counter balance to technological and global trends”
(Carter, 1997, p151).

Within this context, theoretically, TeleCities provides a new platform for the local scale to come together to directly communicate and collaborate on a transnational basis.

1.3 Aim of this Thesis

This thesis is interested in how this implicitly spatial process plays itself out. To explore this, the aim of this thesis is to:

document, assess, and elaborate upon the structure, interactions and spatial contexts of the TeleCities network. Specifically it aims to explore the TeleCities network in terms of its capacity to aggregate dispersed local actors into a separate institutional form; the role agency plays within these structures; and the spatial platforms and intersections TeleCities provides.

To do this the supporting objectives will be:

- To build an analytical framework for the analysis of the formation and operation of the TeleCities network
- To explore the different spatial intersections and the relationships established through TeleCities
- To investigate the role played by the network in disseminating policy innovations at differing scales
- To assess whether the TeleCities network provides European Institutions and sub-national authorities an opportunity for a 'new geography of governance'

1.4 Outline of Thesis

To answer these complex and interrelated questions the thesis is organised as follows:

Following on from this introduction, Chapter Two constructs the analytical framework that will assess and interpret the multi-scalar processes and relationships attached to transnational networking. To date, no fully integrated theoretical framework exists to explore the complex nature of transnational networking. To do this a variety of theoretical contexts have been selected to explore the institutional, social and spatial aspects identified as of intrinsic value within transnational networking.

Chapter Three describes the methodology utilised in the collection and analysis of data. This includes a justification of the methods used. This will include a description of the online questionnaire design; participation and observation within network events; and finally semi structured interviews with key actors both past and current within the TeleCities network.

Chapter Four provides a contextual analysis of European ICT Policy from the 1980's to the present day. The intention here is to view the external environment that was seminal in both the original construction of TeleCities and its' subsequent trajectory. In doing so it will provide a historical background to the external events that TeleCities as a collective entity has responded to, thereby providing a contextual background to the reflexivity of the network that will be explored in subsequent empirical and concluding chapters. Further to this it provides a contextual basis for the subsequent scalar retranslations in terms of the networks ability to disseminate policy innovations at different scales.

Chapter Five will present the first of three empirical chapters within this thesis. The chapter is centred upon TeleCities from three distinct perspectives. Building upon the issues raised in Chapter Four it will provide a historical context to the origins, stabilisation and subsequent progression of the network. Secondly, the chapter will explore the current aims and objectives of the network relating them back to the network's historical trajectory. Finally, the chapter will present data gathered via an online questionnaire with the intention of exploring the network from the inside providing a perspective from current members in terms of their origins of engagement with TeleCities and their subsequent intersection between the network and the local scale.

Chapter Six will build upon this in terms of a detailed analysis of a specific TeleCities workgroup. Presenting data obtained through participation, observation and interviews with key actors of the TeleCities Broadband Work Group, this chapter will provide an analysis of the role agency and reflexivity plays in terms of the collaborative nature of a transnational network. Further to this it will build upon the data gathered in Chapter Five in terms of the institutional and spatial components in terms of policy dissemination.

Chapter Seven, the final empirical chapter, will provide a further spatial depth to the process of transnational networking through a detailed analysis of a specific localities involvement with the TeleCities network. Presenting data obtained through policy documentation and interviews with key actors from the city of Hull, the intention of this chapter will be to observe and contextualise how a local member interacts, collaborates and ultimately benefits through participation with a transnational network. Further to this it will provide an empirical context to the intersection between the transnational space indicative of TeleCities and the bounded territoriality of the city of Hull.

Chapter Eight will act as a conclusion to this thesis. In doing so it will act as a synthesis and academic appraisal of the empirical chapters placing them against the theoretical and analytical issues raised in Chapter Two. An explanation is reached in terms of the institutional, reflexive and scalar articulations present within the TeleCities network.

Chapter 2: Analysing TeleCities: Institutionalism; Agency, Reflexivity and Relationality; and Scale.

2.1 Introduction

The aim of this chapter is to develop an analytical framework that will provide a conceptual context to build upon and theorise the research questions raised in Chapter One. To do this, the chapter has four distinct components. Firstly it will provide a brief theoretical overview concerning emerging discourses surrounding the notion of place and space within the context of globalisation. This will pave the way for the analytical framework that will be used as a means of conceptualising TeleCities in relation to the issues raised in Chapter One.

The first component in building the analytical framework will be an analysis and interpretation of institutionalism; the purpose here is to provide a theoretical context that will enable an interpretation of the institutional components of a 'non-place' based entity. With a contextual understanding developed in terms of the institutionalist components the analytical framework will then move on to explore the role of human agency within an institutional context, this will incorporate issues of reflexivity and relationality. The final building block of this analytical framework will be geographical scale. In essence the use of scale within this analytical framework is essential in providing a theoretical spatiality to the work. At the same time it is a key component in providing a spatial context to the two previous strands of this analytical framework. Since it will be argued within both an institutional and agency context that embedded territoriality is not central in an interpretation of these theoretical frameworks, the incorporation of scale is essential in

identifying the spatial contexts of institutionalism, reflexivity and relationality in terms of the origins, trajectory and cohesion within the TeleCities network.

2.2 Shifting Mobility's: Local Vs Global; Space Vs Place

To build a contextual background to the analytical framework, the following section of this chapter will explore a variety of contemporary conceptual debates within human geography surrounding the concept of local and global power relations within globalisation. Further to this it will examine how global-local binaries have been re-conceptualised in terms of their spatial reach and intersections. Firstly let us examine the socio-economic context that has given rise to these shifting connotations.

From the 1970s onwards there has been a growing conceptual realisation that the stable economic systems underlying capitalism within the West have come under increasing pressure. This, "*transition from one distinct phase of capitalist development to a new phase*" (Amin, 1994, p1) or in Manuel Castells' words a "*restructuring of capitalism*" (Castells, 1989 p7) has give way to a flexibility and fragmentation of production that is now synonymous with post-Fordism. The general concept has its roots within organizational restructuring and workplace practices that were implemented both as a response and a consequence of the financial crisis of the 1970s, specifically rejecting the hierarchically and bureaucratically controlled dominance of Fordist principles in favour of horizontal inter-organisation collaboration enabling that fundamental principle of post-Fordism, *flexible specialization* (Piore and Sabel, 1984). Mirroring these changes, from a wider societal perspective, came a series of regulatory transformations, with the state opting for a more 'market-led' approach through, "*a new set of enabling institutions to restructure labour-management relations, labour training, competition law and financial markets*"

(Gertler, 2000, p615). The subsequent legacy of this shift has been the emergence and interrelation of a variety of (government and non government) institutions, in both the production and accumulation processes. Fundamentally a key narrative behind the Post-Fordist shift is the declining influence of the state as the singular provider and enabler of mass production and consumption, through its intervention and regulatory capacity in the economy (Stoker and Mossberger, 1994). Now the process is dependent on a multitude of actors at a variety of scales.

Although the entire meta-narrative behind post-Fordism is based upon shifting macro-economic principles, the resulting transformations that have been initiated by post-Fordism are seen to have had a profound effect at the local scale. Mirroring the changes at the macro scale, local scale 'market led' initiatives are now seen as the panacea for both social and economic projects. Rather than the state being the singular voice in their promotion and realisation, the local scale is now represented by a stakeholder pluralism, with a variety of actors both from the public and private sectors working on collaborative entrepreneurial ventures. Conceptually this transformation is placed within the shift away from *local government* to *local governance*, a mode now dependent on a multitude of actors and partnerships at a variety of scales. Although apparently a simplistic shift, the notion of governance within the interdisciplinary literatures remains a '*fuzzy concept*' (Markusen, 1999). One of the principal problems lies behind changing definitions of governance according to the context that it is used within. Often insufficient, loose, or in some cases, non-existent definitions of governance are applied to a variety of scenarios seeking to illustrate the changing role of the local scale. Roderick Rhodes (1997) a leading academic within the field acknowledges the problem, noting that "*it (governance) has too many meanings to be useful*" (p15), indeed one could possibly levy the same charge upon his

own definition of “*governance refer[ing] to self-organizing, interorganizational networks*” (p53). A more detailed and contextual approach is offered through Jessop (1997), who defines governance, “*as the complex art of steering multiple agencies, institutions, and systems which are both operationally autonomous from one another and structurally coupled through various forms of reciprocal interdependence*”(p574). This conceptualisation begins to emphasise governance as a collective ideal of a disparity unified by potentially beneficial returns. With its ‘multiple agencies’ ‘autonomy’ and ‘reciprocal interdependence’, Jessop’s notion of governance is the antithesis of the hierarchical, bureaucratic centrality of Fordism. Similarly this transition represents the creation and interrelation of a complex and often untidy web of the state, commerce and quasi-governmental organisations working in a fragmented and loosely co-operative nature at the local scale, Gibbs and Tanner (1997) define this ‘new localism’ as

the rise of local authority marketing strategies; the emergence of public-private partnerships; and the fragmentation of local governance, both externally through the creation of special purpose agencies and internally through competitive tendering and devolved management” (p767)

These partnerships represent a shifting power relation in terms of the state as the singular authoritative voice of promotion and provision of social and economic projects (*MacLeod and Goodwin, 1999*), rather, the shift from government to governance is leading to the “*destatization of the political system*”, (*Jessop 1997*), with power and influence no longer exercised purely by the state. The culmination of this change is indicative of a new entrepreneurial focus at the local scale (*Jones, 1999; Jessop 1994a; Stoker and Mossberger 1994*).

Within these shifting conceptualisations of governance the reach of potential partnerships is no longer dependent upon spatial proximity. Aided by new technology associations can now span the globe, with partnerships constructed and developed upon shared interests and commonalities, rather than actors' geographical location. This coupled with the supposed decline of the nation state and the entrepreneurialist strategies now pursued in a variety of local contexts, has led to a new mobility for the local. Within the context of the shift towards Post-Fordism, the local is not static and bound to its locality, boundaries are not dependent upon elements of territoriality defined in terms of nation state governance; within this new era localities can search and interact with markets and partnerships where it deems them appropriate. A significant development in this context has been the rise in transnational networking by a number of actors based predominantly in local contexts.

The Mobility of Governance: Transnational Networking

Although historically transnational networking has its routes in the twinning of European towns and cities from the early 1930s, it is only in recent years that networking possibilities have risen considerably, in the main due to the significant political and economic change referred to earlier. However in the context of *European* transnational networks, a significant component in their rise has come from increased involvement and a receptive attitude from supranational governance institutions, for example:

"[T]he EU seems to be developing a distinct style of politics and policy making ... As well as its formal vertical relationships with the member states through the Council of Ministers and national governments, the European Commission is also actively cultivating horizontal relationships with regional and local authorities" (Bennington and Harvey, 1998, pp151-152).

In line with this policy shift, and indicative of the government to governance transition, partners, both public and private, have begun to exert considerable influence within supranational governance structures. As a result, traditional horizontal lines of governmental procedure are bypassed in favour of more complex vertical interactions. Aided by new technology that facilitates instantaneous interactions and communications, dispersed geographical communities of interest are able to mobilise themselves into cohesive organisational bodies with the potential to engage in meaningful dialogue with supranational governance. In this context there has been a steady rise in the number and variety of transnational networks operating within a European context. Leitner, Pavlik and Sheppard (2002) divide transnational networks into; *Sectoral Networks* which draw together local authorities concerned with the impact on their regional and local economies of the global and European restructuring of key industrial sectors; and *Thematic Networks* organized around specific policy issues, often in the field of social welfare. In addition to this Bennington and Harvey (1998) propose an additional category, *Spatial/Territorial Networks* representing the interests of cities and communities in different European member states, with common interests based upon place/space. Although this highlights the differing objectives and focal points, common to all transnational networks is their ability to harness and aggregate isolated political pockets of power from a wide geographical area. Their subsequent formulation into a powerful cohesive organisational identity, theoretically provides them a collective voice with the intention of exerting a degree of influence at the supranational level. This enhanced mobility at the micro scale is bound in the government to governance milieu, enabling participation and policy formulation to be carried out through collaboration, consultation and discussion at a variety of scales. This new mobility enables the local scale to operate at a variety of levels, by pursuing an inter-scalar process

within transnational networks, the local scale is afforded an interaction within inter-local, transnational and European scales.

The potential possibilities of transnational networking suggest a redistribution of power and autonomy for the local scale. In many respects it is indicative of recent debates surrounding the nature and conceptualisations of both the global and the local within the context of globalization. Within these debates there are persuasive claims that the new globalized economic arena is synonymous with borderless geographies, with global capital and information flows transcending notions of place in a physical sense (*Castells, 1989, 1996*). Whilst other scholars do not go as far as Castells, there is a recognition that change is seriously afoot, with an acknowledgement that power asymmetries within local-global binaries have been reassigned, as Amin and Thrift, (1994a) comment, “*geography is now globally local rather than vice versa*” (p5). This merging of the global and local, which in itself is a direct component of transnational networking, presents a complex paradox. as Amin and Thrift (1994) note:

“How ... should we conceptualize the global-local nexus, that is the nature of the encounter between place and global space, and how should we think about the role of the individual locality in a globalized political economy? In what sense does ‘territoriality’ or place-boundedness matter?” (p5).

Let us consider Amin and Thrift’s supposition, firstly through an examination of the replication of physical place to virtual space indicative of Manuel Castells’ space of flows thesis. This is then followed by it’s antithesis, that is, rather than the disintegration of place, globalization actually raises the importance of physically defined territories.

The Disintegration of Place?: Manuel Castells and The Space of Flows

The work of Manuel Castells has become synonymous with globalization. His trilogy³ published between 1996 and 1998 has often been cited as the definitive work on the dynamics of what has loosely been defined as the ‘information age’⁴. Although the origins of his ‘space of flows’ thesis can be traced back to 1989 within ‘The Informational City’, it was through his first volume, ‘The Rise of the Network Society’ (1996) that the concept was developed and subsequently seen as an indicative process of globalization. Essentially the concept is centred around the three following consequential processes of technological development:

- *Information Technology* that has enabled knowledge and the transfer of knowledge to be the axiomatic economic driving factor;
- *Network Organizations* that enable the disintegration of time and space with vertical organisational structures that are no longer dependent upon their physical location;
- *Real Virtuality* where the saturation of information sources is altering our understanding of cultural norms, “[b]ut the experience of this communication is structured through very specific communities and associational networks, not through organized ones, as was previously the case” (Latham, 2002, p122)

³ Castells trilogy of tomes are ‘The Rise of the Network Society’ (1996); *The Power of Identity* (1997); and ‘End of Millennium’ (1998).

⁴ Castells terminology of the information age is synonymous with what other theorists have referred to as the information society. Indeed the loose terminology attached to these significant paradigmatic shifts is illustrated in Chapter 4 especially in recent years with the terminology ‘information’ replicated discursively with the new buzz word of ‘knowledge’.

The culmination of these interrelated processes is the ‘rise of the network society’, “*which is resulting in a certain deterritorialization of governance – a replacement of the space of places with the space of flows*” (Leitner, Pavlik and Sheppard, 2002, p275).

Castell’s work was truly revolutionary in the sense that, even as far back as 1989, it was aware of the potential impact ICT would and ultimately did have in a variety of economic, social and cultural spheres. Most notably this was in terms of the ability to replicate and ultimately lessen the need for interactions within different territorial realms. For example:

“the new communication system radically transforms space and time, the fundamental dimensions of human life. Localities become disembodied from their cultural, historical, geographical meaning, and reintegrated into functional networks ... including a space of flows that substitutes for the space of places” (Castells, 1996, p 375).

Whilst on the face of it such comments may verge on the edge of technological determinism it is difficult to understate the impact of Castells’ work. The replication of space from flows proved to be a very appealing concept both in a variety of economic and policy contexts. On an economic basis many of Castells’ ideas came to fruition during the dot.com boom of the late 1990s. Undoubtedly spurred on by these economic shifts (and the huge financial rewards available), Castells’ notion of a space of flows crept into more localised policy contexts. Within a local regeneration context, Castells’ work was seen to represent a panacea in terms of the increased involvement it allowed local government in their “*growing internationalization*” (Jessop, 1994, p272) allowing localities to move outside their territorial boundaries to become players in a globalized context.

Although the space of flows represents a seminal and timely assessment of the forces and processes of globalization, as with any meta-narrative it has come under close scrutiny. Whilst within urban sociology the work has been cited by no less an authority than Anthony Giddens (1996) as comparable to Weber's *Economy and Society*, perhaps not surprisingly considering Castells' central premise that the space of places is being replicated by the space of flows, some of the most visceral critiques of his work have come from within urban and economic geography (Thrift 1995, Jessop 2000, Latham, 2002). The main charge levelled against Castells is that the space of flows metaphor is too smooth, that is, the space of flows appears as a given without an assessment of the coordination, economies of scale and sheer effort needed to manage and maintain its infrastructure in both physical and social terms. As Lathan suggests Castells assumes these "*global forces ... possess some kind of systematic logic*" (Lathan, 2002, p123). Secondly and resonating with the global- local binaries dictating contemporary debates within geographical scale (Gibson-Graham, 2002), the local within the space of flows is an assumed relational component of global processes. Again as Lathan notes, "*the global space of flows, produces events to which the local is obliged to respond – but it refuses to ask the question of how actors who appear powerful came to be so, and how this power is maintained*" (ibid). So, as with the global context, localised contextualisation within the space of flows and the power asymmetries within the nexus between local and global process are assumed rather than described and elaborated on. Further to this, and very much in line with the given organisational and relational components of the space of flows thesis already referred to, I would also argue that Castells fails to elaborate upon the mechanisms to capture, re-

⁵ On a similar theme Hay (2002) also raises the assumed processional logic in terms of globalization discourses

contextualise and ultimately benefit from these global processes. Although Castells refers to a series of links, nodes or hubs, power primarily resides within the space of flows and not *at* these points. Without providing a mechanism for these spaces of flows to be captured or re-territorialized makes it difficult to envisage anything other than a mobile flow of information and capital constantly circumnavigating the globe. It is with this criticism in mind that we can move to the antithesis of Castells' argument.

The Space of Places

Although Castells' work has been enormously influential within urban sociology, there is a general dismissal of his concept from the economic geography and regional studies fraternity. For while they accord the local a new mobility, and this no doubt changes things dramatically, place still matters. Amin and Thrift, (1994a) have been amongst the most critical of commentators in beginning to tackle the conceptualisation of place in the context of globalization. Their work on the nexus between the local and the global examines how the local, in its response to globalization, has itself entered the globalization cycle, that is, *"local initiatives structure responses to processes of globalization and themselves become part of [the] process ... of globalization (Amin and Thrift 1994b, p257)*. This differs from Castells' supposition that assumes power bases will respond to the externality of globalisation, as if globalization exists as a separate entity to which the local *must* respond. With Thrift and Amin, local responses themselves become part of the globalization process. So although the local is enabled a new mobility within the globalized arena, what Amin and Thrift highlighted was not the disintegration of the local, but they argue that the very factors that enabled the local to engage within this new environment were factors that are place specific. Their work mainly concentrates on social and reciprocal behaviour and the ability of the locality to institutionalize its capacities into a cohesive identity. In a further

response to Castells' space of flows thesis, it has been argued that localities are essential in providing the necessary infrastructure to capture Castells' purported global flows. As a result the importance of place as a discrete physically bounded territory within the globalization milieu has subsequently been advanced by a number of scholars (Morgan, 1997, Storper, 1995, 1997). Common to them is their emphasis on the ability of place to provide the necessary infrastructure that provides localities with an opportunity to capture these global flows. Descriptively these processes follow a metaphorical narrative equating the global to movement, whether it be 'flows' (Castells, 1989, 1996), motion (Brenner 1998) or 'deterritorialization (Brenner, 1999), the global is portrayed as a constantly shifting entity. In comparison the local, or place is equated as a capturing, stabilizing mechanism, as with, 'fixity' (Brenner 1998), 'reterritorialization' (Brenner, 1999), or 'capturing the global' (Amin and Thrift 1994).

This attempt to capture the process, rather than be constrained by the dictation of globalized market forces, a charge often levelled at Castells' 'space of flows' thesis has led to the view that a variety of localised contexts are the ideal intermediary space. In recent years the region has been identified *de facto* as *the* spatial choice, with its institutional structures and wider geographical spread as the ideal embedded interface within the globalized arena (Cooke 1995, Cooke and Morgan 1993. Scott 1998, Porter 1996). However, to further complicate matters, within the fluidity of globalization, the region⁶ is not static and bound to its locality. In a similar context to the capacity of transnational networks to be indicative of collective localised actors, increasingly *regional* actors are

⁶ Further to this complexity actual areal definitions of the region itself in physical terms differ enormously. Conceptually the 'region' is often used as a 'meso space' (Jonas, 2006, p402), however this can be indicative of spatial scales above the local yet beneath the national scale (i.e. county boundaries, or unitary authorities). It can also be used in a similar meso context to be indicative of above the national yet below the global, such as the Asia Pacific Region, European Region etc.

coming together forming transnational partnerships formulating new political and economic spaces, that are leading to the merging, separation and articulation of new scales of engagement⁷.

Local Vs Global; Space Vs Place: Constructing a framework to explore local-global interactions

The arguments above present a dichotomy in terms of local scale involvement within globalization processes. However in terms of providing a theoretical and empirical context to this thesis both considerations have considerable advantages. Although I would concur with a variety of new regionalist scholars⁸ that the regional components of infrastructure, spatial proximity and institutional cohesion are vital attributes of any locality's venture within globalisation contexts, I do not go as far as stipulating that these attributes can *only* be found within territorially defined units such as the region or the city. In the context of transnational networking and the empirical focus of this thesis, associations are based upon common interests from a wider and broader geographically dispersed community, consequently issues of territoriality are not the central theme. Aided by new technology, partnerships are now able to transcend time and space and begin to inhabit an electronically mediated space in addition to their social one. However in terms of transnational networks and the empirical focus of this thesis there needs to be an understanding of the structural components of a network like TeleCities. If a non place-based entity can replicate the

⁷ See for example Perkmann (1999, 2002,), Perkmann and Sum (2002) and Church and Reid (1996, 1999).

⁸ See for example the work of Kevin Morgan (1997) and his articulations upon the 'learning region', also the work of Michael Storper (1997) (which is discussed in more detail later in this chapter). Both are notable in their insistence that the social components attached to regional success are dependent upon spatial proximity. Whilst I would not place Amin and Thrift (1994) within new regionalist discourses, their argument follows a similar narrative equating (regional) success with non- economic based assets that are centred around issues of social capacity in terms of spatial proximity.

capacity of a territorial unit, there needs to be an investigation in terms of its *institutional* components.

Further to this I would argue that, although place is highlighted as a determinant of success within the globalization milieu, many of the components specified as place specific can be replicated in the context of transnational networks. The ability of new technology to formulate spatio-temporal fixes within an electronic mediated environment lessens the need for a directly specified location. So although time and space are direct constituents of the process of capturing the global, *where* they are captured in a physical sense is of less importance. However this raises important issues in terms of the scalar attributes of transnational networking and a network like TeleCities. In this capacity the role of geographical *scale* is essential in determining how transnational networks exist in an intermediary capacity, linking a variety of different spatial scales.

This leads us to the final element. Although such a conceptualisation hints at elements of Castells' 'space of flows' with geographical space sacrificed to the fluidity of electronic space, it by no means completely eradicates the need for interactions to take place within a socially mediated environment. Merging many of the vital components of institutionalism and networks, the following quote from Ngai Ling Sum (1997), developed as part of a theoretical framework to explore cross-border regions in Greater China, acknowledges that,

“global/regional/national actors from the private and public realms typically need to meet face-to-face to develop trust, establish networks, form partnerships, settle differences, engage in mutual learning and interaction”
(p5).

This contact replicates the vital instituted components that are seen as central mechanisms of successful regions such as “*infrastructures like networks, norms, conventions, trust-based (often face-to-face) interactions and horizontal relations of reciprocity which are seen to enhance the benefits of investment in physical and human capital*” (MacLeod 2001, p808). However within these conceptualisations the elements are not dependent on their location. Rather, I would argue, it is the interaction between the actors and the infrastructure of the network that constitutes its success rather the embedded location of where the network exists within physical space. In this context there needs to be an understanding in terms of the role *agency, reflexivity and relationality* plays within a transnational network like TeleCities.

With a contextual background provided, the aim of the rest of this chapter is to develop an analytical framework that will provide a conceptual context to build upon and theorise the issues raised above. The three components of the analytical framework are institutionalism, agency and scale.

2.3 Structure as a construct of cohesion and collaboration: Institutionalism

The concept of the institution, and the development of institutionalism as a framework for the investigation of not only the institution itself, but also its place within the wider socio-economic and cultural fabric of life, has been readily and enthusiastically adopted by theorists in a number of different fields in recent years. Its shift away from its positivist origins in neoclassical economics towards a focal point that acknowledges “*all economic*

action is social action and socially situated, and therefore all economic institutions are social institutions" (Barnes, 2000, p 552), has led to a resurgence in the concept across the inter-disciplinary board. With the transition from relatively long term stable institutional forms under Fordism, towards the fluid, transitional and temporal institutional identities of post-Fordism, which have then been further extended and fractured within globalization, institutions, both from their internal competencies and their external relations to other institutions, are now seen as a vital component of analysis. Indeed such has been the resurgence and re-conceptualisation of the concept and context of the institution that in itself it has led, theoretically to an 'institutional turn'⁹ within economic geography (Healey et al, 1995, Raco, 1998, 1999, Macleod, 2001; Amin and Thrift 1994a, 1994b, 1995). In short, from the mid 1990s onwards, academically and politically there has been a widespread acceptance that "*institutions matter*" (Jessop, 2001, p1213).

However whilst the role and concept of the institution as a mode of conceptualisation has been readily accepted to the extent of almost being *de rigueur* in any analysis of regional economic development over the last decade, the terminology of the institution is problematic. As Jessop (2001) notes, "*there is wide variation in how institutions are defined, in the respects in which they are held to matter, and in the reasons for suggesting that they do*" (p1213). In many respects the confusion arises from defining key organisational characteristics as synonymous with those of the institution. To clarify this position, institutional scholars define institutions as "*the humanly devised constraints that shape human interaction*" (North, 1990, p3), that is institutions are the "*rules of the game*"

⁹ See a special edition devoted to the 'institutional turn' in Environment and Planning A, 2001 Volume 33.

(March & Olsen, 1989, p 162). In essence, institutionalism is the framework in which human agency operates, rather than human agency itself.¹⁰

However, even with the separation of structure and agency, institutionalism as theoretical concept remains problematic. In part this is due to recent developments within a variety of academic disciplines that have transformed the notion of institutionalism away from its neo-classical origins and placed it as a key component in the analysis of political, social, as well as economic, contexts. Within this shift the theoretical connotations of institutionalism shift according to the environment within which it is placed. As a result of this there is a variety of differing theoretical frameworks forming the basis of institutional approaches. Perhaps the clearest division between the differing strands is provided by Hall and Taylor (1996) and their seminal paper which outlined the three core theoretical institutional approaches; historical institutionalism; rational choice institutionalism; and sociological institutionalism.¹¹

Although separation and contextual analysis may differ across the three variants, there is a large amount of similarities between the three core areas. In general the concept of institutionalism consists of a number of symbolic systems and rules, that carried out over a period of time provide the structure in which agency operates. For example Scott (1994), provides a description that is typical of many across the institutionalist milieu, in its social description of institutions, contextually applying structures and routines as a means of stabilisation:

¹⁰ This is not to totally discredit agency from institutional processes (as will be seen later in this chapter), as North (1990) points out agency is a key component in the process of devising 'constraints' that subsequently form the basis of institutional frameworks. However once institutional frameworks are established they are firmly seen as structural components that agency operates *within*.

¹¹ Although other scholars have identified upwards of seven different variants of institutionalism (see for example Peters, 1999) in recent years a consensus appears to have been reached which conforms to Hall and Taylor's original framework.

“Institutions consist of cognitive, normative, and regulative structures and activities that provide stability and meaning to social behaviour. Institutions are transported by various carriers - cultures, structures, and, routines - and they operate at multiple levels of jurisdiction” (p33).

Implicit within this definition is the role of the institution providing meaning to social behaviour and as a consequence the separation of agency and structure.

In terms of the three strands identified by Hall and Taylor, if any of the emerging institutional narratives have ‘broken through’ to become the key theoretical strand in recent years it has been sociological institutionalism. As we have already seen, from a regional and urban development perspective there has been a considerable rise in the role of the institution in a theoretical context. Within this academic genre the conceptualisation has been placed within a *“new institutionalist perspective for analysing regional and urban development” (Church and Reid, 1999, p644)*. This approach has been particularly welcomed across academic fields because it:

“seeks explanations for why organizations take on specific sets of institutional forms, procedures or symbols; and it emphasizes how such practices are diffused through organizational fields or across nations. They are interested, for instance, in explaining the striking similarities in organizational form and practice... throughout the world, regardless of differences in local conditions” (Hall and Taylor, 1996, p14).

In many respects the new sociological institutionalism has many similarities with historical institutionalism. However in its emphasis on institutionalisation as a means of form, procedure and symbols, it extends the theoretical relevance of historical perspectives in two core areas. Firstly, from an ontological perspective, it acknowledges that institutional form can be replicated in a variety of differing contexts. This is significant in the sense that it recognises that institutional forms are not static and not purely a direct consequence of local and relational constructs, interactions and power asymmetries in which an institutional form may develop. Secondly, sociological institutionalism has played a significant part in highlighting the importance of human agency within institutional process. However this in no sense presents a dichotomy in terms of the structure and agency division within institutionalism, indeed what is interesting within sociological institutional discourses presented here, is that agency within the institutional context is derived *within* and as a *consequence* of the institutional structure and not as an institutional process in its own right. For example:

“many sociological institutionalists emphasize the highly-interactive and mutually-constitutive character of the relationship between institutions and individual action. When they act as a social convention specifies, individuals simultaneously constitute themselves as social actors, in the sense of engaging in socially meaningful acts, and reinforce the convention to which they are adhering. Central to this perspective is the notion that action is tightly bound up with interpretation. Thus, the sociological institutionalists insist that, when faced with a situation, the individual must find a way of recognizing it as well as of responding to it, and the scripts or templates implicit in the institutional world provide the means for accomplishing both of these tasks, often more or less simultaneously. The relationship between the individual and the institution, then, is built on a kind of

'practical reasoning' whereby the individual works with and reworks the available institutional templates to devise a course of action" (Hall and Taylor, 1996, pp15-16).

This is a significant theoretical development; the recognition of agency within an institutionalist context affords a freedom and a recognition of reflexivity¹² within structure. Whereas it does not stipulate the development of agency as a process of institutionalism it does recognise the ability of actors within an institutional context to alter and shape future directions, this is in direct contrast to the historical determinism assigned to the historical institutional approach, which is:

"closely associated with a distinctive perspective on historical development. [Historical Institutionalists] have been strong proponents of an image of social causation that is 'path dependent' in the sense that it rejects the traditional postulate that the same operative forces will generate the same results everywhere in favour of the view that the effect of such forces will be mediated by the contextual features of a given situation often inherited from the past. Of course, the most significant of these features are said to be institutional in nature. Institutions are seen as relatively persistent features of the historical landscape and one of the central factors pushing historical development along a set of paths." (Taylor and Hall, 1996, p9).

By rejecting this view and ascertaining that actors within an institutional framework have the ability to shift and respond to external events and in a sense transfer from their

¹² The concept of reflexivity is addressed later in this chapter.

historical contexts, sociological institutionalism represents an important analytical tool in the sense that it affords an opportunity to explore not only the institution itself both in terms of its historical and subsequent collective trajectory, but it also enables an opportunity to explore the intra and inter institutional dynamics that are seminal in the ongoing functionality of the institution. In this context emerging 'new institutionalist' discourses have been readily embraced across academic fields as a means of analysis and investigation within a variety of institutional forms.

New Institutionalism within Geography and Regional Studies

Because of its theoretical focus upon not only the semantics of the institution, but also the complex relationships within that framework, the 'new institutionalist' stance has been readily welcomed within both economic geography and urban and regional studies¹³. In particular, its' ability to pursue the internal as well as the external relational components of the institution have made it an ideal conceptual model to explore the semantics of institutions. Further to this, institutionalism within network discourses has been enthusiastically adopted both in academic and policy circles to explore institutional settings in terms of the complex web of relationships that necessitate, substantiate and ultimately institutionalise what were once disparate individual alignments¹⁴. In a geographical context this collectivisation of 'local' actors is indicative of the re-conceptualisation of physical place outlined in the introduction to this chapter. Indeed this alignment of locally based institutional contexts has often been conceptualised as a specific response to globalisation

¹³ See for example Healy *et al* (1995), Raco (1998, 1999), MacLeod (2001) and most notably Amin and Thrift (1994a, 1994b, 1995).

¹⁴ An example of the conceptualisation of disparate actors aligning to construct an institutional presence is the concept of institutional thickness as developed by Amin and Thrift (1995). Institutional thickness explores the interface between local and global relations and the subsequent institutional relationships, practices and interactions. Essentially it centres around notions of collectivist institutional activity that enable, "the capacity of places to develop, consolidate and transmit structures of representation, interaction and innovation" (p106).

providing local scale initiatives a fixing mechanism to 'hold down the global' (Amin and Thrift, 1995). In this regard there has been an increased interest in both academic and political terms regarding the development of institutional capacity¹⁵ through inter-institutional relationships, that are seen as essential competencies if local scale initiatives are to survive, compete and ultimately benefit in the context of the emerging global economy. It is with this proviso that *"city authorities [are] ... developing an institutionally based set of local networks and alliances in which a range of interests are represented and through much wider, global, economic forces can be 'held down' at the local level"* (Raco, 1997, p975).

Institutionalism in a localised context: the importance of the region

These emerging narratives of local-global power intersections and the construction of institutional identities and infrastructures to provide the capacity to hold down these global economic forces have led to a reinvigoration of the role of the region as the ideal spatial scale. However the spatial mobility offered under globalism has reassigned notions of location; this coupled with the supposed decline of the nation state and the entrepreneurialist strategies at a local level has resulted in the re-conceptualisation of the region as the embedded interface between the global economy and local scale initiatives. However, the region is not static and bound to its locality, within the new regionalist strategy the construction of boundaries are not dependent on elements of territoriality defined in terms of nation state governance; within the global local nexus, the new region

¹⁵ Institutional capacity as developed by Healey et al (1995) differs from institutional thickness. As Lagendijk (2006) points out institutional capacity centres around the "institutionalisation of a set of interactive practices, based on specific conventions and competencies, that underpin the strategic capacity of a region to shape and modify, subject to manifold structural limitations, its course of development. The latter is achieved through internal mobilisation, as well as gaining a purchase on external developments" (p16).

can search and interact with markets and partnerships where it deems them appropriate, as Jonas (2006) comments,

“ the advantage[e] of (re)thinking regions along these lines is that the ‘region’ can be seen to operate both as a between space and a meso-level concept, which is amenable to thinking about a spatial combination of flows, connections, processes, structures, networks, sites, places, settings, agencies and institutions” (p402, original emphasis).

Although not without its critics¹⁶, this hierarchical nesting of regionalism as the favoured scale of globalization has resulted in a variety of local partnerships and allegiances that transcend the boundaries of the local and national scale. From an institutional perspective the new regionalist transition has provided scholars with an ideal framework to explore the construction and stabilisation of institutional identities (Healy et al, 1995). Incorporating key elements of the new institutionalist discourse, that explore the concept of agency within institutional structures, emerging narratives have centred around the consideration of economic development in terms of the success or failure of a particular location explained, *“[N]ot primarily [in its] economic structure, but by the particular institutional web, the informally (or formally) codified practices of exchange and encounter, and the regulatory environment” (Swyngedouw, 2000, p550).* It is these informal and formal practices, particularly the interaction between members of institutions, that are seen as the prime factor that facilitates successful regional development and the construction of institutional thickness. With its strong emphasis on collective rather than individualist modes of behaviour, institutional thickness is dependent upon the ‘social capital’ (Putman, 1993) of

¹⁶ For a detailed and systematic critique of ‘new regionalism’ see Lovering (1999).

the institution(s), consequently the “*internal relations [and] associational forms*” (Swyngedouw, 2000, p550) are seen to be central in the development and progression of the institution. Within this shifting contextualisation of the intra and external relationships vis-à-vis actors and institutions there has been a notable transition in the spatiality of institutions. Following Swyngedouw’s comments above, the progression and stability of institutional forms are dependent upon a variety of internal and external relationships between actors and other institutional entities. In this context the notion of embeddedness in terms of the institutional relationships has been enthusiastically welcomed amongst institutional scholars.

The Embeddedness of Institutions

Whilst old institutional discourses viewed institutions as discreet autonomous entities, new institutional analyses have firmly rejected this line of thinking. For them institutions are firmly rooted in a variety of spatio-temporal relationships that have a direct consequence upon institutional forms. Within institutional sociology the concept of these differing relationships across time and space has placed a strong analytical focus upon the embedded context of the institution. As a result, the concept of embeddedness (Granovetter, 1985) is a key component in any institutional analysis that takes the spatial context seriously. In many respects embeddedness builds upon the core characteristics of sociological institutionalism in terms of the relationship between agency within institutional structures. In particular it provides an analytical lens to explore:

“the institutional mechanisms by which networks are initiated, coordinated, monitored, recombined and terminated. This view ...shifted the focus from

examinations of network structure and position to concerns with particular institutional contexts in which actors are embedded” (Grabher, 2006, p164).

However it goes further in the sense that it acknowledges and indeed provides a context to explore the spatial relationships that are deemed to be a core component of institutional forms. In this context *“embeddedness [refers to the] fact that economic action and outcomes like all social action and outcomes, are affected by actors’ dyadic relations and by the structure of overall network of relations” (Grabher, 1993, quoted in Amin and Thrift, 1994, p 12).* In the majority of cases the concept of embeddedness has been placed within a territorial context, that is, it is interested in drawing upon the localised relationships of where the institutional forms exists. For example Amin and Thrift (1994) in empirical work conducted in both the city of London and industrial districts of Tuscany identify some of the purely non-economic contexts that they believe necessitate localised labour:

“First, centres provide face to face contact needed to generate and disseminate discourses, collective beliefs, stories about what the world of production filieres are like. They are also points at which knowledge structures can be tapped into. Second, centres are needed to enable social and cultural interaction, that is to act as places of sociability, of gathering information, establishing coalitions, monitoring and maintaining trust, and developing rules of behaviour. Third centres are needed to develop, test and track innovations: to provide a critical mass of knowledgeable people and structures, and socio-institutional networks, in order to identify new gaps in the market, new uses for and definitions of technology, and rapid responses to change in public demand” (p12).

Essentially the concept of embeddedness presented here and indeed the institutional context elaborated on within this chapter need to be addressed and forwarded in such a way that the nuances and theoretical developments advanced in recent years can shift outside purely localised contexts of both institutionalism and embeddedness.

Institutionalism as a placed defined concept?

As we have already seen the concept and varying strands of institutionalism have been readily accepted in a variety of academic contexts, and in particular within urban and regional studies and economic geography. However in the vast majority of cases it has concentrated upon the concept of institutionalism and indeed embeddedness in purely localised contexts; this seems a theoretical oversight.

Firstly let us consider the concept of institutionalism. I would argue that previous research fails to extend the concept fully. Whereas the concept of institutionalism is seen as a key analytical tool in exploring network capacity, it has only been explored in accordance with the embeddedness of networks in a physical sense. This is problematic in the terms of our shifting connotations of the local. For instance, although differing spatial scales, most notably the local and the regional, are seen to offer sufficient infrastructural support to '*capture the global*', at the same time these spatial scales are seen as both fluid and mobile in their ability to respond to external (global) opportunities and threats, thus empirically they revert back to a fixed entity, that is they are territorially bounded entities. So although within the globalisation milieu concepts of place and what we mean by the local are constantly being contested, within the majority of empirical work carried out on institutionalism in a geographical context, *the local* is equated with the *region*, and

although what we mean by a region and the context of how a region can form itself into a new physical space has shifted considerably within the context of globalization, it is still dependent purely on its physical parameters. Such an ontology fails to grasp the contextual shift in definitions of the local or regional scale. To reiterate this, let us again consider Jonas's (2006) account of these entities as areas that:

“operate both as a between space and a meso-level concept, which is amenable to thinking about a spatial combination of flows, connections, processes, structures, networks, sites, places, settings, agencies and institutions” (p402).

So whilst conceptualisations of these spaces are dependent upon a variety of social, relational and institutional relationships, previous empirical contextualisation of these variants are firmly placed within a place-specific environment. To illustrate this, if we go back to Amin and Thrift's musings in relation to the embeddedness of localised networks and the potential non-economic benefits assigned to territoriality, the components are dependent on interaction, contact and trust, all of which are not dependent on a fixed embedded location. A further way of negating the need for territoriality within institutionalism and embeddedness is illustrated through the power asymmetries of fixity and motion equated within globalisation discourses referred to earlier in this chapter. For example Sum (1997) notes that:

“Deterritorialization can be understood in terms of globalized flows of production, finance, information, culture and so on which are not territorially defined or constrained. In contrast reterritorialization involves actors (and

their networks) that are seeking to capture these global flows and (re)fix them in time and space” (p50-51).

If we apply the same critique against this conceptualisation as we did for Amin and Thrift and their conceptualisation of localised embeddedness within place centredness, again within this use of territoriality, there is a distinct lack of reference to place in a physical sense. The fixing mechanism is equated to actors and their networks, again although the need for physical space within that process is assumed,¹⁷ the specific need for this can be contested, especially if we place this assumption of fixity within the context of TeleCities.

This analysis of the institutional components within this analytical framework has developed the first building block in terms of a theoretical analysis of transnational networking. In doing so it has developed two central arguments. Firstly previous theoretical contexts have emphasised the role of institutionalism within a variety of contexts, however I have argued that this has been done from an ontology¹⁷ that views institutional contexts purely within localised embedded contexts. However this does not negate the concept of institutionalism in a non-place setting. Indeed the key characteristics assigned to both institutionalism and embeddedness are not place specific, their key components are centred upon areas more akin to social capital than location based assets. In this context institutionalism provides an ideal lens to observe how disparate actors over a wide geographic spread have institutionalised their capacities into a separate non place-based institutional entity.

¹⁷ Based on a conversation with Ngai Ling Sum, Lancaster, September 18th 2003.

Of particular importance within this discussion of institutional contexts as a means of analysing network behaviour, is the notion of human agency within the context of institutional structure. Within recent institutional analysis there has been an increased importance placed upon the role of agency within institutional structures. This has been an important development and something that is an essential element of transnational networking. However agency within institutional discourses is very much encapsulated as a process within the initial origins of institutionalisation rather than a distinct theoretical tool in its own right. To observe the interactions of actors within an institutional setting there needs to be a clearer contextual background regarding agency and structure within this analytical framework. This chapter will now build upon the institutional components discussed in this section adding a further element of depth by exploring the role of agency in the next stage of this analytical framework.

2.4 The Human Touch: Placing Agency, Reflexivity and Relationality within an analysis of TeleCities

The intention of this section of the analytical framework is to build upon the issues raised in relation to the institutional contexts already mentioned. Specifically it intends to bring in the role of actors (human agency) to respond to and articulate the institutional direction (structure), allowing it an institutional reflexivity. Further to this it will place the role of agency as a key component of relationality.

Agency within structure: relations, actors and collaboration

As we have already seen, the division between agency and structure within the context of institutionalism is not always clear. The assumption that organisations and institutions are

synonymous has resulted in a certain degree of confusion. Further to this, it has already been identified that many of the components assigned to institutionalism, although used in a localised embedded context, the key criteria are not purely dependent upon localised assets. In many respects these shifting connotations of institutional entities and indeed re-configurations of what is meant by the local scale have been apparent within differing literatures of economic and regional development studies. One of the subject area's most notable scholars, Michael Storper has been particularly prolific in terms of promoting a shift in understanding in terms of what components actually constitute assets within an economic context. For example:

“the guiding metaphor is the economy as relations, the economic process as conversation and co-ordination, the subjects of the process not as factors but as reflexive human actors, both individual and collective, and the nature of economic accumulation as not only material assets, but relational assets”
(Storper, 1997, p248, original emphasis).

Although on the face of it a significant shift purely in economic terms, in many respects such a paradigmatic shift has many synergies with the new institutionalism outlined in the previous section. Again with its dual narrative of relations and coordination and ultimately its dissection of material and relational assets, Storper presents a picture of economic possibilities that is not determined by the materiality of the localised vicinity but by institutional interactions. What is particularly appealing in terms of forwarding this analytical framework is the emphasis that Storper places upon agency within that process.

As we have already seen within institutional discourses, historically the notion of agency within institutionalism has always been the subservient partner of structure. With the institutional turn and the emergence of institutional sociology the alignment of agency within the structural setting of the institution has become more prevalent. However, even within these contemporary narratives, in institutional environments the role of agency is still seen to be dictated by structure. That is the role of agency in terms of institutionalism is seen to be a process of either historical contexts or embedded within specific structural rules and procedures. To be sure, the assumption of structure over agency is central to the concept of the institution, if this were not the case we could not talk in terms of institutional entities, we would merely be talking about individuals within a collective context. With structure, and the rules and procedures that necessitate institutional forms, individuals are confined within institutional structures that provide the necessary stability and meaning within these institutional contexts. As we have already seen, there has been an acceptance of the role of agency within institutional contexts most notably through new sociological institutionalism, however in terms of the fluidity afforded new institutional entities that are not bound in localised regulatory contexts, I would argue that an analysis of agency within institutional contexts has not been taken far enough. In particular the relational contexts which are now deemed a core component of institutions must be observed, assessed and ultimately contextualised in terms of the role agency plays in developing and substantiating these relational contexts. From this perspective the notion of collective reflexivity is a useful context to apply in an analytical context. Storper (1997) defines reflexivity as the:

“possibility for groups of actors in various institutional spheres ... to influence the course of economic evolution as a result of their own critical distance from

the traditional functions of these spheres, this distance itself is facilitated by contemporary technologies and communicational practices” (p249).

The concept of reflexivity is an important analytical tool since it enables an element of agency within institutional contexts. In many respects ‘external influences’ within institutional discourses have limited the external dimension to a set of global economic forces upon which institutional capabilities have enabled localities to respond through a variety of collective actions. In general scholars have adopted the Regulation Approach as a means of pursuing these external influences. Whilst this approach allows a path to address the nuances between economics and social interaction in the framework of capitalism, it comes at the expense of micro level analysis and the subsequent spatial interactions between actors and institutions. This differs from Storper’s notion of reflexivity and also within emerging discourses that are emphasising the importance of agency and forms of reflexivity in institutional contexts.

Progressing the Institution: Learning, Collaboration and Collective Reflexivity

Reflexivity and agency are part of the same cognitive process. For example Colin Hay (2002), echoing Storper in his acknowledgement of the reflexivity of actors within institutional contexts, notes that, *“actors are reflexive and strategic and they orient themselves and their strategies towards the environment within which their strategic intentions must be realised” (p9)*. However Hay raises an important issue in terms of the utilisation of agency within the context of reflexivity:

“we have tended to assume that strategic actors have a fairly direct and unmediated access to the contours of the terrain they inhabit, such that they can

effectively 'read off' the likely consequences of their action from their knowledge of the context in which they find themselves. This, however, is a most dubious premise, akin to the perfect information assumption much beloved of neoclassical economists and many rational choice theorists. Though convenient and parsimonious, it is unrealistic" (p8).

This has important consequences in terms of institutional decision making. By the very nature of actor involvement within an institutional context, *"their knowledge of the terrain and its strategic selectivity is partial; at worst it is false" (Hay, 2002, p9)*. This means that the evolution of institutional forms is dependent upon actors' interpretation of past, current and possible future actions, as a result the contextual environment that actors utilise within institutional forms, *"are discursively mediated, since only certain ideas and narratives bearing on a situation will prevail, social evolution is also based upon discursive selectivity" (Langendijk, 2006, p6)*. In this context the ability of actors within institutional forms to learn reflexively in relation to internal and external opportunities and threats is imperative; the implications within both Hay and Langendijk's iterations is that the evolution of institutional forms is dependent upon the ability of agency to interpret and respond to its contextual environment. For example:

"actors routinely rely upon cognitive short-cuts in the form of more or less conventional mappings of the terrain in which they find themselves. Thus, for instance, policy makers typically conceptualise the policy-making environment through the lens of a particular policy paradigm ... Once again, access to the context itself is discursively mediated. How actors behave - the strategies they consider in the first place, the strategies they deploy in the final instance and

the policies they formulate - reflect their understanding of the context in which they find themselves. Moreover, that understanding may eliminate a whole range of realistic alternatives and may, in fact, prove over time to be a systematic misrepresentation of the context in question” (Hay, 2002, p9).

Essentially Hay is placing the context of agency within institutions upon the ability of actors to learn within structural forms. Although on the basis of it a relatively simple assumption, within institutional discourses the ability of actors to learn collectively as a means of forwarding and progressing the institution has been relatively overlooked. As we have already seen institutions provide the structure, rules, procedures and within more recent strands the culture for agency to operate *within*. So whilst institutionalism provides the structure, to observe the intra-relations of institutions one needs to address the context of agency within these institutional forms. In many respects the notion of learning in an institutional context raises problems. For example:

“learning is frequently associated with informational or practical problems whose cognitive content cannot be codified or routinized ... the problem for the actor is how to coordinate with other actors in the absence of bureaucratic or authority-based means of doing so” (Storper, 1997, p252).

In a sense this lack of coordination is a key component of institutional forms. Although in more political and economic contexts issues of bureaucracy and power do arise, within shifting scenarios like globalisation and the global economy they are by no means the dominant form. In particular if we place coordination within the context of TeleCities,

collaboration is not based upon structures of hierarchy and power, rather it is based upon softer competencies such as trust and knowledge. As Storper (1997) notes:

“Co-ordination is made possible by transactions between actors which are strongly shaped upon relations and conventions. In the former, personal, contacts, knowledge of the other, and reputation generate the required confidence. In the latter and more frequent case, transactions are less idiosyncratic than in the first because they are organized by conventions which permit economic agents to absorb, interpret and utilize information ... Collective action can then take place. Conventions involve mutually coherent routines and expectations. They are a kind of halfway house between idiosyncratic relations and bureaucratic and impersonal rules (Storper, 1997, p253).

Within Storper’s framework collective action is based upon conventions and in many respects this can be seen as an extension of *learning* within institutions. Indeed if we go back to North’s (1990) form-based description of institutions, norms of behaviour and conventions are key characteristics of its informal constraints. However in structural terms conventions are within institutions and not separate from them. As a consequence, the nature of conventions within institutions will be embedded in a series of historical, social and cultural contexts. Whilst such a proposal links back to conceptions of ‘path dependency’ and ‘lock in’, I would argue that such notions within institutional analysis have been dominant due to the tendency to pursue institutions purely in structural terms without acknowledging the role of collective institutional reflexivity to break path dependent trajectories. Because of this, the nature of conventions within an institutional

form must be seen from a cognitive rather than normative perspective. That is, the extent of the institutional reflexivity of an institution will be dependent upon the establishment and *progression* of conventions within that form. Essential conventions within institutional analysis become a key cyclical component of the reflexive process.

Whilst this acceptance of the role of conventions moves us closer towards an understanding of agency within institutional forms, it is merely in descriptive terms. To go beyond the division of normative and cognitive components within a structural context, one needs to be aware of the contextual embeddedness of these relationships both within the institution itself and also its wider external institutional relationships at differing scales. In this capacity it is important to understand the spatial constructs of both agency and structure. A significant way to approach the merging of agency and structure in a spatial context is through the Strategic Relational Approach.

Placing Spatiality and Agency within the Institution: The Strategic Relational Approach

Forming a significant strand of the 'institutional turn' the Strategic Relational Approach (SRA) has been presented as a key conceptual method of institutional and agency analysis¹⁸. In this capacity the SRA is a useful analytical tool in the sense that it examines the role of agency within institutional confines, in doing so it provides a useful halfway house which acknowledges the effect agency plays on shaping structure, or what Bob Jessop (2004) refers to as structural inscribed strategic selectivity, that is:

¹⁸ In terms of conceptual tools to assess the duality of structure and agency, structuration theory as developed by Anthony Giddens (1984) is also a viable alternative. However critics have suggested that Giddens places an over reliance on agency at the expense of structure. Further to this the role of agency is presented in terms of 'individual' actors rather than the 'collective' which is a significant strand of SRA. See Parker (2000) for a critical analysis.

“the recursive selection of strategies and tactics depends on individual, collective, or organizational learning capacities and on the ‘experiences’ resulting from the pursuit of different strategies and tactics in different conjunctures” (p4).

In terms of this research the most significant component the SRA provides is acknowledging the role of agency in providing a reflexivity within institutional confines, thus enabling it to manoeuvre and manipulate the institution in ways beneficial to its collective ideology. Again as Jessop (2001) notes:

“A strategic relational analysis would examine reflexivity as well as recursivity. In other words it would address agents’ capacity to engage in learning and to reflect on institutional context, institutional design etc. This suggests the importance of adding a reflexive turn to the institutional turn in order to take account of actors’ capacity to monitor their own actions” (p1230).

Further to this, the SRA provides a spatial contextualisation to the role of institutionalism and agency, as Jessop (2001) notes:

“Although time and space are important dimensions of institutions at micro and macro levels, they are often neglected in institutional analyses. These analyses must go beyond reference to time and space as external parameters of institutions and/or action. They should pay careful attention to both (a) the

temporalities and spatialities inscribed in (and reproduced through) specific institutional forms, and to (b) the differential temporal and spatial horizons of various actors and their capacities to shift horizons, modify temporalities and spatialities, jump scales, and so forth” (p1230-1231).

This is a timely reminder from Jessop and a key theoretical strand running through this work. The lack of spatial awareness in institutional analysis to date has seriously neglected the implicit spatiality of institutional forms. By incorporating agency within institutional forms, whilst at the same acknowledging the ability of actors (hence, the role of agency) to move outside their institutional forms to engage within other institutional forms at different scales recognises the importance of agency *within* and *across* institutional contexts. In this capacity the role of inter-relations across institutions needs to be seen within relational contexts.

Agency as an asset? The role of relationality

As we have already witnessed a ‘institutional turn’, let us now consider the ‘relational turn’ in economic geography:

“In this ‘relational turn’ economic geographers tend to place their analytical focus on the complex nexus of relations among actors and structures that effect dynamic changes in the spatial organization of economic activities ... This relational economic geography is concerned primarily with ways in which socio-spatial relations are intertwined with broader structures and processes of economic change at various geographical scales” (Yeung, 2004, p 37).

What is interesting within this relational turn is the move away from what Storper (1997) refers to as the *"theoretical holy trinity of technologies, organizations and territories"* noting that they *"must be redefined from a series of machines to a set of relations and their constituent reflexive process"* (p250). The relational turn is of specific interest to this work in terms of the collaborative nature across scales that is implied within transnational networking. By adopting a relational perspective it is possible to go beyond the connotations of collaboration existing only within a singular institutional form and the construction of associations between institutions across spatial scales. Particularly appealing is Storper's call for a re-conceptualisation or a re-focusing of the holy trinity in terms of territories:

moving away from the geography of input-out-put relations ... and the economics of proximity in traded linkages, to the geography of untraded interdependencies ... this, in turn is necessarily bound up within the geography of conventions and relations which have cognitive, informational and psychological and cultural foundations (Storper, 1997, p254-255).

This re-focusing in terms of territories is significant in relational terms for a number of reasons. Firstly, the notion of untraded interdependencies that *"take the form of conventions, informal rules, and habits that coordinate economic actors under conditions of uncertainty"* (Storper, 1997b, p5), is, as we have already seen a distinct component in establishing the role agency plays in institutionalist contexts. However, further to this and in a relational context, these untraded interdependencies are not dependent upon singular institutional forms, again they are indicative of the external relationships that institutions establish in terms of trust, collaboration and reciprocal behaviour. As a result of this

Storper's depiction of the '*geography of conventions and relations*' is a succinct proposition, that is the nature of both conventions and relations are dependent upon agency, whilst at the same time the relational components are embedded within relationships and conventions that exist both within and across different institutional forms. Whilst Storper's notion of untraded interdependencies deals with characteristics that are unique to an individual locality, the recognition of relationality within this process is by its very nature a spatial construct, that is geographies of conventions and relationships, are not dependent upon one institutional form or even multiple institutional forms within one locality, rather relational institutional constructs have the ability to exist on a transnational and global context as well as local. In this context the SRA comes back into the analysis in terms of the role agency plays in institutional contexts in terms of paying careful attention to the:

"differential temporal and spatial horizons of various actors and their capacities to shift horizons, modify temporalities and spatialities, jump scales, and so forth" (Jessop, 2001, p1231).

If we place this coupling of relationality and the SRA within the confines of a transnational network rather than territorially embedded localities we can view the same processes through a slightly different lens. In terms of a transnational network presented in an institutional context, the relational components have a distinct similarity to what Boden and Molotch (1994) call the, "*the thickness of copresent interaction*" (p259), that is "*where intense, recursive, face to face interactions are supported within urban space, with growing mediated flows of communication and contact via technical media*" (Healey and Graham, 1999, p140). In many respects this proposition resonates with notions of Castells' 'network society'. On the face of it, it would appear that this is diametrically opposed to Storper's

notion of untraded interdependencies which is seen firmly as a territorial concept. However as we have already seen definitions of territoriality are being constantly contested and reassigned. Patsy Healey and Stephen Graham (1999) note that “*socially-constructed places are non contiguous, diverse, dynamic and superimposed. As well as being bound to place-based relations, cultural, social, economic, political and environmental links and relations can be stretched across space*” (p11). In particular it is this last element that ‘relations can be stretched across space’ that is important in the global context of relationality. Whilst the core capacities of untraded interdependencies are embedded within a local context, to think about these assets as relational within the collective space of a transnational network may represent a way of bridging the two conceptual divides. For example, whilst the space of flows was critiqued in terms of its inability to provide a means of ‘collecting’ these flows, merging elements of untraded interdependencies within this context, could represent a halfway house in terms of localised embeddedness within a space of flows. That is untraded interdependencies would not only be an asset to be traded *within* specific privileged localised contexts, rather they would be seen to be part of a heterogeneous space of flows, with relationality a global construct rather than embedded within specified historical localised contexts. In this context TeleCities, as a network, provides actors within that institutional context a space of *collective untraded interdependencies*, initially from a localised context merging into a collective space which could then be rearticulated in different localised contexts.

Analysing TeleCities: Institutionalism, Agency, Reflexivity and Relationality

This analysis of structure and agency has built upon the issues raised within the context of institutionalism. Within institutional contexts structure is seen as the dominant form; in this analysis of agency and structure a number of themes have emerged. Firstly using Storper's analysis, the role of agency is acknowledged particularly in terms of the importance he places upon actors' reflexivity in relation to what he terms a re-focusing of the 'holy trinity' of regional economics. Further to this Hay acknowledged the importance of learning within structure. However when the context of learning and reflexivity was explored within Storper's untraded interdependencies, again the institutional environment firmly reverted back to a physical localised context. In doing so the institutional context became the dominant partner rather than the power of reflexivity as a tool of institutional engagement in a variety of relational contexts. As with the reiteration of institutionalism as a place-based variable discussed earlier in this chapter, the insistence of equating relational assets being purely dependent upon these localised embedded contexts misses an important theoretical and ontological shift. Within the context of relationality, relationships within, and across institutions are no longer based purely on spatial proximity. As we have seen relationships and collaboration can now transcend space and time. As a result placing relational assets purely in a localised context fails to address the nuances and indeed spatial mobility afforded institutional entities. In this regard I would argue that institutional contexts are important in terms of providing meaning and stability i.e. structure to disparate actors from a wide geographical spread. However once that institutional identity is established and formalised its ongoing maintenance is dependent upon the agency of those actors within the institutional form.

In essence the notion of relationality brings us back to the dichotomy of space and place presented in the introduction to this analytical framework, that is spatial relationality can be seen as an additional component that can be embedded within well established localised infrastructures. In this context relationality can be equated with conceptions of fixity and motion or deterritorialization and reterritorialization, that is the *capturing* of relational assets is dependent upon a myriad of institutional relations established in both a localised and also a non localised context. Rather the relational component is dependent upon the institutional capacity of institutional forms to fix or reterritorialize these assets. In this context the localised embeddedness of the institutional form, whilst a key context within Storper's analysis of untraded interdependencies, does not negate institutional entities that are not embedded in these localised context. Rather they are dependent upon the institutional components. Within this analytical framework it has already been argued that the core characteristics of institutionalism are not purely dependent upon its physical embedded location. In the context of relationality, I would also argue that a localised embedded context is not the determinant reason in developing relationality. Instead I would argue that agency, through the collective reflexivity of actors within an institutional context, necessitates relationality and the engagement and capturing of relational assets.

To further assess the implications of institutionalism and the subsequent reflexivity of agency within institutional forms, the final building block of this analytical framework will move on to address the overtly spatial context that these ontological shifts present.

2.5 Spatialising Institutionalism and Agency: The role of Scale

So far within this analytical framework we have determined that, institutional forms provide the structure for agency to function; further to this, we have also established the importance of agency within an institutional and relational context. In both cases it has also been established that previous theoretical conceptualisations have embedded themselves firmly within a place-based environment. In the context of this research it has been argued that such an emphasis is unnecessary and fails to take into account shifting pretexts of the local. However such a proposition is not aspatial, indeed by incorporating established theoretical theories outside of their conceptual origins it aims to draw out the fundamental spatial contexts of the process. To do this the final building block within the analytical framework is scale.

Introducing Scale

The role of geographical scale has become almost *de rigueur* as an analytical tool to describe and conceptualise a number of contemporary theoretical debates such as globalization, shifting global local power relations and processes of reterritorialization (Brenner, 2001). As Marston et al (2005) point out in recent provocative article:

“Over the past 20 years the concept of scale has been the object of sustained theoretical reflection. Today the results are being applied in virtually every major subfield, especially in urban, political, economic, feminist and cultural geography” (p416).

Although scale has attracted a high degree of reflection, until relatively recently the role of scale has been “*largely implicit*” (Brenner, 2001, p591). However, whilst the concept itself may have become an implicit part of spatial analysis, within geographical discourses the conceptualisation of scalar process are not uniform across the field, as Marston et al, go on to say:

Despite the insights that both empirical and theoretical research on scale have generated ... there is no agreement on what is meant by the term and how it should be operationalized (p416)

For a concept that is apparently so embedded within the discipline, the lack of clarity may be puzzling to anybody outside the confines of human geography. There are a number of potential reasons behind the ambiguity. Firstly, part of the problem lies with the historical roots of human geography that are placed upon analysis of boundaries and confined territories. From an historical perspective scale has often been synonymous with areal differentiation. In part the connotation of scale and defined boundaries can be traced back to Peter Taylor (1982) and his seminal work “*A materialist framework for political geography*” in which he identified three separate realms; the urban, the national, and the global. Within this framework he also assigned power asymmetries, stipulating the global as the scale that “*really matters*” (p26). Since then, these three scales¹⁹ or variants upon them have been seen as the dominant levels of articulation. Whilst Taylor’s work provided the initial starting point for scale as a geographical conceptual tool, the role of scale within

¹⁹ Whilst Taylor stipulated the urban, national and the global, in scalar contexts the urban scale has been replaced more often than not with the increasingly problematic term ‘the local’. In other contexts additional scales have been added to this three way hierarchy, most notably the regional scale which is often presented as a meso level scale between local and national, similarly the supranational is also indicative of a meso level scale between national and global. In other developments the local scale has been subdivided to parts including the neighbourhood, and also down to the scale of the body and the home (Harvey 1998).

the discipline has been eulogised and contested in almost equal amounts for more than 20 years.

The most significant contribution to the field post-Taylor has come through the work of the political geographer Neil Smith. Smith's seminal contribution to the scale debate was to shift away from scale as purely a divisor of separate geographical units. Rather Smith introduced the concept of scale as a fluid concept that was not necessarily a given, but was constantly contested and open to contestation. Within this shift the role of scale as a descriptor of physical boundaries was lost, with the concept taking a more nuanced approach to spatial reach and the emerging interactions across and between, what were previously seen as three separate and autonomous spatial constructs. As a result, to view scale purely in terms of its physical parameters presents major problems as it can not be identified simply in terms of areal differentiation, for example "*scale is not as easily objectified as two dimensional space, such as state borders. We cannot touch it or take a picture of it*" (Delaney and Leitner, 1997, pp96-97). In this contextual shift scale was to become a fluid entity, becoming synonymous with a '*politics of scale*' (Smith, 1992). The politics of scale differed from previous notions of scale in the sense that spatial differentiation was seen as a political or social construct rather than physical. Within this contextual shift the importance of scale was not just the *separation* of scales but the *interaction* between them. In conceptual terms Smith's '*politics of scale*' was taken a step further through Jonas's (1994) call for a '*scale politics of spatiality*' commenting that "*the language of scale is too powerful to be treated simply as a dimension of spatiality*" (p257). Using concepts of scale-as-abstraction and scale-as metaphor, Jonas provided concrete examples of how locality and globalisation research, failed to incorporate scale in meaningful theoretical context. Rather than pursuing the fluidity of scalar relations,

theorists used narratives of both abstraction and metaphor referencing scale in a context that could not deal with the extreme spectrums of scale (global *and* local) simultaneously. Jonas' call moved scale as a theory beyond the rigid conceptualisation of scale in terms of its rigidity as a descriptor of territoriality.

Whilst on the face of it a natural progression in epistemological terms these nuanced approaches have led to a certain amount of theoretical apprehensiveness in terms of scale, which is indicative of recent debates within human geography²⁰. To an extent this uneasiness is understandable; if the actual parameters of individual scales are fluid, how can scale theorists assess the interaction if we cannot determine where one scale ends and another begins? To illustrate how this epistemological shift has been utilised within human geography, the work of Erik Swyngedouw (1997) and his advancement of Smith's original call for a 'politics of scale' and Jonas's 'scale politics of spatiality' begins to tackle the nuances, subtlety and fluidity of scale and illustrates how the separation of scales is always open to contestation:

"Spatial scales are never fixed, but are perpetually redefined, contested and restructured in terms of their extent, content, relative importance, and interrelations. For example, the present struggle over whether the scale of social, labour, environmental, and monetary regulation within the European Union should be local, national, or European indicates how particular geographical scales are perpetually contested and transformed" (p141)

²⁰ See for example the already referred to Marston et al (2005) and a recent rejoinder by Jonas (2006).

In this respect what Swyngedouw argued was that scale is not an immobile and fixed entity. The construction and subsequent division between scales was dependent upon both agency *within* spatial scales as well as power asymmetries *between* spatial scales. It was with this contextual background that Swyngedouw (1997) coined the term 'glocalization'. Rather than assuming spatial scales are given, Swyngedouw argued that spatial scales can be socially constructed, thus spatial scales are a temporal product of actors within and across different spatial scales who are able to produce spatially defined spaces as a mechanism to fix or reterritorialize a variety of global flows, in essence a *new* space of engagement. This fluid conceptualisation of scale has ramifications in terms of the analytical framework proposed here. Within this understanding of scale, agency operating within institutional contexts has the power to construct intermediary spatial scales. This component of the analytical framework was discussed previously in terms of untraded interdependencies coming together within a transnational network's collective space; such a space of engagement is indicative of Swyngedouw's process of 'glocalization'

Further to Swyngedouw's work on glocalization, scale's most recent and prolific theorist, Neil Brenner, has built substantially upon the social construction of scale. In particular Brenner's work deserves particular attention in terms of the relationality he brings in terms of the scalar debate, for example:

"Scales evolve relationally within tangled hierarchies and dispersed interscalar networks. The meaning, function, history and dynamics of any one geographical scale can only be grasped relationally, in terms of its upwards, downwards and sideways links to other geographical scales situated within tangled scalar hierarchies and dispersed interscalar networks. Scale, therefore,

cannot be construed adequately as a system of territorial containers defined by absolute geographic size ... Each geographical scale is constituted through its historically evolving positionality within a larger relational grid of vertically 'stretched' and horizontally 'dispersed' sociospatial processes, relations and interdependencies" (Brenner, 2001, p 605-606).

The relationality of scale is an important dimension and due to the overtly geographical connotations of both scale and relationality it is surprising that the two strands remained separate for so long. What is interesting about Brenner's coupling of scale with relationality is that it brings a horizontal dimension to scale, that is social processes not only exist (within and across scales) but actually contribute to scalar reconstructions. However, once the theorization of scale begins to attract the level of abstraction indicative of Swyngedouw and in particular Brenner, it is understandable to see why Marston et al (2005), have called for a *'human geography without scale'*²¹ (p417). To provide an empirical context to Brenner's work, the scalar attributes of this process, in relation to transnational networks are highlighted in the work of Leitner, Pavlik and Sheppard (2002):

"Network modes of governance may operate to reinforce the power and importance of some scales while challenging others. Thus, networks are part of the struggles for control over economic, political and cultural space, struggles

²¹ Although I have sympathy for Marston et al and their recent critique, in many respects their paper mirrors some of the objections they sought to reject. By dismissing geographical scale they call for a "flat ontology" part of which consists of "a focus on localized and non-localized emergent events of differential relations actualized as temporary – often mobile 'sites' in which the 'social' unfolds" (p423). In many respects this is a shift in narrative rather than ontology. Scale in areal terms is defined as 'localized' and 'non-localized'. Within this flat ontology where does the localized stop and the non-localized begin? Similarly the connotation of 'mobile sites in which the social unfolds' seems to be indicative of Smith's conceptualisation of scale as a social construct, indeed 'mobile sites' does not seem dissimilar from processes of glocalization.

that may involve jumping scales and/or that may involve operating on several scales simultaneously” (p297).

In many respects this fluid duality of scale as an embedded *and* relational concept is better understood through the work of Kevin Cox (1998) and his models of spaces of *dependence* and spaces of *engagement*. By separating dependence which Cox defines as:

“more-or-less localized social relations upon which we depend for the realization of essential interests and for which there are no substitutes elsewhere ... they define place specific conditions for our material well being and our sense of significance” [whereas spaces of engagement] are inserted into a broader sets of relations of a more global character and these constantly threaten to undermine them a space in which the politics of securing a space of dependence unfolds” (p2).

Within this separation Cox is subtly acknowledging the importance of spatial relationality in terms of specific localised constructs. That is, whilst place specific attributes are a core component of localised constructs of scale, so are a variety of other inter-scalar traits that are an integral part of the *“space in which the politics of securing a spaces of dependence unfolds” (ibid)*. The advantage of Cox’s two way analysis incorporating both the construction and subsequent procedural nature of scalar relations is that localised scalar attributes are seen to be part of wider relational scalar processes. Within Cox’s analysis whilst localised contexts are acknowledged, within spaces of dependence, the relational aspects of scale happen within the fluid and temporal space of the spaces of engagement, in this context the relationality of scale is a social construct. This recognition has major implications for the theoretical strands of this work. If the relationality of scale is indeed

socially constructed, how does this complex and implicitly spatial proposition play itself out over space and time? If scale is indeed socially constructed then what is the role of agency within that process?

The Social Construction of Scale

To explore this, firstly the dialectics of the 'politics of scale' need to be addressed. Brenner (2001) highlights how the conceptual notion of the politics of scale have been interpreted within two distinct empirical and spatial contexts. Firstly:

“the notion of a politics of scale denotes the production, reconfiguration or contestation of some aspect of sociospatial organization within a relatively bounded geographical arena” (p59, Original emphasis).

Within this context, scale is very much seen as a boundary and as a result it presents a scalar narrative that has strong connotations with areal differentiation. As a result of this, agency within this scalar context takes place *within* a singular specified scale. However, the second interpretation of the politics of scale refers to:

“the production, reconfiguration or contestation of particular differentiations orderings and hierarchies among geographical scales ... the referent here is thus the process of scaling through which multiple spatial units are established” (p600, original emphasis).

This process of the politics of scale is distinctly different and an intricately more spatialised process. Here agency is operating within and across scales to construct new scalar identities. In this capacity this conceptualisation of the politics of scale is more indicative

and representative of a politics of *scales* rather than the singular *scale* apparent within the previous definition.

To explore this scalar binary, let us return to the work of Kevin Cox and his separation of ‘spaces of dependence’ and ‘spaces of engagement’. To reiterate, ‘spaces of dependence’ take place within a bounded territory (usually localised), whereas ‘spaces of engagement’ are wider inter-scalar processes resulting in reconfigurations within spaces of dependence as well as constructing new spatial constructs. In terms of agency with these spatial constructs consider the following:

“a consideration of local dependence may help us to analyze, relationally, the material conditions that, at least in part, are serving to constitute scale ... the space of engagement may prove useful in interrogating the diverse ways in which localities and regions- anxious to compete in the era of globalization – are seeking to forge cross-border agreements and closer partnerships with the European Commission in order to secure funding” (MacLeod, 1999, p237).

In these terms we can see how notions of socially constructed spaces, initiated within a localised context play themselves out over time and space. Of interest too within this empirical example are the synergies it represents in terms of the context of this research i.e. localised entities, socially constructing a *space of engagement* to interact with an additional scale. In this context we can see how additional spaces of engagement are constructed and the inter-linkages they form with different spatial scales.

The Politics of Scale(s): Reflexivity, Institutions and Assets

In terms of the processes involved within new spatial constructs, the politics of *scales* provides an ideal lens to observe the role of agency and in particular the relationality of agency within different spatial scales. In particular to take this notion of the politics of scale(s) provides a conceptual basis to explore reflexivity away from a singular bounded territorial scale. Recognising this conceptual shift, the learning components of reflexivity themselves become part of the process of a politics of scale(s). In this capacity we have a process which can be termed *transnational reflexivity*. Within this process reflexivity is not embedded within a discrete spatial scale, rather the process of the politics of scale(s) results in the construction of a separate relationally constructed space of engagement. In many respects this transnational reflexivity within a separate relational space builds upon issues of untraded interdependencies raised previously; that is it provides a separate spatial scale in which additional relationships away from a localised context can be utilised in terms of additional relational assets. Unlike untraded interdependencies these relational assets are not confined to a specific territorial reach, their original scale may have been localised i.e. a space of dependence, now they also exist within a separate collective space of engagement.

2.6 A framework for the analysis of TeleCities: Institutionalism; Agency, Reflexivity and Relationality: Scale

The intention of this analytical framework was to build upon an eclectic range of theories to provide a platform to analyse both empirically and theoretically the TeleCities network; this was done through reviewing and teasing out the applicable theoretical strands of institutionalism; agency and reflexivity; and scale. In doing so the following conclusions can be reached

Firstly, the equation of the local as a place-based variable within the global-local institutional milieu is apparent within the literature. Whilst there is a burgeoning discourse surrounding notions of institutionalism and their interaction or embeddedness within a global context, they tend to centre purely around issues of territoriality and place, resulting in the emanation of a new regional identity and the emerging political space and institutional interactions within that contextual location, rather than the holistic merging of dispersed local actors within transnational networks; here territorial embeddedness is not central. However, this in no way diminishes its theoretical relevance, indeed the central tenor running through this work will be institutionalism and its engagement with the spatial. So whilst the central ethos of institutionalism is paramount, it is the multiple interactions within and across scales within the context of the institution(s) that are essential within the empirical and theoretical strands of this work. Again, I would argue the institution does not need to be fixed to an embedded physical location, rather it is the articulation, separation and interaction between the institutional realms. In this context there are particular similarities between the structure of TeleCities and the constituents behind institutional forms. Whereas a variety of actors come together as a cohesive representation of specific territorially embedded localities, so too do TeleCities members in their formation of partnerships at a variety of levels. All the elements of institutionalism are there; the institutional presence, the interaction and interrelation between those institutions, a defined structural awareness of the institutions and its collectivised formulation into a separate institutional entity, are all vital elements in the production and operation of TeleCities, but with notions of geographical place replaced by the collective space formed by transnational networks.

Further to this, this analytical framework has explored the role of agency, reflexivity and relationality as a means of building clarity and conceptualisation in terms of the processes indicative within transnational networking. The role of agency is seen as a core component in determining how institutional actors progress, reflect and ultimately shape future directions for institutional forms. In this context key elements of the Strategic Relational Approach were deemed as suitable empirical and theoretical avenues of exploration. In particular the collective reflexivity of agency within institutional structures was seen as a key procedural factor within institutional forms. Further to this the SRA provides an opportunity to bring a spatial context to both, institutionalist approaches and the role agency plays in a variety of spatio-temporal conjunctures and the ability of these institutional forms to mediate between space and place. In this context the role of relationality was put forward as a means to explore these socio-spatial constructs and relationships. In particular the role of an instituted temporal space was proposed as a halfway house between the space of flows and localised embeddedness, with relationality seen as a means of capturing localised untraded interdependencies which could then be rearticulated in other localised contexts, but essentially away from their original territorially embedded location. Theoretically these conceptualisations provide a route to explore TeleCities in terms of its *transnational reflexivity*, that is the ability of collective agency to chart institutional direction responding to specific threats and conjunctures as a means of progressing institutionalist entities. Further to this, the relationality of TeleCities can be explored in terms of its spatio-temporal capacity that provides a platform to 'capture' territorialized relational assets within a collective environment.

Finally scale was incorporated to provide a spatial context to the work and to tease out the non place-based characteristics of TeleCities as an institutional form and also to provide a

contextual description of the network's relationality. Although at first glance there is an apparent concrete division behind the separate scales that are significant within this research - the local, transnational and European with each scale firmly nested within its hierarchy, as we have already seen there are a series of contested meanings and a fluidity between scales that places the concept of scale firmly into the realms of abstraction. To go back to the introduction to this thesis and the work of Amin and Thrift (1994b), their contextualisation of the local within the global provides a contextual illustration of the fluidity of scale and how what on the face of it are concrete divisions, actually become part of a cyclical process. That is:

“local initiatives structure responses to processes of globalization and themselves become part of [the] process ... of globalization” (Amin and Thrift 1994b, p257).

To clarify this volatility of scale further and also to incorporate a more concrete understanding of the concept of transnational networking and ultimately TeleCities, we can place the separate theoretical components of this analytical framework, into this conceptual cycle. So within the context of scale, each institutional realm is part of the same scalar articulation of an interrelated process. If we merge the social construction of scale, through an examination of the process of agency within a spatialised setting together with an institutional analysis and begin to spatialise the process of transnational networking, we have the origins of a concrete empirical example of the separation, interaction and articulation of new scales of engagement.

With an analytical context now provided this thesis will now move towards explaining the methodological components of this thesis.

Chapter 3 Methodology

3.1 Introduction

The intention of this chapter is to provide a description and justification of methods of data collection used to meet the central objectives of this thesis as outlined in Chapter One. To do this the chapter is constructed as follows; firstly it will provide a justification in terms of the selection of the three empirical contexts explored in this research, relating them back to the aim of this thesis. Further to this it will explore the methodologies incorporated within the empirical contexts to collect data. Finally this chapter will provide a description of how these methods were incorporated as a means of data collection.

3.2 Justification of the empirical contexts

This thesis uses a multifaceted methodological approach, that provides a holistic and multi-scalar investigation into the roles and purpose of TeleCities. Ultimately it enables a conceptualisation of the network in terms of the four central themes raised in Chapter One; these were:

- To build an analytical framework for the analysis of the formation and operation of the TeleCities network.
- To explore the different spatial intersections and the relationships established through TeleCities.
- To investigate the role played by the network in disseminating policy innovations at differing scales.

- To assess whether the TeleCities network provides European Institutions and sub-national authorities an opportunity for a ‘new geography of governance’.

To develop these themes, a case study approach was adopted. Yin (1994) defines a case study as “*an empirical inquiry that investigates a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident*” (p12). In this regard case studies provide “*a richly detailed portrait of a particular phenomenon*” (Hakim, 1994, p16). To provide this richness in data no singular methodology is assumed, rather within case studies analysis a variety of methodologies are adopted to obtain data and verification from a number of sources. This process of ‘triangulation’ includes methodologies as diverse as historical analysis (through document reviews, interviews, and studying previous reports), qualitative document analysis and interview and analysis of secondary data (Datta, 1996). By adopting an approach that views phenomena and processes from a variety of angles, analysis through triangulation enables a converging of the ‘facts’ (Yin, 1994, p93).

With its utilisation of multiple methodologies, a case study approach allows an examination of the research questions from a number of angles. At the same time it allows an insight into not only the individual case studies but also the intersections between them. This is essential to this research. By adopting a case study methodology, individual components of the analytical framework discussed in Chapter Two can be assessed through specific case studies. Further to this a collective analysis is provided, that is, the three case studies can

build a narrative that describes and enables a conceptualisation of the spatially inter-connected processes within the TeleCities network.

3.3 The Case Studies

The three case studies in relation to the central research questions listed above are:

- An analysis of the TeleCities network in terms of its historical context, current aims and objectives and member perceptions.
- A detailed investigation into the workings of one of TeleCities Work Groups.
- An investigation into the intersection between the city of Hull and TeleCities.

To explore this in more detail let us now take each empirical context in turn.

TeleCities: History; Aims and Objectives; Current Perceptions:

A major aspect of this thesis is to conceptualise the multi-scalar process of transnational networking. To do this a variety of components of the network need to be observed and analysed from a number of directions. Firstly a historical aspect is essential. As outlined in Chapter Two a key theoretical strand of this work is to conceptualise TeleCities through an institutional analysis. To do this it is essential to determine what the historical origins of the network are. To achieve this, Chapter Four, details a variety of European policy contexts, which provides a framework in terms of the external environment that TeleCities has, and continues to operate within. This is important in terms of establishing both a historical and reflexive context to the empirical components of this thesis. With this aspect established, the empirical chapters concentrate upon the processes and events (both internal and external

to the network) that have provided the network with an institutional structure. Empirically this was determined through an analysis of internal policy documents obtained from the TeleCities network and interviews with key actors within and external to the network. Once a historical context to the network was provided, this was followed with a description and evaluation of the network in terms of its current aims and objectives. This was through an analysis of documents obtained from the TeleCities network and interviews with key actors as well as observations at TeleCities meetings and events. This strand builds upon the historical institutional contexts and began the process of an assessment in terms of the networks current institutionalist structure. Finally, to provide a wider contextualisation to the networks collective capacity an online questionnaire was incorporated. By adopting an analytical perspective that explores multiple strands (using multiple methodologies) of the TeleCities network, the intention was to provide a holistic starting point in terms of a conceptualisation of the network that was built upon in the two subsequent empirical chapters.

Case Study Justification

The empirical and theoretical focus of this thesis is TeleCities. As a result any move towards a conceptualisation needs to assess the network in a collective way. It was for this reason that the three way approach detailed above was decided upon. Firstly, it was determined that an investigation into both the historical and present form was needed. Incorporating a historical component into the case study provided ideal foundations to assess the institutionalisation of the network. However it was also felt necessary to bring in a contemporary assessment of the network through an evaluation of its current aims and objectives. This would provide a contextual basis to explore the ongoing institutionalist components of the network and the role of reflexivity within TeleCities. Whilst these two

elements provide a rich qualitative picture of the network, it needs to be noted that in an ongoing capacity, networks like TeleCities involve a wide variety of actors across a wide geographical spread. This component needed to be built into the case study. To incorporate the views of as many actors within the network as possible it was decided to construct an online questionnaire to provide an opportunity to see if a consensus existed in terms of their perceptions of the network, the reasons behind engagement with TeleCities and the benefits they felt they received through their membership. Such an element is vital in pursuing the relationality of TeleCities.

TeleCities Broadband Work Group

With an understanding established in terms of the overall network, the next stage of the research strategy was to build on this through an exploration of the relationality and reflexivity of TeleCities in terms of an analysis of the Broadband Work Group. By studying a specific work group in depth within TeleCities the intention was to provide a deeper contextual understanding of the workings, both in structural and social terms of the network. The goal here was to build upon the institutional components already established and using qualitative techniques explore the social components that are essential towards understanding the collective reflexivity of the network. This was achieved through a variety of methodologies including observations at four workgroup meetings, at The Hague, Ronneby, Gijon and Tallinn, interviews with the key actors within the work group and again through an analysis of TeleCities documents and specific materials provided to work group members. These mixed methods provided a contextual understanding regarding how agency operates within a transnational network and builds upon the institutional components established previously.

Case Study Justification

During the fieldwork period TeleCities adopted a new work strategic framework²². Prior to this a decision had been made to follow one of the work groups during the fieldwork period to provide an empirical basis for the issues raised above. In March 2004, at the Madurodam conference centre as part of the TeleCities event hosted by The Hague, all new work groups were launched. Assessing documentation provided during the event a decision was made to follow “*Overcoming the barriers of the development of the Knowledge Society*” of the new work group schema²³. This allowed an opportunity to attend four incipient work groups attached to this strand of TeleCities new strategic framework. Upon reflection a decision was made to follow the Broadband Workgroup. The reasons behind this were threefold. Firstly from all the work groups attended it appeared the most dynamic (in terms of attendance, discussion and clarity). Further to this background literature and policy documentation research highlighted the importance of broadband in both a local²⁴ and European context. To this end it was felt that the Broadband Workgroup had the most significant chance of progression in terms of its early aspirations. An additional component considered in the selection of the Broadband Work Group was the subsequent involvement by representatives from the city of Hull. Following the actors’ involvement at the local scale and their participation within the work group provided a route of analysis in both localised and European contexts emerging within the confines of TeleCities. In this context I was allowed to attend and observe the workings of the Broadband Workgroup over the next 12 months. This enabled me to identify the key actors to interview within the group,

²² This is presented in more detail in Chapter Five

²³ This strand was considered to be the most indicative in terms of the ‘societal’ strand of concepts connecting to the Information Society that historically the network had promoted.

²⁴ Preliminary work on the Hull case study had already identified how important the role of broadband was perceived to play in a local economic regeneration context.

whilst at the same time allowing me to receive any documentation attached to the work group.

TeleCities and Local Intersections: The City of Hull

The final section concentrated upon a particular intersection between a specific locality and the TeleCities network. The intention was to build upon the previous two empirical contexts again and provide a deeper conceptual understanding of the TeleCities network. By concentrating upon a specific localised context within TeleCities this strand of the research strategy provided rich empirical data in terms of the intersections between the network and the local scale, providing a further conceptualisation in terms of TeleCities as a relational space. This strand was predominately qualitative in its methodological focus. Specifically it identified the key actors who intersect with the local scale and the TeleCities network. However to provide a spatial depth to the process of transnational networking it also delved deeper into local contexts to ascertain if the benefits attached to TeleCities are further embedded within this local context. Methodologically this strand consisted of in-depth interviews and analysis of policy documents that have a direct relevance to these intersections.

Case Study Justification

The city of Hull was selected for a number of reasons. Firstly this research project is a sponsored ESRC CASE studentship. In this collaboration Hull City Council were the industrial partner. As a result there was, an albeit limited, expectation based upon the researcher over and above this, to provide empirical data that would have some benefit to the sponsors. Unlike many CASE studentships, there was very little input for the industrial

partners. Other than meeting the industrial partners at the start of the project no other formal meetings were requested²⁵.

However the benefits of utilising the city of Hull as an empirical case study were numerous. Firstly, Hull have been, and continue to be, one of the network's most active members. They were original signatories when the network launched in 1993 and at the time of writing are the UK representative on the network's steering committee. Because of this, the city of Hull provided an ideal lens to view not only the historical aspects of the network, but also its subsequent trajectory and present day workings. Further to this because of their involvement with the CASE studentship there was a vested interest in the success of this research project. As a result representatives of the City Council and in particular the two members who represented the city in TeleCities were able to provide a "*mode of entry*" (Jones, 1999, p32), both in terms of a localised context and within the two subsequent case studies already discussed.

3.4 Summary

This section has provided an empirical justification for the case studies selected and the methods that will be incorporated as a means of exploring the three central research questions that form the back bone of this thesis. Table 3.1 provides a summary of the methodologies in relation to these three key strands and indicates in which specific empirical chapter these themes are explored. With a justification established in terms of the empirical context of this thesis, this chapter will now explore in more detail the methods that have been selected.

²⁵ When the CASE studentship was initially arranged, the assumption was that the research would investigate a component related to an intended project promoting the role of Hull as a Digital City. However when the research actually started funding for this project had still not arrived. As a result the focus of the research shifted to incorporate elements of the Digital City but in a wider European context. Because of this the usual collaborations expected with a CASE studentship never materialised.

Table 3.1: Strand of Thesis in relation to case study explored within and methods utilised

Theoretical Strand of Thesis	Case Study Explored Within	Method(s) utilised
Institutionalism	TeleCities: History; Aims and Objectives; Current Perceptions (Chapter Five)	<p>Analysis of internal policy documents obtained from TeleCities</p> <p>Analysis of external policy documents with direct relevance to TeleCities external environment (Policy documents from the European Commission developed in relation to ICT, and Information Society Policy)</p> <p>Interviews with selective key actors from within TeleCities, both historically and presently</p> <p>Interviews with key relevant actors external to TeleCities, from the European Commission</p>
Agency and Reflexivity	<p>TeleCities: History; Aims and Objectives; Current Perceptions (Chapter Five)</p> <p>TeleCities Broadband Work Group: Constructing Policy, Reflexivity and Scale (Chapter Six)</p>	<p>Analysis of internal policy documents obtained from TeleCities</p> <p>Analysis of external policy documents with direct relevance to TeleCities external environment (Policy documents from the European Commission developed in relation to ICT, and Information Society Policy)</p> <p>Interviews with selective key actors from within TeleCities, both historically and presently</p> <p>Interviews with key relevant actors external to TeleCities, from the European Commission</p> <p>Analysis of online questionnaire</p> <p>Participation and observation at TeleCities events and the broadband Work Group</p>
Relationality	<p>TeleCities: History; Aims and Objectives; Current Perceptions (Chapter Five)</p> <p>TeleCities Broadband Work Group: Constructing Policy, Reflexivity and Scale (Chapter Six)</p> <p>The City of Hull and TeleCities : Constructions, and Transnational Intersections (Chapter Seven)</p>	<p>Analysis of internal policy documents obtained from TeleCities</p> <p>Analysis of external policy documents with direct relevance to TeleCities external environment (Policy documents from the European Commission developed in relation to ICT, and Information Society Policy)</p> <p>Interviews with selective actors within TeleCities, the European Commission and the city of Hull</p> <p>Participation and observation at TeleCities events and the broadband Work Group</p>

3.5 Methodologies Incorporated

The previous section justified the empirical focus in terms of answering the three central research questions to this thesis. At the same time it has identified a number of quantitative and qualitative methods that are central in the collection of data within these empirical contexts. These are:

- Online Questionnaire
- Observation at TeleCities events and observations within the TeleCities Broadband Work Group
- In-depth Semi-Structured Interviews

These differing methodologies will now be explained in more details, explaining how they were utilised within subsequent empirical chapters.

Online Questionnaire

Due to the wide geographical spread of TeleCities members it was decided that an online questionnaire would be the most appropriate method. As a result a questionnaire was constructed using Microsoft Front-Page²⁶. The strategy behind the design of the questionnaire was centred upon themes developed during the literature review. In this capacity the questionnaire followed the three lines developed in the analytical framework presented in the previous chapter.

²⁶ See Appendix C for a copy of the questionnaire

The questionnaire was divided into four specific areas:

1. Member Profiles
2. Reason behind Engagement with the Network
3. Operation and Perception of the Network
4. Multi-Scalar Relations

The intention behind section 1 was to build up a profile of members; how long had they been a member; who represented the city at TeleCities events; what was their occupation. Section 2 provided a basis for understanding their involvement with the network and potential benefits. Section 3 was interested in the perception of the network in terms of its relationships with other institutions and their perception of what the network actually represented. Finally, Section 4 explored the multi-scalar relations in terms of relationships established as a result of their membership.

The intention was to collect both quantitative and qualitative data centred around these emerging themes. In order to make the questionnaire as simple and practical to fill in the majority of questions were closed questions, which either specified the need to answer 'yes' or 'no', or were based upon a scale system. Here respondents were asked to provide an opinion on a specific question rating their answer from 1 to 5. However to identify themes that are not apparent to the researcher and to give a qualitative context to the questionnaire two questions were kept open²⁷. These related to their original decision to join and three perceived benefits they felt they received from their ongoing involvement with the network.

²⁷ A list of answers of these two open questions is provided in Appendix C

The online questionnaire went live during March 2004²⁸. Members of the network were first informed of the questionnaire via TeleCities electronic newsletter which provided a direct link to the location of the questionnaire. Further to this email requests were sent directly to the listed contact person of individual cities as listed on the TeleCities website. By the end of 2004 the questionnaire had generated 53 individual responses from the 120 cities listed as TeleCities members when the questionnaire was launched online. This represents 44% of the TeleCities membership. Of those 8 were direct responses to my email request informing me of their city's lack of involvement with the network. In total 45 cities, representing 37% of the TeleCities membership completed the questionnaire. The cities were:

Amaroussion; Antwerp; Barcelona; Berlin; Birmingham; Bologna; Camden; Cologne; Copenhagen; Edinburgh; Eindhoven; Espoo; Federikshavn; Gdansk; Girona; Glasgow; Goteborg; Hagen; Hull; Leeuwarden; Leipzig; Lille; Linkoping; Liverpool; Malaga; Metz; Munich; Munster; Ostrava; Oulu; Prague; Ronneby; Salerno; Santiago de Composte; Sienna; Stockholm; Tallinn; Terrassa; The Hague; Tranass; Turku; Valladolid; Vantaa; Vienna; Yalova

The following cities indicated that they were no longer active in the network.

Belfast; Bristol; Cardiff; Leeds; Newcastle; Nottingham; Nuremberg; Sheffield

²⁸ The website is still live at the time of writing; it is available at <http://ahewitson0.tripod.com>.

Completed questionnaires were sent directly to the researchers email account; closed answers were subsequently coded and analysed using SPSS, whilst open questions were analysed using content analysis. Abercrombie et al (1988) define content analysis as:

“The analysis of the content of communication, which involves classifying concerns in such a way as to bring out their basic structure. The term is normally applied to the analysis of documentary or visual material rather than interview data, but the same technique may in fact apply to the analysis of answers to open-ended questions in survey research. Researchers create a set of categories which illuminate the issues under study and then classify content according to these predetermined categories. It is essential that the categories are precisely defined to minimize bias resulting from the judgement of different investigators. This technique produces quantitative data which can be processed ... and analysed statistically. However content analysis is sometimes criticized as involving subjective judgements which may create data that are quantifiable but not valid” (Abercrombie et al 1988, p50).

Whilst content analysis will always be charged as ‘subjective judgement’, categorisation was developed with this in mind. Categorisation was not formed prior to any analysis, rather categorisation was based purely upon the discursive qualities of the open answers allowing the categorisations to form themselves, rather than placing content into pre-defined areas to suit the narrative of the research³⁰.

³⁰By placing the emphasis upon emerging themes, analysis followed a grounded theory approach constructing theory through data as themes and issues emerged (Glaser and Straus, 1967).

In summary the intention of the questionnaire was to provide a brief snapshot in terms of members perception of the network from a wide geographical spread of TeleCities members. As a result, as with any questionnaire, the researcher needed to tread a careful path in terms of collecting as much relevant data as possible without making it too long as to detract respondents from completing the questionnaire. In this sense the questionnaire was used to provide a brief background contextualisation in terms of member involvement.

Observations

In light of the limited potential benefits attached to the online questionnaire listed above, observational techniques were also used to add a further qualitative depth to the work. However it needs to be noted that these observational methods were by no means indicative of a more structured ethnography. Rather it was a procedural methodological development; the first level of observation was centred upon what Herzog (1996) refers to as ‘casual observation’ (p37), for example:

“People do casual observation whenever they informally watch what is going on in a setting to get a feel for the situation. Social scientists often do something similar to get ideas for a more serious study later on. The difference is that the scientist is after more than just a ‘feel for the situation’. The scientist tries to determine what the most important variables are and how best to operationalize them, that is what specific features or behaviours to observe”
(p37).

This component was a vital element of establishing a concerted research strategy. Through attendance at an early TeleCities event³¹ prior to the fieldwork period the researcher was able to determine a number of key aspects that would never have been apparent. The organisation of events, the social components of the network and the identification of key actors were all established at an early stage. Further to this through the researcher's contacts with the city of Hull, the researcher was able to introduce himself to a number of different members of the network and converse with them regarding the research. From this, further recommendations came regarding key actors and events. This early involvement with the network provided a basis of establishing trust in terms of developing potential contacts that would prove particularly fruitful at a later stage in the research.

The level of observation developed as the fieldwork period progressed, specifically within the case study devoted to the Broadband Workgroup. The launch of the Broadband Workgroup represented the researcher's second attendance at a TeleCities event, as a result he was aware of the environment he was in and the procedures taking place. Further to this the researcher's attendance at the Broadband Workgroups opening session was indicative of the 'storming' process apparent within early group formation and construction. Although the researcher made it evidently clear from the start that any involvement with the group was purely in research terms, his involvement with the group during this 'storming' period helped significantly at later events when the group progressed towards 'forming' and generally stabilisation. As a result of this process the researcher was seen as a member of the group rather than a detached observer and the observational techniques employed during the Broadband Workgroup case study progressed to what Herzog terms 'field observations'. The progression to field observations:

³¹ I attended the TeleCities event in Liverpool in October 2003

“means that the researcher uses a variety of procedures ... supplementing observation with interviews, examination of relevant documents or other outputs produced in the setting and any other techniques that might be useful” (Herzog, 1996, p39).

This multiple methods approach was adopted within the Broadband Workgroup. By observing the ongoing processes within the group, the researcher was able to explore new lines of inquiry as and when they arose, exploring the Workgroup as a whole. Again this is a key feature of field observations, again Herzog notes:

“ [t]he goal of field observation is an in-depth understanding of the dynamics of the setting as a whole, how it works as a system” (ibid).

This element leads to the final significant component of field observations. Because it concentrates on the workings of the system, it is by its nature a fluid methodology. In this capacity it does not assume a predisposition on the researcher to go into the field with a firm predication of the outcomes. Herzog notes that:

“[m]ost research methods ... are designed to test specific predictions or hypotheses made in advance. This is not true of the typical field observation. There is a general goal of understanding the system under observation, but usually there are no specific prior predictions to be tested” (ibid).

This was an essential component of the research methodology³². As an analysis of the Broadband Workgroup was an ongoing process, a methodology was needed that was purely organic in terms of interactions, descriptions and analysis within the “*setting as a whole*” (*ibid*)³³.

During workgroup sessions, attendees introduced themselves at the beginning of the meeting. This provided the researcher with an opportunity to explain his involvement with the workgroup and clarify the researcher’s role, whilst at the same time obtaining permission to record the meeting using a Dictaphone from workgroup members. This provide a detailed audio record of work group meetings. These meetings were transcribed and incorporated into the workgroup empirical chapter, building a narrative in terms of member involvement and progression of the workgroup.

In-depth Interviews

The final methodology incorporated into the research strategy was the use of in-depth semi-structured interviews. As it has already been noted, the use of observational techniques provide a firm basis to assess and identify key actors within specific environments. This technique was used throughout the research, identifying key actors who were seen to be central to the three case studies selected. Throughout the observational process it emerged that the key actors within all three case studies were relatively small. For instance, although the TeleCities membership is potentially representative of over 120 European cities, actual

³² As with the construction of specific categories within the content analysis referred to earlier, grounded theory was utilised during observations as a means of drawing emergent themes from the data.

³³ The layout and analysis of Chapter Six is indicative of this process. Because the methodology adopted was ongoing and organic the chapter is presented in a linear and chronological order.

pro-active participation within the network was significantly lower than this³⁴. However, key actors, past and present, were identified and approached via email requesting an interview. This process started with a interviews with Dave Carter, representing the city of Manchester and Steve Fleming representing the city of Hull. This started a 'snowballing' process' where key actors were asked to provide details of other potentially significant actors who were or had been involved with the network. This process continued during the observation periods, meeting frequently on a social basis with, the presidency, members of the TeleCities management team and members of the steering committee. A similar process took place within the other two case studies. As a result by the end of the fieldwork period 41 interviews were carried out with 32 different actors³⁵.

Interviews lasted between 30 minutes and in exceptional cases almost 2 hours, however in general average interviews lasted approximately 1 hour. Interviews were constructed in accordance to the case study under investigation and due to the semi-structured nature of the schedule were very much informant-led and dependent upon that actors individual context. The advantage in adopting a semi-structured approach is that it provides sufficient structure to facilitate comparative analysis, whilst enabling an opportunity to explore any other avenues that emerge throughout the interview. In all cases progressive focusing was included. This technique allows an evaluation of the data throughout the fieldwork period enabling the research to move with whatever themes and issues developed. As a result the interview became further refined throughout the fieldwork period, omitting questions that were not producing relevant or productive data and incorporating further themes that were

³⁴ Attendance figures provided in Chapter Four provide a breakdown of city involvement with the network over the last four years

³⁵ See Appendix E for details of interviews

³⁷ See Peterson and Sharp, 1998 for a detailed description and assessment

developing. All interviews were transcribed and analysed using the qualitative software package Atlas Ti. Again a grounded theory approach was utilised to construct emerging narratives that ultimately lead to what Glaser and Straus (1967) term 'theoretical saturation', with the final questions in all case studies repeating elements and themes uncovered earlier in the study.

3.6 Conclusion

This chapter has provided a justification for the case studies to be incorporated within this thesis. Further to this it has explained the rationale behind a variety of methodologies that are incorporated to collect data.

With a methodological context provided this thesis will move towards an examination of the policy environment that TeleCities operates within.

Chapter 4: Technology, Public Policy and Transnationalisation in the European Information Society

4.1 Introduction

The intention of this chapter is to explore a variety of policy initiatives at the supranational scale. This will form a contextual basis for the construction, reflexivity and relationality of TeleCities which will be explored later in this thesis. Further to this it will provide a starting point to observe how policy innovations are disseminated at a variety of scales. To do this the chapter will trace the emergence of a new receptiveness at the European scale to engage with local initiatives, through a detailed analysis and review of the complex world of ICT policy. Starting from the 1980s with the ESPRIT programme it will place the ICT policy procession firmly within the context of the developing European Framework Programmes and their particular relevance and receptiveness to the local scale. Further to this, this chapter will chart the transition away from technology policy *per se* towards a more human-centred technological framework in the form of Information Society policy.

4.2 Technology Policy within the European Union

The history of Research and Development (R&D) dedicated to technology within Europe has a long and complex history going back to the 1960s³⁷. However from 1980 onwards, and in particular throughout the 1990s, the role of technology within European R&D was to become a key priority:

“Before the 1980’s EU activities designed to promote research and technological development (RTD) were pretty small beer. By the mid 1990’s

funding for research was the third largest item of policy expenditure in the EU's budget (Peterson and Bomberg, 1999, p200).

There are a number of reasons behind this significant drive towards increased policy expenditure at the European level. Firstly, at a political level there was a considerable awareness within Europe, and especially within the Commission under the Jacques Delors presidency, that if Europe was to compete in the emerging global market place then it needed to grasp and embrace the rise in new technologies before its competitors (Japan and the USA) did. In this context the convergence of information and communications technologies (ICT) was beginning to have profound implications for the transfer of data on a global basis. Although the futurology of the 'global village' had long formed part of the ideology behind a unified Europe, from the 1980s onwards the role of ICT and the emerging market for telecommunications was shifting the concept away from rhetoric towards being the central foundation of a Europe that could compete and lead on a global basis. In this context ICT within the technology strand of European R&D was to witness an exponential rise in technology policy expenditure from the 1980s onwards.

The first specific European funded policy programme that makes reference to ICT was the European Strategic Programme for Information Technology (ESPRIT) set up in 1984, initially as an independent body outside the jurisdiction of any specific administrative body within the Commission. Whilst ESPRIT provided the foundations for ICT in a European context, the role of telematics³⁸ within European technology R&D programmes began the

³⁸ Although the phrase 'telematics' is now generally encapsulated within the notion of ICT, in the late 1970s telematics was seen to embrace the 'increasing integration of microelectronics, IT and telecommunications' (Peterson and Sharp, 2001, p73)

following year, in 1985. through the RACE³⁹ programme. Although the concept of telematics as a buzzword can be traced back to the late 1970s (Peterson and Sharp, 1998, p73) it was not until RACE, as part of the 2nd Framework programme (1987-92) that a specific programme dedicated to telecommunications was implemented.

Whilst both programmes were innovative in terms of their subject orientation, their development also represented a transitional phase in the sense that they began to alter European funding mechanisms and the culture of R&D through an insistence on transnational and multi-sector collaborative working patterns. In this sense the core ideology behind ESPRIT and RACE was to stimulate transnational linkages that would lead to an awareness of market opportunities beyond home borders and greater understanding of developments in the global economy⁴⁰ (Peterson and Sharp, 1998, p6).

The success of both programmes in terms of their collaborative nature and timely assessment of the importance placed upon ICT and telematics as a driver for increased global competitiveness was acknowledged in 1987 when DGXIII (Telecommunications) took over the responsibility for both programmes. In doing so DGXIII incorporated both programmes into its framework, with the intention of expanding activities with a specific focus on telecommunications and building upon the collaborative nature of technology transfer and innovation that had been central to both the ESPRIT and RACE programmes (Peterson and Sharp, 1998, p73).

Technology Policy and the emerging Information Society

³⁹ Research and Development in Advanced Communications Technologies for Europe

⁴⁰ ESPRIT itself was based upon Japan's Very Large Scale Integration (VLSI) programme (Peterson and Sharp, 1998, p6)

Although the legacy of both the ESPRIT and RACE programme provided the initial underpinning for a more trans-European collaborative working environment, in the mid-1980s engagement in the European research arena was predominately the domain of the consultant and the research institute. At this stage the research agenda was firmly dominated by a linear 'technological push model' where research was carried out by research agencies and then disseminated predominantly within the industrial sector. This was to change in the 1990s when the research agenda shifted towards the potential role of technological applications in a societal context.

This transition can be seen in terms of a progression of the cultural shift started by ESPRIT and RACE moving towards a more collaborative basis for research. This shift towards a research agenda focused upon end-users and a more inclusive orientated technological policy push was embedded within the rapid societal, economic and cultural change that the rapid rise in new technology was bringing on a global basis. Politically and theoretically this transition has been placed within the concept of the information society.

The Information Society

Although the identification of the 'Information Society' (IS) can be traced back to Machlup in 1962 it is only in recent years that the concept has begun to carry any real currency. In particular the work of Daniel Bell and his "The Coming of the Post-Industrial Society" (1973) set the scene for future theorists in terms of its seismic assessment of the change ahead. Whilst Bell placed his analysis of the transition between industrial and post

industrial in terms of a shift from manufacturing to a service orientated economy, other theorists have built upon the concept examining it from a variety of viewpoints⁴¹.

By the early 1990s the variety and complexity of the work carried out by theorists was leading to a conceptualisation of the IS as a meta-narrative that not only encompassed the economic aspects of the change but also placed this new paradigm in a wider socio-economic context. For proponents of the IS this shift is viewed as monumental as those encountered in the Industrial Revolution⁴².

Throughout the 1980s and early 1990s there was considerable debate within academic circles surrounding the actuality of the IS concept. Webster (1994, 1995) was amongst the first to critique the all-encompassing conceptualisation of the IS, noting that in general five key elements (the technological, economic, occupational, spatial and the cultural) have been used, often in isolation, by theorists to contextualise and conceptualise the emerging IS. As a result he argued that the conceptualisation of the IS as a meta-narrative was often built on vague and misguided notions. However by the mid 1990s, with the increased use of digitised information, advanced telecommunications infrastructures and applications, the concept began to lose its futurologist associations and began to resemble a coherent understanding of the subsequent change ahead. With the rise of the Internet, by the early 1990s the concept had shed its conceptual origins and made that rare shift from the domain of the theorist and academic to that of the politician.

⁴¹ See for example Castells (1989) on the informational mode of development.

⁴² See for example the futurology of Alvin Toffler and in particular 'Future Wave' (1980).

4.3 European Governance and the Information Society: 1990 - 1996

In a European context, of all the scales of governance, none has embraced the ideology behind the information society as vehemently as the European Commission. The eagerness behind this engagement can be traced back to the rise of the global economy. As we have already seen, at the supranational level, politically there was deep seated concern regarding the future economic capacity of Europe in terms of its capability to compete with its major competitors. By the early 1990s, Europe was responding politically to the perceived competitive edge it believed the USA had gained through the development of the Clinton/Gore administrations National Information Infrastructure (NII) (Dai, 2000). The origins of the NII were directly wrapped in information society rhetoric, with the new electronic infrastructure deemed as central to the USA's domination of the information age as its transport infrastructure had been the industrial age. Responding to such rhetoric, the NII was a key component in influencing a significant policy shift at the European level that would lead to a plethora of policy documentation espousing an integrated and cohesive Information Society for Europe.

In the context of concerns over 'European competitiveness' and in response to the NII, the Commission responded by shifting its linear technological push model of promoting technology via large corporations, as had been the case with previous strands of technology policy, towards a more holistic approach centred upon end users and applications. The result was that Commission embarked on one of its largest policy initiatives:

"Compared to any other major technological programme sponsored by the EU in the past, the scale and scope of the current European policies towards creating an information society in Europe is unprecedented" (Dai, 2000 p20).

Politically, the starting point for this new direction can be traced back to 1992 with the Maastricht Treaty. Whilst the Maastricht Treaty would go on to have much wider implications on European integration and competitiveness throughout the next decade, in the context of this research its distinct legacy was to position research as a socio-economic activity with a proviso to develop through *'demonstration projects that incorporated innovations developed in EU programmes (Peterson and Sharp, 1998, p116).*

This cultural shift was subsequently elaborated on in 1993 with the publication of the Delors White Paper on Growth, Competitiveness and Employment (CEC 1993). The Delors White Paper was significant for a number of reasons. It shifted the role of technology policy away from its more abstract orientated connotations and placed it as a central component in Europe's bid to compete on a global basis. To do this the Delors White Paper took the role of technology as a discreet and autonomous entity and interpreted the pursuit of technology policy as a process of innovation that would be central to increasing Europe's competitiveness. Further to this, it shifted the connotation of what technology policy actually was, placing it as a key component of other more socially oriented sectors, as Peterson and Sharp point out:

"Perhaps the White Paper's most important legacy for technology policy was its emphasis on background measures such as education, training, risk capital and technology transfer, as opposed to spending on research per se" (Peterson and Sharp 1998, p129).

This emphasis on 'background measures' was significant in the sense that pure research was now secondary within a new agenda that emphasised *"societal needs as a basic*

starting point for designing technology policies” (Dai, 2000, p23). Further to this it was also seminal in rearticulating discourses around the IS as a key motivator in implementing its vision:

“In insisting that the EU had to prepare for the information society, develop communications infrastructures and rethink the very nature of work, the White Paper endorsed the view that Europe had to grasp the nettle of a twenty-first century, post industrial economy” (Peterson and Sharp 1998, p129).

The Delors White Paper represented a seismic shift in terms of technological research policy. By increasing the emphasis of technology as *the* key driver for Europe’s economic future, the White Paper had laid the first foundations towards an overarching strategy of an inclusive European Information Society that would dominate the political landscape at the supranational level for the next decade and beyond.

The Bangemann Report: Legitimising the Vision

With the foundations laid towards a research agenda that had the rhetoric of the IS at its core, the European Commission was now placed as the central supranational institution to realise these ambitious objectives. In terms of policy directives, the most significant of these following the White Paper was the formation of the Bangemann group and their subsequent report *Europe and the Global Information Society* (CEC, 1994a)⁴³. This report proved to be enormously influential in terms of providing political legitimacy for the ideology of the IS, especially in contextualising it as the central foundation towards Europe’s future economic well-being. As a result the Bangemann report has been used for

⁴³ Commonly referred to as the Bangemann report

almost a decade as the key European policy-oriented text in justifying and legitimising this new political directive, as Paschal Preston points out:

“The Bangemann report had more major and lasting influences on the framing of subsequent EU policies for ICT research and communications services. Indeed, for some years following its publication, this report was repeatedly cited as a sort of ‘bible’ or master mantra by Commission documents and officials dealing with a wide spectrum of industrial and social policy directives” (Preston, 2003 p40).

Historically the Bangemann report was to have two central legacies. Firstly by building upon the Delors White Paper and responding to the perceived threats from the USA and their NII, the report emphasised the need for a comparative European information infrastructure, to be achieved through a liberalisation and national deregulation⁴⁴. The Bangemann reports second legacy was to build upon the Delors White Paper with its concerted shift towards ‘societal needs’ as a basis for technology policy. In particular the Bangemann report is notable for emphasising the societal context of the route ahead rather than presenting it in a purely technologically prescriptive context. As Preston points out, such a shift was central in moving R&D in a more user-orientated direction:

“The Bangemann report’s most obvious influence was to insert the term ‘information society’ as the key term in the vocabulary rather than IT or ICT.

⁴⁴ The issue of a liberalised telecommunications infrastructure had been on the European agenda since the mid 1980s when the Commission recommended the liberalisation of telecommunications on a pan-European basis through its Green Paper - *Towards a Dynamic European Economy* (European Commission 1987). After a period of intense negotiations between member states and the Commission a compromise was reached through the Open Network Provision, which was adopted in 1990. This provided the beginning of the process that was to lead to a completely liberalised telecommunications infrastructure by 1998.

This semantic shift was meant to reflect a greater emphasis on demand side rather than the technology centred approaches to R&D” (Preston, 2003 p40).

By placing greater emphasis upon the demand side, in effect the Bangemann report was initiating a move away from telematics promoted through diffusion within the private sector. Further to this, the report represented a shift away from the technology push model that had been dominant within the R&D arena. Rather, the central narrative within the Bangemann report was upon initiating research directives based upon applications⁴⁵:

“Today technology is in search of applications. At the same time, societies are searching for solutions to problems based on intelligent information” (CEC, 1994a, p21).

By calling for applications-based research, the Bangemann report represented a perceptive acknowledgment that in order to meet the challenges demanded of a European Information Society, the role of technology needed to be encapsulated in a societal context. Indeed the central tenet of the report was not concerned with technology *per se* but rather the application of that technology in creating sufficient critical mass throughout Europe:

“We can only create a virtuous circle of supply and demand if a significant number of market testing applications based on information networks and services can be launched across Europe to create critical mass” (CEC, 1994a, p22).

⁴⁵In the context of the policy documentation relating to the IS, applications are defined as Telematic services available in the professional and private spheres such as telework, telemedicine, tele-education and teletraining or telemanagement of traffic.

It was in this capacity that the role of applications was deemed central in diffusing the potential benefits of a European information society:

“Initiatives taking the form of experimental applications are the most effective means of addressing the slow take-off of demand and supply. They have a demonstration function which would help to promote their wider use” (CEC, 1994a, p22).

To ‘launch the information society’ the Bangemann report proposed the following ten application areas:

- Distance learning
- A network for Universities and Research Centres
- Telematic services for SMEs
- Road Traffic Management
- Air Traffic Control
- Health Care Networks
- Electronic Tendering
- Trans-European Public Administration Network
- City Information Highways

The ten application areas had a strong emphasis towards the public sector, and for the first time in a R&D context the potential role of cities and regions was emphasised:

“It is necessary to involve local, metropolitan and regional administrations in their development. Cities can have an extremely important role in generating early demand and also in promoting an awareness among their citizens ... In certain cases, local administrations could demonstrate the benefits by assuming the role of the first mass user” (CEC, 1994a, p22).

Whilst there had been a limited amount of engagement with cities and regions and the Commission regarding ICT previously, the Bangemann report was seminal in the amount of emphasis it placed upon their potential role. By actively courting their involvement Bangemann was in effect offering cities a potential route of engagement at the European level that was previously unheard of. In doing so it was for the first time welcoming non-traditional research partners into the wider European technological research arena.

The Legacy of Bangemann: The Information Society within Emerging European Political Discourses

The Bangemann report even at this early stage had been enormously influential in the sense that it had shifted the focus of research away from technology as an isolated entity and bound it within a discourse of societal inclusivity. By incorporating applications as a necessity and placing cities and regions as key actors within that process, the report in effect provided a new playing field for previously excluded stakeholders.

The foundations laid down by the Bangemann report were built upon when the European Council met in Corfu in June 1994. At the meeting, the Bangemann Report was acknowledged, comments raised and subsequently elaborated on in “Europe’s way to the

Information Society” (CEC 1994b). Whilst the report mainly followed Bangemann’s emphasis on the necessity to liberalise telecommunications and their regulatory frameworks, it confirmed Bangemann’s commitment to applications based research as a core driver towards a European Information Society. At the European Council meeting in Corfu the shift away from research as an abstract concept in terms of its socio-economic benefits was extended with an emerging narrative of research as a necessary signifier and contributor towards employment opportunities:

“Research projects and experimental applications must be moved from the laboratory into real life in order to create new markets and new job opportunities” (CEC 1994b, p11).

With the role of applications-based research further emphasised and a call to move these ‘experiments’ out of the laboratory and into real life, the report followed the narrative developed within Bangemann, emphasising the potential role cities and regions have to play in ‘bottom up’ solutions:

“Initiatives will be designed and set up in a bottom-up fashion by the private sector, possibly in partnership, for those applications which are related to public interest or influenced and regulated by public authorities, with Member States, regions and cities” (CEC, 1994b, p11).

Whilst we have already seen that the Bangemann report signified a transition away from the technology push model of previous R&D programmes, the emerging role of cities and regions in this shift was becoming more apparent with each new policy directive. In doing

so policy directives were developing a much more concerted narrative of inclusivity and cohesion than had been the case previously. Whilst there was no doubt that The Bangemann report espoused the benefits of the free market and its neo-liberalist aspirations within the information society, this was at least matched with a socially orientated perspective that envisaged an 'information society for all'. This trend continued through the next stage of substantive policy directives emerging from Europe and in particular the installation of a group of High Level Experts. Their "*Working Document on the Social and Societal Aspects of the Information Society*" (CEC 1995) report was influential in the sense that it was devoted to the consequences of the information society from the citizen's perspective. The report took the core social and societal strands from both the Bangemann and Europe's Way to the Information Society reports and attempted to construct them into a short term overarching strategy:

"The main purpose of the Group is to aid the Commission in its formulation of policy and in launching debate in areas of immediate strategic social and societal concern to Europe. Six themes have been selected. They are by no means a comprehensive approach to the social and societal aspects of the information society. Rather, they reflect the top agenda items for the Commission in this area over the short to medium term" (CEC 1995, p1).

The six themes were:

- Employment
- Working Conditions and Work organisation
- Education and Training
- Health
- Labour markets
- Regional and Urban Cohesion

Although the six themes had specific synergies with the previous reports (especially the Bangemann report and its ten applications to launch the information society), the notable addition from the High Level experts was the inclusion of a theme concentrating upon Regional and Urban Cohesion. The inclusion of a strand dedicated to the regional and urban scale is significant for a number of reasons. Firstly it positions the urban and regional scale within the emerging policy directives. Previous to this report the regional and urban scales were only of interest in terms of their role as disseminators of applications. The report offers the first example of the urban and regional scale recognised as an actual arena of implementation and engagement in terms of a European-wide information society. Second, it was also seminal in the sense that it binds technology with the regional and urban scale in terms of its potential social and economic capacity, noting that the take up of technology could lead to a divide in terms of a ‘fast and slow track information society’. In doing so the report represents one of the first examples to acknowledge the existence of a potential two tier information society.

By exploring the potential benefits of telematics to the urban and regional scales in terms of its social and economic capacities, the High Level Group of Experts were cementing a process where technology and subsequent policy directives shifted away from previous economic-centric approaches towards a recognition of the cohesive potential of technology. This element formed the core of their interim report “Building the European Information Society for Us All, First Reflections of the High Level Group of Experts (CEC 1996d), where they stressed the need for:

“an integrated EU approach to the information society in order to increase social cohesion [...] The Group proposed that social policy merited at least equal consideration with economic policy in formulating a European approach to the information society” (Gibbs, 2001, p78).

European Governance and the Information Society: 1990 - 1996 Summary

By 1996, the shift towards a R&D framework that placed the social in parity with the economic was complete. This represented a significant shift away from policy that was overtly technological towards a more human-centred approach. In the context of this research, the transition has two important elements. Firstly, the emphasis placed upon applications represented a significant shift in terms of engineering policy outcomes. By removing the emphasis upon technology and replacing it with the application of that technology, the Commission moved from a technology push model towards a policy push model. Secondly the emerging policy directives specifically targeted cities as a potential partner in achieving policy outcomes, with the Bangemann report explicitly emphasising the potential role cities had to play in both generating demand and promoting awareness to their citizens. This was taken a substantial step further with the Group of High Level

Experts and their “*Working Document on the Social and Societal Aspects of the Information Society Report*” (CEC 1995) where the role of cities and regions is targeted as a key scale of engagement by the Commission regarding social cohesion.

4.4 Realising the Vision: Cities as a participatory actor within the European Information Society?

With a context now set for the emerging and expanding policy directives underway by the mid 1990s, the chapter will now explore some of the specific funding framework opportunities that were developed as a result of this shift with the intention of bringing cities into the research process.

Telematics Application Programme (TAP)

The first significant legacy of the Bangemann report in terms of initiating a new funding culture at the European scale, came when the Commission launched the Telematics Application RTD Programme with:

“decision 94/801/EC of 23rd November 1994, the Council adopted a specific programme for research and technological development, including demonstration, in the field of telematics application of common interest⁴⁶. (1994 – 1998) (referred to as the Telematics Application Programme (TAP))” (DGXIII Telematics Applications RTD Programme, 1999, p5)

The move towards a more societal context espoused in particular throughout the Bangemann report was a key component in TAPs three main strategic aims, which

⁴⁶ “Applications of common interest” is used to refer to systems (hardware and software) and/or teleservices of common interest teletraining, (teleworking, telemedicine etc) which use information and/or communications technology (DGXIII Telematics Applications RTD Programme, 1999).

emphasised the need for the programme to promote technology in terms of 'public interest', 'creation of employment' and 'improving the quality of life and the environment'

At its launch in 1994 TAP was allocated a total budget of 843 million Ecu representing a 6.9% share of the total 4th Framework Programme's Budget. The beginnings of TAP represented the first substantive programme to tackle head on the challenges laid down in the Bangemann report. In particular at its core was Bangemann's call for the development and support of applications-based research in the field of telematics, with a particular emphasis placed upon 'user-led' projects. By user-led the emphasis was on those specific actors and institutions that would potentially benefit from the research to play a significant role in the process. In this context TAP was the first programme to break the R&D technological policy push model and provide a funding framework that was entirely user-led. Within this new user-led context TAP operated within a five stage development plan with users involved at every stage of the project; the five stages were:

- Analysis of user needs
- Translation of user needs into functional specifications
- Building of a demonstrator
- Validation of the demonstrator with users in real-life situations
- Elaboration of an exploitation or technology implementation plan

The final component of TAP that differed markedly from previous European funding initiatives was that it was constructed around a targeted research agenda with

application areas directed towards having an impact on a societal context. This approach differed markedly to R&D programmes of the past in the sense that previously the research area was constructed around a range of generic topics rather than the specifics laid down in TAP. At its launch thirteen specific areas were targeted. Table 4.1 breaks these sectors down in relation to their allocated budget.

Table 4.1 application areas and budget allocation of TAP

Sector	Total (millions of ecus)	% of total budget
Telematics Engineering	10,806	1.3%
Support Actions	13,010	1.5%
Environment	28,140	3.3%
Libraries	30,014	3.6%
Information Engineering	37,896	4.5%
Research	48,068	5.7%
Administration	49,538	5.9%
Disabled and Elderly	63,773	7.6%
Urban and Rural Areas	70,361	8.3%
Language Engineering	77,991	9.3%
Education and Training	86,999	10.3%
Health Care	128,160	15.2%
Transport	198,284	23.5%
Total	843.040	100.0%

Adapted from (DGXIII Telematics Applications RTD Programme, 1999 p7)

The intention behind TAP needs to be seen more widely than a supportive new environment to develop and incorporate new technological applications by users. By placing both applications and a new user-led context central to the new research agenda, TAP was also a key component in providing a framework for disseminating applications and creating that critical mass that the Bangemann report had specified necessary as a pivotal signifier of any emerging Information Society. For example:

“Whilst the initial emphasis [of TAP] is focused upon providing the marketability of the technology, effort is also being centred upon preparing the groundwork for the future development of future services. Thus the development of this technology, as a means of supporting the shift to the information society, is evolutionary” (Turner, 1997 p103).

In the context of this research, two components of TAP have particular significance in this developing shift towards a user led application based; Urban and Rural Areas and Support Actions.

Telematics for Urban and Rural Areas

At its launch in 1994 the telematics for urban and rural areas (TURA) sector of TAP represented the most significant and coherent engagement of a telematics initiative aimed purely at an urban or rural context. Within TURA there was a recognition that both urban and rural areas would share the same challenges in their socio-economic development. In particular there was a concern that if both areas could not engage with an effective use of telematics, they could miss out on the significant employment and commercial opportunities presented within the emerging IS. Intrinsically the intentions mapped out by

TURA were those laid down within the Bangemann report, with its dedication to the application of new technology in societal context, especially in terms of its inclusivity.

Between 1994 and 1998 TURA received an 8.3% share of the overall TAP budget representing 70361 ECU (see table 4.1). Organisationally TURA was organised around six specific topic areas, these were:

- Telework,
- Business Organisations,
- Tourism and Cultural Heritage,
- Regional Development,
- Cities
- Social Integrations.

Telematics for Urban and Rural Areas: Cities

The Cities dimension of TURA was instrumental in providing the first route for urban areas and regions to engage with applications based research in a user led context. Although TURA was in effect active as part of TAP from 1994, it was not until the end of 1995 that the sector funded its first project within the Cities strand, this was subsequently followed up with four further projects in early 1996. Table 4.2 shows the focal point of these early collaborative ventures and the cities who participated

Table 4.2 Partners and project foci: TURA funded projects

Partners	Project Acronym	Focus of project	Starting Date	Duration
Barcelona, Gothenburg, Cologne, Toulouse, Leipzig, Torino, Las Palmas, Bologna	DALI	The aim of DALI was to add value to city solutions for citizens' needs through multimedia telematics products and services. Goals included improving the quality of life of citizens, developing the information environment of SMEs and increasing the productivity of the city administration.	1.12.95	18 months
The Hague, Newcastle, Leeds, Livorno, Rome, Helsinki	EQUALITY	EQUALITY aimed to demonstrate how the quality of life of less favoured European urban citizens can be improved by providing integrated social, health and local civic tele-services using multimedia telematics	1.1.96	2 Years
Antwerp, Nice, Nurmberg, Rotterdam, Stockholm, Joensuu, Strasbourg, Vienna	INFOSOND	INFOSOND aimed to fulfil the user needs of citizens in cities with regard to electronic delivery of information and services. The project offered a wide range of opportunities from easy access to public, professional, economic, educational, scientific and leisure information and services, to voice, mail and video between citizens, local government and enterprises.	1.1.96	2 Years
Olivetti, Antwerp, Nice, Rome	MAGICA	MAGICA focused upon the generation of WWW based multimedia catalogues that would allow user organisations improvements in how they meet their institutional goals	1.1.96	2 years
Between 5-10 cities and regions were involved in each of the three countries of Italy, Spain and Austria	MUNICIPIA	MUNICIPIA created an interactive telematic value-added network to foster improved dialogue and experience exchange between European, national and local authorities, as well as other key local actors. Between 5-10 cities and regions were involved in each of the three countries of Italy, Spain and Austria.	1.1.96	18 months
Karlsruhe, Luleà, Marousi and Nancy.	OSA- TESMA	This project demonstrated the usefulness of high-speed access to multimedia data for administration and planning in European cities	1.1.96	2 years

Adapted from TWEURO website (accessed 21/06/04)⁴⁷

⁴⁷ Available from <http://www.tweuro.com/tura/cities/index.html>

As table 4.2 illustrates, all of the projects funded by the Cities strand of TURA followed the duality of application areas in a societal context that had been initially introduced through the Bangemann report and solidified through subsequent policy directives. In particular the overarching narrative of all the programmes in the cities strand of TURA centred around notions of inclusivity and parity of access for citizens regarding new telematics services, with four of the projects directly addressing the need of citizens' access to services within a local context.

The development of TURA, and in particular its Cities strand, represented two significant milestones in terms of European IS policy directives. Firstly the projects that TURA funded, from the perspective of the majority of cities involved, represented their first major collaboration on a European-scale project. This is significant in the sense that although the role and participation of cities were seen to be a key component in the building of a European Information Society, until this point their role had been purely bound in the rhetoric of the Bangemann report. TURA shifted that and it provided a platform, finances and a culture of receptiveness for those cities willing to take their first steps towards European collaborative working.

Second this shift also represented a significant milestone in terms of the Commission's engagement with cities. As we have already seen prior to the Bangemann report, cities were not even in the funding loop as far as European R&D was concerned. With the Commission's enthusiastic acceptance of the concept of the information society it had embarked on a route that placed issues of inclusivity and social cohesion on a par with its economic objectives, as a result it needed to engage with new partners. In this context TURA provided the first platform for cities and the Commission to engage and collaborate together.

TAP Support Actions - European Digital Cities (EDC)

Whilst TURA represented a new engagement between the Commission and cities, it was still only a small scale collaboration with a limited number of particularly proactive and in the main larger cities engaging in the projects. If cities were to be the dissemination nodes for applications that had been envisaged from the Bangemann report onwards, then it needed an additional platform of engagement.

Although this was recognised within TURA⁴⁸, due to the sectors wide remit of serving both the urban and rural scales in a variety of different strands it did not have the financial muscle to instigate a more visible and inclusive programme. What it needed was a platform that would enable cities to cooperate⁴⁹. This opportunity manifested itself for the Commission in 1995 when it received a bid for a support action as part of the TAP programme. The bid was originally initiated by the networks, TeleCities⁵⁰, POLIS⁵¹, Car Free Cities⁵² and the Eurocities Transport Committee⁵³, with TeleCities ultimately responsible for overall administration of the project⁵⁴. Receiving initial funding of almost 3 million Euros, the overall intention of the EDC programme was to:

“accelerate the deployment of cost-effective solutions responding to a common definition of the “urban demand” for telematic services and applications. The scope of the project covers a number of networking activities by cities, towns and regions with a view to laying the foundations of the Global Information Society as outlined by the G7 World Conference

⁴⁸ Based upon personal correspondence with Stephan Pascall former head of TURA.

⁴⁹ This aspect is explored in Chapter Five.

⁵⁰ The role of EDC within TeleCities is discussed in more detail in the next chapter.

⁵¹ A union of 55 cities collaborating on issues related to transport and the environment.

⁵² A network of 60 cities dedicated to innovative solutions regarding problems created by car use in cities.

⁵³ A sub-group of Eurocities exploring issues connected to transport in major cities.

⁵⁴ From interviews with a number of key actors within the Commission and TeleCities it is apparent that the Commission actively encouraged members of TeleCities to bid for the EDC programme.

of February 1995, the Delors White Paper and the Bangemann Report”

(Project description from TWEURO website. Accessed 21/06/2004)⁵⁵

The EDC programme differed markedly from the previous applications-based research that cities had been carrying out within TURA. Firstly the EDC represented a major increase in funding compared to the funds available from TURA and as a consequence it offered long term stability for those involved. However the major substantial difference between previous collaborations between cities and the Commission was the fact that the EDC programme was not purely concerned with developing applications (although that was an aspect of the programme), instead it's intention was to become *the* platform that would increase the visibility and opportunity of the Commission's Information Society programme to individual cities throughout Europe.

The EDC programme consisted of regular dissemination activities in the form of newsletters to cities within the programme, the organisation of four conferences a year with a specific thematic focus dedicated to the needs and requirements of cities and local authorities, the maintenance of the EDC website. and the administration and co-ordination of working groups.

Specific topics on work groups within EDC were selected on the basis of the programme's overall objective to lay '*the foundations of the Global Information Society as outlined by the G7 World Conference of February 1995, the Delors White Paper and the Bangemann Report*' (*ibid*). Because of this the work group topics had very close alignment with the European Information Society policy directives and in particular the Bangemann report (see table 4.3).

⁵⁵ Available from <http://www.tweuro.com/tura/cities/index.html> accessed 21/06/2004)

Table 4.3 Comparison between EDC Work Group Topics and the Bangemann report

EDC Work Group Topic	Bangemann Application Area
<ul style="list-style-type: none"> • Environment • Employment and teleworking • Healthcare • Quality of life for disadvantaged people • Education and training • City information highway and public administration • Teledemocracy • Standards 	<ul style="list-style-type: none"> • Road Traffic Management • Air Traffic Control • Telematic services for SME's • Health Care Networks • Distance learning • A network for Universities and Research Centres • Electronic Tendering • Trans-European Public Administration Network • City Information Highways

(Source CEC 1994a and Mino, E. 1999)

The EDC programme represented a significant shift for the Commission in terms of its dissemination of IS policy directives. The funding and time scale attached to the programme showed an unprecedented commitment from the Commission in terms of their support to cities and their potential contributory role in building a European Information Society. Although TURA had a strand devoted to cities within its framework, as we have already seen this was relatively small scale and at that stage the domain of a relatively few progressive, and in the main, larger European cities. In many ways the role of the EDC programme from a Commission perspective was to counteract this and build upon the notion of inclusivity that was a dominant strand of the IS policy. With the EDC, the Commission provided a 'shop window'⁵⁶ for cities and local authorities that increased the visibility of European IS programmes and began a process

⁵⁶Interview with Tapio Rissanen European Commission Project Officer for EDC

of engagement with cities in that process. In this context EDC was transitional in that it offered cities a dedicated platform to come together and explore the potential benefits of user-led application based projects. Until the project finally finished in 1998, for the majority of cities involved the EDC programme represented their first interaction and collaboration on a European basis.

Integrated Applications for Digital Sites

In 1998 the Commission through DGXIII launched the Integrated Applications for Digital Sites Programme (IADS). The intention behind IADS was to build upon the work carried out in TAP in generating public demand for user-based telematic applications within cities and regions. However rather than separate telematic services within thematic strands as had been the case with TAP, its intention was to bring these strands together within individual projects. So any successful bid within the programme would need to include at least three of the application areas from TAP.

“Over the last ten years telematics applications research has proceeded on a sector by sector basis and in so doing has achieved an impressive array of results ... The time is now ripe to build on this past success and move towards an integrated approach to applications ” Integrated Applications for Digital Sites” projects in 1998.” (DGXIII, IADS. Project Summaries 1998 p1).

In the short term all IADS project deliverables were dedicated to the marketing of new integrated system and service delivery platforms within cities and regional areas. Through this approach the Commission was laying down the foundations for Europe’s information society

“Projects have been launched and each will lead to the marketing of new system and service platforms at the beginning of the next decade. Beyond that, the EU’s objective is to have created, within the next ten to fifteen years, the ideal digital zone: a region, city or rural area where most services can be accessed on-line in a cost-effective and user friendly manner. This ideal may be seen as the precursor of a fully matured European Information Society” (DGXIII, IADS. Project Summaries 1998 p1).

However whilst the application area was to be implemented within either a city or a regional context, IADS represented a shift away from the dominance of cities as the prominent user-led researcher. Instead with the 5th Framework Programme set to begin, the Commission was welcoming back industry and other external research partners back into the research process with the role of cities prioritised within the validation process.

“The EU’s contribution goes mainly to industry (with 50% of technological development costs being covered), though cities and regions also receive a share (generally 33% funding for the validation phase of the work)” (DGXIII, IADS. Project Summaries 1998 p4).

In a sense the IADS framework was the bridge between the golden age of cities within a European R&D context and a return to the dominance of research institutes and consultancies that had been prevalent previous to the 4th Framework Programme. Whilst the role of the city would not be downgraded within the process of achieving a European information society, its role would change markedly at the start of 2000 with the implementation of the Lisbon Agenda.

4.5 European Governance and the Information Society 2000 onwards: The Knowledge Society

Whilst the integration of the information society into European political discourse represented one of the most significant and comprehensive strategic shifts to date, by the end of the 1990s its underlying legacy was debateable. In part the problem lay with the overtly techno-centric perspective of what actually constituted an information society. Throughout the 1990s although many of the programmes were orientated towards both the technical and the social, in many cases the application area was predominately technical, with the social aspect of applying that application area an assumed outcome. Further to this there was considerable debate as to what had actually been achieved through the plethora of policy directives. The central problem in assessing progress was mainly due to the ongoing ambiguity with the concept. Throughout the 1990s the criteria of what actually constituted an information society were generally wrapped up in an evangelical zeal of urgency and competitiveness with loose references to new technology as the infrastructure of the information age. Other than that the concept was at best variable and at worst considerably vague.

Both these issues were recognised within the Commission with the next wave of IS policy directives constructed around these concerns. To address the overly technical orientation of previous programmes, there was a distinct shift towards a narrative of inclusivity. Although previous programmes had sought to emphasise the potential problems of a digital divide or a two-tier information society, this was never central to the meta-narrative of a European information society. However, although the new wave of programmes placed inclusivity in terms of the citizen as a central component, the core principle behind the new framework again was primarily economic. In this sense the dichotomy of inclusivity and free market economics was merged through a subtle shift in terminology in terms of the policy documentation. Whilst the rhetoric of the

information society was still central, the role of the citizen was deemed to be central in terms of the initiative's economic aspirations, especially in terms of the evolution of the Commission's new buzzword – knowledge. The replication of knowledge at the expense of information was apparent in the emerging conceptualisations of the 'knowledge society' and the 'knowledge economy'. In both cases the notion of knowledge representing the interface between technology and the citizen was central in removing the strong technologist connotations of the information society, and presenting the concept within a socio-economic context.

Further to this the policy documentation was to take on a more overtly national context. As we have already seen, until this point the Commission had been particularly proactive in terms of promoting its policy 'beneath' the national scale through its engagement with cities and regions. This engagement, which was a direct legacy of the Bangemann report, had been devoted to the information society in terms of key application areas and concerns of infrastructure. With the Lisbon Agenda the intention was to build upon these foundations, placing the dual overarching strategies of global economic competitiveness and social inclusivity at its core.

The Lisbon Agenda

The Lisbon Agenda was launched in May 2000. The intention behind the Agenda was to take advantage of the strong economy and make Europe *"the most dynamic and competitive knowledge-based economy in the world"* by 2010. In many respects the ideology of the Lisbon Agenda mirrored the optimism of the early IS policy directives of the mid 1990's, calling for an axiomatic socio-economical shift. For example:

“[T]he EU ... is facing a paradigm shift driven by globalisation and the new knowledge economy. This is impacting on every facet of life and requires a radical transformation of Europe’s economy and society. The Union needs to shape this change swiftly according to its values and its concept of society. We need to reorient our policies to capture the benefits of the new knowledge based society: the current economic outlook – the best for a generation – provides a unique opportunity to do so” (CEC, 2000b, p2).

Table 4.4 highlights the key priorities that were identified to enable this shift

Table 4.4 Priorities and Themes of Lisbon Agenda

Priority	Key Themes
<i>eEurope</i>	The uptake of digital technologies is likely to be the main driver of substantial growth in the EU over the next decade. The challenge for Europe is to create the conditions in which this potential can be realised - to use the productivity gains achieved to make the economy more dynamic and create jobs.
The Internal Market	The Internal Market remains central to the creation of an economic climate that stimulates growth, competitiveness and innovation. However, a number of major areas are still underperforming. These require urgent attention in order to improve the Union’s medium term economic outlook, as part of an overall strategy for structural reform.
Financial Services	To deliver an integrated capital market and a dynamic financial services industry that can serve investors, businesses and consumers alike.
Enterprise	Jobs in the new economy will primarily be created by vibrant small and medium sized firms – with a small number of them growing rapidly to become leading global companies. This calls for a twin strategy. First, we have to build a dynamic business environment in which companies can be created, grow, and innovate within competitive markets. It must be an attractive and simple environment that really helps small businesses and it must be supported by risk capital finance and an effective innovation policy. Secondly, we have to encourage risk taking and the spirit of enterprise. We must... break down the cultural barriers to risk taking at all levels
A European Research Area	Research and technology account for between 25 and 50% of economic growth and is a principal driving force for competitiveness and employment. In the knowledge based society, they will, more than ever, be an engine of economic and social progress. In the global economy, technology and research represents tomorrow’s jobs. Research in Europe remains fragmented and compartmentalised. This is worrying. The Union is again lagging behind its major competitors in key areas – and the gap is widening.
A Review of Financial Instruments	All the Community’s financial instruments must now be reviewed to ensure they can play their full role in preparing the knowledge based society.

(Adapted from CEC 2000b)

Essentially the intention of the Lisbon Agenda was to build upon the previous decades work that had continuously espoused a new socio-economic direction for Europe. However unlike previous directives, within the Lisbon Agenda there was an implicit desire to measure the entire process.

eEurope an Information Society for All

eEurope an Information Society for All (eEurope ISA) was the specific strand of the Lisbon Agenda that was launched both to build upon the many IS directives to date, whilst at the same time shifting the concept of the IS towards the Knowledge. Launched at the Special European Council at Lisbon, the initiative which was subsequently termed eEurope ISA 2002, was presented as:

“a political initiative [which will] ensure that the European Union benefits for generations to come from the changes the Information Society is bringing” (CEC, 2000, p1.)

Although the potential benefits were seen to be a mixture of economic and societal, with the initiative placing inclusivity, entrepreneurialism and cohesion as the three key building blocks, the intended outcome was very much a linear progression in terms of the European Union’s plan to operate within a global context. Indeed if anything the economic aspirations placed upon the initiative far outweighed anything to date with its overtly ambitious plan for Europe to become *“the most competitive and dynamic economy in the world”*(*ibid*). In many respects the ambition was a product of its time. With the role of the Internet opening up new markets and the vast rise in e-commerce and e-business which would ultimately lead to the dot.com boom period, the notion of the information society which Europe had committed to over the last six years appeared

to be materialising. With this in mind at the political level within Europe, the fears of global competitiveness that fuelled the initial move towards a European information society resurfaced. However, whereas previous IS policy directives had predominantly concentrated upon infrastructure and applications, the concern now was upon a perceived skills shortage on behalf of European citizens in terms of their capabilities in a fully fledged knowledge-based society.

Responding to criticisms levelled at previous IS policy directives eEurope ISA adopted a roadmap towards its ambitious objectives, which would allow for a clear assessment of the initiative's progress. To do this eEurope ISA clearly identified a number of socio-economic areas with specifically defined targets to enable Europe's shift towards a knowledge based economy, that would be central if Europe was to play a dominant role in the new global economy. In line with the initiative's narrative espousing the role of the Internet, online services, parity of access and citizen skills dominated the ten specific areas; in total they were:

- European youth into the digital age
- Cheaper Internet access
- Accelerating E-Commerce
- Fast Internet for researchers and students
- Smart cards for secure electronic access
- Risk capital for high-tech SMEs
- .eParticipation for the disabled
- Healthcare online
- Intelligent transport
- Government online

(CEC, 2000.)

Whilst the above thematic areas do have some continuity in terms of the foundations set by the Bangemann report, i.e. ten specific areas relating to infrastructure, social and economic concerns, the major difference was that unlike previous IS policy directives, eEurope ISA provided very little acknowledgement in terms of specifics regarding the role of cities within the process. Whereas within Bangemann and subsequent framework and policy directives throughout the 1990s, the role of the city was seen as an important intermediary between the European IS directives and the citizen, eEurope ISA provided very little in way of city involvement. In part the demise of the role of cities within directives can be seen against the shifting R&D funding frameworks, and in particular the move away from implementing the information society in terms of specific application areas towards promoting both infrastructure and services that was dominant from the Bangemann report onwards. However the most significant component regarding the reduced role of cities in the process, was the Lisbon Agenda's insistence on targeting national government as its scale of engagement to achieve its ambitious targets. In many respects this has been the Agenda's undoing. Whereas cities were more than willing to venture into new partnerships and collaborations with the European institutions, on a national basis this has not been the case. This appears a fundamental oversight; as Stefan Collignon (2003) makes clear the national context of collaboration is very different. For example:

“National governments are accountable to their national constituencies, and ultimately democratic choice through elections will always have primacy over negotiated intergovernmental coordination” (Collignon, 2003, p241, original emphasis).

Similarly, the Lisbon Agenda is seen as a purely economic initiative. Due to its overtly ambitious plan to be “*the most competitive and dynamic economy in the world*”, the omission of a dedicated role for cities in an economic collaborative capacity, was deemed to be a missed opportunity by Richard Leese, the leader of Manchester City Council:

“It is simply not possible to make significant progress in stimulating economic growth and creating jobs without harnessing the full potential of Europe's cities, which are the places where most economic activity takes place” (Richard Leese, Guardian Newspaper, Saturday March 18, 2006)⁵⁷

Although the role of cities in a defined economic capacity was undoubtedly reduced, the eEurope ISA did contain a number of thematic strands that enabled pro-active cities an opportunity for engagement. In particular, the role of the city was seen as a key driver in terms of the emerging role of e-governance. Because of this, the role of the city was to become synonymous with the ‘local authority’. Whilst the semantics of terminology may appear to have little consequence in terms of whether it was the city or the local authority delivering the agenda, the shift was significant in the sense that the role of potential research partners was determined in terms of the emerging e-governance agenda. This increased emphasis towards the role of local government was to continue in the next stage of the Lisbon Agenda.

eEurope an Information Society for All 2005 action plan

The next component of the emerging Lisbon Agenda came with the ‘*eEurope an Information Society for All 2005*’ (CEC 2002) action plan which was presented to the

⁵⁷ available from <http://www.guardian.co.uk/eu/story/0,,1733688,00.html>

Sevilla European Council 21/22 June 2002. It's intention was to build upon the Internet connectivity that had been gained under eEurope 2002 to stimulate services, applications through e-commerce and online public services. Again within the report it was the role of local government that was highlighted, indeed if anything the perceived role of local government was far more prevalent than within eEurope 2002, with the modernisation process again seen as a key driver towards inclusivity:

“The new action plan focuses on a limited number of key targets where government action can make a genuine difference: the modernisation of public services to make them more productive and more equitable” (Zobel, and Filos, 2003, p3).

To do this eEurope 2005 identified specific areas of public policy relating to broadband connectivity to public administrations, schools and healthcare. It also laid a specific requirement for interactive public services that were accessible for all, and offered on multiple platforms. Whilst building upon the momentum of the eEurope ISA, the 2005 initiative's aspirations also incorporated a variety of strands from IS directives from the mid-1990s onwards. In particular, it was notable in its emphasis upon *“the exchange of experience, good practices and demonstrations, [and] learning from failures” (CEC 2002)* that was the central component of the EDC programme. Similarly following in line with previous IS policy directives, the launch of projects would be used as a means *“to accelerate the roll out of leading-edge applications and infrastructure” (ibid).*

eEurope 2005 cemented the transition away from the role of cities with IS policy directives and placed the role of 'local' collaboration firmly in the context of local government. In part this transition can be seen in terms of the changing R&D

Framework programmes. As we have already seen since, at the end of the 4th Framework Programme the role of the city had been diminished at the expense of consultancies and research institutes, and the overtly national context of the Lisbon Agenda. However with the 6th Framework programme about to begin as eEurope 2005 was launched, there was to be a tentative welcoming back of non-traditional partners and, in particular with e-governance being high on the European agenda, the role of local government was seen to be important in the report's overall aims and aspirations. In this context many aspects of the framework were building upon the success of previous initiatives from Bangemann onwards, particularly in terms of collaboration as a means of information and knowledge exchange and the construction of projects as a means of delivering and dissemination applications towards end-users.

However, whilst the methods of achieving eEurope 2005's overarching aspirations were similar, the role of local government within the process was not as prominent as the role cities had played in previous IS directives. Although the role of local government was placed as a central component in meeting both the needs of infrastructure and applications, in both senses its role was seen purely in terms of providing an environment to validate and demonstrate potential applications, rather than the user-led centric research where cities had been the dominant player. By placing local government as the key validator and deliverer of e-governance in a tightly bound framework the report was in effect responding to previous critiques of IS policy initiatives and their often vague socio-technological aspirations. With the programme clearly monitored and local government contributing to the e-governance process the intention behind eEurope 2005 was to provide a clear and collective route towards implementing a key strand IS policy.

European Information Society 2010

With its strong procedures of benchmarking embedded within the process, a concrete assessment of the initiative could be made unlike previous major IS directives. Although it did achieve a number of its goals, in many respects the ambitious objectives of the Lisbon agenda and its overtly national orientation contributed to a general feeling of failure in terms of its overall achievements.

“While many of the fundamental conditions are in place for a European renaissance, there has simply not been enough delivery at European and national level. This is not just a question of difficult economic conditions since Lisbon was launched, it also results from a policy agenda which has become overloaded, failing co-ordination and sometimes conflicting priorities” (CEC 2005 p3-4)

By 2005 a new framework was needed to push towards the core Lisbon objectives. In this capacity the aims and aspirations behind the eEurope action plans were consolidated and a new policy framework was devised that provided an invigorated five year plan to place Europe at the heart of the global knowledge based economy by 2010:

“The Commission proposes a new strategic framework, i2010 – European Information Society 2010, laying out broad policy orientations. It promotes an open and competitive digital economy and emphasises ICT as a driver of inclusion and quality of life. A key element of the renewed Lisbon partnership for growth and jobs, i2010 will build towards an integrated approach to information society and audio-visual media policies in the EU” (CEC 2005a)

Essentially i2010 has three key areas -

- the completion of a **Single European Information Space** which promotes an open and competitive internal market for information society and media;
- strengthening **Innovation and Investment** in ICT research to promote growth;
- achieving an **Inclusive European Information Society** that promotes growth and jobs in a manner that is consistent with sustainable development and that prioritises better public services and quality of life. (*ibid, p4*)

At the time of writing i2010 is in its infancy. However its framework represents no immediate departures from previous initiatives to support the Lisbon agenda. For example the construction of a 'Single European Information Space', is a specific continuation from the original eEurope ISA and the intention to strengthen 'Innovation and Investment in ICT' could almost have been copied directly from the Bangemann report over ten years ago. Similarly narratives of inclusivity are also a central component of the new initiative following the trend set again in the Bangemann report and more fully integrated through the eEurope ISA report. In terms of the role of cities, again there is a strong emphasis on the role of local government especially regarding the initiative's continuation in utilising e-governance as a key driver towards the knowledge economy, mirroring the initial transition away from cities towards the role of local government laid out at the start of the Lisbon process

4.6 Conclusions

In a sense the period between 1994 and 1998 represented a golden age for cities and their involvement in European IS policy directives. The 4th Framework Programme and

in particular the Maastricht Treaty had placed an increased emphasis upon the Commission to produce R&D frameworks that had an implicit socio-economic context. The shift in R&D directives came as the Commission was enthusiastically embracing the concept of the information society and in a sense the two trajectories of a new socio-economic context to research and narratives of inclusivity of the IS policy directives represented a key conjuncture for the Commission. In many respects the role of cities met the key criteria of both aspects. In 1998 the landscape was to change. Although in general the transition between Framework Programmes 4 and 5 represented little change in funding for the majority of sectors, the notable exception was the Information Society programmes (Sharp and Peterson, 1999, p158)⁵⁸. Further to this with the introduction of the 5th Framework Programme, the role of non-traditional partners was diminished when the Commission moved the research agenda back towards its old client groups pre 4th Framework Programme and a more welcoming environment for the consultant and the research institute.

Through the major thematic programmes bridging the 4th and 5th Framework Programmes such as the Integrated Applications for Digital Sites (1998 – 2000) and the Information Society Technologies (IST) which was initiated at the start of the 5th Framework Programme and still running to this day, a greater emphasis was placed upon collaborative research that favoured industry, research institutions and consultants than had been the case in the 4th Framework Programme. Whilst it was by no means a return to the domination of industry within R&D frameworks during the Commission's commitment to the technology push model, the role of the city was diminished. In general their role was relegated to one within the validation process rather than that of lead user which had been a central component of TAP.

⁵⁸ The overall budget for the IS programmes reduced from 27.4% of the total budget in FP4 to 24% in FP5

However from a European Union perspective the period between 1994 to 1998 had been a particularly pro-active period that had led to a significant change of mindset within the Commission both in terms of its shift towards parity in terms of social inclusion and economic capacity. Utilising the Bangemann mantra, IS policy had become ingrained at the European level with considerable time, effort and resources ploughed into achieving a foundation for an inclusive European information society. However by 2000 a new overarching strategy was needed to take into account both the considerable achievements that had been made in terms of European policy directives and the ever changing scenarios on a global basis, in particular the rapid impact the Internet was seen as having on the global economy.

With the implementation of eEurope 2000, the emphasis shifted away from the concept of the information society in terms of its socio-economic origins towards a more economically centred framework with an emerging narrative of a knowledge-based economy. The transition is notable in terms of its focal point towards the role of cities in that process. With an increased emphasis on national collaboration the role of the city diminished in terms of IS directives. Within eEurope 2000 and its continuation in 2005 the role of the city is seen as a key enabler in facilitating the emerging e-governance agenda. Because of this shift the role of the city within a European context is replaced with the role of local government

To conclude; the process of implementing an overarching European IS policy directive has led to significant changes in terms of funding, the role of R&D in a collective European context and the emergence of new partners within that process. Whilst different Framework programmes and policy directives have varied in the role offered

to the local scale, compared to the political landscape pre-Bangemann, their role is now ingrained within IS policy directives.

The following chapters will explore to what extent cities and local government have exploited these opportunities and to what extent these policy innovations have been disseminated at a variety of scales. Firstly through an analysis of the TeleCities network.

Chapter 5: TeleCities: History; Aims and Objectives; Current Perceptions – providing a contextual basis for analysis

5.1 Introduction

The purpose of this chapter is to begin a wider process of conceptualising TeleCities in terms of the three theoretical strands identified in Chapter Two. To do this the chapter has three distinct sections. Firstly, drawing on interviews with key actors from within the TeleCities network and the European Commission it will offer a brief historical context to the network in terms of its construction and objectives from its inception in 1993, through to the present day. Secondly, the chapter will examine the current aims and objectives of the network relating them back to the network's historical trajectory. Further to this, the chapter will present data gathered via an online questionnaire. Here the intention is to go within the network to provide a perspective from current members in terms of their origins of engagement with TeleCities and their subsequent intersection between the network and the local scale. Finally the chapter will present a synthesis of these three separate components to provide the first foundations towards a conceptualisation of this 'spatially stretched' process that will be built upon in the two subsequent empirical chapters.

5.2. The construction and subsequent trajectory of TeleCities:

This following section will examine the construction of TeleCities, linking it intrinsically to the environment of European ICT and Information Society policy initiatives discussed in the previous chapter.

The Origins

The origins of TeleCities can be traced back to the intercity network of Eurocities. In 1993 a number of predominately larger European cities within Eurocities were making their first tentative steps towards exploring the potential benefits ICT could play in a local economic context. As we have already seen in the previous chapter, at the European scale the role of ICT was being espoused in both economic and societal capacities, however on a local basis it was still relatively embryonic, with only a few particularly pro-active cities beginning to assess the potential implications it could have, especially in terms of regeneration.

Historically Eurocities formed as a network of cooperation between Europe's 'larger cities'⁵⁹ in 1986. In the early 1990s a strand of the network in the form of a working group was initiated to explore the role of 'technology' in an urban context through the Eurocities Committee for Technological Co-operation (CTC). At that time the committee viewed technology as an all encompassing concept which was very much in line with the European policy and R&D directives of the time. In line with the policy shift that was emerging through the Delors White Paper in 1993, the CTC initiated a working group with the specific intention of exploring the potential role of ICT (rather than technology) in an urban context.

The work group consisted of five cities, Barcelona, who were leading the group, Nice, Bologna, Manchester and The Hague. As part of the work group a conference was organised with the intention of exploring the role of ICT in an urban context. For Dave Carter⁶⁰, who was then working within economic development in the city of Manchester, this represented his, and the city's, first foray into Europe regarding the

⁵⁹ Membership to Eurocities is only available to cities with a population above 250000 inhabitants

⁶⁰ Dave Carter is currently head of Manchester's Digital Development Agency.

potential role ICT could have in a local economic context. He explains his thoughts regarding the conference as follows:

“We went to this conference incredibly naively thinking that there would be all these other cities across Europe all doing ICTs with the end result being economic impact, social benefit, but not at all. The conference was 75% dominated by consultants, universities who had been getting money out of the Framework Programme, and felt that post-Maastricht, there was an undermining of the traditional spend, because in the past it been spent on pure industrial development. Maastricht came along – fourth framework came along – very different, it’s got to take account of the socio-economic factors, it’s got to have as much emphasis on employment factors as it does on research issues. So all the consultants saw all their money drying up and we just couldn’t believe it, here was the Commission, who we’d seen as this remote, elite body, coming out with policy statements that agreed with the small minority of cities that are there, like ourselves, Barcelona, the Hague etc” (Interview with Dave Carter, Manchester, June 10th 2003).

Buoyed by this coupling of a receptive atmosphere on behalf of the Commission and the realisation that there were other cities interested in pursuing the potential role ICT could play in a local context, Dave Carter took a spontaneous decision to integrate the city of Manchester much further into the process of European collaboration:

“This very forward looking EU official said we want to involve the public sector ... So it was then that there was a question about the next steps and

having met Andre[Vander Meer representing The Hague] for the first time and the two people from Bologna who were crucial I just stood up and said OK we are volunteering to host the next meeting in October” (Interview with Dave Carter, Manchester, November 17th 2005).

In essence that next meeting would become the starting point for TeleCities. So essentially the origin of the network was an entirely organic process and to some extent almost *ad hoc* in the sense that it really did appear to be a unique conjuncture between the Commission and a small group of proactive cities, as Dave Carter comments:

“this incredible alliance [formed] over the top of people, between a tiny cluster of cities and the Commission, who were looking for some good practice ideas and they said – why don’t you form yourselves into some kind of network” (Interview with Dave Carter, Manchester, June 10th 2003).

As we have already seen, the start of the 4th Framework was seminal in this new responsive attitude at the European level. At the same time, from those cities present within the CTC, there was awareness that this new socio-economic orientation from the Commission that was bound within the rhetoric of the information society could be extremely beneficial in a local context. Andre Vander Meer, who represented the city of The Hague during the initial meetings that would eventually lead to the construction of TeleCities explains:

“[At] the time there were some indications that the information society would push through. There had been some previous waves in the 80’s but it

became apparent that it was going to affect a lot of our citizens and enterprises and also the service delivery in the city hall. As far as the service delivery was concerned there were already networks existing, focusing on mainly ICT issues, which had to do mainly with the internal affairs of the municipality. What was new in TeleCities origins, was that there was an increasing awareness amongst a few people that information society technologies were going to have a dramatic impact upon the local economy” (Interview with Andre Vander Meer, The Hague, 29th September 2005).

Prior to the intended meeting in Manchester later in the year, plans were made to assess levels of interests amongst the core membership of cities within Eurocities in terms of developing a new network. At this stage the core cities were interested in exploring the role of technology in a more socially orientated capacity, rather than the overtly techno-centric leanings of the CTC. Eric Mino, at this stage representing the city of Nice, explains:

“[W]e made a survey amongst Eurocities [members] about the interest of the different cities in new technology for various applications. The results were very positive we had a lot of interest from the large cities” (Interview with Eric Mino, Nice, January 12th 2005).

However rather than initiate the network from within Eurocities, the core members of the CTC, aware of the window of opportunity presented in the 4th Framework programme and the Commission’s receptiveness at the earlier conference in Nice, took the decision to present the concept of a new network directly to the Commission

through DGXIII (Telematics). As Eric Mino explains the subsequent desire of the Commission to engage with the incipient network was indicative of the emerging shift in R&D policy framework programmes:

“We presented these ideas to different services of the Commission and it was at the time of the 4th Framework programme, so the Commission was looking more at the user orientation and the cities were representing the users at the local level, so this was very welcome from the Commission”
(Interview with Eric Mino, Nice, January 12th 2005).

With the Commission envisaging a network representative of cities and ‘users at the local level’, they enthusiastically welcomed the idea behind the network to the extent of funding it through a one year feasibility study. Funding for the network came through TURA as part of DGXIII (Telematics), who, as noted in Chapter Four was, set up with a specific remit to promote the role of telematics to rural and urban areas. In this capacity there was an apparent cultural shift within the Commission. Although cities had been identified as a key partner particularly in the delivery of application based areas that were emerging from a policy perspective from 1993 onwards, at that time they did not have a specific platform of engagement with cities. From the perspective of the Commission a network of receptive and pro-active cities represented the ideal intermediary between their new policy orientations and their intended scale of engagement, as Stephan Pascall, the then head of sector within TURA notes:

“The Commission was encouraging these networks, because in a way that was the only way that they could somehow make cities cooperate”

(Interview with Stephan Pascall former Head of TURA, Brussels, January 10th 2005).

Similarly the conjuncture was further strengthened due to the implicitly socio-economic orientation of the core cities. In particular their principal interest lay within technology on a political basis predominately orientated towards local economic perspective, rather than the overtly technical, a point elaborated upon by Andre Vander Meer:

“[TeleCities] was embedded in a political context, we were all civil servants. I would also say that we were quite experienced civil servants all of us so we knew what was at stake. ... [TeleCities] was much more related to the political issues and this is very important for the development of TeleCities” (Interview with Andre Vander Meer, The Hague, 29th September 2005).

Whilst the organic nature of proceedings that had been prevalent since the first meeting in Nice continued, due to the funding arrangements agreed by the Commission, the organisational capacity of the network needed to represent something more than a small number of interested and enthusiastic representatives of European cities. Due to the requirements placed upon them through official funding via the Commission the network intrinsically adopted a more formal approach. As a first step the network needed a full time project manager to coordinate the feasibility study. In this capacity Eric Mino who had been seminal in the initial core grouping of cities left his position with the city of Nice to take the project manager position. This signified the start of the network in a formal sense. With the foundations of the network beginning to cement, plans were made to build upon this impetus. Contact with cities interested in joining the

emerging network were made and on the 7th and 8th October 1993 11 cities⁶¹ met in Manchester and the concept of TeleCities as a separate network was instigated. At the event Eric Mino recommended binding the formal construction of the network in terms of a declaration, setting out the intentions of the new network, as a result Eric Mino and Dave Carter constructed “The Declaration of Manchester⁶²” which was subsequently signed by those cities present⁶³. This key text set out the network’s *“willingness to collaborate with the European Commission in defining an overall strategic plan for the concerted development of telematics in the urban environment”* (*Declaration of Manchester, TeleCities Official Document, 1993*). The intention of TeleCities was to contribute to this process through joint pan-European projects that will

“promote the exchange of experience; examine the issues related to the development of harmonised info-structures or telematics networks and services across Europe which will serve both the development of local industrial and service sectors, local society and local citizens” (ibid)

With the signing of the Declaration of Manchester, TeleCities represented a collection of European cities that operated within a defined network structure. From this point on the network began to promote itself at a variety of conferences and workshops within Europe. By 1994 TeleCities had grown to a collective of 30 cities. In April of that year the network held its first Annual General Meeting, where it launched itself as a democratic network of co-operation, operating within Eurocities.

⁶¹ The cities were; Amsterdam, Barcelona, Birmingham, Bologna, The Hague, Cologne, Lille, Manchester, Nantes, Nice and Nottingham

⁶² See Appendix X for a copy of the Declaration of Manchester

⁶³ There are 13 signatories on the Manchester declaration; both Hull and Leeds signed retrospectively

TeleCities: Stabilisation 1994-1996

After the official launch of the network in 1994 Manchester was elected as TeleCities first president and the network established the TeleCities Coordinating Office (TCO) as part of Eurocities in Brussels, with Eric Mino becoming its' first coordinating manager. The decision to place TeleCities as part of Eurocities⁶⁴ infrastructure was seen as pivotal to the networks future:

“EUROCITIES ... success has been that it has developed a professional networked office in Brussels with 20 FT members of staff. So we realised that we needed a member of staff for TeleCities within that – that was always a concept, we always knew that a secretariat in Brussels is a key bureaucratic factor in a successful organisation, you just can't have them anywhere” (Interview with Dave Carter, Manchester, June 10th 2003).

With an established infrastructure providing a centrality to the 'location' of the network and a full-time member of staff dedicated to TeleCities, the next stage in the evolutionary process was to generate income. This was provided through two distinct routes; firstly cities needed to pay a yearly fee to remain a member of TeleCities⁶⁵ and secondly through funding from the Commission. With an element of financial security established, cities were free to begin work on project bids. As Dave Carter points out, the collaboration on project bids during the early years of TeleCities was seminal in building both an element of trust within the network and allowing those cities to find their feet in the relatively uncharted waters of European collaborative working:

⁶⁴ Although TeleCities was placed within Eurocities organisational infrastructure, as an entity the network remained relatively autonomous to its parent network.

⁶⁵ During the fieldwork period the fee to remain a member of TeleCities was 4000 Euros, although membership was free to all Eurocities members. As a result fee paying members were cities who did not meet the criteria to join Eurocities (that is a city population above 250000).

“The first thing was to get a little bit of money out of the Commission, about 50,000 or 100,000 euros to organise the events, so I think we got the money on the grounds of disseminating opportunities for the 4th Framework programme for bids, so essentially you just had conference after conference in those 6 cities, so one in Bologna, one in Barcelona, one in Antwerp one in The Hague and so on and all those conferences really were, apart from getting to know each other, who’s writing what bid – do you want to be in my gang – let’s have a workshop and write a bid on X, it was just a bid writing machine” (Interview with Dave Carter, Manchester, November 17th 2005).

The dominance of bid writing within the group was due to a commitment they had received during the network’s feasibility study the previous year when a representative of TURA promised the network that they would receive funding through project bids. Due to the network’s relationship with TURA, Dave Carter felt they were “*kicking at an open door*” (*ibid*).

By the end of 1994 TeleCities members submitted 10 finalised bids to TURA. Of these 4 were awarded funding, through the Cities strand of the programme for periods of between 18 and 24 months. The projects INFOSOND, DALI, EQUALITY and MAGICA⁶⁶ were all funded from TURA for periods between 18 and 24 months, began in earnest at the end of 1995 and the beginning of 1996.

The Cities strand of TURA represented the first concerted effort from the Commission to engage with cities in terms of a number of significant application areas stemming

⁶⁶ See Table 4.2 in the preceding chapter for a full description of the projects

from the Bangemann report. Whilst the intention from a Commission perspective was to engage with cities as a means of disseminating significant application areas in a societal context, for TeleCities this first round of funding for non-traditional research partners was central in establishing it in terms of its collective identity and promoting the network to other cities:

“In terms of sustaining a momentum it showed people we could deliver, it gave us a credibility so people politicians in particular could see that we had done things like DALI, so it made people think if I want a successful bid then I need to join TeleCities” (Interview with Dave Carter, Manchester, November 17th 2005).

This raising of credibility on a political basis was leading to TeleCities becoming further integrated into the complexities of the European R&D arena. In essence the years immediately after the official launch of TeleCities represented a significant period of consolidation and stabilisation for the network. By offering itself as a collective platform it represented an intermediary space both for cities wishing to engage in collaborative European projects, whilst at the same time allowing the Commission a crucial disseminatory route in terms of its shift towards delivering key socio-technical applications areas in an urban context. This latter component would be central to the next evolutionary phase of the network.

TeleCities and the European Digital Cities Programme 1996

In 1996 Andre Vander Meer representing The Hague replaced Dave Carter and Manchester as the second TeleCities president. With the ongoing projects funded by TURA increasing the network’s visibility, an established infrastructure and membership

increasing *“TeleCities moved from a pioneer phase to a steady organisational phase”* (Andre Vander Meer, TeleCities, Promotional Document, 2004). Whereas the *pioneer phase* provided cities within the network a collaborative meeting space, all of the projects were carried out by cities. TeleCities was not incorporated in any capacity as an institutional partner; it was merely the space of engagement for cities. As a result if TeleCities wanted to represent anything more substantial than a bid generating club it needed to progress as an organisational entity in its own right. This shift is indicative of the transition of TeleCities in terms of its’ *steady organisation phase* and the establishment of TeleCities as an organisational entity in its own right. The most significant event in this process was when TeleCities secured significant funding⁶⁷ to administer the European Digital Cities programme, a support action from the TAP programme on behalf of the Commission. This project differed in the sense that the bid had been submitted by TeleCities as a network, rather than the construction of project proposals by collective individual members:

“we had the results of a public call for proposals from the Commission, it was something called support action, so it was a project managed by TeleCities as a result of an open call for proposals but it was a support action so we had a number of things to do for the Commission and basically it was focused on dissemination” (Interview with Eric Mino, Nice, January 12th 2005).

From TeleCities perspective the role of EDC was central in building its organisational capacity and its future expansion:

⁶⁷ 3 million Euros.

“up until [EDC] it had been done by luck, getting projects with small amounts of token money from the Commission and volunteer labour, suddenly with EDC we could appoint a full time project co-ordinator plus a full time administrator, pay for office space in a an expanded Eurocities office and then have Eric organise four conferences a year for three years”
(Interview with Dave Carter, Manchester, November 17th 2005).

With the increased funding of EDC, TeleCities was able to shift away from its previous incarnation of a meeting house to generate bids. In doing so it was seen as an entity in its own right that could provide the organisational infrastructure to support the project, whilst at the same time provide a starting point towards applications based research.

This shift was to represent a move towards a closer relationship between the network and European institutions. As we have already seen in the previous chapter the foundations behind the EDC were a specific linear development in terms of European IS policy directives to date. In particular the thematic components of the EDC were directly related to the application areas assigned within the Bangemann report. In this context the EDC was seen as an important element in disseminating application areas to particularly pro-active cities, as Andre Vander Meer notes:

“We were talking about a time when this was all new; [the Commission] was actively seeking closer relations with ground level Europe so to speak. So this is were we gave an added value and we knew what we were talking about” *(Interview with Andre Vander Meer, The Hague, 29th September 2005).*

This is an important development in terms of the emerging relationship between the network and the Commission. Whilst the Bangemann report was frequently used to

promote the shift towards inclusivity in terms of the societal application of new technology, how it initiated its ten application areas in a city context was always going to be problematic. Similarly in a local context the role of the city as a pro-active actor within the process of a European Information Society to date had been purely been the domain of the core cities who had secured funding as part of the Cities strand of TURA. In a sense the EDC programme was seen as a response to both these concerns:

“The intention behind EDC was to get together the city players from different countries in that structure. ... they had at least 6 different working groups, covering subjects like transport, tele-work, health care, so it was an activity based network. They had meetings where they created further collaboration so that was firstly networking. Second was information dissemination through the conferences and of course they had the website running the information ... it was like a shopping window for the cities of Europe and during that period they increased the number of members from 80 to 120 by the time it stopped. So it was an important tool of promotion [for TeleCities] and thanks to that [TeleCities] is still running” (Interview with Tapio Rissanen EC Project Officer on EDC, 4th February 2005).

As the quotation above indicates and as we have already seen in the preceding Chapter, the EDC programme’s core elements were derived from the Bangemann report’s ten application areas. These were used as the thematic work groups of the EDC; as a result it provided a contextual working environment for cities to engage in collaborative working focusing purely on the Bangemann report’s key priorities. Further to this it increased the visibility of European IS initiatives specific to cities, opening up the concept on a pan-European basis with the intention of creating at least a starting point

towards the role of application areas within cities as a means of developing a critical mass of users.

In essence TeleCities became *the* platform to enable the network and dissemination activities to take place and to an extent TeleCities and the EDC programme almost became indistinguishable from one another. Because of this, TeleCities involvement with the EDC programme was instrumental in constructing the network into a more coherent and collective entity. The network adopted the thematic focus of EDC into its framework, widening out the role and purpose of the network. This meant that the nature of the network became much more structured around conference events, with detailed disseminatory activities rather than the ad hoc arrangements that were previously planned to construct European pilot project bids. As a result the organisational structure, thematic priorities and to an extent the network's overarching objectives, that were initially embedded into the network as part of its requirement to administer the EDC are still running to this day.

TeleCities: A changing environment 1998-2000.

The period between 1994 and 1998 represented a key conjuncture between the Commission and cities. By 1998 the environment was to change significantly, with the start of the 5th Framework Programme marking a distinct shift by the Commission in terms of its funding streams. Rather than seeking out cities as partners the 5th Framework Programme reverted back to funding traditional research partners in the form of consultancies, research institutes and universities. However, the legacy of the EDC programme provided the network with a firm foundation to operate within this new environment. Through EDC funding TeleCities had developed an internal organisational capacity, its membership had increased significantly and to some extent

it had built a brand identity for itself. These components collectively allowed the network to operate within the 5th Framework.

“[it was] an economy of scale – it was just three people in an office in Eurocities – it doesn’t cost a lot, so the majority of that you could find out of your subscriptions. Once you’re at the stage of having 50 or 60 paying members you can afford to do that. Then you get to a self sufficient level in terms of the events because people organise the conferences at their own expense, so there has never been a subsidy for conferences, whereas for those three years we were paid to organise those conferences, so we charged the cost (against our funding) and each member could claim travel expenses for one representative. But other than that there were no costs and we had no shortage of people queuing up afterwards wanting to host an event and they hosted them at their own expense” (Interview with Dave Carter, Manchester, November 17th 2005).

The start of the 5th framework also represented other transitions from within the network. Most significantly Eric Mino left his post as coordinating manager of the network to be replaced by Charlotte Nielson, a Dane with previous experience of consultancy work in Brussels. With these transitions Charlotte’s first task as TeleCities co-ordinating manager was to:

“reanimate the network in the sense of getting new members and new projects because EDC had ended and we had this identity problem where EDC seemed to equal TeleCities, which wasn’t the case so the network had

to establish a new identity” (Interview with Charlotte Nielsen Copenhagen, 27th January 2005).

Following the new framework priorities towards engagement with the more traditional research partners of previous R&D frameworks TeleCities began to seek out alternative funding opportunities. As a result the direction of the network became orientated towards partnerships with external organisations. From the perspective of TeleCities, this mainly consisted of the network acting as a platform of dissemination for external lead partners. This more entrepreneurial shift was apparent in the network’s next major project. With Rome replacing The Hague as TeleCities new president in 1998, the network attempted to build upon the EDC programme and the role it had played in providing the network with both a collective narrative and a framework for structured activities. Towards the end of the EDC programme TeleCities had entered into a partnership led by the University of Edinburgh⁶⁸. The project, called Public Administration and e-Commerce in Europe (PACE), overarching intentions were to:

“accelerate and expand the European e-commerce market in the arena of Public Administrations, through the implementation of a programme of Integrated Accompanying Measures for the benefit of Public Administrations ... PACE will generate a learning environment exploiting the synergies of different accompanying actions (studies, dissemination, training and awareness raising activities, working groups, etc.) with a view to creating a sustainable process grounded on TeleCities the largest

⁶⁸ The full list of partners involved was: University of Edinburgh; TeleCities; Notre Dame University; Helios Management and GMD

European network of cities involved in the Information Society” (Available from Information Society Technology Website⁶⁹: Accessed July 13th 2005)

With the launch of eEurope an Information Society for All in 2000, the PACE project mirrored the central themes of the new directive with an emerging narrative centred around the knowledge economy. At the same time the PACE project discursively shifted the role of cities within the process, replacing them with the emerging role of local government. In this context PACE was seen as an important component in enabling TeleCities to shift its focus in line with the 5th Framework Programme and maintain its momentum and visibility that it had gained via EDC. Utilising the role the EDC programme played in providing the network a collective identity and visibility, the PACE project was incorporated in its entirety into the TeleCities framework. Throughout its lifetime, PACE provided the thematic focus of the network, with TeleCities members contributing to the programme through working groups and collaborative working at conferences. The PACE project in many ways replicated the role EDC had played previously. By structuring the network’s working activities around a concrete project the network had a defined thematic narrative that all members could engage in. Further to this the PACE project represented a seminal moment in the network’s trajectory, by aligning itself to a project that itself was a direct response to the dominant strand of IS policy of the day, TeleCities had placed itself ideologically and discursively in line with the Commission that would set in play a shift away from the network in terms of project bids and a move towards a more policy orientated network. However the significant difference between EDC and PACE programmes was that under the EDC programme the Commission had taken a pro-active stance and in many respects had guided and initiated the relationship with TeleCities. With PACE, the

⁶⁹http://cordis.europa.eu/fetch?CALLER=PRO_IST&ACTION=D&RCN=54357&DOC=7&CAT=PROJ&QUERY=1

Commission were not involved in any capacity, TeleCities as a network had proactively engineered the process, aligning itself with the Commission .

In 2000 the city of Vienna was elected as the president of TeleCities. At the same time, the aims and objectives of the Lisbon Agenda were presented by the Commission. As a consequence of this, TeleCities began to build upon its work during the PACE project, seeking an alignment with the Lisbon Agenda. To achieve this, in cooperation with the University of Edinburgh, the deliverables of the PACE project were constructed into a document targeted at the Commission. Noting the shift away from the role of cities and the emerging narrative of e-governance within the Lisbon Agenda the document “Towards e-Citizenship for All - issues and Trends for Future Policy and Strategy in e-Government: A Contribution from TeleCities to the Sixth Framework Programme RTD” was launched in Brussels in 2000. In essence the network was attempting to align itself with the eEurope ISA action plan, the key Information Society strand of the Lisbon Agenda. The Vienna presidency was particularly keen to promote this more overtly political orientation for the network

“Vienna was the first presidency who really had issues in the political sense, which was setting up a closer connection with the Commission as an aim of the network. Setting up a closer co-operation with the then future applicant countries and to make TeleCities one of the main interlocutors on behalf of cities and EU institutions and of course to force e-government ... so I think that was one of the first times that the presidency came up with a policy statement” (Interview with Ingrid Goltz, Gijon 1st October 2004).

With this emerging shift, the “Towards e-Citizenship for All” policy document was presented to the Commission in a sense to provide the network with an identity card in terms of its achievements to date and to position itself in terms of its future plans vis-a-vis the Commission as Anna Lisa Boni, then TeleCities coordinating manager explains:

“the e-citizenship for all [policy document] was a clear way to lobby the sixth framework because you had to send a message, but you had to send a message that was representative and it was representative because it didn't come from the sky, it came from what the cities were doing at the local level. It would come with flesh because it was all about case studies of cities, models and so on and it would be structured and clear” (Interview with Anna Lisa Boni, Brussels, 8th October, 2004).

In this context, for the first time, the network had pro-actively instigated a policy document to lobby the Commission. This represented a significant shift in the ideology of the network. In part this shift was due to necessity. The inception of the network came as a direct result of the Commission and their desire for a platform between themselves and the local scale. However from the 5th Framework Programme onwards the role of cities within the major IS policy strands had diminished. By producing a policy document the network was attempting to lobby the Commission in terms of the potential role cities had to play in terms of ongoing and future IS policy. Essentially its intention was to tell the Commission that TeleCities still mattered.

TeleCities: 2002 to the present day

The move towards a more policy orientated network was to continue when Barcelona became the network's new president in 2002 as the 6th Framework Programme was implemented. Their strategic intention for the network was to develop:

“TeleCities as a recognized and strong network of European local authorities ... fostering innovation to imagine our future urban areas successfully evolving in the European space ...TeleCities should lay the cornerstone for building up European public services and become a platform to stimulate local democracy and contribute to the emergence of real European citizenship” (Teresa Serra. Barcelona Presidency 2002-2004 and Manuel Castells. TeleCities, Promotional Document, 2004).

At this point Charlotte Nielsen left the network, to be replaced by Anna Lisa Boni, who had been involved with the network in a membership capacity representing the city of Bologna. With a new presidency, coordinating manager and the 6th Framework Programme in its infancy, a strategic decision was made to reinvigorate the network and attempt to gain some of the ground it was widely considered to have lost during the 5th Framework Programme. However, the Lisbon Agenda, had resulted in the role of the city being diminished at the expense of the national scale in terms of delivering the Agenda's ambitious aims. With a distinct lack of project initiatives on offer from the Commission, the network took the decision to build upon the more policy-oriented stance adopted under the Vienna presidency and use this as an opportunity to reignite its relationship with the Commission. To achieve this the network attempted to build upon the foundations that the “Towards e-Citizenship for All” policy document had given them in terms of its more policy-centric approach. With the intention of making further

inroads with the Commission, the concept was refined into a central framework for TeleCities activities over the next two years. Within the framework the concept of e-Citizenship for All was developed. Essentially the e-Citizenship for All framework with its four main strands dedicated to e-democracy, e-learning, e-security and re-engineering local public administration was directly aligning itself to the eEurope ISA action plan, the Commission's new strategic IS framework. The intention was to have a framework within the network that was directly in line with Commission policy as had been the case under EDC and PACE.

This move towards a structured framework that could engage with European Information Society policy proved to be particularly successful when the "Towards e-Citizenship for All" policy document was acknowledged by the Commission. This resulted in TeleCities inclusion in the e-Europe 2005 action plan where it was highlighted as an ideal channel to incorporate views from the local scale.

"[T]he regional and local dimension shall be particularly taken into account, inter alia by maintaining an open dialogue with networks such as TeleCities" (eEurope 2005: An Information Society for All, p19)

Buoyed on by this success, the process of developing a thematic structure in response to European Information Society policy was continued after the completion of the "Towards e-Citizenship for All" work programme. TeleCities aimed to consolidate its previous achievements placing them into a strategic framework that again would be in direct alignment to the Lisbon Strategy. The network's new framework was the

Knowledge Based City concept⁷⁰. It was launched in 2004 as Liverpool was elected to the presidency of TeleCities.

5.3 Past to the Present: TeleCities Current Strategic Orientation

With a historical context provided, this chapter will now move towards the networks current strategic orientation. However, rather than present them in a purely descriptive context, the intention of this section is to assess the current orientation of the network consequentially in relation to the networks historical trajectory described above

TeleCities: Current Aims and Objectives

In recent years TeleCities has adopted a much more pro-active stance. Providing overarching strategic frameworks, the network with its increased policy awareness has become a more directed and focused organisational body. With the network initiating and responding to a variety of internal and external influences, TeleCities has progressed into a recognised and cohesive separate collective entity. As part of this process a number of inter-related strands have emerged which form the basis of the network's collective aims and objectives as the following statement makes clear:

“TeleCities objectives are to influence the European Agenda to ensure that the interests of cities are taken into account in policy making; Foster exchange of experience and knowledge transfer amongst cities; Inform members on policies, programmes and initiatives at EU and local level; facilitate and support the development of EU funded projects relevant to the members and the network” (TeleCities Website accessed 2003).

⁷⁰ The Knowledge Based City strategic framework is presented in more detail in Chapter 6.

Thus, TeleCities' overarching objectives can be broken down into three central and inter-related strands; Policy, Knowledge Exchange and Projects.

TeleCities: Policy

Firstly the network has a clear political angle; it aims to *"influence the European Agenda to ensure that the interests of cities are taken into account in policy making"*. (ibid). In many respects the political angle is the networks most recent component especially in terms of policy in a pro-active capacity. Due to the reinvigoration of the network at the start of the 6th framework programme and its success of integrating itself into the eEurope Action plans recommendations, this component has become a core priority for the network. Discursively it builds upon this perceived inclusion in the policy making process, placing the networks historical relationship with the Commission as a significant contributor in providing cities a voice in the policy making process. For example:

"TeleCities originates from the belief that local authorities have a fundamental role to play in the development of the Information Society and new forms of governance. Through a regular dialogue with the European Institutions and participation in EU consultation processes, TeleCities plays a key role in influencing the European agenda and ensuring that the interests of cities are taken into account in policy making" (TeleCities Website accessed 2003).

Further to this the policy focus of TeleCities is represented through the network as an intermediary in the sense that it provides a platform for both a local and European policy contexts through a network strategy based on:

“priorities and trends existing at both local and European levels”

(Interview with Anna Lisa Boni, Brussels, 8th October, 2004).

The spatial duality of the network to operate at both the local and European scale materialises through exploiting its’ capacities as a collective repository of knowledge (which are embedded in an intra-local framework) and reconstructing them in a collective European context. This stance is a direct consequence of the network’s historical trajectory. Starting with the EDC programme TeleCities represented a collection of cities that were operating in a defined European Information Society policy context. Through their collective collaborations and contributions, cities have generated discourses attached to specific projects that have been reconstructed via the organisational capacity of TeleCities as a local response to European IS directives. This collectivisation of cities was a distinct component of the PACE project where the network reconstructed its collective workings into the e-Citizenship for All strategic framework and presented it as a direct response to Commission policy. The success of previous strategic frameworks that have placed policy as the core principle behind the collectivisation of the network has led to the Knowledge Based City concept being the networks key priority at he time of writing. Devised in accordance with the Lisbon Agenda the framework allows members to engage in a policy context focusing on priorities and trends that merge spatial scales.

TeleCities: Knowledge Exchange

The second element relating to the networks core objectives is to *“Foster exchange of experience and knowledge transfer amongst cities”*. The concept of knowledge exchange is firmly embedded within the network; it was a principal reason behind the initial construction of TeleCities when a small number of cities who were working in isolation came together to exchange ideas. However exchanging knowledge on a

transnational basis again highlights the intermediary components of the network. In line with the promotion and construction of policy that merge scales, the capacity of the network to provide a platform for knowledge exchange is presented in terms of the duality of the local and European scales. By its very nature TeleCities can be seen to be 'trans-European' or transnational. By bringing together a variety of cities with similar needs it enables the network to act as an arbiter of knowledge from both the supranational and local levels. However the centrality of knowledge exchange became a more formal component of the network during the EDC project. As the network became a platform of dissemination it needed to adopt a more formal structure in terms of how it would collate, contextualise and disseminate information of direct relevance to cities. In this context the network developed into an important collective space to gather and exchange information. Within the PACE project this same approach was adopted, whilst in both cases the outcomes can be conceptualised as policy centric, the policy component is only presented as a result of the organisational capacity of the network to repackage and retranslate what are ultimately intra-local discourses into targeted policy documentation. With the organisational structure of TeleCities providing a framework directly attached to the Lisbon process TeleCities members have the opportunity to engage in a collective thematic space where knowledge is produced, shared and ultimately retranslated at a variety of scales.

TeleCities: Projects

The final strand of the networks overarching objectives is to "*facilitate and support the development of EU funded projects relevant to the members and the network*". In a sense the network's involvement in projects is a vital component of the two previous strands. Through its early collaborative working with European project bids the network stabilised and provided those cities involved with new information regarding the role of

new technology and transnational partnerships. Further to this the major projects that have been attached to the network in more recent years have formed both the network's core organisational structure which have subsequently led to the network's engagement with the Commission on a policy basis. From a Commission perspective the current Head of Evaluation for Information Society Policy Programmes within DGXIII, Peter Johnson notes that:

“we see networks like TeleCities as intermediaries between the research activities and the real world, the investment and change programmes, whether it is in this case city governments or in other cases regional governments or even private sector groups. We see TeleCities as a sort of link between research and technology development and real world deployment of information society systems” (Interview with Peter Johnson, Brussels, 21st December 2004).

In this context, TeleCities involvement in projects has materialised itself in two separate strands. Firstly cities within the network have taken on a pro-active stance. In this context individual cities have used TeleCities as a facilitator for European funding opportunities. Cities have constructed partnerships and consortia within the TeleCities umbrella and used the network's expertise, experience and organisational capacity as a starting point to engineer European project bids. Secondly, as a response to the shifting European Framework Programmes, the network itself has become a collective entity participating as a partner with external organisations. In this context the network has served as a dissemination platform for the external partner, whilst at the same time tapping into a rich seam of information of direct importance to members.

5.4 Inside the network: The Online Questionnaire

With a contextual background set regarding the networks thematic priorities as well as its construction and subsequent trajectory, this chapter will now explore TeleCities in terms of its' members perceptions through the presentation of data gathered as part of an online questionnaire. The intention behind the questionnaire was to go beyond the strategic rhetoric attached to the network and explore it from members' perspectives.

Involvement with Network

Firstly the questionnaire is able to provide a context in terms of the representation of cities within TeleCities. Respondents were asked how often they had attended a TeleCities event over the last 12 months. As events are organised on a seasonal basis 4 was the maximum any member could attend. Of the 45 responses attendance was as follows

Table 5.1: Respondents attendance at TeleCities events over the last 12 month period

4 Events over the last 12 months	22% n-10
3 Events over the last 12 months	33% n-15
2 Events over the last 12 months	13.3% n-6
1 Events over the last 12 months	24.4% n-11
0 Events over the last 12 months	6.7% n-3

Source: Online Questionnaire

Whilst these figures give an indication of respondents activity within TeleCities, to provide a deeper understanding in terms of actual member involvement with the

network, it was felt necessary to assess member interaction as a whole with the network over a longer time-scale. To enable this figures were obtained from the TCO in regards to attendance at TeleCities events over the last three years⁷¹

Table 5.2: Cities attendance at TeleCities events over the last three years

Events Attended	Number of Cities	% of total membership
0	31	25.8%
1	28	23.3%
2	11	9.2%
3	5	4.2%
4	7	5.8%
5	5	4.2%
6	5	4.2%
7	3	2.5%
8	2	1.7%
9	6	5.0%
10	5	4.2%
11	8	6.7%
12	4	3.3%

Source: TeleCities Coordinating Office

This table illustrates the relatively low levels of member participation within TeleCities. Although within promotional literature TeleCities regularly makes use of the 120 cities that make up its membership, actually participatory involvement is way below this

⁷¹ Figures presented are from the TeleCities Spring event hosted in Brussels until the TeleCities 2005 Summer event hosted by Manchester.

figure. Indeed over a quarter of listed members had never attended an event over the last three years.⁷²

After establishing member involvement in TeleCities the questionnaire then looked at the reasons behind members original decision to join the network.

Members Perception: Why did they join TeleCities

The questionnaire asked respondents to define their initial reason in joining the network⁷³. In the majority of cases benefits attached to involvement with the network were in line with the thematic focus of TeleCities. For example

“Virtual city halls, e-learning, e-commerce are topics on the every day agenda of a city. In TeleCities we meet experts from other cities, universities and IT companies to discuss future challenges, to create project ideas for testing ideas, we find partners for common projects and so on”

Source: Online Questionnaire

So whilst the thematic focus of the network are placed as reason behind engagement, in this case TeleCities is seen as a platform that allows potential actors from across Europe to meet and form potential partnerships. A similar reason behind engagement is also expressed below. Again projects and knowledge exchange is listed as significant in their decision to join as is their desire to learn from ‘bigger cities’

⁷² Such low levels of participation can be explained in terms of the relationship between TeleCities and Eurocities already referred to. Although TeleCities was always an autonomous network due to its historical relationship with Eurocities any member of Eurocities could automatically become a member of TeleCities. As a result many cities enrolled without becoming a regular participatory member.

⁷³ See Appendix D for respondents answers.

“Sharing experiences and plans helps in planning one's own activities. It is also good for a fairly small city to be aware of the issues that bigger cities have to face now. TeleCities membership allows you to do benchmarking. A contact network like TeleCities allows you to find partners for project cooperation”

Source: Online Questionnaire

Again the thematic focus of the network is seen as a key reason behind engagement in terms of ‘projects, good practices and exchanges’

“We want to be first with information and activities regarding Information Society subjects and be involved in European projects and good practices and exchanges”

Source: Online Questionnaire

Similarly these strands are also highlighted by the following respondent in terms of implementing both ‘European ICT standards’ and development of the information society, but within a local context

“It is good opportunity to exchange best practice ideas and seeking partners for common projects. Also preparation of common European ICT standards and devising the way for development of information society on municipal level”

Source: Online Questionnaire

What the responses indicated was that there was no one overriding reason that was central behind their original decision to join the network. Rather respondents' decision to join the network was very much multifaceted.

Potential benefits gained through involvement with TeleCities

With an understanding established regarding original engagement with the network, the questionnaire then moved on to ask respondents how the decision to join TeleCities had subsequently benefited their city. To do this the questionnaire asked respondents to list three benefits they felt they had received as a result of their involvement with TeleCities⁷⁴. As would be expected in many respects answers mirrored those relating to reasons behind joining the network in the first instance. An analysis of the differing reasons revealed a number of recurring themes. To aid analysis and quantify the process, a number of categories that encapsulated respondents reasons were produced. Again, in general these mirrored the network's overarching objectives of Policy, Knowledge Exchange and Projects, although a number of additional benefits were given. In total the following categories were assigned. Networking; Knowledge Exchange; Access Knowledge; European Awareness; Projects; Marketing and Others⁷⁵.

An analysis of these perceived benefits is included as supporting evidence in the next section. Here predetermined themes are used within the questionnaire to provide an assessment of respondents perception of TeleCities. Respondents were asked to rate a number of questions upon a scale of 1 to 5. *1 indicated not true* through to *5 which indicated very true*. The pre-assigned benefits are policy; knowledge exchange; partnerships; and marketing⁷⁶.

⁷⁴ See Appendix D for respondents answers.

⁷⁵ See Appendix D for a categorisation of respondents 3 potential benefits and the categories they were assigned to.

⁷⁶ These pre-assigned benefits were decided upon on the basis of early interviews with a number of TeleCities members and observations made at an early TeleCities event as outlined in Chapter Three.

Members perception: Policy

In terms of the perception of its members, the networks policy orientation is not seen as a key priority. Whilst the network envisages itself as playing a *key role in influencing the European agenda*, and is indicative of the networks move towards a policy centric focus in recent years, Table 5.3 indicates that members on the whole do not perceive the network as providing their city with an opportunity to influence European governance.

Table 5.3 I feel that TeleCities offers our city an opportunity to influence European governance

1	2	3	4	5	Uncertain
6.7% n-3	24.4% n-11	46.7% n-21	17.8% n-8	2.2% n-1	2.2% n-1

Source: Online Questionnaire Data

However if we examine the data within Appendix C that relates to members' perceived benefits of joining the network there is a recognition in terms of the policy angle of the network. A closer examination of perceived benefits in terms of policy reveals a different ideological context. Rather than engage within the network to promote policy, the perception of policy is presented discursively within contexts of raising awareness of European policies, funding and developments within ICT or the Information Society in a European context. To illustrate this members highlighted the benefit in terms of its potential to raise awareness providing an "*understanding of European issues*" or as another respondent commented an "*overview of European / common priorities in the development of the Information Society*". Only two comments related to the potential benefits of the network in an overtly pro-active political sense seeing TeleCities as

offering them an “opportunity to promote of the role of cities in the context of a European Information Society” and a further feeling that it could “contribute to [the] development of information society.”

Members Perceptions: Knowledge Exchange

As we have already seen, the ability of TeleCities to provide a platform to engage in knowledge exchange was central in the networks original construction. The importance of knowledge exchange to the network remains today, with members perceiving it as the dominant benefit regarding their membership.

Table 5.4 I feel that TeleCities offers our city an opportunity to participate in knowledge exchange

1	2	3	4	5	Uncertain
		6.7% n-3	22.2% n-10	71.1% n-32	

Source: Online Questionnaire Data

This is consistent with perceived benefits of joining the network, were the issue of knowledge exchange emerged as a significant reason behind engagement with the network. During the content analysis, the ability of the network to provide knowledge was divided into two separate strands. Firstly where respondents highlighted the network’s ability to obtain knowledge in a collaborative sense i.e. by using terminology like sharing, exchanging this was termed ‘knowledge exchange’ within the analysis category. However in many cases the concept of gathering knowledge through participation in the network was represented discursively in less pro-active ways,

through terminology like identification of best practice, obtaining information and access to knowledge bases.

Members Perceptions: Partnerships

The following table confirmed the role of TeleCities as a means of providing a platform for potential partnerships.

Table 5.5 I feel that TeleCities offers our city an opportunity to form partnerships with other cities

1	2	3	4	5	Uncertain
		17.8% n-8	35.6% n-16	46.7% n-21	

Source: Online Questionnaire Data

The ability of the network to form partnerships was seen as a strong component behind respondents engagement with the network. To provide a deeper contextual angle to this, data from the content analysis provides a variety of perceived benefits attached to partnerships Firstly the concept of ‘networking’ was prevalent. In the majority of cases this perceived benefit is mainly expressed by actually citing networking, in other cases it is represented through benefits in terms of ‘contact’ and ‘potential partnerships’. Or in one case *‘security in the knowledge that you are not alone’*. As a result networking benefits can be seen in terms of providing members with a collective space to generate contact and develop partnerships, for instance [TeleCities provides] *“a pool for project partner search”* and *‘international contacts can result in project cooperation’*. To provide a further understanding of the network in term of its potential to form partnerships, respondents were asked to indicate whether or not they had developed a partnership with a variety of organisational and institutional bodies as a result of their membership of TeleCities.

Table 5.6 Different relations established as a result of TeleCities membership

Contact as a result of TeleCities membership	Yes	No
A city that is not a member of TeleCities	48.9% n-22	51.1% n-23
A Municipality or Region	55.6% n-25	44.4% n-20
National Government	24.4% n-11	75.6% n-34
European Government	11.1% n-5	88.9% n-40
Private Organisation	46.7% n-21	53.3% n-24
University or Research Institute	51.1% n-23	48.9% n-22

Source: Online Questionnaire Data

In many respects the role of TeleCities in providing a platform for potential partnerships and projects raised earlier is confirmed here. What is interesting in terms of the partnerships established as a result of TeleCities membership is that it is predominately institutional or organisational entities existing in a similar scalar context to members. That is, it is other cities, municipalities, private organisations and research institutes that members have engaged in rather than potentially *scale jumping* partnerships involving national or European government.

Members Perceptions: Marketing

A further potential benefit which in many respects is a by-product of involvement with TeleCities is the marketing potential the network brings.

Table 5.7 I feel that TeleCities offers our city a marketing opportunity within Europe

1	2	3	4	5	Uncertain
	8.9%	28.9	35.6%	20.0%	6.7%
	n-4	n-13	n-16	n-9	n-3

If we examine this in line with the content analysis, in the majority of cases the marketing potential was very much presented in terms of the network's ability to present their city in a European context both in the sense of the network's thematic focus, such as the following comments indicate '*good opportunity to present Gdansk's ICT projects on European level*' and '*we market our ICT profile internationally*'. In other cases the marketability of the network was seen in terms of its place marketing potential, for example one respondent related it in terms of '*providing promotion and marketing of our area (image and location)*'

Questionnaire Summary

The intention behind the online questionnaire was to build a picture of TeleCities in terms of the perceptions of its actual members. In terms of member involvement the data presented here indicates that although respondents of the questionnaire were predominately pro-active within the network in general participation in the network is considerably lower than the 120 cities listed within promotional literature connected to the network.

Further to this it has established that in general, reasons behind engagement closely mirror the three overarching priorities of the network identified earlier in this chapter. However by placing members perception against the themes identified in the content

analysis a number of tentative conclusions can be reached. Firstly it was identified that members perception in terms of policy influence was more centred around the context of policy in terms of knowledge exchange and projects rather than the utilisation of TeleCities as a collective network to influence European governance. Additionally, knowledge exchange was identified as a key component in terms of members participation and perception of the network. However through the content analysis it was established that connotations attached to knowledge exchange vary. In particular a number of aspects in terms of utilising TeleCities as a repository of knowledge were identified which consisted of less varying degrees of participation in terms of knowledge exchange. Additionally, marketing was identified as component behind engagement with the network. Further to this partnerships are seen as a key component behind membership. By incorporating the collective space of TeleCities enables a variety of networking processes. In this context the questionnaire data provided evidence in terms of the network to act as a platform to generate a variety of partnerships at a variety of different scales.

5.5 Conclusions

The intention behind this chapter was to provide an empirical context to the involvement of cities within the process of IS policy directives and the subsequent role of TeleCities within that process. To do this the chapter explored the network from three distinct perspectives; its construction, its current aims and objectives and member perceptions.

The origins of the network represented a seminal conjuncture in terms of a new collaborative environment between the European and local scales. With the 4th framework programme in its infancy and in particular the emerging role of the

Bangemann report in terms of shifting the European R&D research agenda, cities found themselves in a particularly receptive environment. However within this process a number of points need to be addressed.

Firstly although TeleCities was becoming embedded within the culture of European funding mechanisms it is important to note that in its early incarnation it did not represent a collective organisational intermediary. Rather at this stage the structure of TeleCities represented a temporal transnational space for a variety of cities to work collaboratively generating new project bids and working on those they had already secured. This temporal nature of TeleCities was further extended because as a collective entity it was not incorporated into the process institutionally; it provided the collective space, but was not incorporated into the official process. So once the project consortium had secured funding although that process originated within the umbrella of TeleCities, it was the lead city that became the contractor and NOT the network. So although the network provided the space and identity to develop and initiate projects it did not represent a collective separate institutional representation of those cities.

The rise of TeleCities as a separate and self-contained organisational entity did not come until it secured the EDC programme. With increased funding and a definitive thematic focus the network was able to establish itself in terms of a collective representation of cities rather than the temporal meeting space it had been during its original incarnation. This linear development represented a significant move in terms of the emergence of TeleCities as an intermediary of IS policy. In this capacity the construction, stabilisation and increased visibility of the network was dependent upon the Commission in terms of providing the funding, organisational structure and indeed the refined thematic focus of the network. In doing so the Commission had provided

itself with a collective platform of responsive and pro-active cities to engage with in terms of disseminating application-based research to the city level.

With shifting framework programmes this receptiveness on behalf of the Commission diminished. However by this time TeleCities had created its own organisational capacity and had built enough critical mass to secure its own survival in this less receptive atmosphere. In this context TeleCities has been reflexive in terms of its ability to respond to its external influences. With the PACE project acting as the network's thematic framework, TeleCities represented a coherent organisational entity that proactively placed itself as an intermediary on its members behalf rather than one in existence purely for the Commission to disseminate its political will.

With the introduction of the Lisbon Agenda, the role of the network changed significantly. With a diminished role for cities in terms of project initiatives that implicitly sought their participation, the network adopted a more policy centric framework. In many respects this proactive stance was a consequence of the conjuncture of the 6th framework programme, a new president and coordinating manager. Without a major project aligned to the network for the first time the reflexivity of the network again became apparent when a decision was made to align itself completely with the Commission via its eEurope ISA strategic framework with the intention of placing itself as a key intermediary between cities and Commission policy.

Whilst the initial construction of TeleCities can be seen as an organic process, over the last ten years the network has progressed to represent itself in terms of a separate institutional identity. To substantiate this position, the network has adopted a multifaceted approach to meet the needs of its members whilst at the same time locating itself as an intermediary between cities and the European scale. Operating upon its three

core principles of knowledge exchange, policy and projects the network can be seen as a reflexive entity that has the potential to react and be pro-active within the context of its thematic foci.

The data from the questionnaire indicate the perceived potential benefits to members are varied. However in the majority of cases members perceptions are very much in line with the networks three overarching strategic strands listed above, which themselves are a culmination of TeleCities historical trajectory. The overwhelming perceived benefit is primarily concerned with utilising TeleCities as an intermediary to gather and disseminate knowledge collectively. With this the overarching concern for members, the remaining benefits can be seen to be intrinsically linked to the collection and utilisation of this knowledge in different spatial and contextual capacities. For example 'networking' with narratives of 'contact' and co-operation' is espoused as beneficial to members. As a result, the process of networking within TeleCities, can be seen as representative of collaboration within an intermediary space that is allowing cities contact and cooperation outside their spatially defined locations. This spatial shift also materialises through the expressed benefit of marketing. Through interaction with the network, member cities are able to present themselves within a European context both to other cities and to an extent market this perception back in a local context too. Again members are utilising TeleCities and its intermediary capacity, this time in a marketing context that spatially shifts the connotation of the city in both local and European context.

This 'spatial stretching' is also apparent in members perception of the networks 'policy' context, which is more centred upon the potential benefits attached to the increased European awareness the network provides members. Whereas it clarifies the perception of members away from policy construction as an overriding aspiration, the ability of the

network to provide a collective intermediary capacity with a tightly defined thematic focus provides members with a space to engage with policy that is relevant in a local or collaborative context.

The final component, that of partnerships, has been a mainstay of the intentions behind TeleCities since its inception. Again this potential benefit places TeleCities in its role of allowing a collective space of engagement. TeleCities provides the space to seek out potential partnerships and utilise the increased European awareness as a means to construct trans-European projects.

Collectively the utilisation of TeleCities by members, in terms of its knowledge exchange, policy and partnership and project contexts emphasise the relationality of the network.

With an emerging conceptualisation of the process of transnational networking established the next chapter will explore in more depth this subsequent interaction between the network and its members through an examination of the Broadband Work Group.

Chapter 6: TeleCities Broadband Work Group: Constructing Policy, Reflexivity and Scale

6.1 Introduction

As we have already seen in Chapter Four, the engagement of the local scale within European IS policy directives has been encouraged by the Commission, particularly in the context of European R&D Framework programmes. However the complexity of the environment and the changing Framework Programmes have seen an ever changing scenario for those cities who have engaged in European transnational collaborations. Emphasising this complexity, Chapter Five illustrated the role a transnational network has played in this process. This chapter aims to bring these two strands together through an examination of the TeleCities' Broadband Work Group (BWG) illustrating the processes and spatial implications of policy construction within a transnational network.

In order to do this the chapter is structured as follows. Firstly it provides a historical context to the BWG, locating it from its initial inception within the wider contexts of European IS policy directives. This is then built upon through the analysis of data collected through fieldwork carried out between March 2004 and June 2005. Drawing upon data collected through attendance at four BWG meetings, and interviews with key actors within the group this chapter will investigate the functionality of the network's intermediary capacity, following the work group from its inception describing the processes, aims and aspirations behind a transnational collaborative project. In doing so it will provide empirical data on how policy is constructed, shared and disseminated on a collectivist basis.

6.2 Broadband Work Group: Policy Origins

As we have seen the trajectory of TeleCities has shifted throughout the years. Although the network had initially generated a series of project initiatives during the 4th Framework Programme it had struggled to replicate this within both the 5th and 6th Framework Programmes. As a result the most recent incarnation of TeleCities adopted a more policy-centric focus than in previous years placing itself in close alliance to European IS directives with the specific intention of making inroads in terms of its political influence.

The origins behind this shift can be traced back to 2000 when a number of key developments occurred. Firstly, Barcelona, signatories of the Manchester declaration and one of the most pro-active cities in the network was elected as the new president of TeleCities. Second, the network had recently appointed Anna Lisa Boni as the new TeleCities coordinating manager, and finally the 6th R&D Framework was about to begin. Collectively these events represented an ideal opportunity for the network to develop a strategic framework that could reinvigorate the network in terms of its policy influence. This new political strand to the network was realised through the Knowledge Based City (KBC) framework which was launched at the 2003 TeleCities AGM in Porto.

The Knowledge Based City Framework (KBC)

The intention of the framework was to consolidate and build upon TeleCities' legacy over the last 10 years. The 5th Framework Programme had represented a challenge to TeleCities, but due to the organisational capacity the network had built in previous years, it had come through this period relatively unscathed in terms of its collective membership. However a conscious decision had been made to 'repackage' the network in terms of a proactive alignment with Commission policy. This process materialised

through the construction of the network's new strategy, the Knowledge Based City (KBC) framework, which in essence was a response to the Lisbon Agenda, highlighting the potential role cities could play within that process⁷⁷. Dave Carter, representing Manchester on the steering committee, explains:

"We were focusing on the next step, whereas initially you could see [TeleCities] was an embryonic network – gets a bit of money in the Fourth Framework, up the next level Fifth Framework doesn't deliver but it doesn't matter as there is a bridge across this divide and then you get framework six where you are back in but in a slightly different way So it was saying lets think about the issues more, it's not just about following FP6 it's about what are the issues. The issues are the broadband strand, e-citizens rights, local national e-government, so for [TeleCities] the next level issues are in European policy it's FP6 to 7 by way of Lisbon agenda and i2010"
(Interview with Dave Carter, Manchester, November 17th 2005)

As Dave Carter makes clear, the next stage of TeleCities would be more focused than previous years in terms of its policy orientation. There were a number of reasons behind this. The entrepreneurial approach the network had adopted during the 5th Framework Programme had led to a debate within the network as to what TeleCities actually represented⁷⁸. Further to this there was a perception within the steering committee that whilst the Lisbon agenda was being enthusiastically espoused as the new driver towards a European Information Society, the potential role for cities within that process

⁷⁷ The KBC is noticeable in mirroring the terminology of the Lisbon Agenda, incorporating 'knowledge based city' whereas in previous years the networks strategic frameworks had always been devoted to the 'information society'.

⁷⁸ Based on a conversation with Steve Fleming (city of Hull), during the trip to Gijon, September 30th 2004).

represented a significant policy gap. Steve Fleming, representing the city of Hull on the TeleCities steering committee explains:

“There was always an issue in the network about whether it was doing delivery projects, you know demonstration projects and things like that, what the network was about – was it about best practice network, doing things network or was it about policy? And at that time we were having this discussion well what we need to do is to get more policy markers down and this was a significant response to that by responding to the Lisbon agenda. Anna Lisa Boni who was the manager at the time was having discussions with people in the Commission and the Parliament and what became clear was an emerging policy gap – we’ve got these goals we don’t know how they fit in – cities can do a lot, you need to do some more lobbying, policy stuff” (Interview with Steve Fleming, Hull, 8th December 2005).

To bridge this perceived ‘policy gap’ the framework of the KBC was structured to provide the network with an opportunity to operate within the European policy contexts of the Lisbon Agenda and i2010. Chapter Four illustrated that both the Lisbon Agenda and i2010 were predominantly concerned with a shift towards a knowledge economy that would be pivotal in advancing the European economy in a global context. As a result the KBC directly aligned itself to the Lisbon Agenda and the role of the city within that process.

As well as providing a more focused policy viewpoint it is also important to note that at this point the network was without a central collective project for the first time in its history. Previous chapters have shown the ability of the network to secure, manage and

complete major projects has been a key component in the cohesion of the network. Similarly the integration of a major project into the network establishes an institutional relationship between the network and the Commission. Therefore the construction of the KBC can be seen as a twofold attempt to give the network a collective identity whilst at the same time allowing the network to develop a more policy orientated direction. The then manager of the network explains:

“You know we had the working group results, anyway they do exchange, I mean they do project proposals they do exchange and they do dissemination, you can’t invent different activities. If you have one box that you put all these things it is much better because it is all towards one common direction, so that was the rationale behind that. I thought with the Lisbon process it was important to place yourself with a theoretical framework that then links to the network and the members would be able to be applied and put flesh on the concepts” (Interview Anna Lisa Bon, Brussels, 18th October 2004).

With an intention to align the network to the Lisbon strategy, the Barcelona presidency suggested a recent strategic output that they had developed themselves aimed at the Spanish regional level. Nora Bousdira, the officer representative of Barcelona explains :

“During one steering committee meeting with the core members we had a really interesting debate to decide what would be the direction of the network. The result was the Knowledge Based City framework; this was at the strategic level an output from Barcelona because exactly this framework

was originally from the political campaign for the Catalan region”

(Interview with Nora Bousdira, Barcelona, 15th March 2005).

The retranslation of a strategic initiative from the regional scale to form the basis of a transnational network in many respects builds upon the concept addressed in the previous chapter, that is, the conception of TeleCities as an intermediary generating and disseminating discourses at a variety of scales. Whilst the network provides the platform to re-contextualise the policy, it represents a reversal of the process with policy redirected from a previously embedded scalar context into the relational space of TeleCities. Essentially it adds a further element towards the reflexive nature of TeleCities and in particular its ability to act as an intermediary within spatially stretched processes.

From within the steering committee the response to incorporate the strategy into TeleCities was particularly positive. Essentially, the network had substantial foundations towards a strategic framework which offered the network a cohesive direction in line with current European policy:

“It was trying to put the technology into a wider context in the way that the knowledge agenda had moved on. So what it was trying to do and what colleagues in Barcelona had done was to have a look at what things needed to happen for cities to play this role and get the benefits from both the technology and the knowledge society. So it was meant to simply and easily produce a joined up focused picture with some sense of direction”

(Interview with Steve Fleming, Hull, 8th December 2005).

Using the Barcelona campaign as a starting point, the KBC framework was retranslated both linguistically and in a scalar context away from its regional origins towards a more transnational oriented development that hoped to build upon TeleCities' historical legacy and reinvigorate it in terms of a position of strength with the European institutions, for example:

“The new strategic framework wishes to include all the topics that have been addressed in the past years by TeleCities but also those emerging from the growing level of specific issues that naturally emerge in the fast moving evolution of Information Society. Of course, the new strategic framework will continue to aim at supporting all members in exchanging experience and developing concrete partnerships, but also to ensure a strong and stable position of TeleCities vis-à-vis the European institutions with a long-term perspective” (TeleCities 2003b, p3).

To achieve this multifaceted approach, the framework provided four central objectives;

- *Ensuring information and knowledge rights for citizens*
- *Overcoming the barriers to the development of the knowledge society*
- *Fostering the knowledge based industries*
- *Promoting the modernisation of public services and eGovernment.*

(ibid, p3)

In many respects the KBC replicated the role that the EDC programme and PACE had played so effectively the previous decade. By locating itself as an intermediary with a strategic framework that merged spatial scales it provided an opportunity to engage in

European policy processes. This was the clear intention behind the KBC; through its alignment to the Lisbon strategy it provided cities with a relational space to engage within the major European IS policy directive.

Table 6.1 highlights these synergies through a comparison between the KBC four core strands and elements of the Lisbon strategy

Table 6.1: Synergies between KBC and Lisbon Strategy

TeleCities Knowledge Based City framework	Lisbon Strategy
<i>Ensuring Information & Knowledge Society rights for citizens</i>	<i>An information society for all</i>
<i>To overcome the barriers to the development of the Knowledge Society</i>	<i>Education and training for living and working in the knowledge society</i>
<i>Fostering the Knowledge-based industries</i>	<i>Creating a friendly environment for starting up and developing innovative businesses, especially SMEs</i>
<i>Promoting the modernisation of public services and eGovernment</i>	<i>Real efforts must be made by public administration at all levels to exploit new technologies to make information as accessible as possible.</i>

Adapted from Lisbon Strategy (2000b) and TeleCities KBC Framework (TeleCities, 2003a)

However whilst there are a number of synergies, the *specific* role of cities is questionable. As we have already seen in Chapter Four, the Lisbon Agenda was strategically aimed at the national scale with a diminished role for cities compared to the major European directives of previous years. As a result, the key difference with the KBC in comparison to previous strategic frameworks was its distinct lack of official institutional engagement. Whereas the EDC programme was funded and monitored in an official capacity, leading to a formal connection between the network and the Commission, the KBC although a proactive response on behalf of the network aligning itself with European policy directives, had no formal connection within that process. Without a formal connection established, the framework was very much presented as a lobbying tool for cities to engage further within the Lisbon Agenda. For example,

“Priority will be given to acknowledge the role of cities in the process of achieving the Lisbon goals, which aim at “making Europe the most competitive Knowledge-based economy in the world”. Here our goal is to place the city related aspects of this process higher on the EU agenda as well as on the agenda of the national and the local level. To this end, we aim to promote a strategic framework around The Knowledge-based City”
(TeleCities 2003b, p 10).

The KBC framework was delivered to the TeleCities steering group one day prior to the 2003 TeleCities AGM in Porto by Anna Lisa Boni. Members of the steering group unanimously accepted it and the KBC framework was officially launched to all member cities at the AGM on the 26th November 2003.

New Work Group Schema

Once the KBC framework was accepted by the TeleCities membership, the steering committee and the TCO incorporated the framework into a new schema for the working groups. The role of work groups have been a vital component of TeleCities since they were incorporated into the organisational structure of the network during the EDC programme. Since then working groups have been constructed in line with the network's strategic framework. Lasting between two and three years, work groups represent the 'backbone' of the network enabling individual cities to collaborate collectively within TeleCities. Their overall objectives are to:

"Share experiences and practices amongst member cities: Transform these experiences into ideas, guidelines and recommendations to influence European policies" (TeleCities Website⁷⁹)

To meet the objectives of the framework, each strand of the KBC concept was incorporated as an overarching theme and a number of potential work group topics were developed with the intention of contributing to the overall framework. The new framework was seen as representing a collective goal that would allow members to contribute to aims and objectives of the network, whilst at the same meeting the KBC overarching objectives:

"The rationale behind the adoption of this framework is to guide the members to fulfil the mission of the network (policy making, exchange of experience, project development) in a well structured and targeted way, so to capture as much knowledge as possible and meaningfully use it for

⁷⁹ Available from: www.telecities.org/workgroups accessed December 1st 2003,)

learning and promotional purposes at the European and local level”

(TeleCities 2003b, p3).

Table 6.2 represents the potential topics suggested as a way of contributing to the KBC framework

Table 6.2: Potential Work Group Topics

Strand of Knowledge Based City Concept	Potential Working Group Topics
Overcoming the Barriers of the development of the Knowledge Society	Broadband access for all Public Authorities as the main knowledge provider Lifelong learning eLearning contents and digital literacy for all eInclusion
Foster the Knowledge Based Industries	Delivery of high quality online services for businesses (especially SMEs) Use of Mobile technologies and location based services within Public Authorities Promote ICT entrepreneurship and innovation Promote Broadband access and eBusiness strategies for SMEs
Ensuring Information & Knowledge Society rights for citizens	Rights to Accessibility Rights to education and information Information rights Rights to participation
Promote the Modernization of Local Public Authorities and eGovernment	Re-engineering processes New online services for citizens in Healthcare, education, tourism, culture Use of new technologies for risk management and civil protection eSecurity solutions for online transactions Open Source Software for public authorities Interoperability between administrations

(Adapted from TeleCities 2003c)

The logistics of implementing the new working group schema were discussed at the steering group meeting in Barcelona on the 26 January 2004. A membership-wide call was issued from the steering group for potential chairs, sub chairs and work group

leaders. Once calls of interest had been received the intention was to clarify levels of interest at the next TeleCities event in The Hague in March 2004, where the new work groups would be launched.

Summary

The KBC represented a key juncture for the network to reinvigorate itself in terms of a more policy orientated network. In doing so it provided TeleCities with an overarching strategic framework that aligned itself directly with the Lisbon strategy. Further to this, specific work groups were implemented that allowed members to work within an environment that was specifically policy-oriented towards the European scale. However without the institutional relationship established in terms of an official project funded via the Commission, the actual effectiveness of the framework in a policy context was unknown.

6.3 Broadband Workgroup Meetings 2004 – 2005

With a historical background now established, this chapter will explore in detail how an individual work group has operated within this framework and its subsequent contribution towards reinvigorating TeleCities in terms of its political influence.

The Hague Event March 17th – 19th 2004

The new work group schema was officially launched at the TeleCities event at the Madurodam conference centre in The Hague on March 18th. The event was opened with a special thirty minute plenary session presented by the then vice president of the network primarily highlighting the revisions to the framework based on comments received during the open call. Once this session had ended, members split into groups

according to their preference of strands relating to the KBC. The first two parallel sessions were:

- Ensure Information and Knowledge Society rights for Citizens
- Overcoming the barriers of the development of the IS

Followed in the afternoon by:

- Promote the modernisation of local Public Authorities through eGovernment”
- Foster the knowledge based economy

As outlined in Chapter Three a decision was made to follow the “Overcoming the barriers of the development of the Knowledge Society” strand of the KBC framework.. After the open call, four potential work group topics were suggested as outlined in Table 6.3 below

Table 6.3. Work groups relating to Overcoming the Barriers of the development of the Knowledge Society strand of KBC

Strand of Knowledge Based City Concept	Potential Working Group Topics
Overcoming the Barriers of the development of the Knowledge Society	Broadband EInclusion ELearning ESecurity

(Adapted from TeleCities 2003c)

The Broadband Working Group

The first BWG meeting was allocated a 2 hour time slot. The intention of the meeting was for those cities present to determine the future direction of the work group using the new work group schema as a guide to proceedings. In this capacity the new work schema places broadband as both an economic and social matter:

“Broadband is crucial to economic development and quality of life in European cities. In this sense the role of cities will be to ensure equal access for all to telecommunications infrastructure and the Internet. This can only be done through an effective collaboration between cities and telecommunications sector – such a cooperation will be a necessary condition to guarantee the territorial balance of broadband infrastructure as well as to set up affordable and high quality Internet access services”
(Working Group Framework Document 2003, p4).

With this loose contextual background and definition providing a starting point to the BWG, 13 cities attended that first meeting; they were: Siena; Salerno; Manchester; Zaragoza; Eindhoven; Hull; Munchen; Leeuwarden; Tranas; Ronneby; Amaroussion; The Hague, Turku.

Broadband Workgroup Meeting; The Hague March 2004: Leadership and Priorities

The work group session lasted approximately two hours. During the consultation period prior to the work group’s first meeting, a number of cities had expressed an interest in chairing the work group, however at the first meeting Heleen Kerkhoff representing the

city of Leeuwarden emerged as the clear leader. Heleen Kerkhoff had been employed by the city of Leeuwarden in an economic development capacity for the last six years, however prior to this she had been employed by the city in a consultancy basis. As a result she had been representing the city at TeleCities events almost since the inception of the network. For her, the desire to be involved with the broadband work group in a leadership capacity stemmed from a national and in particular a local context:

“[Broadband] is a very big issue in the Netherlands in general and specifically in Leeuwarden. Within our development it plays a major role in what is happening at the European level, so for me it was a major point of interest to get some interest and support at the European level for some issues” (Interview with Heleen Kerkhoff, Leeuwarden, 25th October, 2005)

Whilst there was a consensus behind Heleen taking overall responsibility for the group, the session represented the first time members of the network had actually met in a productive environment since the adoption of the KBC as the network’s new framework. Because of this the core focus of the group was entirely exploratory and to an extent relatively disorganised. Steve Fleming representing Hull explains:

“The first working group was chaotic because there was a lot of interest in it. But always at the start of a work group you get chaos like that, people want to lead, they want to point it in their direction, lots of people coming from different backgrounds speaking different languages, you always get that chaos” (Interview with Steve Fleming, Hull, 8th December 2005).

To progress within this first meeting, Heleen asked for introductions from members and a brief synopsis of broadband initiatives taking place within their respective cities. This was followed with a discussion to prioritise the direction of the work group. In this capacity members expressed a desire to separate the concept of broadband into two separate areas – one devoted to infrastructure, and secondly the implications that broadband has for services and content within cities. In conclusion the following priorities were decided upon:

“A specific focus is necessary in order to avoid too broad attention. A lot of things are actually happening in member cities with respect to broadband, which is a topic that seems to be high on the agenda. There was a strong expression to share experiences (also worst practices). The participants are in different stages of broadband development” (TeleCities 2004).

The themes for the subsequent working group sessions were also discussed. Rather than define a tight framework at this stage the working group set a tentative agenda for the next meeting in Ronneby; the questions to be addressed were:

- *What are the barriers to deployment of broadband?*
- *What kind of partnerships should be developed between the public and private sector?*
- *What are the most suitable business models for providing broadband services? What are the possible role of local authorities?*
- *How could we more effectively catch the user’s requirements and how could we afterwards assess their satisfaction?*

(TeleCities, 2004)

Finally, in line with the overarching objectives of the KBC, work group chairs needed to forward one action from experience exchange, project proposal or policy paper. However as the working group was still in its infancy no collective decision had been made. Rather the work group decided to keep its options open until their next meeting pursuing all three avenues.

Table 6.4 Actions Decided by Work Group

Action Required	Action decided by Work Group
Exchange of experiences? Discussion on solutions and Cities projects Key success elements	Overview of best practices from different perspectives
Project proposal? Organize a session to discuss participants interest in a EU project in this field	To be prepared after June for meeting in September, if members indicate their interest
Policy paper? Discussion Policy needs in Broadband infrastructure in Cities / Recommendations to EU institutions	Legal issues/roles of cities/business models: recommendations based upon results/best practices in different EU-cities

(Adapted from TeleCities, 2004)

Summary

Although the first session was undoubtedly a chaotic affair, the BWG had developed to the extent that it had a tentative agenda towards its future aims and objectives. The KBC framework had provided members with a starting point to relate their own individual experiences of broadband into a wider European scenario and had provided the work group with a thematic context to explore its potential in a local capacity. Further to this a leader within the group had been established. With Heleen Kerkhoff emerging as the chair of the BWG, her experience of broadband in a local context and her long established involvement with the network contributed to the BWG having a firm foundation. As a result of this first meeting the BWG had already developed in accordance with the core priorities of the network as a whole and the new work group schema.

Broadband Workgroup Meeting; Ronneby June 2004: Unifying the group

The BWG met three months later as part of the TeleCities Summer Event on June 4th. With an allocated two hour slot on the afternoon the following members met for the second time. Siena; Eindhoven; Hull; Leeuwarden; Tranas; Ronneby; Amaroussion; The Hague. Additionally the following members also attended, Vienna; Barcelona. The intention behind the work group was to build upon the discussions that had originated at the last meeting, particularly in relation to broadband infrastructures in a city context. To provide a pan-European perspective Heleen in collaboration with Eleni Maglara⁸⁰ from the city of Amaroussion had approached a number of representatives of member cities asking them to give a presentation highlighting how broadband infrastructure was provided in their city.

⁸⁰ Eleni's involvement arose from discussions at the first broadband meeting at The Hague.

The Presentations

Essentially the rest of the work group was dedicated to presentations with the explicit intention of building a knowledge base around broadband initiatives at the local scale. To achieve this four members of the work group were invited to provide a brief presentation relating to the role of broadband in their city⁸¹. In addition the national context, in this case Sweden, was provided through the inclusion of a presentation from the consultancy firm Cisco. As we have already seen a core component of TeleCities is its ability to share information on a pan-European basis. In this capacity the work group provided the thematic context for those giving presentations an opportunity to market their own initiatives and in one case disseminate a particular European project the city had been engaged with.

Summary

As we have already seen in the previous chapter, cities engagement with the network is predominately centred around the three overarching priorities of the network: knowledge exchange, projects and policy. The meeting in Ronneby provided the platform for a number of these strands to emerge. First, by requesting members of the BWG to present their individual initiatives to other members of the group, a clear contextual environment for knowledge exchange was provided. Further to this it forced cities within the BWG to be pro-active. Together, the effect of the presentations established the group in terms of its collective thematic constituents. With the agenda at Ronneby constructed in line with the KBC providing the group its thematic orientation in its early stages, the engagement of cities within the framework was established for the first time. As a result the BWG represented a more unified identity than had been the case in The Hague.

⁸¹ The cities were; Eindhoven, Siena, Tranas and Amaroussion.

Broadband Workgroup Meeting; Gijon October 2004: Policy and Projects

The next TeleCities event was held in Gijon, Spain between the 29th of September and 2nd October 2004. The BWG met for the third time on the afternoon of 2nd October, again with a two hour time slot allocated. Cities who had attended previous work group sessions were: Eindhoven; Hull; Leeuwarden; Ronneby; The Hague; Manchester; Turku. Additionally Prague also attended

At the initial launch of the BWG, there had been a division between the role of broadband in term of infrastructure and services. The meeting in Ronneby concentrated upon infrastructure; in Gijon the focus was upon services:

“In Gijon, we will have a closer look at the broadband services that are on offer or being developed for the target groups in the cities and specifically the role of operators and cities” (TeleCities 2004a).

The Ronneby event had seen the start of the BWG in a more participatory capacity. With four of the core members contributing to the session, both a knowledge base was established in terms of city projects in a local context and an atmosphere of collaboration had been established. Keen to build upon this momentum Heleen had contacted both Steve Fleming from the city of Hull and Dave Carter from Manchester to provide presentations relating to their respective cities. Because of their long-time engagement with the network, Heleen was fully aware of developments within both Hull and Manchester and felt they would provide an ideal context to explore broadband in terms of services:

“My analysis of the Ronneby workgroup was that the best part was the overview from Cisco. We had a discussion at Ronneby with Dave and Steve,

where it seemed the next logical step was to concentrate on services, on real services for cities and that's why I asked Dave and Steve to do presentations in Gijon" (Interview with Heleen Kerkhoff, Leeuwarden, 25th October, 2005).

Steve Fleming explains how he became involved:

"We were talking about things and Heleen asked me if I would do it. I'd made a contribution somewhere in some discussion and Heleen asked if I'd do something. She also had Dave Carter involved and we were demonstrating what this broadband actually meant. It was showing what the value of this stuff actually was which is one of the problems" (Interview with Steve Fleming, Hull, 8th December 2005).

By bringing more members into the group on a participatory basis, Heleen was building the collaborative nature of the work group. At the same time she was constructing a common narrative:

Heleen was doing her usual very calculated way of trying to develop something, develop a position or a common view (Interview with Steve Fleming, Hull, 8th December, 2005)

This is an important element. Although the KBC provided a strategic framework to work within, developing a commonality within that framework was very much left to the work group itself. By incorporating as many members as possible in a relatively small amount of time, members had made a commitment to the work group. So whilst Heleen used her role as leader of the group to draw in various alliances, at the same time

she was attempting to develop a coherent narrative within the group, producing what Steve Fleming referred to as a '*common view*'.

The materialisation of this '*common view*' would become more apparent in the next phase of development within the BWG. With an emerging collective narrative developed, the BWG began to move beyond its knowledge exchange sessions. Whilst these were clearly beneficial to members both in terms of the knowledge it provided and the role it played in developing a common thread within the group, the overall strategic orientation of the network is centred around projects and policy *as well as* knowledge exchange. As documentation gathered from the event makes clear, the Gijon event shifted the focus of the work group away from knowledge exchange and began to incorporate both policy and project strands:

"We will work on a TeleCities Policy paper from the cities' perspective (also supporting the paper from the Committee of the region). The third issue is to set up a joint project for bench learning, as a preparation for eTEN call (spring 2005), ERDF structural funding after 2007 or EIB funding" (TeleCities 2004).

With the shift towards incorporating both project and policy strands within the group, the Gijon event represented a notable shift in the aims and aspirations of the BWG. To an extent the transition from knowledge exchange to project and policy orientation was a linear progression. Whilst the process of engagement through knowledge exchange had bound the BWG into a more cohesive group due to its participatory nature, the progression towards both project and policy elements was embedded within the KBC. Further to this, with Heleen firmly at the helm of the BWG she decided that both contexts were essential if engagement and participation was to continue:

“This was one of the things we had been discussing between the working group sessions, it was some sort of Adam and Eve thing, starting over and over again. So I suggested that it would be better to have a starting point, so this could be a joint project or support to get towards a higher level of development. So the cases were brilliant and they lovely to have a look at, but we could see that it would help to have some joint interest that we could fight f,,r like in the old days of TeleCities were we were putting in bids and finding out where the interests was” (Interview with Heleen Kerkhoff, Leeuwarden, 25th October, 2005).

The Project Route

To ‘find out where our interests was’ and to launch the potential bid, Heleen brought in Martin Van Rossum, Heleen describes his involvement:

“He had been listening at the two previous events and he said there are some very good opportunities to go for some projects, so let me have a look at what we can do” (Interview with Heleen Kerkhoff, Leeuwarden, 25th October, 2005).

Martin van Rossum’s involvement with TeleCities goes back to 1994. Working predominately in an independent consultancy capacity, Martin has initiated and managed a variety of projects connected to TeleCities, starting with INFOSOND and DALI⁸² in the mid 1990s to the more recent MUTEIS⁸³ project. At the Gijon event, Martin presented his view of how the work group could integrate a trans-European

⁸² See Chapter 4, Table 4.2 for more details regarding the INFOSOND and DALI Projects

⁸³ MUTEIS (Macro-Economic and Urban Trends in Europe’s Information Society) was an IST funded transnational project administered by Martin Van Rossum in his consultancy capacity within the University of Maastricht. Additional partners were; International Institute of Infonomics (Maastricht), European Institute for Comparative Urban Research (Rotterdam), Jönköping International Business School, University of Helsinki, NEXUS (Dublin) and The Hague. TeleCities acted as a platform of dissemination hosting the MUTEIS end of project conference at the TeleCities Hague Event in March 2003.

project, placing the broadband topic central to TeleCities' new framework. In this context he proposed an initial starting point of collecting the best practice case studies already presented at the Ronneby and Gijon events and repackaging these for the basis of an E-TEN bid:

"So following our best practices it should be feasible to enter the E-TEN 2005 call, expected in spring and see whether building on the practices presented to us today and the ones in Ronneby and see whether or not we can present this under the E-TEN programme. That can be seen as a rather short term action. Then of course if this is giving us some faith, we may want to consider more long term actions, because talking about practice of broadband policies you are talking about structural funding, about 2007 and beyond. So it takes a long time to prepare inter-city co-operation but we could enter those types of programmes. In the last 11 years of TeleCities that was always a lot of fun and it would be a pity if it did not continue that way" (Martin Van Rossum. Transcription from presentation at Gijon BWG meeting, 1st October 2004).

Although within the group there was initial interest, the strategy espoused by Martin was perceived to be more beneficial to his consultancy than the actual aspirations of cities within the BWG:

"It was a typical Martin Van Rossum approach. He presented a Xmas tree of ideas and he couldn't explain how it could work, his idea was to have some huge integrated approach and have all sorts of funding involved. So if we had gone with his proposal he would have had a lot of work and a lot of hours to send bills for, but it would have been impossible to predict were we would end up. The main problem with his point of view is that it always

begins with his point of view – the funding possibilities and not of the cities and their problems and what they would like to solve” (Interview with Heleen Kerkhoff, Leeuwarden, 25th October, 2005).

As a result the project described by Martin went no further. However, keen to incorporate a project within the work group a number of cities within the BWG began to work on a potential project bid at subsequent BWG meetings.

Broadband Workgroup: Constructing Policy: The Origins

The second element to materialise at the Gijon event was the launch of a potential policy statement to be constructed by BWG members. As we have already seen the move towards integrating both policy and project strands within the BWG were as a direct result of the KBC:

“[The policy angle] came from the [KBC] framework set up by the steering committee because it was expected from all the working groups that there would be several strands including activities that would provide the basis for lobbying and policy stuff. I suppose I translated that into in the sense that we should have some type of declaration or manifesto or policy paper” (Interview with Heleen Kerkhoff, Leeuwarden, 25th October, 2005).

It was in this context that Heleen proposed to the meeting in Gijon that the work group could work towards a policy paper promoting the role of cities and broadband infrastructures. Although Heleen had emphasised the need for a more project and policy orientated work group as a means to find ‘*where the interest lay*’, in a policy context, to a large extent she already knew. Prior to the meeting in Gijon, Heleen had had discussions with representatives from The Hague who were particularly keen to

incorporate a more overtly policy orientated direction for the work group, Marten Buschman, The Hague's' representative at TeleCities explains:

"From the first time when we heard about broadband, my vice mayor [Wilbert Stolte] found that a very good idea. One of his advisors was also in Gijon and so [he] went [to the meeting] to stress it is not only projects and exchanging best practices but also we want to have some influence on the European Commission in terms of policy. That's why Heleen introduced the policy question in Gijon, the personal advisor of Wilber Stolte was there and he made some interventions and offered some ideas" (Interview with Marten Buschman, The Hague, 9th December 2005).

With this in mind Heleen had prepared a starting point for a potential policy paper, placing the role of broadband as a core component of both the eEurope Action Plan and the Lisbon Agenda:

"The reason why we decided to talk about this policy paper is that the European Commission is talking about it at this very moment; they have this e-Europe action plan. At the summit at Lisbon, where they said, we want Europe to be the most competitive environment for the economy and one of their aims was to be connected at high speed" (Heleen Kerkhoff, transcription from presentation at Gijon BWG meeting, 1st October 2004).

Additionally Heleen incorporated a recent request from the Committee of the Regions (COTR) who at that stage were engaged with the DG for Education and Culture regarding a consultation exercise concerning national broadband strategies:

“There was a draft report and you will find it in your documentation and you will see that their ambitions are not that high. But as the Commission does they sent out these papers for comments for example to the Committee of the Regions, the Committee of the Regions then contacted TeleCities and asked for comments. Obviously the Committee of the Regions want to know the cities’ view, they talk about rural areas, but obviously we are urban areas. On the 22nd September the Committee of the Regions has had a discussion about this paper using preliminary documents already, but they still want some comments from us” (Heleen Kerkhoff, transcription from presentation at Gijon BWG meeting, 1st October 2004).

Rather than merely place the intended policy orientation of the network within the KBC framework, Heleen had examined the potential role of broadband within the context of the major European IS policy directives of the day. Whilst the KBC framework was constructed as an alignment to the Lisbon Agenda, it was a guiding document rather than a defined response to its plethora of recommendations and targeted actions. In effect Heleen had extended the role the BWG could play in a policy context through her own initiative. In doing so she had provided the foundations for the work group to operate within a tightly bound European policy area that had direct implications for the role of cities within that process.

Summary

A number of milestones occurred at the Gijon meeting. Firstly the work group discussed a potential project and a more policy-centric orientation. This

materialised in part due to the requirements placed upon work groups within the KBC framework. However the most significant component behind this shift was the active role Heleen Kerkhoff played in placing both 'policy' and 'projects' as core components to the progression of the work group. This proved the starting point for a number of alliances and relationships that would subsequently dominate the BWG.

6.4 Constructing Policy: The Broadband Manifesto

Although both a project and policy paper were proposed at Gijon, the project never fully materialised⁸⁴. As a result the potential policy paper formed the basis of the focal point behind the BWG throughout the rest of the fieldwork period. Although discussions held at the Gijon event indicated that there was a degree of enthusiasm behind the potential policy paper, the main reason behind this more overtly policy orientation was the willingness of The Hague to play a much more active role in the group. As we have already seen The Hague have had a long and pro-active relationship with the network. As one of the initial signatories on the Manchester Declaration and with a particularly productive period as president of the network during the 4th Framework Programme, they have participated and led some of the major projects. As a consequence, The Hague was fully aware of the political potential of the network in terms of its intermediary capacity between the city and European scale. Although representatives of the city had attended the BWG since its launch, until this point they had not been particularly pro-active in the workings of the group. Marten Buschman, The Hague's representative at TeleCities, explains the origins behind their desire to inject a more policy oriented strand into the workgroup.

⁸⁴ Although the bid as described by Martin Van Rossum never materialised. A potential bid was submitted towards the end of 2005. This was, a collaboration between Leeuwarden, Hull, Tranas, Eindhoven and Amaroussion. The bid was unsuccessful due to an apparent misunderstanding of the funding criteria. However the group hope to revive the bid at a later date.

“What we wanted to achieve [was] to make the European Commission change their attitude about broadband. Because at that time, especially last year the attitude of the European Commission [was], well it doesn’t matter – ADSL is good enough. Also the role of cities and municipalities was not as clear as it should be. So we wanted to show the European Commission that it is possible in Europe to build some broadband networks” (Interview with Marten Buschman, The Hague, 9th December 2005).

In this context the origins of the BWG policy orientation are firmly embedded in a national context. In particular, through a particularly pro-active stance from the urban scale within the Netherlands regarding fibre optic networks and an insistence that they should be placed at the centre of next generation infrastructures⁸⁵. As a result the desire to promote the BWG in terms of a policy direction was matched by the other Dutch cities in the work group. Indeed all the Dutch cities within the BWG were particularly proactive in a national context through their involvement with the Stedenlink organisation, a national campaign promoting urban broadband initiatives to the national scale. Robert Elbrink from Eindhoven explains the organisation’s focal point:

“In Holland we have this thing called Stedenlink it is ... focusing on broadband and urban ICT. One of the things we do is that we all have fibre optic projects going on and we are really fighting the local level against the national level, who are very convinced that the market will do it and we have found out that this has not been done” (Interview with Robert Elbrink, Eindhoven, 4th November 2005).

⁸⁵ Based upon a conversation with Robert Elbrink, Eindhoven, November 4th 2005

Whilst Stedenlink was providing these Dutch cities with a network to promote broadband infrastructures, it was purely centred on a national context as:

“their only goal is to establish broadband in the Netherlands” (Interview with Marten Buschman, The Hague, 9th December 2005).

It was within this capacity that the cities of Leeuwarden, Eindhoven and The Hague who were all particularly proactive in the Stedenlink organisation, had discussions, regarding utilising the BWG as a vehicle towards a more European policy-orientated domain, to promote and lobby the role of cities in terms of broadband infrastructures. Those members who represented their cities within both networks, suggested utilising TeleCities as an avenue to the European scale:

“Well what Heleen and I did, also with Marten Bushman, we introduced TeleCities to Stedenlink and said wouldn't it be good if Stedenlink would be the Dutch branch of TeleCities and then you have a short line to the European point of view” (Interview with Robert Elbrink, Eindhoven, November 4th 2005).

With members active within both TeleCities and Stedenlink, the organisation was seen as an ideal starting point:

“It was very convenient – Stedenlink is a broadband organisation, Wilbert Stolte is the chair of the organisations. Two of the people working on that organisation Stedenlink are Heleen and Robert, these two are the people are very active in the work group; more active than the other cities. Both of

them are very active in project proposals on broadband and in TeleCities. That is why it was easy to put together” (Interview with Marten Buschman, The Hague, 9th December 2005)

Politically the synergies between the two organisations were particularly appealing to Wilbert Stolte. Indeed as chairman of the Stedenlink organisation and the political representative of The Hague in Eurocities, pursuing the policy angle through TeleCities was seen as an ideal opportunity, as Robert Elbrink notes:

“Well Mr Stolte the Alderman from The Hague was very much in favour of it, he is very active in Eurocities. He said well if we are going to do that then I also think it is good to introduce a more policy strand into TeleCities. So the idea from The Hague is OK we can get a more policy orientated working group” (Interview with Robert Elbrink, Eindhoven, November 4th 2005).

To realise this Martin Buschman the officer representative for The Hague in both Stedenlink and TeleCities was given the responsibility of integrating the policy strand into the broadband work group:

“It was Wilbert Stolte who thought before the Tallinn event, that there needed to be something political, so Martin Bushman got the task from Wilbert Stolte who had decided that there would be a political message one way or the other, which would give him and The Hague exposure at the European level” (Interview with Heleen Kerkhoff, Leeuwarden, 25th October, 2005).

Whilst the work group had undoubtedly progressed, the majority of decisions regarding this shift had taken place away from TeleCities events and the non-Dutch members of the BWG. Although other members were kept in the loop via email, the decision was taken entirely by the coalition of The Hague, Leeuwarden and Eindhoven:

“I think we’d had some discussions but what Heleen was doing was getting on with doing that work, actually it wasn’t just Leeuwarden it was the Dutch cities, Stedenlink I think they call it, they were actually doing a lot of work, The Hague and Eindhoven and others, because that was what you had, Leeuwarden and Eindhoven were actually doing a lot of the driving thinking. So yes we did talk about it and there was quite a lot of email traffic about this sort of stuff but it was primarily driven by Heleen and Robert”
(Interview with Steve Fleming, Hull, 8th December 2005).

To rectify the lack of involvement from other cities within the network and to bring them up to date an additional interim meeting of the broadband work group was arranged to take place in The Hague in early April.

Hague Meeting 8th April 2005

On 8th April 2005, the cities of The Hague, Leeuwarden, Eindhoven, Hull, Siena and Nantes (representing the economic development forum of Eurocities) and Maurice Paullison, the newly appointed TeleCities coordinating manager, met to bring the non-Dutch cities up to date and to discuss the idea of promoting a more European policy oriented viewpoint. The aims and objectives of the emerging policy strand were presented to the cities present; these were to:

“Develop a common Eurocities strategy on Broadband development and a shared vision on the role of local governments

Be a spokes partner for the Commission as well as other institutions

Prepare a common statement on the role that local governments can play in Broadband development on the issues of investment, services vs infrastructure, access, transparency and cooperation with businesses”
(TeleCities 2005).

At the meeting Wilbert Stolte gave a keynote speech in which he placed broadband as a key component of *economic and social development for European cities* and called upon the cities present to work towards *the realisation of new future proof communication infrastructures*. After a series of presentations and discussions from the cities present, the synergies between Stedenlink and a potential broadband policy statement from TeleCities were first presented to the non-Dutch cities:

“What we did from Stedenlink was that we already had the Dutch broadband manifesto and we proposed Heleen and I, at The Hague session – wouldn’t it be a good idea if we said these are the ten points that are standing in the manifest, wouldn’t it be a good idea to translate the Stedenlink manifest and present it as the output of the broadband policy work group and that is how the broadband manifest was born, it is actually a translation of the Dutch Stedenlink manifesto” (Interview with Robert Elbrink, Eindhoven, November 4th 2005).

Although the initial process of constructing this policy strand from the work group had taken place as the result of consultation between the three Dutch cities, the feedback

from other members was particularly positive. From their perspective the Stedenlink documentation provided solid foundations for any policy directives:

“Rather than start from scratch, we decided they had already done the thinking and we could basically work on a translation to see how it could be adopted into a European statement. So it was very much influenced by the Dutch ... we had the chance to take things out if we wanted to but there was no need to re-invent the wheel because the Dutch people are far ahead in development and they know what they are doing so there are no big reasons to disagree with them” (Interview with Ann Wulf Armistead, Hull, November 23rd, 2005).

With the proposal to utilise the Stedenlink document agreed upon, Heleen began the process of working the original Dutch Stedenlink document into a ‘Broadband Manifesto’. Initially this was purely a technical translation from Dutch into English. This basic translation was emailed to members of the BWG on the 19th of April and presented as the first draft of the Broadband Manifesto.

Tallinn Meeting 22nd April –the Broadband Manifesto is presented to members
After the interim meeting in The Hague the BWG met again formally four days later in Tallinn as part of the TeleCities Spring event on April 22nd. This was the first time that members of the work group who did not attend The Hague meeting were made aware of the new policy orientation within the work group. Again the group was chaired by Heleen Kerkhoff. Cities who had attended previous work group sessions were: Eindhoven, Hull The Hague, Manchester, Ronneby, Tranas, Turku; also attending were Bologna.

Heleen Kerkhoff opened the session and then Marten Buschman introduced the new broadband policy orientation of the workgroup and its intention to construct the Stedenlink document into a TeleCities policy paper:

“The broadband policy paper has a very short history – we discussed the importance of broadband, not only because it is mentioned in the Lisbon strategy, but also because it will change how people work and use the internet. Things like E-health, E-care etc. are only possible because of broadband. So we decided to set up a work group, it started on 8th April with a meeting in The Hague. So what we are doing now is taking the second step, there is a draft of the policy paper and this translated from a Dutch organisation Stedenlink” (Marten Buschman, Presentation to BWG, Tallinn, April 22nd 2005).

With the Broadband Manifesto at this stage a basic translation of the Stedenlink document Heleen suggested a rewrite of the Manifesto, incorporating elements of European policy through the “Connecting Europe at High Speeds” policy paper that had been introduced to members of the BWG at the Gijon event:

“My suggestion would be to have a look at the guidelines the European Commission already issues, they did that in their paper connecting Europe at high speeds and we know already that the ambitions of this paper are already very low. They just cover ADSL, wireless and they don’t have anything to do with broadband being fibre optic. My suggestion would to have a look at the main issues mentioned and give a response from the

urban point of view. So what I would suggest is to rewrite this broadband manifesto the first release being just a direct translation from the Dutch case, using the main issues from the connecting Europe at high speed case – what is good and what is not good and then see what comes out of it” (Heleen Kerkhoff, Presentation to BWG, Tallinn, April 22nd 2005).

With the BWG in agreement that the manifesto needed to take on a more European dimension, Dave Carter representing Manchester suggested a way forward:

“We emphasise what the shortcomings are already, that is it doesn’t go far enough, it should do a lot more, even without specifying what those [things] are. We can then say there is going to be a consultation process to see how it is going to be strengthened particularly focusing on the following points which can be questions – so it’s not prescriptive. And that alone at the 25th May officer executive committee and the June politician executive committee [within Eurocities] gets it noticed it’s there within the overall Eurocities umbrella as a priority and this forum has a lead on it” (Dave Carter, Presentation to BWG, Tallinn, April 22nd 2005).

Summary

The Tallinn BWG was devoted to bringing members up to date on the policy orientation that the work group had shifted towards since the Gijon event. Marten Buschman introduced the concept of a policy paper that was based upon Stedenlink and the work the Dutch cities had already carried out. Again Heleen Kerkhoff placed the policy paper in the context of the ‘*Connecting Europe at High Speeds*’ document that was first introduced to members at the BWG in Gijon. Whilst members of the BWG were in

general agreement with the concept there was very little in terms of active debate within the group. Indeed only Dave Carter suggested a way of moving forward the document and integrating it into the Eurocities executive committee to increase the political legitimacy of the subsequent manifesto.

Europeanising Policy: Constructing the Broadband Manifesto

After the Broadband Manifesto was launched in Tallinn the process of constructing the document into a European policy paper began. In line with his ideas at the Tallinn BWG session:

“Dave Carter wrote a short and brilliant piece on what was missing for cities in this Committee of the Regions document” (Interview with Heleen Kerkhoff, Leeuwarden, 25th October, 2005).

Using Dave Carter’s analysis of the shortcomings of COTR document and the direct translation of the Stedenlink document Heleen began modifying the Broadband Manifesto. The re-write was then emailed to members of the BWG asking for comments on the development of the Broadband Manifesto:

“Most people were pretty satisfied, I don’t know if they read it as we didn’t get too much back from them. What we did get in terms of input came later from the Eurocities office” (Interview with Heleen Kerkhoff, Leeuwarden, 25th October, 2005).

With the Broadband Manifesto beginning to take shape, in line with Dave Carter’s recommendations at the Tallinn BWG, the document shifted within the formal

structures of Eurocities. This proved a significant step in formalising the document and was helped considerably by Maurice Paullison, the network's policy officer. Because of his commitment and background knowledge of the subject area, he became a central player in the final stages of constructing the manifesto into a European policy document. Heleen Kerkhoff explains,

“That’s mainly down to the personal commitment of Maurice Paulisson, who works for Eurocities, but before that he worked for Amsterdam in their ICT and broadband area. Amsterdam has a very ambitious broadband project, so he had a good knowledge of this area. He had participated in this area at The Hague event and it now enables him to do his best for Eurocities, because he can put in his own knowledge, so he really did pick it up and put a lot of effort in – shaping it, the layout, fighting for it at the Eurocities executive committee, he even set out some type of rationale for it which was used as the introduction for the manifesto” (Interview with Heleen Kerkhoff, Leeuwarden, 25th October, 2005).

Heleen and Maurice began the process of transforming the manifesto from its national context giving it a European perspective, by constructing the document in terms of the dominant strands of European policy related to the Information Society and Knowledge Economy:

“I pulled out all of the typical Dutch issues, and what I did was to have a look at the i2010 agenda and the broadband plans of the European Commission – Connecting Europe at High Speed. So I made a translation of the European issues into the manifesto” (Interview with Heleen Kerkhoff, Leeuwarden, 25th October, 2005).

“In Tallinn it was agreed that the manifesto was a good document but it lacked a European perspective so we checked the text on what is a typical European or Dutch perspective and what needs to be changed. We included references to current policy developments at the European level such as i2010 and things like that” (Interview with Maurice Paullison, Brussels, 2nd November 2005).

By incorporating elements relating to the i2010 agenda and the Lisbon strategy the manifesto was subsequently finalised at the Manchester event in July 2005 where it was presented to the steering committee:

“At Manchester there was a final draft presented to members and it was put forward at the advisory board meeting at Manchester as a final draft. There was not so much a formal decision as this is it, most people said go ahead with it. We then finalised with the communications department and then it was on the agenda for the Eurocities excom” (Interview with Maurice Paullison, Brussels, 2nd November 2005).

After the advisory board meeting at Manchester the Broadband Manifesto⁸⁶ went before the Eurocities executive committee where the document was well received and became an official Eurocities document in October when it was officially launched.

6.5 Conclusions

The intention of this chapter was to show how a TeleCities work group collaborates and operates in a transnational capacity. Starting in early 2004 the inception of the work

⁸⁶ A copy of the finalised Broadband Manifesto is included in Appendix F

groups came at a time when the network had made a strategic decision to engage in a more policy orientated manner. The conjecture of the 6th Framework Programme, a new presidency and a new TeleCities manager led to the construction of the KBC framework that intended to provide members with an overarching framework to engage in the central priorities of the network whilst at the same time placing it as a key driver in contributing to the Lisbon strategy.

The development of the KBC represented a significant development in terms of the network attempting to find a collective policy orientation. However this chapter has illustrated that although the framework has been a key component in guiding the work group, its subsequent interpretation was left almost entirely down to both the leader and the cities that attended and actively participated in the BWG sessions. In this capacity the actual workings and outcomes of the group have been largely dependent upon a relatively small number of individuals who have manoeuvred the work group in their chosen direction. The two early BWG sessions in The Hague and Ronneby provided members with the opportunity to build trust and alliances and the Ronneby event in particular allowed many of the subsequent core members of the group an early opportunity to participate in the work group. However at the Gijon event the work group moved towards a policy-oriented focal point. There were a number of elements behind this shift. In her leadership role Heleen Kerkhoff felt that there needed to be a more integral component to substantiate the work group. The role of policy within this process was initiated through discussions with Heleen and representatives of The Hague. This was subsequently substantiated through other conversations with other Dutch cities, utilising their involvement of both the BWG and the Stedenlink organisation as the basis of a policy paper that used the national context as a starting point which would eventually lead to the launch of the Broadband Manifesto.

As a result the 'Dutch Coalition' of Leeuwarden, Eindhoven and The Hague had effectively taken the decision to utilise TeleCities as a convenient route to promote their national concerns regarding the role of the city in relation to broadband infrastructure. In doing so it represented a significant turning event in terms of the role of the work group. Within the context of the face-to-face meetings via TeleCities events, the BWG was very much a reflexive entity in the sense that it was attempting to establish a commonality in terms of its membership aspirations and build upon these collectively. In this capacity the role of the work group, whether it be knowledge exchange or policy construction, was to provide a trans-European context to the issue of broadband. In many respects the Dutch Coalition shifted the goalposts; rather than the BWG being representative of a collective trans-local space, they utilised the space in a premeditated context with the intention of inserting a national policy perspective into a European policy context. This utilisation of TeleCities as a policy intermediary mirrors the original decision to incorporate Barcelona's regional campaign as the foundation for the network's KBC and builds upon the notion of TeleCities as a relational space to (re)construct policy ideals from one context and re-translate them in another scalar domain.

With an understanding provided in terms of the networks collective working capacity the next chapter will explore the intersections with a transnational network on a singular local basis, through a case study of the City of Hull and their involvement with the TeleCities.

Chapter 7: Local Digital Visions – The City of Hull and TeleCities : Constructions, and Transnational Intersections

7.1 Introduction

The aim of this chapter is to build upon Chapters Five and Six through a detailed description and analysis of how a local level initiative has intersected with the TeleCities network. In doing so it will widen the empirical focus to observe how central actors at the local scale have pursued the notion of the Information Society and to what extent their involvement with TeleCities has contributed to their own 'digital vision'. In doing so it will provide a detailed examination of how local scale initiatives feed into and respond to processes of transnational networking.

The chapter is structured as follows. Firstly it offers a geographical, economic and political background regarding the city of Hull. Leading on from this it will provide a historical context to the origins and subsequent trajectory of the city of Hull's digital visions and its later formal acceptance as a core strategy of the city's regeneration strategy. This development will then be examined in relation to the role TeleCities has played within that process.

7.2 Hull: Geographical, Economic and Political Background

Geographically Hull is an isolated city. Placed on the North East coast of England, the city has its roots within the fishing industry and the manufacturing sector. With its heavy industrial focus, the city suffered greatly from de-industrialisation and the recession of the 1980s.

The Labour Market.

The population of Hull was estimated at 243,589 in the 2001 census, with a total economically active population of 173, 804. Manufacturing represented the largest industry of employment with 20.74% of the workforce working within this sector (against a national average of 14.96%). Unemployment in Hull was also above the national average, with 10,825 registered unemployed at the last census. This represented 6.23% of the population almost double the national average of 3.35% (HMSO 2001).

The politics of Hull.

Hull became a unitary authority in 1996. Throughout the 1990s and up until 2002 it was a Labour controlled Council. From 2002, due to an increase in the Liberal Democrat vote, Labour lost overall control and since that point no individual party has been in overall control of the Council. As of 2006 the Council consisted of:

Labour	25 Councillors
Liberal Democrats	25 Councillors
Conservatives	2 Councillors
Hull Independents Group	5 Councillor
Independents	2 Councillors

Regeneration in Hull

Throughout the last decade Hull City Council has attempted to rejuvenate the image of Hull through a variety of 'place marketing' strategies. Responding to the City's first Regeneration Strategy in 1994 which identified the "*poor, vague or outdated image [of Hull] outside the area as an intrinsic weakness*" (*Challenges for the Future, 2001, p113*) considerable effort has made to rectify this 'outdated image' of the city. Working

with a variety of partners and key players within the city, consultants have developed an image enhancement strategy that set Hull the target of being a *“Top Ten City characterised as pioneering”* (ibid). Within this context there has been a variety of targeted *“flagship projects which potentially contribute to the theme of urban renaissance and achieving the declared goal of Top Ten City status”* (ibid). The most significant of these developments has been The Deep located at Sammy’s point where the River Hull meets the Humber. This £40 million pound ocean discovery centre opened in 2002 and has been very successful in providing a new focal point both nationally and internationally for the city building upon its past cultural links with the sea. In addition there has been considerable regeneration of the Town Docks. The City has followed national trends in renovating old disused industrial premises into new consumerist and residential spaces converting the old industrial centre of the City into a marina and shopping area as well as the restoration of the ‘old town’ with its’ executive housing and bars and restaurants.

Regeneration in Hull: A Digital Vision?

Following the ‘pioneering’ route set in the City’s First Regeneration Strategy in 1994 there has been a concerted effort to develop what has become known as the digital agenda within Hull. Mirroring the city’s first Regeneration Strategy the role of new technology has been incorporated within the aspirational aim:

“To take advantage of Hull's unique opportunities to make Hull a World Top Ten Information Age City”. (Hull City Website⁸⁷. Accessed July 17th 2004)

⁸⁷ Available from www.hullcc.gov.uk/digitalcity

In many aspects, in the early 1990s Hull represented the stereotype of a once great manufacturing base struggling to find a role in a rapidly shifting and increasingly global economic arena. With the emerging field of ICT presented as a panacea for the reinvention of cities where manufacturing had been dominant, many cities in similar positions were keen to place themselves at the vanguard of this new and exciting era. In many respects Hull's aspirations mirror those espoused by Manuel Castells highlighted in Chapter Two. In particular their desire to promote Hull in the context of a digital city was directly in line with Castells notion of a 'networked society' for example:

" A digital city means a connected city. Time and space will no longer be important as services and goods will be available 24 hours a day, 7 days a week. The world will be smaller. We will be competing with places like Bangalore and Shanghai. In practice it should mean that technology is part of everyone's life making things easier, so that we can spend more time on things that really mean something to us"(ibid).

Central to this aspirational aim is a sophisticated and dedicated telecommunications infrastructure. In this capacity Hull has always been significantly ahead of the game through its unique resource, Kingston Communications.

A Digital Vision?: The Role of Kingston Communications

In 1902 13 out of 1334 UK local authorities took out a licence to provide telephone services, of these only 6 eventually provided services and by 1912 The Hull City Telephone Department was the only local authority in the country providing telephone services for its citizens. In 1987 the department became Kingston Communications

(Hull) PLC, (hereafter KC) and in 1999 the city Council floated KC on the stock exchange, although they still maintain a 44.9% stake in the company.

Because of its public ownership, KC's legacy, with its remit to citizens rather than shareholders for much of its existence has paved the way for a city ahead of many others in terms of its infrastructure. In light of many cities' eagerness to attract the major players to their region, the city of Hull have not been slow in their promotion of the city as the 'Broadband Capital of Britain'.

However the reality of utilising KC as one of the city's key assets has been problematic. In many respects the problem lies with the often widely differing perceptions of the duty of KC in a local context. From KC's perspective, the period from the late 1980s witnessed dramatic changes in the telecommunications marketplace. The deregulation of the sector was a key political concern at the European scale from the early 1990s onwards and was ultimately achieved before the end of that decade. Further to this, KC became a PLC in 1999. As a result the captive market place of Hull for KC and its remit towards the city had changed considerably. Rather than a localised public company, KC now found itself with fiscal responsibilities to its shareholders in an increasingly competitive marketplace. The notion of KC as a long held historical asset assisting the city, adopting a more entrepreneurial has led to perception within the city that the company has ignored its social responsibilities. Within this shifting and increasingly complex environment a number of initiatives external to the company have taken place that have aimed to incorporate KC into a process of regeneration placing the role of new technology at its core.

7.3 Corporate Strategy Vs Public Policy – Hull and the Digital Vision

To examine the role new technology has played in a local economic development context within Hull one needs to go back to the late 1980s. In part spurred on by the political climate of the day, with a neo-liberalist ideology firmly embedded within a national context, the free market represented the new panacea for local economic strategies (Hepworth et al (1989), Graham (1994)). In this context, aspects relating to local regeneration rapidly adopted a new entrepreneurial approach particularly in terms of an emerging culture of stakeholder pluralism. However, at this stage, the role of technology as a determinant of local regeneration was still a relatively abstract concept with only a small number of concrete examples of how cities were engaging with this new concept⁸⁸. In many respects the promotion of new technology within local government was based upon relationships with key individuals and local institutions, rather than a cohesive central strategic shift from local government itself.

This is undoubtedly the case with the city of Hull. Starting from the late 1980s onwards a number of local technology entrepreneurs and local institutions have engaged to varying degrees of success in a number of strategies and alliances that have eventually led to the role of new technology becoming a core component of the city's regeneration strategy. From within local government itself, the key actor has been Steve Fleming, who for over twenty years has been employed within the City Council, in a variety of economic regeneration posts dealing with:

“strategic development ... employment development, community development also some European type stuff [generally concerned with]

⁸⁸ See for example Graham and Dominy (1991) and Gibbs and Tanner (1996).

seeing the future of the city” (Interview with Steve Fleming, Hull, May 6th 2004).

From the 1980’s onwards Steve has engaged with a variety of networks and institutions both within and external to the city seeking to legitimise the role of technology in a local regeneration context.

Hull, Regeneration, and Technology: Early Visions

The role of new technology as a means of regeneration within Hull, although never implicit until relatively recently, has always been implied due to the city’s historical legacy with KC. Whilst the relationship between Hull and KC places the city in an enviable position in terms of a core infrastructure and expertise to take the vision forward, the actual reality of taking advantage of “*Hull’s unique opportunities*” has been a long and often arduous project.

The first indications that new technology could be incorporated as part of a process of regeneration came through the Hull 90s initiative. Predating the City’s first regeneration strategy, the Hull 90s initiative was set up in the late 1980s with the specific intention to construct a unified vision for the city and its role through the 1990s, very much in line with emerging narratives towards the mode of governance. Board members included representatives from the Council, the private sector and the University of Hull.

In this context a number of key technology entrepreneurs have been prominent in their dedication to promote Hull in terms of its’ technological capacity. Graham Chesters, at the time Pro-Vice Chancellor at the University of Hull, has been a long-time exponent.

He first entered the fray in the late 1980's as part of the team of the Hull 90s: Graham describes its origins:

“[I]t was set up in the late 80's and it was an informal voluntary gathering of different sectors, business, education, political, to try and understand how the city worked above and beyond the central workings of the City Council and that partly due its lack of constitution was just one of those groups that was well meaning and wanted to move things forward but didn't have any statutory purpose, but in a way it identified the issues and the people who might begin to form the core of some regeneration body”
(Interview with Graham Chesters, Hull, 7th September 2004).

Formed on the back of a failed City Challenge bid, the Hull 90s initiative had a quasi-visionary role attempting to identify, formalise and strategise a collective view of the city. Within this context the role of KC was seen as a potentially pivotal component of the strategy:

“ We were looking at the usual things strap lines, unique selling points and so on and inevitable in that context what comes up is KC and whether you came from City Council, education or business there was no denying that there was something unique about KC” *(Interview with Graham Chesters, Hull, 7th September 2004).*

It was at this stage that Steve Fleming first became initiated into the process of presenting a unified vision for the city. Working at this stage as an economic development officer within the regeneration department, Steve was becoming

increasingly aware of developments taking place in other cities at the time. Spurred on by this, he commissioned a report to explore the potential impact new technology could play in a local context:

“At the same time as Hull 90s was going on I commissioned Segal, Quince and Wicksteed to look at the impact of technology on the economy ... it had two strands; one to do with what we would now call the Information Society or the digital agenda and the second was what would now be known as innovation policy. So this report gave us a raft of stuff and that went to the economic development committee ... and it was fuelling the debate around the Hull 90s agenda” (Interview with Steve Fleming, Hull, May 6th 2004).

The completed report and the emergence of the Hull 90s discussion provided Steve Fleming with the initial foundations of the potential role new technology could play within a regeneration strategy. However more importantly it had also identified key actors within the city who were interested in pursuing a similar agenda. Encouraged by this Steve began to look for other avenues to explore the role of new technology. It was in this context that Steve became aware of further technology entrepreneurs within the city. Working in a self organising capacity, a bottom up approach to promoting Hull through new technology was forming through the emerging Hull Multimedia Association (HMA).

The emergence of the Hull Multimedia Association

The origins of the Hull Multimedia Association (HMA) can be traced back to the early 1990s with Bill Walker then working as a journalist with the Hull Daily Mail:

“It included some interesting people including David Woods at KC, Alison Lovelock at the City Council doing information stuff with the libraries, Ian Dolphin who is at the university, Bill Walker who was then at the Daily Mail and some others. They all thought this was important, this range of people from the commercial sector and the public sector” (Interview with Steve Fleming, Hull, July 15th 2005).

With a collection of core actors representing the city on a multi-sectoral basis, and in particular the emergence of KC within that process, Steve Fleming was quick to integrate himself fully into the HMA. In particular he recognised the potential opportunity of utilising his relationships within the association to gather momentum in integrating the role of new technology as a driver for regeneration within a formal context with the Council. To articulate this Steve attempted to manoeuvre the HMA in a way that could potentially influence policy at a strategic level within the City Council:

“I eventually became involved with the committee and I was trying to steer it and secure it in a policy direction because at this time I’d already done the first economic development strategy for the city and I was now starting to work on the city regeneration strategy so I was trying to get the issues that were coming out of this stuff embedded into the strategy for the city” (Interview with Steve Fleming, Hull, July 15th 2005).

However at this stage the intention to integrate it at policy level within the Council met with considerable resistance as *“most of the policy players didn’t have their heads around it (Ibid).* Whilst Steve struggled to incorporate the

ideology behind the HMA into a policy context, the first cracks were beginning to appear in terms of the Association's collective identity.

In many respects the breakdown of the HMA was the start of the dichotomy new technology represented in Hull. In the sense that the role of KC was always seen as pivotal, in its role as Hull's 'unique resource', however even at this stage five years prior to the privatisation of the company, members of the HMA were becoming increasingly frustrated at the perceived division between their social and corporate responsibilities:

"One of Hulls greatest strengths is KC, its also one of its greatest weaknesses, because you can't do anything without them - so if they are on board and they really do it right then you benefit, if they don't do it or don't do it right then you don't and you don't have any where else left to turn"
(Interview with Bill Walker, Hull, June 30th 2004).

From within the HMA there was a distinct perception that their responsibilities were firmly at a corporate level and even at a corporate level their priority was not necessarily Hull:

"[T]he then chief executive [of KC] looked upon Hull as a prisoner market - there's no competition, why should we bother? What really matters is Scandinavian opportunities, Canada, anywhere but Hull, it was very frustrating. Some of us were trying to create I suppose a strategic pressure on KC - saying you just can't do that, but it was very difficult to make any inroads with KC because they saw themselves simply as copper wire

providers just concerned with the infrastructure, not getting involved in what was going across the lines or to whom and for what purpose” (Interview with Graham Chesters, Hull, 7th September 2004).

By 1995 the frustrations with KC as well as the developing divergence of interest of those involved led to the eventual demise of the HMA:

“I think people actually saw the benefit of working in partnership said I’ve got to do this for my business anyway, I’d rather do it together as we can bring so much more to the party, but as time went by the business imperative took over - so those who needed to do it had to do it, I’d love to have done it with you guys but I’ve got to do it now, and you were left with those who wanted to talk about it, knew a lot about it, understood a lot about it, but for different reasons - the City Council was always facing re-election, KC (with the rapid changes underway in ICT) was focused on what it needed to do for itself rather than the city. I really regret that, we still talk as if we are ahead of the game” (Interview with Bill Walker, Hull, June 30th 2004).

However in terms of the construction of the digital agenda within the Council the HMA had provided the first significant foundations. It provided those involved with their first substantive experience of public private initiatives. More importantly from Steve Fleming’s perspective it provided a collection of relationships with other technological entrepreneurs within the city that could be utilised in the future. Ultimately the HMA:

“established an agenda and it established a set of relationships around the issue and where it could go, it also showed that was an interest within the city” (Interview with Steve Fleming, Hull, July 15th 2005).

Establishing an agenda and a set of relationships was integral in Steve Fleming’s subsequent attempt to incorporate new technology in a more strategic capacity within the City Council when he decided to seek approval to join the TeleCities network

Transnationalising Local Governance?: Hull, TeleCities and the Politicisation of the Digital Agenda

With the demise of the HMA there was no longer a collective vehicle to mobilise support towards a digital vision for Hull. To rectify this Steve sought a new avenue that would have the potential to increase the legitimacy of the digital vision. Without a similar body to the HMA Steve looked further a field:

“[T]he HMA wasn’t going anywhere, whereas TeleCities was a club where there was action going on” (Interview with Steve Fleming, Hull, 11th April 2003).

The decision to join TeleCities was seen as a response to the demise of the HMA. However whilst the HMA was purely a local concern the decision by Steve Fleming to engage on a transnational basis was to bring a subtle legitimacy to the idea of a digital vision for Hull

“One of my motivations was to bring this type of thing from outside the city into the city and part of that was to demonstrate that other people are taking

it seriously and they are doing something about it ... It was about this classic thing with Hull, you need to go outside find people who are interested and motivated and bring their examples back into the city to motivated people here” (Interview with Steve Fleming, Hull, July 15th 2005).

From Steve’s perspective the HMA had proved that there was a desire to pursue an innovative agenda within the city, albeit perhaps a sporadic one. Keen to build upon this, the role originally envisaged for TeleCities was to act as a collective vehicle for the digital agenda, believing the European dimension would add further credence to the vision. In this context the initial remit behind Hull’s desire to join TeleCities can be seen as a wider legitimisation tactic to integrate the role of new technology within the confines of the City Council. To achieve this Steve Fleming set about selling the ideology behind the network to the Council:

“I’d been to one of their early conferences in Manchester ... I recommended to the Council that we should be joining things like TeleCities. If this is going to be important, it is going to get our name up, it puts us in a position to see what’s going on and to get funding “ (Interview with Steve Fleming, Hull, 11th April 2003).

After the demise of the HMA, Hull’s engagement with TeleCities offered a space to engage with other significant players in the context of new technology. It also offered the city an additional identity that a collective local scale approach could never offer. Hull’s director of regeneration explains:

“Really it was also about being in a place where the big players came to, I don’t just mean the cities but some of the technology companies, it was seen as having a critical mass and a brand and a presence” (Interview with Mark Jones, Hull, September 12th 2004).

However, more importantly, by placing the role of new technology in an overtly European context, the decision to join TeleCities immediately politicised the process, as the decision to join the network had to be submitted *“to the politicians ... including the leader of the Council at the time” (Interview with Steve Fleming, Hull, 7th May 2004).* Consequently, to provide multi-party support for the decision to join, Steve Fleming began lobbying other members of the Council. John Fareham, the then leader of the opposition within the Council explains:

“Steve Fleming collared me all those years ago and had a word with me because that is how Steve and I work. ... Steve knows me well enough to know I’m not one of those who is set in my ways, he had a word with me in the corridor and being fairly indifferent about these type of things I said well you’ve got my support It’s over a decade ago now but I would say it was sort of lobby in the corner job - its how politics works” (Interview with John Fareham, Hull, June 29th 2004).

Because of this need to obtain support within the Council, discourses of the TeleCities network as a representation of cities pursuing regeneration in terms of new technology, and the potential of that technology to be incorporated on a local basis, were placed within a political context. The process was finalised when Steve had mobilised enough support to submit the proposal. The political legitimacy of the decision to join the

network and the potential role of new technology in local contexts was given a substantial boost due to the involvement of the then leader of the council:

"[Joining TeleCities] had to get committee approval. In those days we had the economic regeneration committee and I wrote a report to them, the leader of the Council was on that committee, he wasn't chair of it, and he said that this is something that we must do this is very important stuff for the future, so we joined" (Interview with Steve Fleming, 7th April 2003).

Although the leader of the Council sanctioned the decision to join the network it was not on the basis of his understanding of the actual purpose and intentions of the network:

"The leader of the Council at the time said, I don't understand this, but it's important. Which is quite honest, he understood the impact, even if he didn't understand the technology ... In many respects it was very early in terms of the understanding in the Council, outside [the Council] I think there is more understanding, but inside the Council it is rather archaic.. So it was sold on an economic basis" (Interview with Steve Fleming, Hull, 7th April 2003).

With cross party support Hull City Council joined TeleCities in 1995.

7.4 The emerging Digital Agenda – Constructing a strategic vision within the Council: old meets the new

Whilst the discussions to join TeleCities were ongoing, in 1994 the first steps were made to formalise the issues the Hull 90s initiative had sought to address five years previously, through the construction of a separate organisational entity, CityVision which was:

“based upon a partnership of organisations drawn from across the public, private, community and voluntary sectors”(Challenges of the Future Report, 2001, p106).

This local strategic partnership was set up to create the city’s strategic regeneration partnership with the intention of providing a framework of co-ordination for the city’s regeneration activities. CityVision was divided into a variety of subsections relating to the responsibilities of the City Council such as learning, health and education. Although the previous consultancy work and Steve’s engagement with HMA had contributed to the role of new technology being recognised within the framework, there was a degree of frustration especially within the economic division of CityVision that the role of new technology was not a more central component of the overall framework, a problem Steve Fleming felt was due to policymakers within the Council unable to grasp the significance and importance of new technology in a regeneration context. Both Steve Fleming and Graham Chesters felt that the role of new technology needed to be a much more central component of the strategy:

“I was just very frustrated, Steve was just as frustrated that nobody was taking this seriously, the trouble was if say telematics is a part of health and this and that it just becomes peripheral to all of those and actually you don’t

get any sense of co-ordination or economies of scale, so it's a question of saying is it pervasive but you need a concentration and that presents all sorts of structural problems to bodies like CityVision because people will say it's the same with the economy, the economy is pervasive, the same with learning" (Interview with Graham Chesters, Hull, 7th September 2004).

Realising that the role of new technology was not as central to the agenda of CityVision as he felt it should have been Steve again sought to mobilise interest in the digital agenda. Again utilising his links with other technological entrepreneurs within the city, he attempted to promote the concept outside the confines of the City Council.

Challenges of the Information Society: A Vision for Hull

In 1996 the emerging digital agenda took a significant step forward when Steve Fleming used his links with Graham Chesters and commissioned another external report, funded jointly by the Hull Economic Development Agency and the University of Hull's City Research Fund. The report, *"The Challenges of the Information Society: A Vision for Hull"* was intended to counteract the *"conceptual resistance"* that Steve Fleming felt he had encountered during the construction of the CityVision framework.

"I would say that it was commissioned to counteract the fact there was a lack of focus and lack of understanding. So one of the key things about [the report] was to establish that vision, as the report was entitled - A Vision for Hull"(Interview with Steve Fleming, Hull, May 7th 2004)

Although the intention was to define the role of new technology at the strategic level, the report placed the role of new technology in terms of the challenges of the emerging

concept of the Information Society. The report's author Xiudian Dai was working in the Department of European Studies at the University of Hull and outlined the origins of the report:

"It was in early 1996, Steve Fleming came over to the University and he wanted to do a little research project that set the vision for the emerging information age in Hull. The Council provided some research funding and the University was very helpful also they contributed match funding. The main objective of the report was to kick start a process of public debate with regard to the new issue of the Information Society or the Information Economy and the potential impact this could have on Hull and what opportunities does this promise at the local level, that was the overall objective" (Interview with Xiudian Dai, Hull, July 9th 2004).

The decision to place the report within the framework of the Information Society, was a conscious decision on Steve's behalf:

"That was deliberate because even then we were saying its about what the technology can do rather than the technology and the fact that work in the future is going to be based around information, the buzzword was knowledge. So yes it was conscious, the objective was to say this is the challenge that is coming to Hull, this is where we need to be going, these are the opportunities we can use to form the city regeneration strategy agenda which will then go back into the City Council" (Interview with Steve Fleming, Hull, May 7th 2004).

The report in many ways solidified previous digital visions but took that first significant step in presenting an image of Hull as a 'digital city'. In line with much of the information society literature of the time, the report took on an evangelical zeal, calling for Hull to compete on a global basis through its acknowledged technologically advanced infrastructure, breaking free from its geographical isolation:

“Hull has woken up and is moving forward to embrace the benefits of the information revolution. In Hull, key city strategies, such as the City Regeneration Strategy and the City Council's new Economic Development Strategy, identify the development and impact of ICTs and the Information Society as a strategic issue for Hull. However, this issue needs to be fully studied and addressed in accordance with the characteristics of the city so that the opportunity manifested in the Information Society can be converted into reality. The overall response of Hull to the challenge of the Information Society is to transform the local community into a Digital City step by step. In other words, every sphere of community life will be represented on, or facilitated by, a city-wide broadband digital network linked to other parts of the world” (Dai, 1996, p37).

To achieve these goals the report called upon City Council to play a much more proactive role in the co-ordination of this new vision

“Hull City Council should play a leading role as a policy maker, enabler, facilitator and coordinator throughout the development process of the Information Society in Hull, working closely with CityVision. This leading role can be established by adopting a 'policy push' approach with regard to

the major aspects of the Information Society at the local level. The 'policy push' approach does not deny the role played by technology push and market pull" (Dai, X, 1996, p37).

The report was also seminal in the sense that for the first time, in a specific policy context, Hull and their involvement with TeleCities was encouraged as a potential route to further legitimise their own digital vision in respect of knowledge exchange and potential projects on a trans-European basis

"The City Council needs to enhance its links with other 'digital cities' in the UK, Europe and other parts of the world; experiences of others could be useful. Inter-digital city links are potentially important for Hull in terms of collaborating with peer cities for specific projects related to the Information Society (most of the current EU research funding programmes emphasise cross-border partnership). In particular, continued efforts should be made in participating in activities of 'European Digital cities' consortium and the 'TeleCities' consortium" (Dai, X, 1996, p35)

The report called for the Council to play a prominent role in the vision, but as an organisation they were not particularly forthcoming or responsive. Steve Fleming felt that although there was a degree of interest within the Council, to embed it a higher strategic level proved difficult:

"What happened after Xiudian's report was everyone said it was important but thought it was too difficult, too far away to do anything . I wasn't getting

that much support from in here doing it and it wasn't until Tom McVie⁸⁹ and Colin Inglis⁹⁰ took a big interest in it." (Interview with Steve Fleming, Hull, May 7th 2004)

Building the Momentum: The Information Society as a Key Opportunity for Hull

Whilst the Vision for Hull report had failed to embed itself within the Council at a strategic level, the culmination of the momentum that had been building through the HMA, Hull's membership in TeleCities, and the collective strategic role of CityVision led to an acceptance and an enthusiasm within the Council at a political level. This coupled with the actual rapid technological developments happening globally, led some political members within the city to think perhaps Steve might have had a point all along:

"There came a time with the arrival of digitalisation, the selling off of KC, which was rapidly broadening out from being a telephone company, the fact that we were getting computers as members it was a big sea change, internet access, suddenly members were waking up to the fact that there is a whole new technological world out there, suddenly Steve became the right man in the right place" (Interview with John Fareham, Hull, June 29th 2004).

At the same time the political leadership of the City Council was changing, bringing on board a more receptive attitude regarding new technology:

⁸⁹ Tom McVie was elected to Hull City Council in 1996 and was an early advocate of the potential role new technology could have in delivering services to citizens.

⁹⁰ Colin Inglis subsequently became the Leader of the City Council, and like Tom McVie, has been a particularly vocal in his support of Hulls and the potential of new technology.

“Also a change in the Labour leadership in particular Tom McVie embraced it with a particular enthusiasm and realised that the old way of doing things was costing us an arm and a leg, therefore we had to look at new ways of delivering our services” (Interview with John Fareham, Hull, June 29th 2004)

Tom McVie was keen to implement a new approach in the delivery of Council services. In this capacity Steve Fleming was keen to welcome a particularly strong ally from within the City Council at a political level. As soon as Tom McVie came into the Council, Steve introduced him to his involvement with TeleCities and the city’s decision to stand for election to the network’s steering committee.

“When I came into the Council in 1996, I became involved with a number of aspects of this (new technology), I became heavily involved with the work Steve and Ann were doing regarding Hull’s membership of TeleCities” (Interview with Tom McVie, Hull, June 17th 2004).

Tom McVie at that time was almost unique in his recognition of the role of technology seeing it was a means to achieve things both internally and externally to the Council, rather than a separate issue:

“There was shift away from how the Council was working, moving away from traditional services and more towards a call centre provision, internally we were looking to revamp our business systems that were shot to pieces, externally it (new technology) was a way of connecting with the public - our customers” (Interview with Tom McVie, Hull, June 17th 2004)

By 1997, through the culmination of work he had carried out over the previous years and the emerging realisation within the Council that new technology could offer a notable benefit to the city, Steve was able to incorporate a significant strand relating to the concept of the Information Society into the review recommendations of the city regeneration strategy:

“The review recommendations we did on the first city regeneration strategy, in March 1997, the second recommendation was technology challenge and opportunity needs to be addressed - the issue needs a champion and the third one was to establish the information society as key opportunity for Hull” (Interview with Steve Fleming, Hull, May 7th 2004).

Bringing the Digital Agenda within the confines of the Council: The Internal Groupings

Now that the role of new technology was beginning to carry some currency at a strategic level within the City Council, Steve Fleming was keen to embed it in a more formal sense. To start the process Steve initiated a series of internal working groups with the intention of consolidating and forwarding the digital vision within the City Council. Firstly in 1997 the Information Society group was set up to mobilise key actors with a specific interest in the digital agenda with the intention of constructing a digital strategy for the city. Because the group was attached to the economy team of CityVision it had the distinct advantage of incorporating its vision into the strategic framework of city regeneration strategy. Steve intended to bring together a number of those key technology entrepreneurs who had been working on different aspects of the digital

agenda over the years as well as to incorporate key aspects of the Vision for Hull report into that strategic framework. Steve wanted:

“[T]o focus the agenda with people like Graham [Chesters] and others to keep things moving on the back of The Vision for Hull report. The Information Society group was to try and keep those players together and to keep the agenda moving and connect that back into the strategic vision of the city” (Interview with Steve Fleming, Hull, May 7th 2004).

The Information Society group were instrumental in providing the basis for Hull’s first City Information Strategy. With a firm receptiveness now embedded in the Council at a political level the strategy began to materialise.

Presenting Legitimacy: The role of the UK Digital Cities Conference in promoting the digital agenda within Hull

During this period it was obvious that the digital vision had begun to carry some weight within the Council, in particular through the enthusiasm of the then leader Pat Doyle and Tom McVie. In addition Ann Wulff-Armitstead was appointed to the regeneration department, with a specific remit to work alongside Steve Fleming on implementing the digital agenda. Support mobilising the next stage of the strategy and embedding it further within a political context came when Steve put these relations and the city’s role in TeleCities together as an ongoing external aid to build strategic legitimacy towards the digital agenda. This materialised when plans were made for a UK sub-branch of TeleCities at the network’s Lewisham event in 1999, both Ann Wulff-Armitstead and Tom McVie were at the conference:

“It was an attempt to have a European network, but within that to also have a national network. In some countries the national branches of TeleCities work quite well, in England we have a problem pulling it off. At the time Lewisham where the UK representative on the steering committee and they were pushing for a national network. So they launched it in Manchester, that was in October of 1999. In December of that year the TeleCities conference was in Lewisham and part of that even was dedicated to the national branch. The event mainly consisted of a series of presentations and we had Tom McVie there, towards the end there was a call for anyone who was interested in hosting the next one I said Hull should do it”
(Interview with Ann Wulff-Armitstead, Hull, July 4th 2005).

Although very much of a spur of the moment decision, the political goodwill that TeleCities had already generated around the digital agenda in general, led to a commitment at a political level. Tom McVie through his involvement with the network and his desire to promote the concept internally and externally to Hull provided the promise of funding to organise the conference:

“Tom McVie said you spend what you need to and we’ll sort it, so we set about organising the conference; in the end we were allocated £25000”
(Interview with Ann Wulff-Armitstead, Hull, July 4th 2005)

The event was held at Hull City Hall on May 18th and 19th 2000, with representatives of the national and local government as well as two former presidents of TeleCities presenting papers to over 200 delegates over the two days. From Steve Fleming’s point of view the UK Digital Cities conference:

“Focused the agenda in a way that was simple to grasp - it could be bought into and was bought into - it would mobilise the masses around doing something” (Interview with Steve Fleming, Hull, May 7th 2004).

So the process of Hull hosting the event was initiated on a political basis through Tom McVie as a result of his involvement with TeleCities. The event was significant in the sense that it brought a variety of actors from the national and European levels to the city, raising the city’s profile both internally and externally.

This proved to be a particularly key event in terms of the ongoing construction and legitimisation of the digital agenda within the city. Although there was an element of support from within the Council, the UK Digital Cities conference showed that there was a significant interest in this type of agenda both nationally and at a European level, adding a further credence to the city’s vision:

“The UK Digital Cities Conference ... got the message out about Hull. One of the key objectives was to get the message across how significant the opportunities were for Hull for the future of the city and capture the attention of everybody in the city” (Interview with Steve Fleming, Hull, July 14th 2005).

“We did the conference and it was a success, we had about 200 people attending it and this again provided us with an impetus to get things moving again. The fact that we had people attending from all over the UK and

Europe raised the digital agenda's profile within the Council" (Interview with Ann Wulff-Armitstead, Hull, July 4th 2005).

Implementing Multi-Agency Support: The Information Age Summit

With the success of the UK Digital Cities conference establishing the digital agenda on a local and national basis for Hull, the next stage was to implement that further into the Council through a more locally based conference. The conference entitled 'The Information Age Summit Hull: an information age city' was held on Friday 23rd March 2001. The conference was divided into four workshops; Economy, Inclusion, Learning and E-Government and services. Steve Fleming saw the summit as a means to construct the support he was developing into a coherent action plan

"[T]he summit ... was about that constituency of interest and working it through into a simple action programme which everybody agreed with"
(Interview with Steve Fleming, Hull, July 14th 2005).

The summit concluded that if the city was serious about pursuing a digital future a number of key steps were needed; these were

- *Establish a 'Hull' community deal*
- *Establish the deal between the Hull Community and Kingston Communications*
- *Create the mechanism to champion, develop and do.*
- *Do it now – the uniqueness of 'now'!*

(Hull City Council Website Accessed July 21st 2005⁹¹)

⁹¹ : available from www.hullcc.gov.uk/digitalcity/information_age_summit.php

To implement these key steps a Digital City Group was set up in the summer of 2001. In many respects it formalised those original self-organised relationships that had developed during the Hull 90s discussions and the subsequent formation of the HMA, consisting of partners from the private, public & community sector organisations. With a clear agenda beginning to emerge and the beginnings of a vehicle to implement the summit's outcomes, the process took another step forward when the outcomes of the Information Age Summit were then incorporated into the City Summit. This was a significant step, as prior to this point anything concerned with a digital vision for Hull was generally a separate strand often carried out in isolation by key local technology entrepreneurs. The City Summit represented a much more holistic view of what the city envisaged for itself. Indeed the City Summit was the:

“first event to bring together key players from all sectors of the city: public, private and the community, to share ideas and priorities for planning the future of our city” (Department of Regeneration. 2001a p1).

The summit took the form of a one day event divided into a series of workshops that sought to construct a unified vision that would contribute to Hull's Urban Renaissance:

“The workshops looked at 9 key areas, from achievement in education to the quality of urban design, from community involvement to the ability of the city to maximize and build upon its potential in any, and every arena, from the importance of the creative industries to the role of entrepreneurs in our city and from health to the digital city and the future for which we must all be ready” (ibid).

Contributing to the digital agenda within the summit, a workshop was developed with the intention of bringing together much of the previous work that had been done around new technology within Hull and presenting it as means to regeneration. In this capacity Steve Fleming and Ann Wulff Armitstead brought in Tom McVie and Xiudian Dai to facilitate the workshop. The workshop was entitled “An Information Age City: Theory into Practice”. Xiudian Dai opened the workshop with a presentation to delegates; it followed the omnipresent zeal attached to information society policy discourse. For example placing the challenges available to Hull the following context was given:

“We have entered a new era of civilization – a technological revolution, manifested and driven by technological convergence, network interconnectivity, service interoperability, market liberalisation, ‘Glocalisation’ (lapse of time and distance), the transition to a new/digital economy and the rise of a network society” (ibid)

To implement this vision the summit came to two significant conclusions. Firstly it ratified the conclusion from the Information Age Summit. This was significant in the sense that it formalised the digital vision within a policy framework for the first time:

“[T]he outcomes from the Information Age Summit were fed into the City Summit through a work group and these issues were confirmed as priorities for Hull City, so it became part of a policy statement from the city” (Interview with Steve Fleming, Hull, July 14th 2005)

Further to this, it called for a separate vehicle to deliver the agenda. Operating in a similar mould to the previous self organising groups of previous years, a separate company with the full support of the City Council was established with the intention to:

“lead, direct and develop cutting edge, entrepreneurial and multi-agency initiatives placing Hull at the forefront of broadband digital and mobile technology developments in the UK and worldwide” (Hull City Council Website: Accessed 7th May 2004 ⁹²).

Again the city’s involvement with the network was highlighted at this crucial juncture:

“Hull has been a pioneer in this field. It was a founding member of the TeleCities network and has been promoting the concept and the advantages to the community and economy of Hull if the City adopts the concept” (ibid).

Digital City Group and CityDigital

Receiving full backing by Hull City Council on 22nd October 2002, CityDigital⁹³ was established as a partnership company limited by guarantee. Its main intention was to establish joint ventures with partners and other external funders to create projects of particular relevance to the digital agenda in Hull. Councillor John Robinson, the portfolio holder for Economy, City Centre and Digital City issues felt that CityDigital

⁹² Available from www.hullcc.gov.uk/news/02_oct/79ce02tcm.php. Accessed 7th May 2004

⁹³ *“a contact point for digital activities in the City, including partners from private and public sector*

Available from http://www.hullcc.gov.uk/portal/page?_pageid=221,52427&_dad=portal&_schema=PORTAL: Accessed 10th July 2006

was essential in preventing the digital agenda being constructed purely around market forces:

"Digital technologies are changing how societies and economies work. The impact of digital technologies creates opportunities from which Hull is well placed to benefit. The Digital City concept is Hull's response to this environment of seismic change and opportunity and allows us to shape our future as opposed to leaving it to market forces alone to define what it will be" (John Robinson, Leader of Hull City Council. Press Release, 2004, Hull City Council Website Accessed May 7th 2004⁹⁴).

Having established the key events that have finally led to the establishment of a formal body to implement the digital agenda in Hull, the next section will explore the role of TeleCities within that process.

7.5 TeleCities as an opportunity for Hull? Local level initiatives and their transnational intersections

Whilst the role of TeleCities may not have been *the* key component to the construction of Hull's digital vision there is a strong argument to be made that the city's involvement in the network has aided and contributed to that process significantly. Throughout the events listed above TeleCities has been incorporated as an external route of legitimacy towards the digital agenda. To explore this in more detail this section of the chapter will explore the intersection between this process and Hulls involvement with TeleCities

As Chapter Five illustrated, there are three overarching strategic objectives to the network; Knowledge Exchange; Policy; and Projects. These three strands have been

⁹⁴ Available from www.hullcc.gov.uk/news/02_oct/79ce02tcm.php, accessed 7th May 2004

utilised in various contexts by TeleCities members. Similarly these three elements also emerged in Chapter Six, in terms of the Broadband Workgroup. To continue this narrative and to see how these themes are played out in a local context the final section of this chapter will present the intersection between TeleCities and the city of Hull in line with these three core elements.

Hull and the role of TeleCities in constructing a Digital Vision: Knowledge Exchange

The capacity of TeleCities to enable knowledge exchange has been a key component throughout Hull's membership of the network. As Steve Fleming makes clear below his re-translation of initiatives acquired solely as a result of their membership of TeleCities have been instrumental in building Hull's own digital initiative:

"I bring what I've learned at TeleCities and translate that to members of the Digital City initiative, so some of the things that I've learned through TeleCities have become part of the Digital City strategy - the other people might not realise what they're signing up to was stuff that was acquired elsewhere. For example Tampere - what is in the Digital City stuff here is things that I had learned directly from [Tampere] at TeleCities meetings 4 or 5 years ago. ... they had 6 or 7 key action plans such as E-Tampere which is the equivalent to Digital City and I just absorbed chunks of that and translated that into a local context" (Interview with Steve Fleming, Hull, May 7th 2004).

Similarly the current head of regeneration at Hull City Council, Mark Jones perceives engagement with the TeleCities network as a core component of their need for continuous learning:

“Things like revolutionising teaching and learning, business interactive TV etc, these things didn’t just happen, Steve didn’t wake up one morning and say - that’s a good idea, they came out because his knowledge bank has been stimulated from discussions at places like TeleCities. I get a little bit defensive when people say, why go to this why go to that - well why did you go to university. It is about continual learning, if you are not in that stimulated environment these days then you are out in the woods” (Interview with Mark Jones, Hull, September 12th 2004).

In many respects the quote above raises one of the core problems presented to cities regarding engagement with a network like TeleCities. Within the climate of target setting, scrutiny and measurable attainments of local government, to actually measure or judge any level of impact regarding involvement with the network is very subjective:

“People say why are we in TeleCities that’s just a trip for me to go off on quarterly trips, but that’s missing the point, But people think well, it’s not really that tangible. ... we tend to think action, action, action on a too narrower front and too short a term. So people have difficulty seeing why we want to be in TeleCities, its substantiating our position, we’re acquiring this knowledge” (Interview with Steve Fleming, Hull, July 14th 2005).

“In terms of measurables I’d be hard pressed to tell you [what TeleCities has achieved], but in terms doables, inspiration - I see it as a bank, TeleCities acts as the bank for public authorities to be there in terms of the sharing, the good practice, the learning from other areas - which then sets you on a course of action in your own area, then perhaps that delivers some deliverables in your own area” (Interview with Mark Jones, Hull, September 12th 2004).

As we have already seen there has always been a high degree of political goodwill in terms of the city’s involvement with the network. On a political basis there is a perception that it is instrumental in gaining an advantage in terms of the knowledge and learning opportunities the network provides, Councillor Kath Lavery, Portfolio Holder for Development and Renewal Services within Hull City Council explains:

“[being a member of TeleCities] gives us the edge. There is a lot of people who would like to get in but can’t. So it gives us the edge, the networking and indeed the learning from others it is very important that we are in there” (Interview with Kath Lavery, Hull, October 14th 2004).

Whilst there is evidence that TeleCities has contributed to a variety of aspects of Hull’s digital agenda from raising awareness on a pan-European basis to increased political legitimacy, the role of TeleCities has been a subtle one. In many respects the most successful use of the network in a local context has been in a political context illustrated in the next section.

Hull and the role of TeleCities in constructing a Digital Vision: Policy

Policy in terms of the networks overall strategy is often represented in terms of a bottom up process, that is a collection of cities attempting to influence the European agenda. Previous chapters have shown that TeleCities has attempted to promote its policy aspirations, in particular through its new overarching framework, the Knowledge Based City concept. On rhetorical basis this is presented as a key component of Hulls involvement with the network:

“The thing is one of the functions of TeleCities is to write European policy and although a lot of the members go for exchanging information, finding out what is happening, what is possible etc, there is also and from Hull’s point of view we have always been part of it to say we are actually there to shape European policy because it is one thing for the politicians in the European parliament to say but we are the ones delivering these things on the ground so we need to have a voice and we feel that TeleCities is a good way of doing that” (Interview with Ann Wulff-Armitstead, Hull, July 4th 2005).

However during the fieldwork period this was not the context in which policy was pursued. In many respects the context of policy was not utilised in a collective local sense aimed at the supranational level. On a local basis at least it was used more subtly to enrol key local political actors into the process of constructing and legitimising the digital vision. In this capacity the relationships with other cities within the network was used to massage political egos.

"I remember how secretly proud I was when Sweden and in particular Stockholm came here to see of our developments regarding new technology. Now if you know Stockholm, for them to send 15 people here to see what we are doing means something" (Interview with Tom McVie, Hull, June 17th 2004).

On a political basis at least, engagement with TeleCities can be seen as a route that shifts the perception of Hull outside its national connotations and places it within a Europeanised space of progressive cities:

"It ... promotes Hull, ... not a lot of people are aware of Hull so it helps us box above our weight. You have to remember when you look at some of the other cities hooked into this, they are at the national scale ... everyone talks about Barcelona they are like a Leeds a Liverpool a Manchester, it is a big city, we are more at a level of a Balboa something like that and it gives us a chance to show that we are boxing above our weight which we are." (Interview with John Fareham, Hull, June 29th 2004)

In a similar capacity association with TeleCities enables Hull to utilise the brand and identity of TeleCities as an additional route to legitimise its own vision at the local scale. For example, although the broadband manifesto that Hull contributed towards within the Broadband Work Group illustrated in the previous chapter, was seen as an attempt by cities to influence the European scale, in a local context it could be used as a further tactic of legitimacy. For example:

“[The broadband manifesto] is setting a goal, a goal that has some justification and reasons. Its also a good way of focusing an argument – we are doing some work now on the connecting Hull concept and the issue is how are we going to deliver it, then you can bring in the broadband manifesto because these cities have done this, its that TeleCities thing – this is a benchmark thing, it has come out of real stuff – do we need to commit to this goal and how do we get to this goal and I can use that in relation to that discussion. So it’s not just a Steve Fleming rant or a rave its something that has come out of something solid” (Interview with Steve Fleming, Hull, July 14th 2005).

In many respects this aspect builds upon the acquisition of knowledge through TeleCities events referred to earlier. By incorporating a variety of discourses and texts the city of Hull have utilised TeleCities as a means of progressing and legitimising their own digital vision

Hull and the role of TeleCities in constructing a Digital Vision: Projects

In terms of project involvement, although deemed a core overarching strategy for the network, from Hulls perspective this has been particularly weak. Reasons behind this are primarily down to time:

“If you have a project you have to put the time in. We haven’t done that and this has been issue. ... if we played it right we’d be getting some direct money out of projects” (Interview with Steve Fleming, Hull, July 14th 2005).

However through their recent involvement with the BWG they have formed a number of alliances that could form the basis for future project bids:

“Well hopefully we will be part of that project if it gets the funding, that is one of my ambitions to be part of a European project, that is one of my motivations. The work group has give us an opportunity to find people you feel you can work with which is quite important” (Interview with Ann Wulff-Armitstead, Hull, July 4th 2005).

The city’s lack of involvement in terms of projects and indeed the context in which the policy angle has intersected between TeleCities and the city of Hull indicates that the impact in terms of EU IS policy embedding itself in a local capacity is not particularly strong. Whereas Chapter Four presented a variety of contexts in which EU IS policy had targeted the local scale, in the case of the city of Hull these aspects have not materialised. However that is not to say IS policy has not been recognised, as this chapter illustrated a number of discursive and legitimising tactics have been incorporated in terms of a variety of policy contexts.

7.6 Conclusions

As we have already seen in Chapter Five, TeleCities is indicative of an intermediary that enables actors to generate and reconstruct discourses at a variety of scales. Chapter Six illustrated how the BWG utilised this intermediary capacity to reconstruct policy from one scale to another. This chapter has illustrated the developments associated with the construction of the digital agenda in Hull, in particular it has examined this process in terms of the role TeleCities has played in what is an intrinsically local scenario.

Within these intersections between the local and the transnational a number of aspects need to be addressed. Firstly, whilst the rhetoric of transnational networking is concerned with role of cities coming together as a unified force, in the case of Hull their interaction within the network is dependent upon a very small number of individuals rather than a wholesale representation of that city. In this sense the role of Hull within TeleCities has been used as a key external driver to legitimise the ongoing construction of the digital vision within Hull by a few key players.

The intended role behind the initial decision to join the network in 1995 was to build upon the interest that was established within the HMA. With the demise of the HMA, Steve Fleming needed another platform to provide external leverage towards a digital vision within the City Council. Whilst TeleCities never replicated the role of the HMA, the brand and identity of the network has been used to considerable effect over the years. Until Hull joined TeleCities, the emerging digital agenda had remained firmly outside the confines of the City Council. Even within the HMA, Steve Fleming was the only representative from the City Council and although he attempted to move the HMA towards a more policy orientated body this never materialised. To a large degree, the initial politicisation of the digital vision and its subsequent acceptance in terms of its potential role in a regeneration context became embedded within the Council as a result of joining TeleCities. Because it was presented very much in a political context, cross party agreement was needed before the city joined. As a result the ideology of the network and its potential benefits to Hull has always been rooted in a political context within the City Council.

The decision to join TeleCities was a key event in the acceptance of new technology in a regeneration context and the network has been utilised in this context throughout the

last ten years. In this capacity, the ideology and brand of TeleCities has been utilised to mobilise additional key local actors into the construction and maintenance of the digital agenda. Steve Fleming has used his connections within TeleCities as well as the network's brand identity, to display an alignment in terms of the city's innovative stance regarding new technology at a variety of key events that have ultimately contributed to the formalisation of the digital vision.

Chapter Five provided a contextual background towards individual member engagement with the network. In particular it illustrated the network's three overarching strands; Policy; Knowledge Exchange and Projects, both in terms of the aims and objectives of the network and member perceptions. This chapter has provided further illustrations of how an individual locality can utilise these three strands.

To be sure, policy has been an important element. However, the empirical research both in this chapter and Chapter Six does not suggest that Hull's involvement with TeleCities is embedded in the construction of a collective political ideology representative of cities, as is often cited behind inter-city transnational networks. Although this implies a reduction in Hull's involvement in a political context, policy has been a central narrative throughout this chapter. Rather than the collectivist approach that is seen as a core component of networks, Hull's engagement with the network on a political basis has been used primarily in a local context. In particular Hull's engagement with TeleCities has been used as a key legitimising strategy to enrol key political actors into the process politicising the digital agenda. In this capacity the role of TeleCities has been very important in providing a political acceptance of the role of new technology in a local context. Further to this the decision to join TeleCities allowed, for the first time, the role of new technology and its implications for Hull to be presented in a political capacity.

Even at this stage the effect was powerful with the leader of the Council enthusiastically offering support to join although he readily admitted his lack of understanding.

In terms of knowledge exchange, the evidence from this chapter builds upon the role of TeleCities as an intermediary platform that allows the retranslation of discourses gathered on a transnational basis to be reconstructed in a local context that was raised within Chapters Five and Six. In this sense the notion expressed by Mark Jones earlier in this chapter of TeleCities as a bank is an appropriate analogy to make and is undoubtedly a key component behind the city's involvement with the network. However given the network's role within Hull's digital agenda, TeleCities has been utilised more abstractly than just a repository of ideas. Through its engagement with the network, the city of Hull has utilised the brand, identity as well as its collective knowledge to integrate the role of new technology as a key factor in the city's regeneration strategy. Collectively these intersections between TeleCities and local scale initiatives can be seen in terms of a separate scale of engagement that has been utilised at key junctures as the digital agenda has been constructed.

However, whilst there is a clear link between the network and the local scale in terms of knowledge obtained and the use of the network as a route for politicising the digital agenda, this is not the case regarding Hull's involvement with specific collective projects within the network. Due to the relatively limited number of representatives from Hull engaging within the network and their time commitments, it has been necessary to prioritise their objectives in relation to their involvement with the network. In this sense representatives from Hull have pursued the network as a route to obtain knowledge towards the construction of their own digital agenda.

As a means of concluding this thesis, the final chapter will bring together the preceding empirical chapters, presenting them in line with the theoretical issues raised in Chapter Two.

Chapter 8: Conclusions: Conceptualising TeleCities – A New Geography of Governance?

The aim of this thesis was to

document, assess, and elaborate upon the structure, interactions and spatial contexts of the TeleCities network. Specifically it aimed to explore the TeleCities network in terms of its capacity to aggregate dispersed local actors into a separate institutional form; the role agency plays within these structures; and the spatial platforms and intersections TeleCities provides.

To do this the supporting objectives were:

- To build an analytical framework for the analysis of the formation and operation of the TeleCities network.
- To explore the different spatial intersections and the relationships established through TeleCities.
- To investigate the role played by the network in disseminating policy innovations at differing scales.
- To assess whether the TeleCities network provides European Institutions and sub-national authorities an opportunity for a ‘new geography of governance.’

In conclusion this Chapter will bring together these research questions together with the Analytical Framework developed in Chapter Two and the empirical data presented in Chapters Five, Six and Seven.

8.1 Conceptualising TeleCities: Institutionalism meets Agency

The first supporting objective to this thesis was to provide an analytical framework to explore the formation and operation of the TeleCities network. The analytical framework provided a basis to conceptualise TeleCities in terms of its competencies and ability to link aspects traditionally assigned to physical territoriality with wider debates surrounding the disintegration of place.

Within Chapter Two it was shown that previous theoretical contexts of institutionalism have been pursued from an ontological perspective that views institutional contexts purely within localised embedded contexts. Rather than institutionalism being confined to territorial settings it was argued that the key characteristics assigned to both institutionalism and embeddedness were not place specific, rather their key competencies were centred upon notions of socially reciprocal behaviour rather than location based assets. In this context, a coupling of the theoretical issues raised in Chapter Two with the empirical evidence presented in this thesis provides a conceptualisation of TeleCities in terms of a spatially autonomous entity that provides a variety of social competencies traditionally assigned to territorially embedded scenarios. In this capacity TeleCities can be seen as a separate institutional entity that provides a relational space for its widely dispersed membership.

In terms of the representation of TeleCities as an institutional entity, the first significant building block came through the signing of the Manchester Declaration. The

Manchester Declaration was seminal in the sense that it offered a materiality to the network that provided a contextual basis to legitimize and justify the network's existence with the intention on building a relationship with the Commission. Further to this it enabled a textual foundation towards an emerging institutional infrastructure that provided the network a framework that would contribute to stability in its early stages. Finally the document was an important element in constructing the identity and brand of TeleCities; by adopting a declaration as its starting point the network placed itself within the same procedural and cultural capacities as the European institutions. In particular the materiality of the Manchester Declaration provided a contextual starting point in terms of stability and presented a *formal* meaning in terms of activities within the network. In doing so it was indicative of a process of enabling a structural context to internal relations and interaction with other European Institutions. In this sense the Manchester Declaration provided a reference point for the incipient network to move beyond individual disparity into a form that was more representative of collective cohesion.

This process needs to be seen in relation to the external institutional partnerships it was building. As Chapter Five illustrated the origins and progression of TeleCities were firmly embedded within a European policy context. The Manchester Declaration itself was written as a response to the funding it had received through TURA, which in itself was a linear development of the Bangemann Report. As a result the origins of TeleCities were firmly embedded in a variety of institutional and policy contexts at the European scale. Because of this, the process of institutionalisation was very much a linear process that developed in line with these emerging relationships.

In this context, the most apparent event in terms of the institutionalisation of the network, came through the networks involvement with EDC. Through its alignment with the EDC programme, TeleCities became representative of an *institutional partner*, that is, it became officially embedded within a European policy context. Within this formal relationship with the Commission, TeleCities became indicative of something more than a loose collection of cities. This relationship enabled TeleCities to develop core territorially defined institutional characteristics. With the EDC programme, TeleCities integrated an organisational infrastructure, thematic focus and organisational capacity that are still embedded in the network to this day. These characteristics were, and still are central to the institutionalisation of TeleCities. In particular the EDC programme provided the capacity to generate the key social characteristics such as interaction, contact and trust that are traditionally assigned to territorial institutional embeddedness.

In this capacity TeleCities became representative of a space that was not territorially defined, yet provided the social characteristics of territorial institutional embeddedness to mature. As a result the structural coherence of the network, provided through TeleCities alignment with EDC provided a mechanism of fixity. That is, TeleCities as an institutional entity provided an infrastructure to reterritorialize policy contexts at a variety of scales, although the network itself was not embedded in a territorial context. In this sense TeleCities was and still is indicative of an institutional form that is not territorially defined.

Whilst this provides a historical context to the process of institutionalisation, Chapter Six illustrated how this same process is still firmly embedded within the network. With the networks current strategic framework, the KBC concept provides these core

characteristics, providing a thematic focus and giving a collective contextual framework to the network that individual actors can operate within. This thematic focus provides a detailed structural framework to allow for actors, to work towards a unified vision that again is a specific characteristic of territorially embedded institutionalism. This process of institutionalisation has seen TeleCities as a collective body utilise key policy contexts that have espoused the role of the city in a European policy context, enabling a collective identity. However, whereas territorially embedded institutionalist discourses emphasise localised characteristics, the institutional process of TeleCities are indicative of a merging of policy contexts between the local and European scales that provide a basis for a collective identity to emerge. Whilst this implies that an institutional process is only possible as a *response* to wider global forces, namely external policy alignment, the empirical evidence in this thesis does not support this. In this capacity let us explore the role of actors within that institutional context

The coupling of agency within institutional contexts was raised in Chapter Two.

Within structural and institutional settings the importance of agency and reflexivity was highlighted through the work of Storper (1997), Hay (2001) and Jessop (2001). However, as with institutionalist approaches, the notion of learning and reflexivity were conceptualised purely within an institutional territorially defined localised context. Because of this, discursively, institutional components became the key characteristic rather than the power of reflexivity as a tool of institutional engagement in a variety of relational contexts. To explore these competencies away from territorially defined locations, the role agency plays within the institutional confines of TeleCities was illustrated in Chapters Five and Six. The emphasis of collective or transnational reflexivity was apparent in TeleCities role in the PACE project. Progressing and building upon the institutional capabilities enabled through the EDC programme, the

PACE project provided a collective strategic framework that members could engage in. In this sense the collective focus, in parity with European policy, continued the process of policy alignment as a process of institutionalisation. However, it represents a significant progression in the sense that, in an institutional context it illustrates the role agency plays *within* and as a *consequence* of the networks established institutional structure, that is the institutional context established was utilised by actors to construct a new "*course of action*" (Hall and Taylor, 1996, p16). This is an important merging of institutionalism and agency in the sense that institutional structures provided the framework to rework discourses, a basis for collaboration, and that key institutional characteristic, an understanding of *the rules of the game* enabling ongoing process of institutionalisation. The progression and merging of agency within institutional contexts provides the basis for a cyclical process that is still running to this day through the KBC concept.

This process was apparent during the transition from the 4th Framework Programme to the 5th Framework Programme. Through the EDC programme the network had built enough institutional capacity, in terms of membership, infrastructure, and collective cohesion to shift its focus within a less welcoming environment. At this point the network emerged in terms of its reflexivity, aligning itself *independently* to the major strand of IS policy and constructing a strategic framework on the basis of the PACE project.

This notion of agency within the structural confines of TeleCities was further explored in Chapter Six. Whilst the KBC provides the institutional basis for the network, it differed from previous policy alignments in the sense that it was a guiding document rather than attached to a major Commission sponsored project, like EDC or PACE. In this capacity the interpretation of that framework was far more in the hands of work group members and was more dependent upon a small number of actors within the

BWG rather than TeleCities acting as a collective institutional entity. Without that formal institutional relationship with the Commission, institutional structures *within* TeleCities are weaker. Consequently agency is allowed a greater flexibility. In this context Chapter Six illustrated how key actors within the BWG, whilst operating within the networks framework, constructed policy documentation that had a specific national relevance. In this sense the BWG illustrates the subtle variations between institutionalism and agency. Whereas previously, under the EDC programme and the PACE project agency was indicative of a *collective institutional process*, within the KBC, without that formal relationship, the interpretation of this process, by individual actors, was open to far greater interpretation.

In this context the notion of TeleCities has strong links the SRA, specifically in the sense of institutional strategies that “*depends on individual, collective, or organizational learning capacities and on the ‘experiences’ resulting from the pursuit of different strategies and tactics in different conjunctures*” (Jessop, 2001, p1230). This last point is of particular importance. The reflexivity of TeleCities has enabled the network to respond with *different strategies and tactics in different conjunctures*. Whilst TeleCities role in the EDC was dependent upon key actors and relationships established between members of the network and the Commission, their alignment with the PACE programme was a specific strategic response at a specific conjuncture, that was dependent on collective experiences. Again a different strategy at a different conjuncture materialised within the KBC, this process was open to interpretation by individual and collective agency, however in all cases the process was guided by the institutional contexts of the network.

8.2 Conceptualising TeleCities: Relationality; Reconstructing Policy

The combination of the networks institutionalisation and its subsequent reflexivity brings us to the *relationality* of TeleCities. This provides a conceptual basis to explore the different spatial intersections and the relationships established through TeleCities. As the previous section illustrated the process of institutionalisation has allowed TeleCities to act as a platform of fixity. The empirical evidence from this thesis, illustrates the role of TeleCities in providing a platform for the temporal and spatial horizons of members in a variety of contexts. In a scalar sense the European origins of the network placed TeleCities as a reflexive entity in terms of Commission influence, however the network's subsequent trajectory has allowed it to jump its scalar origins and utilise the foundations of a collective space towards a more proactive network that is implicitly trans-local. By building upon its historical institutional relationships, achievements and identity, the network has successfully managed this new scale of engagement providing a framework of potential empowerment to members in terms of knowledge exchange, policy and projects. Further to this, these objective pillars of the network have been presented firmly in a transnational scalar context promoting a scalar duality in terms of their synergies between the European and local scales. In many respects this scalar duality bears a number of similarities to the politics of scale(s) raised in Chapter Two. If we build upon the processes of reflexivity already apparent within the network, and examine this as a spatial process, in the sense that reflexivity attached to the network has taken place away from a territorially bounded scale, then TeleCities can be seen as a relationally constructed scale of engagement. In this context the network has been able to build upon its intermediary capacity between the local and European scales, providing a proactive space of engagement for inter-city collaboration in a variety of aspects.

These scalar reconstructions were made apparent in Chapter Six during the fieldwork carried out regarding the BWG. Firstly, the KBC concept that all work groups operated within, had its origins within a regional context (it was originally constructed by Barcelona and aimed at the Catalonian regional level). The subsequent retranslation of this framework into a transnational context builds upon issues already raised which emphasised the intermediary capacity of TeleCities in terms of its ability to capture and rearticulate a variety of potential collaborative processes and political discourses at a variety of scales. By incorporating the Barcelona strategy into a transnational context the relational component of TeleCities is again illustrated in terms of its ability to provide a platform for a process that is not bound within one discreet spatial scale.

A similar process of scalar re-translation was also evident within the BWG. The translation (both linguistically and scalar) of the Stedenlink document from its national origins into the Broadband Manifesto represented a significant merging of local, national and European policy. This merging of scales has been reconstructed by key actors who have utilised both the intermediary capacity of TeleCities as a collective scale of engagement and its institutional identity as a means of promoting the role of cities within a European political process. In this capacity a small number of Dutch cities were able to articulate their concerns, which prior to the BWG were directed purely in a national context, and rearticulate them within a European context. By utilising TeleCities within that process, the national context of Stedenlink was able to jump from a policy perspective embedded in a national scalar context to a European context with considerable ease. Again at the root of this repositioning of scales is the intermediary capacity of TeleCities. Due to the network's historical relationship with the Commission, the representation and identity of the network is to a degree embedded within European political processes, or at least more so than a national organisation

such as Stedenlink could ever hope to be. As a result key actors have utilised the relational space of TeleCities to transform the Stedenlink document away from its national origins and place it within a European context.

Building upon this, a similar example of relationality was observed in Chapter Seven in terms of the city of Hull and their intersection with TeleCities. In prioritising their involvement with the network in terms of an additional route of legitimising their own digital vision, Hull, have utilised the policy connotations of the network to considerable effect. As we have seen, Hulls involvement with the network and their involvement with the BWG did not materialise in terms of collective policy aimed at the European scale, rather it has been the manipulation of the networks brand and identity to politicise the *local* agenda rather than the European. The decision to join TeleCities can be seen as a linear development in terms of the achievements made through the HMA in the sense that it provided an indication that there was interest in the potential of new technology and that building coalitions outside the confines of the Council could be a way to place strategic pressure on a political basis. Indeed the initial decision to join TeleCities brought a large degree of political goodwill that has continued up until the present day. As a result of this, the intersection of TeleCities and Hull's role within it has led to a perception of what one Council member referred to as '*boxing above our weight*'. In many respects this element of engagement is particularly appealing from a political perspective as it shifts the connotations of Hull as an isolated city with a struggling economy and places it at least from a European perspective as a leading city working in collaboration with other key technologically advanced cities.

Building upon the relationality of the network, within Chapter Two the notion of reflexivity was coupled with Michael Storper's theory of untraded interdependencies. In

many respects incorporating untraded interdependencies is in line with this thesis's theoretical narrative of placing territorially defined concepts within differing spatial scenarios. Within the empirical work carried out, specifically within Chapter Seven, the notion of untraded interdependencies provides a novel ontological route to explore the relationality of TeleCities. This utilisation of TeleCities by the city of Hull as a collective repository of untraded interdependencies provides an empirical context of relational assets that are not traded *within* specific localised contexts, rather TeleCities, as an intermediary provided members a space of *collective untraded interdependencies*, that originated in one local context, and then were reconstructed in different local contexts. For example the whole concept behind the Digital City concept referred to in Chapter Seven was a specific untraded interdependency obtained through TeleCities that was originally applied in a different localised context before being rearticulated in the city of Hull:

“what is in the Digital City stuff here is things that I had learned directly from [Tampere] at TeleCities meetings 4 or 5 years ago. ... they had 6 or 7 key action plans such as E-Tampere which is the equivalent to Digital City and just absorbed chunks of that and translated that into a local context”
(Interview with Steve Fleming, Hull, May 7th 2004).

However given the networks role within Hull's digital agenda, TeleCities has been utilised more abstractly than a mere repository of ideas. Through their engagement with the network, the city of Hull has utilised the brand, identity *as well* as its collective knowledge to integrate the role of new technology as a key factor in the city's regeneration strategy. Collectively these intersections between TeleCities and local scale initiatives can be seen in terms of a separate scale of engagement that has been

utilised at key junctures as the digital agenda has been constructed. In many respects this aspect of local intersections with TeleCities illustrates the intermediary nature of the network in terms of providing an opportunity to tap into relational assets.

A similar theme also emerged in terms of the data from the online questionnaire suggested the overriding reason behind membership was related to concepts of knowledge exchange. By utilising TeleCities as an intermediary, cities are able to share and generate discourses which are subsequently retranslated in a local context. Again this builds upon the notions of untraded interdependencies and the role of assets that are not territorially defined raised in Chapter Two. In this capacity TeleCities can be seen as a relational transnational temporal space that enables a diverse geographically dispersed community to exchange knowledge, construct coalitions and produce discourses which can be subsequently reconstructed at a variety of scales.

8.3 Conclusions: TeleCities a New Geography of Governance?

In the conceptualisation of TeleCities presented above, a number of complex and inter-related spatial; processes are apparent, however to what extent does TeleCities as a spatial intermediary operate in terms of a ‘new geography of governance’?

This thesis has illustrated that European policy has been at the heart of TeleCities from its inception. Whilst the network may not have become the powerful collective voice of cities influencing European policy it once envisaged, that is not to say that policy doesn’t matter, on the contrary. As we have seen a structured policy centred framework is essential to the process of institutionalism that binds the network, both in terms of its initial construction and ongoing functionality. This has implications in the sense that the network is always in alignment to European policy, implicitly its thematic focus will

always be in relation to the major strand of European IS policy. However this does not suggest TeleCities is indicative of top down approach to policy dissemination.

Rather the connotations and utilisation of policy has transpired in more subtle and relational contexts than a mere dictation of policy from above. In terms of the BWG, TeleCities was used as an institutional intermediary to retranslate (in a scalar sense) policy documentation from a national to a European context. This would not have been possible without the institutional structure and identity of TeleCities. In a similar capacity the city of Hull utilised the relational space of TeleCities to promote its own specifically local agenda. In both cases participation with TeleCities is indicative of a separate scale of engagement that has been incorporated into policy and governance related contexts that are firmly territorially defined.

In a sense this brings us to the dichotomy of space and place presented in the introduction to Chapter Two. Within these diametrically opposed views, the evidence in this thesis suggests that there may be some middle ground with elements of each providing a new conceptual lens to observe the merging of local and global power relations.

In many respects the scalar processes presented within this thesis are indicative of localities operating within a *space of flows* However in terms of the empirical work carried within this thesis the *space of flows* cannot be seen as an autonomous separate space. The empirical examples presented in this thesis have taken place in the *spaces of places*. In this sense I would argue that conceptions of the *space of places* have shifted, rather than place being assigned as a territorially defined construct, the core characteristics of 'place' have taken place within the fluid and temporal space of

TeleCities, which have then been retranslated back in a territorialized local context not within Castellan notions of virtual space.

The empirical work presented in this thesis does not suggest that TeleCities is an autonomous process existing within a virtual space of flows, rather it is an additional component of what are predominately territorially defined processes. However in terms of the relationality of TeleCities and its various scalar intersections, what we term specifically territorially embedded capacities needs to be reconsidered - the vital elements that are attributed to territorially embedded networks such as, face to face contact, the need to generate and disseminate discourses, collective beliefs, points at which knowledge structures can be tapped into, were all apparent within the TeleCities, it enabled social and cultural interaction, it acted as a place of sociability, a space to gather information, establish coalitions, develop and maintain trust, and develop rules of behaviour.

If we allow this re-conceptualising of what we term specifically localised embedded capacities, perhaps we can start to think of new geographies of governance that are not totally territorially defined, rather they are mixture of (transnational) localised assets encapsulated and retranslated within a variety of scalar contexts.

Bibliography

Abercrombie, N. Hill, S and Turner, B.S. (1988) *The Penguin Dictionary of Sociology*, "2nd ed. London. Penguin Books

Amin, Ash (1994) *Post-Fordism: Models, Fantasies and Phantoms of Transition*. In *Post-Fordism: A Reader*. Edited by Ash Amin. Oxford, Blackwell

Amin, Ash and Thrift, Nigel (1994a) *Living in the Global*. In *Globalization, Institutions and Regional Development*. Edited by Ash Amin and Nigel Thrift. Oxford, Oxford University Press. pp 1-22

Amin, Ash and Thrift, Nigel (1994b) *Holding down the Global*. In *Globalization, Institutions and Regional Development*. Edited by Ash Amin and Nigel Thrift. Oxford, Oxford University Press. pp 257--260

Amin, Ash and Thrift, Nigel (1995) *Globalisation, Institutional 'Thickness' and the Local Economy*. In *Managing Cities: The New Urban Context* Edited by Patsy Healey et al. Chichester, John Wiley and Sons. pp 91-109

Barnes, T. (2000) *New Institutional Economics*. In Johnston, R.J *et al* (Editors)(2000) *The Dictionary of Human Geography*. Oxford, Blackwell. pp551-552

Bell, D (1973) *The Coming of the Post Industrial Society*.. New York. Basic Books

Bennington, John and Harvey, Janet (1998) *Transnational Local Authority Networking within the European Union: Passing Fashion or New Paradigm?* In *Comparing Policy Networks*. Edited by David Marsh. Open University Press, Buckingham. pp149-166.

Boden, D. and Molotch, H. (1994). 'The compulsion to proximity', in R. Friedland and D. Boden (eds) *Nowhere. Space, time and modernity*. Berkeley: University of California Press

Brenner, N. (1998). "Between Fixity and Motion: Accumulation, Territorial Organization and the Historical Geography of Spatial Scales." *Environment and Planning D: Society and Space* 16(1): 459-481.

Brenner, N. (1999) "Globalisation as reterritorialisation: The re-scaling of urban governance in the European union" *Urban Studies* 36. pp 431-451

Brenner, N. (2001) 'The Limits to Scale? Methodological reflections on scalar structuration. *Progress in Human Geography*. 15. pp 525-548

Carter, Dave (1997) 'Digital Democracy' or 'Information Aristocracy'? *Economic Regeneration and the Information Economy*. In *the Governance of Cyberspace*. Edited by Brian D. Loader. Routledge, London. pp136-152

Castells, M. (1989) *The informational city*. Blackwell, Oxford,

Castells, M. (1996), *The Rise of the Network Society*. Blackwell, Oxford.

Castells, M. (1997) *The Power of Identity*. Blackwell, Oxford

Castells, M. (1998) *End of Millennium*. Blackwell, Oxford

Collignon, S. (2003) Is Europe going far enough? Reflections on the Stability and Growth Pact, the Lisbon strategy and the EU's economic governance. European Political Economy Review 1(2):pp. 222-247

Commission of the European Communities (CEC) (1993) 'White Paper on Growth, Competitiveness and Employment: the Challenges and Ways Forward into the 21st Century', COM(93), 700 Final. Brussels: CEC.

Commission of the European Communities (CEC) (1994a) 'Europe and the Global Information Society: Recommendations to the European Council'. Brussels: CEC.

Commission of the European Communities (CEC) (1994b) 'Europe's Way to the Information Society: an Action Plan', COM(94), 347 Final. Brussels: CEC.

Commission of the European Communities (CEC) (1995) 'A Working Document on the Social and Societal Aspects of the Information Society: the High Level Group of Experts'. Brussels: CEC.

Commission of the European Communities (CEC) (1996a) 'The Implications of the Information Society for European Union Policies: Preparing the Next Steps', COM(96), 395, Final. Brussels: CEC.

Commission of the European Communities (CEC) (1996b) 'Europe at the Forefront of the Global Information Society: Rolling Action Plan', COM(96), 607, Final. Brussels: CEC.

Commission of the European Communities (CEC) (1996c) 'Proposal for a Council Decision: Adopting a Multiannual Community Programme to Stimulate the Establishment of the Information Society in Europe', COM(96), 592, Final, 96/0283 (CNS). Brussels: CEC.

Commission of the European Communities (CEC) (1996d) 'Building the European Information Society for Us All: First Reflections of the High Level Group of Experts', Interim Report. Brussels: CEC ([www:http://www.ispo.cec.be/hleg/hleg-ref.html](http://www.ispo.cec.be/hleg/hleg-ref.html)).

Commission of the European Communities (CEC) (2000) '*eEurope 2002: an Information Society for All, Action Plan*'. Brussels: CEC.

Commission of the European Communities (CEC) (2000b) '*The Lisbon European Council: An agenda of economic and social renewal for Europe*' Brussels: CEC.

Commission of the European Communities (CEC) (2002) '*eEurope an Information Society for All 2005*'. Brussels: CEC

Commission of the European Communities (CEC) (2005) '*Working together for growth and jobs a new start for the Lisbon Agenda*'. Brussels: CEC.

- Commission of the European Communities (CEC) (2005a) *Communication from the Commission of the Council of the European Parliament, The European Economic and Social Committee and The Committee of the Regions*. Brussels: CEC
- Cooke, P. (1995) *Regulating Regional Economies* in M. Rhodes (ed) *The Regions & the New Europe*, Manchester University Press.
- Cooke, P. and Morgan, K. (1993) *The network paradigm: new departures in corporate and regional development*, *Environment and Planning D*. 8. pp 7-34
- Cox, Kevin R (1998) *Spaces of dependence, spaces of engagement and the politics of scale, or: looking for local politics*. *Political Geography* 17 (1) pp 1-23
- Church, Andrew and Reid, Peter (1996). *Transfrontier co-operation, spatial development strategies and the emergence of a new scale of regulation: the Anglo- French border*. *Regional Studies* Vol 29, No 3. pp 297 - 316
- Church, Andrew and Reid, Peter (1999) *Cross-border Co-operation, Institutionalization and Political Space Across the English Channel*. *Regional Studies* Vol 37, No 7. pp 643-655
- Dai, Xiudian (1996) *Challenges of the Information Society: A Vision for Hull*. Unit for Research on Information and Communications Technologies. Department of European Studies. University of Hull
- Dai, Xiudian (1999) *Networked Governance and European Regions in the Digital Age*. Paper presented to the CSGR annual conference 'After Global Crisis: What next for Regionalism'. University of Warwick.
- Dai, Xiudian (2000) *The digital revolution and governance*. Aldershot, Burlington
- Datta, L. (1996) *A Pragmatic Bias for Mixed Method Designs*. In *Advances in Mixed-Method Evaluation: The Challenges and Benefits of Integrating Diverse Paradigms*. J.C. Green and V.J. Caracelli. San Francisco, Jossey-Bass Publishers. pp 33-46
- Delaney, David and Leitner, Helga (1997) *The political construction of scale*. *Political Geography* 16 (2) pp 93-97
- Department of Regeneration (2001) *Challenges for the Future*. Department of Regeneration. Hull
- Department of Regeneration (2001a) *City Summit Document*, Department of Regeneration. Hull
- Dicken, Peter et al (2001) *Chains and networks, territories and scales: towards a relational framework for analysing the global economy*. *Global Networks*. Vol 1, No 2. pp – 89 -112
- DGXIII (1998) *Telematics Application Programme. Promotional Document*. Brussels
- DGXIII (1999) *Integrated Applications for Digital Sites (1998 – 2000) Project Summaries*. Brussels

- Friedmann, John (2001) Intercity Networks in a Globalizing Era. In *Global City-Regions*. Edited by Allen J. Scott. New York. Oxford University Press.
- Gertler, M. (2000) Post Fordism. In Johnston, R.J *et al* (Editors)(2000) *The Dictionary of Human Geography*. Oxford, Blackwell. p615
- Gibbs, David (1994) The role of information and communication technologies in urban economic development. Local Government Policy Making. Vol 21 (1) pp38-44
- Gibbs, David and Tanner, Keith (1996) Information and communication technologies and local economic development policies: The British Case. Regional Studies. Vol 31 (8) pp 765 – 774
- Gibbs, David (2001) Harnessing the Information Society? European Union policy and information and communication technologies. European Urban and Regional Studies Vol 8 (1) pp 73-84
- Gibbs, David *et al* (2001) Governance, institutional capacity and partnerships in local economic development; theoretical issues and empirical evidence from the Humber Sub-region. Transactions from the Institute of British Geographers. No 26 pp 103-119
- Gibson-Graham J.K. (2002) 'Beyond global vs local: economic politics outside the binary frame' In *Geographies of Power: Placing Scale*. Edited by Andrew Herod and Melissa W Wright. Blackwell, Oxford. pp 25-60
- Giddens A. (1984) *The Constitution of Society*. University of California Press. Berkeley, California.
- Giddens, A (1996) *The Times Higher Education Supplement* (London), 13 December
- Glaser, B. & Straus, A. (1967). *The discovery of grounded theory: Strategies for qualitative research*. New York: Aldine.
- Grabher, G. (2006). Trading routes, bypasses, and risky intersections: mapping the travels of 'networks' between economic sociology and economic geography. Progress in Human Geography 30(2). pp 163-189
- Graham, Stephen. (1994) 'Promoting the networked city – the challenges of urban telematics policies'. In *Management of information and communication technologies*. London, Aslib. pp 286-308
- Graham, S. and Dominy, G. (1991) 'Planning for the informational city: the UK case' Progress in Planning Vol 35. (3) pp169-248
- Granovetter, Mark (1985) 'Economic Action and Social Structure : the problem of Embeddedness' American Journal of Sociology. 91. pp 481-501.
- Hakim, C. (1994) *Research Design – Strategies and Choices in the Design of Social research*. London. Routledge

- Hall, P. and Taylor, R. (1996): "Political Science and the Three New Institutionalisms" Political Studies, 44. pp.936-958
- Harvey, D. (1998) The body as an accumulation strategy. Environment and Planning D. 16. pp 401-421
- Hay, C. (2002) Political Analysis. Palgrave, Basingstoke
- Hay, C., 2004, What Place for Ideas in the Structure-Agency Debate? Globalisation as a 'Process Without a Subject': Available from :www.york.ac.uk/depts/poli/news/freesrc/hay.pdf
- Healey, P. and Graham, S. (1999) Relational concepts of place and space: issues for planning theory and practice, European Planning Studies. Vol 7 (5). pp 339-354
- Healey, P. (1998) 'Building institutional capacity through collaborative approaches to urban planning'. Environment and Planning A (30). pp1531 - 1546
- Healey, Patsy et al (Eds) (1995) Managing Cities: The New Urban Context. Chichester, John Wiley and Sons
- Hepworth, M. (1991) 'The municipal information economy'. In Cities of the 21st Century. Edited by J. Brotchie et al. London, Longman. pp171-178
- Hepworth, M.E., Dominy, G. and Graham, S. (1989) Local authorities and the information economy in Great Britain. Newcastle Studies of the Information Economy, No 11, University of Newcastle upon Tyne
- Herod, Andrew and Wright, Melissa W. Eds (2002) Geographies of Power: Placing Scale. Blackwell, Oxford
- Herzog, T. (1996) Research Methods in the Social Sciences. Harper Collins, New York
- Hodgson, G. M. (1988). Economics and Institutions: A Manifesto for a Modern Institutional Economic. Cambridge, Polity Press.
- Hollingsworth, J. Rogers (2000) 'Doing Institutional Analysis: Implications for the study of Innovations.' Review of International Political Economy, 7 (4), Winter, pp 595-644
- Jessop, Bob (1994) Post- Fordism and the State. In Post-Fordism: A Reader. Edited by Ash Amin. Blackwell, Oxford. pp 251-279
- Jessop, Bob (1994a) The transition to post-Fordist and the Schumpeterian workfare state. In towards a post-Fordist welfare state. Edited by Roger Burrows and Brian Loader. London, Routledge. pp13-37
- Jessop, B. (1997) Capitalism and its Future: remarks on Regulation, Government and Governance", Review of International Political Economy, Vol.4, No.3, Autumn, pp.561-581.
- Jessop, B., 2001, "Institutional re(turns) and the strategic-relational approach" Environment and Planning A 33 1213-1235

- Jessop, B. (2004) From localities via the spatial turn to spatio-temporal fixes: a strategic-relational odyssey. *SECONS #6: 'Soc.-Econ. Space'*, discussion forum, 2004. Available from <http://www.giub.uni-bonn.de/grabher/downloads/jessop.pdf>
- Jessop, R. D, Peck, J.A and Tickell, A (1999) Re-tooling the machine: state restructuring, uneven development, and urban politics: in Jonas, A. E. G. and Wilson, D. (eds.), *The urban growth machine: critical perspectives two decades later*, New York, State University of New York Press, 1999, 141-59.
- Johnston, R.J *et al* (Eds) (2000) *The Dictionary of Human Geography*. Oxford, Blackwell
- Jonas, A.E.G (1994) 'The Scale Politics of Spatiality' *Environment and Planning D. Society and Space*. 12. pp 257-264
- Jonas, A.E.G. (2006) Pro scale: further reflections on the 'scale debate' in human geography. *Transactions of British Geographers*. 31. pp 399-406
- Jones, M. (1997) 'Restructuring the local state: economic governance or social regulation?' *Political Geography*. Vol 17. pp 959-988
- Jones, Martin (1999) *New Institutional Spaces: TECs and the remaking of economic governance*. Regional Studies Association. London
- Lagendijk, A (2006) The accident of the region. A strategic relational perspective on the construction of the region's significance. Paper to be presented to at the 2006 AAG Conference in Chicago. Available from www.ru.nl/contents/pages/23506/lag06-aag.pdf. Accessed 21/7/2006
- Latham, Alan (2002) *Rethorizing the Scale of Globalization*. In *Geographies of Power: Placing Scale*. Edited by Andrew Herod and Melissa W Wright. Blackwell, Oxford. pp 115-144
- Leese, R. (1996) *The Guardian* (Manchester) March 18th
- Leitner, Helga, Pavlik, Claire and Sheppard, Eric (2002) *Networks, Governance, and the Politics of Scale: Inter-urban Networks and the European Union*. In *Geographies of Power: Placing Scale*. Edited by Andrew Herod and Melissa W Wright. Blackwell, Oxford. pp 274-303
- Lovering, J. (1999) Theory led by policy: the inadequacies of the new regionalism (illustrated from the case of Wales). *International Journal of Urban and Regional Research*. Vol 23, pp 379 –395
- Machlup, F. (1962). *The Production and Distribution of Knowledge in the United States*. Princeton University Press, Princeton NJ.
- MacLeod, Gordon (1996) *Recasting regulation and governance in lowland Scotland: from 'economic planning to enterprising spaces*. Unpublished PhD Thesis. University of Lancaster

- MacLeod, Gordon (1999) Place, politics and scale dependence: exploring the structuration of Euro-Regionalism. European Urban and Regional Studies. Vol 6 (3).pp 231 – 253
- MacLeod, Gordon (2001) New regionalism reconsidered: globalization and the remaking of political economic space. International Journal of Urban and Regional Research. Vol 25.4, December. pp 804 –829
- MacLeod, Gordon (2001a) Beyond soft institutionalism: accumulation, regulation, and their geographical fixes. Environment and Planning A. Volume 33, pp 1145 – 1167
- March, J.G. and Olsen, J.P.(1989) Rediscovering institutions: the organizational basis of politics. Free press, New York
- Markusen A. (1999) 'Fuzzy Concepts, Scanty Evidence, Policy Distance: The Case for Rigour and Policy Relevance'. Regional Studies Volume 33 (9). pp 869-884
- Margetts, Helen (1997) 'The national performance review: a new humanistic public management. In Globalization and marketization of government services; comparing contemporary public-sector developments. Edited by Andrew Massey. Basingstoke, Macmillian Press Ltd. pp 47-70
- Marsh, David. Eds (1998) Comparing Policy Networks. Open University Press, Buckingham
- Marston, S.A., Jones III, J.P. and Woodward, K (2005) 'Human Geography without Scale' Transactions of the Institute of British Geographers. 29. pp 416-432
- Mayer, Margit (1994) Post-Fordist City Politics. In Post-Fordism: A Reader. Edited by Ash Amin. Blackwell, Oxford. pp 316-338
- McDowell, L. (1999) Gender, identity and place. University of Minnesota Press. Minneapolis
- Mino E. (1999) Experiences of European Digital Cities. TeleCities. Brussels
- Morgan, K (1997) The Learning Region: Institutions, Innovation and Regional Renewal, Regional Studies, Volume 31 (5).
- Naim, T (1997) Sovereignty after the election. New Left Review 224, pp 3-18.
- North, D.C. (1990) Institutions, Institutional Change and Economic Performance. New York. Cambridge University Press.
- Parker, J. (2000) Structuration. Milton Keynes. Open University.
- Peck, Jamie and Tickell, Adam (1994a) Too many partners ... The future for regeneration partnerships. Local Economy Vol 9. pp 251-265
- Perkmann, Markus (1999) Building Governance Institutions Across European Borders. Regional Studies. Vol 33.7. pp 657 - 667

- Perkmann, Markus (2002) 'The rise of the Euroregion. A bird's eye perspective on European cross-border co-operation', published by the Department of Sociology, Lancaster University at: <http://www.comp.lancs.ac.uk/sociology/soc103mp.html>
- Perkmann, Markus (2002a) 'Policy entrepreneurs, multilevel governance and policy networks in the European polity: The case of the EUREGIO', published by the Department of Sociology, Lancaster University at: <http://www.comp.lancs.ac.uk/sociology/soc104mp.html>
- Perkmann, Markus (2002b) Institutional Entrepreneurship in the European Union. In *Globalization, Regionalization and Cross-Border Regions*. Edited by Markus Perkmann and Ngai-Ling Sum Basingstoke, Palgrave Macmillan. pp 103
- Perkmann, Markus and Sum, Ngai-Ling (2002) *Globalization, Regionalization and Cross-Border Regions*. Basingstoke, Palgrave Macmillan
- Peters, B.G. (1999) *Institutional Theory in Political Science: The New Institutionalism*. Pinter, London
- Peterson, J. (1997), 'States, Societies and the European Union', West European Politics, Vol. 20, No. 4, October, pp.1-23.
- Peterson, J. and Bomberg, E. (1999) *Decision-making in the European Union*. Basingstoke, Macmillan
- Peterson, J. and Sharp, M. (1998) *Technology Policy in the European Union*. Basingstoke. Macmillan
- Piore, M. and Sabel, C. (1984), *The Second Industrial Divide: Possibilities for Prosperity*, Basic Books, New York.
- Porter, M.E. (1996), "What is strategy?", Harvard Business Review, Vol. 74 pp.61-78.
- Powel. W and Di Maggio, P. (eds) (1990) *The new institutionalism in organizational analysis*. University of Chicago Press, Chicago
- Preston, P. (2003) 'The European Union's ICT Policies : Neglected Social and Cultural Dimensions' in Servaes, J (Ed.) 'The European Information Society', Creskill, NJ: Hampton Press.
- Raco, M (1998) Assessing 'institutional thickness' in the local context: a comparison of Cardiff and Sheffield. Environment and Planning A. Vol 30. pp 975 - 996
- Raco, M (1999) Competition, collaboration and the new industrial districts: examining the institution turn in local economic development. Urban Studies, Vol 36 pp 951 - 968
- Rhodes, R.A.W (1997) *Understanding Governance: Policy networks, Governance, Reflexivity and Accountability*. Buckingham. Open University Press.
- Scott, A. J.1998. *Regions and the world economy : the coming shape of global production, competition, and political order*. Oxford: Oxford University Press.
- Scott, W.R. (1994). *Institutions and Organizations*. London, Sage Publications.

- Smith, N. (1984) *Uneven development: nature, nature, capitol and the production of space*. Blackwell. Oxford
- Stoker, Gerry and Mossberger, Karen (1995) 'The post-Fordist local state; the dynamics of its development. In *Local Government in the 1990s*. Edited by John Stewart and Gerry Stoker. Basingstoke, Macmillan Press Ltd. pp 210-227
- Storper, M. (1995) The resurgence of regional economies, ten years later: The region as a nexus of untraded interdependencies. *European Urban and Regional Studies*, 2. pp.191-221
- Storper, M. (1997) *Regional Economies as Relational Assets*. In Lee, R. and Willis, J (eds) *Geographies of Economies*. Arnold, London . pp 248-258
- Storper, M. (1997b) *the Regional World: Territorial Development in the Global Economy*. New York. Guildford Press
- Sum, Ngai-Ling (1997) 'Time-space embeddedness' and 'geo-governance' of cross-border regional modes of growth: their nature and dynamics in East Asian cases. In *Beyond Market and Hierarchy*, edited by Ash Amin and Jerzy Hausner. Cheltenham, Edward Elgar. pp 159-196
- Sum, Ngai-Ling (2002) 'Globalization, Regionalization and Cross Border Modes of Growth in East Asia: the (Re)Constitution of Time-Space Governance. In *Globalization, Regionalization and Cross Border Regions*. Edited by Markus Perkmann and Ngai-Ling Sum. Hampshire, Palgrave Macmillan. pp 50-76
- Swyngedouw, Erik (1997) Neither Global nor Local: glocalization and the politics of scale. In *Spaces of Globalization: reasserting the power of the local*. Edited by Kevin R. Cox. Guildford Press, Oxford. pp 137-166
- Swyngedouw, Erik (2000) *Elite Power, Global Forces, and the Political Economy of 'Glocal' Development*. In *The Oxford Handbook of Economic Geography*. Edited by Gordon L Clark, Maryann P. Feldman and Meric S. Gertler. Oxford University Press, Oxford. pp 541- 558
- Taylor P. (1982) 'A materialist framework for political geography.' *Transactions of the Institute of British Geographers*. 7. pp 15-34
- Telecities (1993) 'The Declaration of Manchester' available from <http://eurocities.poptel.org.uk/Telecities/library/index.htm>
- Telecities (1996) 'Understanding Teledemocracy' paper to First European Digital Cities Conference. 'The Challenge of the Future' (May), Copenhagen
- TeleCities (2003) TeleCities Website: www.telecities.org
- TeleCities (2003) *TeleCities: Ten Years Connecting Cities*. Promotional Document
- TeleCities (2003a) *The Knowledge Based City Concept*. TeleCities. Brussels

- TeleCities (2003b) TeleCities 2004 Draft Work Programme. TeleCities. Brussels
- TeleCities (2003c) New Framework for the Working Group Activities TeleCities. Brussels
- TeleCities (2004) Minutes from Broadband Working Group, The Hague Event. TeleCities. Brussels
- TeleCities (2004a) Handout to members of the Broadband Workgroup from the Gijon event. TeleCities Brussels
- TeleCities (2005) Handout to members of the Broadband Workgroup from the Tallinn event. TeleCities. Brussels
- Turner, C. (1997) Trans-European Telecommunications Networks: The Challenges for Industrial Policy, Routedledge, London
- Thrift N (1995) "A Hyperactive World", in Johnston R, Taylor P & Watts M (eds.) Geographies of Global Change: Remapping the World in the late Twentieth Century Blackwell, Oxford. pp. 18-35
- Toffler, A. (1980) The Third Wave. New York: Bantam Books.
- Tömmel, I. (1998), Transformation of Governance: The European Commission's Strategy for Creating a 'Europe of the Regions', Regional & Federal Studies, Vol. 8, No.2, Summer, pp.52-80.
- Webster, F. (1995). Theories of the Information Society. London. Routledge.
- Webster, F. (1994) "What Information Society?" The Information Society, Vol. 10, No. 1:1-24
- Yeung, H., 2005, "Rethinking relational economic geography" Transactions of the Institute of British Geographers 30 37-51
- Yin, R.K. (1994) Case Study research: Design and Methods. Thousand Oaks. California. Sage Publications
- Zobel, R. and Filos E. (2003). eEurope 2005 and the European Research Area: Policy and Research Measures Aiming at Europe to Become the Worlds Largest Knowledge – Based Economy by 2010. In proceedings of the Portland International Conference on Management of Engineering and Technology (PICMET), Portland, USA, 20-24 July

Appendices

Appendix A: TeleCities Members

President: Liverpool (UK)

Vice President: Cologne (Germany)

Steering Committee Members (14)

Amaroussion (Greece) • Antwerp (Belgium) • Helsinki (Finland) • Kingston upon Hull (UK) • Marseille (France) • Nice (France) • Rome (Italy) • Stockholm (Sweden) • The Hague (Holland) • Vienna (Austria) • Prague (Czech Republic) • Naestved (Denmark)

Other Local Authorities (104)

• Aarhus (Denmark) • Amsterdam (Holland) • Bari (Italy) • Belfast (Northern Ireland) • Berlin (Germany) • Bilbao (Spain) • Birmingham (UK) • Birkirkara (Malta) • Bologna (Italy) • Bonn (Germany) • Bradford (UK) • Bremen (Germany) • Bristol (UK) • Brussels Capital Region (Belgium) • Camden-London (UK) • Cannes (France) • Cardiff (UK) • Copenhagen (Denmark) • Cuenca (Spain) • Edinburgh (UK) • Eindhoven (Holland) • Espoo (Finland) • Frankfurt (Germany) • Frederikshavn (Denmark) • Gdansk (Poland) • Genoa (Italy) • Gent (Belgium) • Gijón (Spain) • Glasgow (UK) • Göteborg (Sweden) • Grenoble (France) • Grosseto (Italy) • Hagen (Denmark) • Heraklion (Greece) • Huelva (Spain) • Islington-London (UK) • Jena (Denmark) • Jun (Spain) • Katowice (Polish) • Koper • Leeds (UK) • Leeuwarden (Holland) • Leipzig (Germany) • Lille (France) • Linköping (Sweden) • Linz (Austria) • Lisbon (Portugal) • Livorno (Italy) • Lodz (Poland) • Lyon (Holland) • Maastricht (Holland) • Madrid (Spain) • Manchester (UK) •

Metz (France) • Milan (Italy) • Modena (Italy) • Montpellier (France) • Munich (Germany) • Münster (Germany) • Nantes (France) • Naples (Italy) • Newcastle (UK) • Nottingham (UK) • Nova Gorica (Slovenia) • Nuremberg (Germany) • Oulu (Finland) • Ostrava (Czech Republic) • Palermo (Italy) • Porto (Portugal) • Reus (Spain) • Rijéka (Croatia) • Ronneby (Sweden) • Rotterdam (Holland) • Sabadell (Spain) • Salerno (Italy) • St Petersburg (Russia) • San Sebastian (Spain) • Seville (Spain) • Sheffield (UK) • Siena (Italy) • Southampton (UK) • Strasbourg (France) • Sunderland (UK) • Swarzedz (Poland) • Tallinn (Estonia) • Tampere (Finland) • Terrassa (Spain) • Thessaloniki (Greece) • Totana (Spain) • Tranås (Sweden) • Turin (Italy) • Turku (Finland) • Utrecht (Holland) • Valencia (Spain) • Valladolid (Spain) • Vantaa (Finland) • Venice (Italy) • Viladecans (Spain) • Vilafranca del Penedès (Spain) • Vilnius (Italy) • Waterford (Ireland) • Yalova (Turkey) • Zaragoza (Spain)

Appendix B: The Manchester Declaration



Declaration of Manchester

7th/8th October 1993

Meeting under the auspices of the Eurocities Committee for Technological Cooperation, 13 representatives of European Cities participated in a workshop to discuss strategic issues relating to the development of telematics in urban areas

These cities confirmed their decision to launch an initiative called 'TeleCities', within Eurocities, open to all European cities. Through this initiative, the cities express their willingness to collaborate with the European Commission in defining an overall strategic plan for the concerted development of telematics in the urban environment. The objectives of the "TeleCities" Club, through the development of joint pilot projects in the field of telematics, are to:

- promote the exchanges of experience
- examine the issues related to the development of harmonised info-structures or telematics networks and services across Europe which will serve both the development of local industrial and service sectors, local society and citizens.

The participants agreed to promote telematics through Eurocities and other European cities as well. The emerging TeleCities network will be interested in all aspects of the demand for new urban telematics services and, through Eurocities, will present this demand to the European institutions, in preparing the Fourth European Community Framework Programme.

Amsterdam, Barcelona, Birmingham, Bologna, The Hague, Hull,

Cologne, Leeds, Lille, Manchester, Nantes, Nice, Nottingham

Questionnaire for TeleCities Members

This questionnaire survey forms the basis of a research project being carried out by the Department of Geography at the University of Hull. The research is sponsored by the Economic and Social Research Council (ESRC) in the United Kingdom. The aim of the research is to assess the role of a transnational network (TeleCities) within the context of globalization and shifting governance structures. Ultimately the data collected will form part of the basis for my PhD.

The aim of the survey is to build a picture behind members involvement and interaction in the network.

The information in this questionnaire will be treated in the strictest of confidence and names of respondents will not be used in any analysis or presentation of the data

The questionnaire takes approximately 10 minutes to complete

If you would like any further information regarding the research or would like to contact me please email me - A.Hewitson@geo.hull.ac.uk

Thank you for help

Andy Hewitson

PhD Student (Department of Geography at the University of Hull)

Supervisors - Professor Dave Gibbs (Geography) & Dr Xiudian Dai (Politics)

1. What is the name of your city _____

2. What is your name _____

3. What is your job title _____

4. How long has your city been a member of TeleCities _____

5. Who's idea was it to originally join TeleCities (Please give their job description and department) _____

6. Are any other people from your city active within TeleCities

Yes No Don't Know

If yes what is their job title _____

7. Is your city part of any other European City Network

Yes No Don't Know

If yes could you please list which ones _____

8. Please could you describe why your city is a member of TeleCities

Please list 3 benefits that you feel your city gains through its involvement with TeleCities

I _____

II _____

III _____

9. Please complete the following statements using the scale provided, insert a tick or cross to indicate how accurately they best describe your city's involvement with TeleCities

Not True ←————→ *Very True*

I feel that TeleCities	1	2	3	4	5	uncertain
offers our city an opportunity to participate in knowledge exchange						
offers our city an opportunity to influence European governance						
offers our city an opportunity to formulate partnerships with other cities						
offers our city an opportunity to develop collaborations with business partners						
offers our city an opportunity to develop collaborations with business partners						
offers our city a marketing opportunity within Europe						
offers our city an opportunity to promote of the role of cities in the context of a European 'Information Society'						
offers our city new funding prospects						

10. Complete the following statement using the scale provided. Insert a tick or a cross to indicate your perception of TeleCities and its relationship with the following European institutions

I feel that TeleCities relationship with the following institutions is...

	<i>no relationship</i>	<i>a weak relationship</i>	<i>a basic relationship</i>	<i>a strong relationship</i>	<i>a very strong relationship</i>	<i>uncertain</i>
The European Commission						
The European Parliament						
Committee of the Regions						
Council of the European Union (Council of Ministers)						

11. Please indicate on the following scale, by inserting a tick or a cross, to what extent you feel the following areas are important methods of gathering information through TeleCities

Not important ←————→ Very Important

	1	2	3	4	5	uncertain
The social networking capacity (exchange of knowledge on a personal and informal manner)						
Presentations by other TeleCities members at TeleCities events						
Presentations by academics at TeleCities events						
Presentations by private businesses at TeleCities events						
Presentations from members of the European Commission at TeleCities events						
TeleCities Working Groups						
Through the TeleCities website						

12. Please indicate by inserting a tick or a cross in the relevant box how often a member of your city has attended a TeleCities event over the last year

4 Times over the year	
3 Times over the year	
2 Times over the year	
1 Time over the year	
Never	

13. Using the scale provided please indicate by inserting a tick or a cross in the relevant box, how important the following modes of communication are in your involvement with TeleCities

Not important ←————→ Very Important

	1	2	3	4	5
Email					
Telephone					
TeleCities website					
Personal contact					
TeleCities electronic newsletter					

How is information that is gathered at TeleCities events relayed back to other members/departments of

your city (Tick all that apply)

Through meetings with your own department

Yes No

If yes are these meetings informal

(and/or) formal

Through meetings with other departments in your city

Yes No

If yes are these meetings informal

(and/or) formal

If there are other means of passing on information please list them here

14. Please tick or place a cross in the relevant box to indicate how often you access the TeleCities website

Daily	
Weekly	
Monthly	
Less frequently than monthly	
Never	

15. Please indicate whether you have had contact with any of the following institutions as a consequence of being a TeleCities member

City (Non TeleCities member)

Yes No

If yes please give details _____

Municipality/Regional Authority

Yes No

If yes please give details _____

National Government Department

Yes No

If yes please give details _____

European Government Department

Yes No

If yes please give details _____

Thank you for your help. That concludes the questionnaire

Appendix D: Open answers to Questionnaire Content Analysis

City	Reason for Joining	3 Perceived Benefits	Categorisation of those benefits
Barcelona	To have contacts with others cities for projects and exchange of experiences - to get visibility at European level	<ol style="list-style-type: none"> 1. EU projects - collaboration - innovative projects for the municipality 2. Exchanges : learning experiences - contacts to prepare projects or organize 3. Visibility - promotion of local projects, policies and actions at European level 	<p>Projects</p> <p>Knowledge exchange Networking</p> <p>Marketing (Visibility) on the European scale</p>
Girona	We consider extremely important sharing opportunities, programs, thoughts, meanings... We truly believe we can learn from other people experiences and ways to improve quality of life to citizens. We are ready to net working, building from common experience and knowledge.	<ol style="list-style-type: none"> 1. Identification of best practices in the fields we need to work and work with them in EU programs 2. Being aware on state of the art experiences throughout EU 3. Improve local awareness on EU its value, and the need for all to be in, to make it true 	<p>Access knowledge</p> <p>Knowledge exchange</p> <p>European awareness</p>
Birmingham	Networking opportunities - EU agenda is important in terms of regeneration opportunities across the region	<ol style="list-style-type: none"> 1. Contact 2. Awareness of EU funding 3. Security in the knowledge that 'we are not alone' 	<p>European awareness</p> <p>Networking</p>
Linköping	Possibility to have influence, exchange of ideas,	<ol style="list-style-type: none"> 1. Early Information and 	<p>Policy</p>

	benchmarking, information about EU and IT, possibilities to find partners and networks	<p>possibility to influence</p> <ol style="list-style-type: none"> 2. Knowledge about what's going to happen 3. Network 	<p>Knowledge</p> <p>Network</p>
Stockholm	Stockholm is a leading city and region in the area of knowledge based society. Appr 80 % of the entire TIME industry in Sweden (Telecom, IT, Media, Entertainment) is located in the Stockholm region, appr 30 % of the entire ICT-industry in the Nordic countries (Sweden, Norway, Finland, Denmark, Iceland) is located in Stockholm. Appr 20 % of those privately employed in the Stockholm region work directly for a TIME company, making up a huge portion of the income of the City of Stockholm and the economic growth of the region.	<ol style="list-style-type: none"> 1. Visibility on a high profile arena 2. New knowledge and insights 3. Potential partnerships (in other areas than ICT also) through networking 	<p>Marketing (Visibility)</p> <p>Access Knowledge</p> <p>Networking</p>
Edinburgh	To enable sharing of experiences in terms of E-Government and to develop opportunities for project working/funding at EU level.	<ol style="list-style-type: none"> 1. Awareness of potential EU-funding projects 2. Learning experience 3. Best practice sharing 	<p>European awareness</p> <p>Projects</p> <p>Knowledge Exchange</p>
Turku	We are a part of Europe. It is important to be involved in development. Cities and city regions are important in information society processes	<ol style="list-style-type: none"> 1. follow the European development in ICT and information society 2. connections with other cities and colleagues 3. contribute to development of information society 	<p>European awareness</p> <p>Networking</p> <p>Developing a IS</p>
Oulu	Sharing experiences and plans help in planning one's own activities. It is also good for a fairly small city to be aware of the issues that bigger cities have to face now - they are waiting for you, also, after a year or two. Telecities membership allows you to do benchmarking. A contact network like Telecities allows you to find partners for project cooperation. Telecities membership is also a way to do marketing of your city.	<ol style="list-style-type: none"> 1. Learning from other cities experiences 2. Being able to look into the future by observing bigger cities' challenges 3. Benchmarking 	<p>Knowledge exchange</p> <p>Access Knowledge</p> <p>Benchmarking</p>

Glasgow	Share in projects. Learn from other cities. Networking.	<ol style="list-style-type: none"> 1. Understanding of European issues 2. Access to Research, e.g. MUTEIS 3. To work on projects/working groups 	European awareness Access to knowledge Projects
Frederikshavn	Exchange of ideas Experience from other cities in Europe Information about EU projects	<ol style="list-style-type: none"> 1. Information about EU projects 2. Experience from other cities 3. Personal network 	Projects Knowledge Exchange Networking
Cologne	Exchange of experience in ICT, influence policy of EU Commission, development of projects, contacts to European partners	<ol style="list-style-type: none"> 1. To learn from developments of other cities 2. Partner search for projects 3. To place cities on the European agenda 	Knowledge Exchange Networking projects Promotion of cities within Europe
Amaroussion	Participation in policy formulation Get informed about relevant EU policy Exchange of know how and experience with other European local authorities Participation in projects	<ol style="list-style-type: none"> 1. Exchange of know how 2. Provision of information concerning relevant EU policy 3. Participation in projects 	Knowledge exchange European awareness Projects
Leipzig	contacts to other european cities find partner for pan european projects share information	<ol style="list-style-type: none"> 1. contacts to other cities 2. share information 	Networking Knowledge exchange
Eindhoven	- scanning for best practices - possibilities for co-development - networking / "promotion" of the city	<ol style="list-style-type: none"> 1. Overview of European / common priorities in the development of the Inf. Soc. 2. Participation in a 	European awareness Knowledge exchange

		European city network to exchange ideas and policies 3. Resource of knowledge	Access to knowledge
Leeuwarden	exchange of ideas, project generation, partnerships	1. Networking 2. Project ideas - (best) practices exchange 3. Access to funding	Networking Knowledge Exchange Access funding
Prague	International cooperation, exchange of experience and knowledge and sharing, common projects, policies, analyses, trends, lobbying...	1. Prague involvement on EU scene 2. Learn from other cities 3. Contacts and preparation of projects	Marketing (visibility) Access knowledge Networking Projects
Valladolid	To be involved in a network of technologically and socially advanced municipalities, allowing us to be update in innovative experiences	1. Experiences exchange 2. Access to innovation projects 3. Partner finding	Knowledge Exchange Projects Networking
Hagen	Virtual city halls, e-learning, e-commerce are topics on the every day agenda of a city. In TeleCities we meet experts from other cities, universities and IT companies to discuss future challenges, to create project ideas for testing ideas, we find partners for common projects and so on.	1. Information concerning IT-developments and politics on European level 2. Exchange with other cities and experts 3. Basis of potential partners for European projects	European Awareness Knowledge exchange Networking Projects
Copenhagen	To share experience with other members	1. Information 2. Knowledge	Access knowledge
Munich	for fostering the information society in cities; exchange of experiences; to further the media and IT economy in the cities.	1. TC as a catalyst for the implementation of internet based solutions in the cities (1994/1995) 2. To promote public kiosk solutions in Munich (1997-2001) 3. To stimulate GIS solutions in Munich	Access Knowledge Marketing
Tranas	Information, project partners, economy	1. Economy	Economy

		<ol style="list-style-type: none"> 2. Stimulation to the organization 3. Information from EU 	<p>Access knowledge European Awareness</p>
Camden	To provide the opportunity for knowledge sharing, networking, partnership development and influencing the EC policy on IS issues.	<ol style="list-style-type: none"> 1. Improved knowledge of Information Society issues 2. Partnership and project development 3. Understanding of EU funding programmes 	<p>European Awareness</p> <p>Networking Projects</p> <p>European funding</p>
Antwerp	Exchange of experience Pool for project partner search City Marketing	<ol style="list-style-type: none"> 1. Exchange of experience 2. Pool for project partner search 3. City marketing 	<p>Knowledge exchange Networking Marketing</p>
Ronneby	Modern ICT development is stimulated. A way to profile the city abroad. Opportunity to join international ICT projects.	<ol style="list-style-type: none"> 1. Better opportunity to develop in the ICT field 2. We market our ICT profile internationally 3. International contacts can result in project cooperation 	<p>Marketing</p> <p>Networking Projects</p>
Kingston upon Hull	Political will to promote Hull in Europe Gives us the chance to influence European policy setting. Informs Hull's own vision and Digital City Agenda.	<ol style="list-style-type: none"> 1. Helps shape and inform our Digital City Agenda 2. Give us access to potential European Partners 3. Promotes Hull in Europe 	<p>Access knowledge</p> <p>Networking</p> <p>Marketing</p>
Vienna	platform to meet other cities and business, to, exchange of experience and learning form each other. Politically: to grow together in Europe	<ol style="list-style-type: none"> 1. Knowledge about what goes on in cities in ICT 2. ICT contact persons in many European cities 3. Partner search for EU proposals 	<p>Access knowledge</p> <p>Networking</p> <p>Projects</p>
Berlin	cooperation and exchange about ICT and eGovernment	<ol style="list-style-type: none"> 1. European contacts 2. Exchange of experience 3. Benchmark of 	<p>Networking</p> <p>Knowledge exchange</p> <p>Benchmarking</p>

		objectives	
Lille Métropole	networking and best practices exchanges within the network Contacts and meetings with a wider partnership ambition(eu Projects for example), * Economic and business partnership opportunities	<ol style="list-style-type: none"> 1. Promotion and marketing of our area (image, location) 2. Best practices on IT initiatives 3. IT actors network 	<p>Marketing</p> <p>Access knowledge</p> <p>Networking</p>
Munster	TeleCities deals with topics of IT for the cities government itself, but also with themes that concern Münster as a city with an extense IT-Cluster	<ol style="list-style-type: none"> 1. Knowledge Exchange with other cities (bigger or same size) 	Knowledge exchange
Metz	European ICT Network	<ol style="list-style-type: none"> 1. Information 2. Dissemination from TeleCities Cities to Metz 3. Dissemination from Metz to TeleCities Cities. 	Knowledge exchange
Göteborg	In order to establish networks	<ol style="list-style-type: none"> 1. A base for establishing international projects 2. Access to the knowledge base 3. Shaping a lot of informal contacts 	<p>Projects</p> <p>Access knowledge</p> <p>Networking</p>
Vantaa	Co-operation and knowledge exchange on European level	<ol style="list-style-type: none"> 1. Knowledge exchange 2. Co-operation 3. Best Practices 	<p>Knowledge exchange</p> <p>Networking</p> <p>Access knowledge</p>
Liverpool	It is a very useful networking and policy forming group of cities	<ol style="list-style-type: none"> 1. Enhanced knowledge 2. Networking possibilities 	<p>Access to knowledge</p> <p>Networking</p>
Gdansk	It is good opportunity to exchange best practice ideas and seeking partners for common projects. Also preparation of common european ICT standards and devising the way for development of information society on municipal level. Good concept and realisation of particular Working Groups (WGs).	<ol style="list-style-type: none"> 1. Exchange of experiences 2. Working within working groups 3. Good opportunity to present Gdansk's ICT projects on European level 	<p>Knowledge exchange</p> <p>Networking</p> <p>Marketing (Visibility)</p>

Siena	Siena is member of Telecities because is a city with a lot of technologic and innovative project	<ol style="list-style-type: none"> 1. Opportunity to formulate partnerships with other cities 2. Opportunity to develop collaborations with business partners 3. Opportunity to promote of the role of cities in the context of a European 	<p>Networking</p> <p>promotion of cities within Europe</p>
Yalova	We want close relations with European Cities We want to develop joint projects	<ol style="list-style-type: none"> 1. Close relations with European cities 2. Develop joint projects with European cities 3. Be a part of Europe 	<p>Networking</p> <p>Projects</p>
Terrassa	We want to be at first rank of information and activities regarding Information Society subjects and be involved in european projects and good practices exchanges	<ol style="list-style-type: none"> 1. European visibility of our city 2. Have information on it's source 3. Projects and exchanges developments 	<p>Visibility (European)</p> <p>Access knowledge</p> <p>Networking</p> <p>Projects</p>
Tallinn	Co-operation in field of E-Government, sharing experience, etc	<ol style="list-style-type: none"> 1. Co-operation 2. Sharing experience 3. Best practice examples 	<p>Networking</p> <p>Knowledge exchange</p> <p>Access knowledge</p>
Espoo	We see that Telecities supports the strategy of the city of Espoo. We aim to present the expertise that we have in Espoo, to develop new solutions and to learn from other cities.	<ol style="list-style-type: none"> 1. Benchlearning 2. EU projects (according to our own interests) 3. Image and to become well-known 	<p>Benchmarking</p> <p>Projects</p> <p>Marketing</p>
Salerno	opportunity to participate in knowledge exchange and opportunity to formulate partnerships with other european cities	<ol style="list-style-type: none"> 1. Exchange of experiences with other members 2. Partnerships with other cities 3. Meeting with other members of TeleCities 	<p>Knowledge exchange</p> <p>Networking</p>
Bologna	We mostly interested in exchanging best practices, developing European Projects and working on European Policies	<ol style="list-style-type: none"> 1. Information on Policies and Funding opportunities 2. Comparison with other cities' experiences 	<p>Access knowledge</p> <p>Knowledge exchange</p> <p>Networking</p> <p>Projects</p>

		3. Partner search for projects	
Ostrava	sharing experiences following european activities in ICT	<ol style="list-style-type: none"> 1. Following European activities in ICT 2. Sharing experiences 3. Getting to know about Ostrava 	<p>European awareness</p> <p>Knowledge exchange</p> <p>Marketing/ Visibility</p>
The Hague	To discuss and have projects with the newest developments of the ICT-technology and so to be a forerunner in the Knowledge Society	<ol style="list-style-type: none"> 1. Doing projects 2. Exchange knowledge 3. Changing the organisation in Den Haag with help of TeleCities work 	<p>Projects</p> <p>Knowledge exchange</p>
Santiago de Compostela	We are interested in knowing what other cities are involved in, get ideas and, if possible, join a project and get some funds.	<ol style="list-style-type: none"> 1. Share knowledge and experience with peers 2. Get ideas about new services for our citizens 3. Hope that we can participate en projects that help us to use ITC, get funds, etc. 	<p>Knowledge exchange</p> <p>Access to knowledge</p> <p>Networking</p> <p>Projects</p> <p>Access funding</p>
Malaga	Mayor concern for e-Government developing the City Council's Website with proximate incorporation of on-line procedures	<ol style="list-style-type: none"> 1. Obtaining crucial information and guidelines about e-Government 2. Making important contacts with other cities handling the same issues we are facing relative to e-Government 3. Opportunity to influence, in cooperation with other cities, the policy making in the European Union 	<p>Access to knowledge</p> <p>Networking</p> <p>European Awareness</p>

Appendix E: Interviewees

Interviewee & Affiliation	Date(s) of Interview(s)	Contribution to Chapter(s)
Steve Fleming City of Hull (TeleCities Member)	11.04.2003 06.05.2004 15.07.2005 08.12.2005	5,6,7
Ann Wulf-Armistead City of Hull (TeleCities Member)	14.07.2005 04.07.2005 23.11.2005	5,6,7
Heleen Kerkhoff City of Leeuwarden (TeleCities Member)	01.10.2004 25.10.2005	6
Robert Elbrink City of Eindhoven (TeleCities Member)	01.10.2004 04.11.2005	6
Dave Carter City of Manchester (TeleCities Member)	10.06.2003 17.11.2005	5,6
Mike Bastiman City of Leeds (TeleCities Member)	28.04.2003	5
Chris Newby (City of Liverpool) (TeleCities Member)	29.04.2003	5
Peter Johnson European Commission: DG Information Society	21.12.2004	5
Enrica Chirroza European Commission: MUTEIS Project Officer	05.01.2005	5
Martin Van Rossum	17.01.2005	5,6
Marten Buschman City of The Hague (TeleCities Member)	09.12.2005	5,6
Nora Bousdira Officer Representative City of Barcelona (TeleCities Member)	15.03.2005	5,6
Bill Walker Former Head of HMA Hull	30.06.2004	7
Huw Saunders Kingston Communications City of Hull	21.06.2004	7
Graham Chesters Former Pro-Vice Chancellor University of Hull	07.09.2004	7
Tom McVie Councillor City of Hull	17.06.2004	7
John Fareham Councillor City of Hull	29.06.2004	7
Kath Laverly Councillor	17.06.2004 14.10.2004	7

City of Hull		
Pat Doyle Former Leader of Hull City Council	09.07.2004	7
Anna Lisa Boni Former Manager of the TeleCities Coordinating Office	18.10.2004	5,6
Francesco Laera Former Project Officer TeleCities Coordinating Office	18.10.2004	5,6
Albert Deisler Vice President TeleCities City of Cologne (TeleCities Member)	30.09.2004	5
Tapio Rissanen European Commission: Former Project Officer EDC Programme	04.02.2004	4,5
Stephen Pascall European Commission: Former Head of TURA	10.01.2005	4,5
Maurice Paullison Project Officer TeleCities	02.11.2005	5,6
Tommy Klaar Commune of Tranas (TeleCities Member)	11.12.2005	5,6
Xiudian Dai Hull University	09.07.2004	7
Andre Van der Meer Former President of TeleCities City of the Hague (TeleCities Member)	29.09.2005	5
Eric Mino Former Manager of the TeleCities Coordinating Office	12.01.2004	5
Ingrid Goltz Former President of TeleCities City of Vienna (TeleCities Member)	30.09.2004	5
Charlotte Nielson Former Manager of the TeleCities Coordinating Office	27.01.2005	5
Mark Jones Head of Regeneration City of Hull	12.09.2004	7

Appendix F: The Broadband Manifesto



Broadband Manifesto

TeleCities is the Knowledge Society Forum of Eurocities, the network for local governments of more than 120 large cities in over 30 European countries. Telecities actively contributes to implementation of the i2010 agenda, applying broadband and ICT in cities.

TeleCities embraces high speed secure networks as an engine of economic and social urban development. Members share know-how about proven models of broadband deployment and stimulate the development of broadband services. Based on practical experience and a coherent vision, the cities participating in TeleCities with this manifesto present ten building blocks for a broadband policy.

- 1 No knowledge society without broadband and broadband services**
TeleCities underlines the importance to cities of high speed and secure networks. Broadband networks make cities more attractive as places to live, play and work. Broadband is not only a precondition for the deployment of ICT's, it also boosts the development of the urban knowledge economy, connecting all citizens in the community to a high quality infrastructure and thus preventing a 'digital divide'.
- 2 No broadband services without optical fibre**
Optical fibre is the only future-proof infrastructure. Investing in other permanent infrastructure can only yield short term results and will prove suboptimal, slowing down innovation. TeleCities does, however, regard wireless broadband infrastructures as a useful addition, especially for mobile applications or applications in the public space.
- 3 Independent fibre networks**
Maximum access to networks leads to social gains. In order to ensure open access, the networks should operate fully independently from the services offered. TeleCities supports the four-layered model, regarding the unbundling of the energy market as an attractive model. Broadband infrastructures should be open, affordable and widely accessible.
- 4 A fibre monopoly? Naturally!**
The passive fibre infrastructure is a natural monopoly. It is a network-bound infrastructure comparable to roads, sewers, and energy and requires large onetime investments. Competition on this single asset does not make economic sense. Still, well-functioning network-bound infrastructures are essential for society to function.
- 5 A market system, subject to...**
Monopolies are unlikely candidates for a free market system. Regulation can be used to correct earlier arrangements. TeleCities argues for an open, accessible, passive layer of infrastructure to guarantee competition in the service layer. Finance, particularly for the backbones, through local, national and European public funds, should be allowed in the same way as for (national) roads and highways or other basic infrastructures.
- 6 Make room for local initiatives**
An open infrastructure creates a market where local entrepreneurs can offer their services through and open infrastructure, thereby stimulating the local economy. The services themselves will lead to improvements in community and social life. The success of local bundling of demand underlines the need for such an infrastructure. Businesses and public sector should cooperate in smart local partnerships and funding programmes need to cater for such initiatives.
- 7 Connect the dots now**
Trans-national interconnected Open Broadband networks, based upon standard technology and regulatory frameworks, unleash the critical mass needed to deploy services throughout the Union. It is expected that by 2008 a large number of households will need the symmetrical connections that only fibre can provide. It takes five to eight years to complete large infrastructural projects. Time is therefore of essence!
- 8 Platform for public services**
In order to prevent 'reinventing the wheel' we recommend the development of union wide standardized interoperable platforms for public sector services (such as E-Health, E-learning, E-security and government).
- 9 The voice of cities: Consulting Partner**
The i2010 initiative recognises the role of cities in the development of high speed networks and rich multimedia content. Telecities brings together experts from innovative cities and is a natural consulting partner for the Commission when preparing further action with regard to the deployment of broadband such as the 7th Research Framework Programme, the review of regulatory frameworks and the Competitiveness and Innovation Programme.
- 10 Collaboration: call for support**
The European Commission and national governments are leaving too much to the market without demanding sufficient guarantees as to the quality of the development. Taylor-made financial arrangements are needed. Moreover, the desired development of broadband and broadband services calls for collaboration between all parties: cities, regions, national government, market parties, interest groups and other relevant organisations.

WE CALL ON THEM NOW TO ENDORSE THIS MANIFESTO VIA WWW.BROADBANDMANIFESTO.NET.

Endorsed by Stedelijk netwerk
of Dutch Broadband Cities





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