

Partnership Working in Local Electronic Government

Sarah Helen Cotterill

Submitted in accordance with the requirements for the degree of PhD

University of Leeds
Leeds University Business School
November 2007

The candidate confirms that the work submitted is her own and that appropriate credit has been given where reference has been made to the work of others. This copy has been supplied on the understanding that it is copyright material and that no quotation from the thesis may be published without proper acknowledgement.

Acknowledgements

Dr Stephen King, in supervising this work, has provided extensive advice, support and encouragement. Additional guidance has also been given by Dr David Allen, second supervisor; Demelza Birch and Janice Morphet from Communities and Local Government; and other staff in Leeds University Business School.

This research is jointly funded by the Economic and Social Research Council, Communities and Local Government and Price Waterhouse Coopers, as part of the Governance and Quality of Life Postgraduate Research Programme.

Officers and councillors from local e-government partnerships, local authorities and other public organisations have generously given their time to participate in the research.

Abstract

This research explores how English local authorities and their partners work together on electronic government. E-government is the use of computer technologies by government to transform the provision of services and information, improve internal organisation, encourage citizen participation and promote sharing between partners.

In the UK and elsewhere there is increasing emphasis on public sector organisations working together in local partnerships. Partnerships can potentially encourage the delivery of joined-up services to citizens, promote democracy and improve public policy making, but partnership working is not always easy and can be challenging for the individuals and organisations involved.

This thesis addresses the research question: "How can local authorities and their partners work together to successfully implement electronic government?" The research is based on a systematic literature review and comparative case studies of three sub-regional e-government partnerships, using a mixed methods approach. The literature review covers local governance, e-government, public sector partnerships, dissemination of best practice and social networks. In each case study social network data was collected from participants using a short questionnaire to ascertain who they dealt with in relation to e-government. This data was analysed using social network software and then used during qualitative interviews and workshops to generate discussion.

A model of partnership effectiveness has been developed which identifies *network structure, governance, maturity* and *context* as four themes contributing to the success of local e-government partnerships. Network structure influences effectiveness in three ways: cohesion amongst the partners encourages organisational learning; a central core agency is important to ensure that partnership ideas reach fruition; opinion leaders come up with good ideas and can mobilise others. Governance includes the existence of a clear shared vision and strategy, the commitment of leaders, accountability and getting the right people

involved. Maturity refers to a stable group of people from different perspectives working together over time, facing challenges and persevering. Councils with smaller populations have more to gain from partnership working because they lack the capacity to develop e-government solutions alone.

The study contributes to academic research by developing a theoretical model of the factors contributing to effective e-government partnerships. This is the first study to examine how public organisations network together on e-government and the methodological approach is novel in research into UK local governance.

Table of Contents

Acknowledgements	2
Abstract	3
Table of Contents	5
List of Tables and Figures	7
Abbreviations.....	10
Glossary of Council Types	10
1 Introduction.....	11
1.1. Motivation for Current Study	11
1.2. Outline of the Thesis.....	11
2 Literature Review.....	14
2.1. Introduction.....	14
2.2. Literature Review Methodology	15
2.3. Modernisation and Local Governance	23
2.4. Electronic Government	32
2.5. Public Sector Partnerships.	49
2.6. Dissemination of Best Practice	68
2.7. Social Network Analysis	77
2.8. Conclusions from the Literature Review	85
3 Research Design and Methodology.....	90
3.1. Introduction.....	90
3.2. Research Philosophy.....	90
3.3. Research Design	99
3.4. Research Protocol	107
3.5. Research Methods.....	111
4 Case Narrative 1 - Metropolitan.....	130
4.1. Introduction: Metropolitan	130
4.2. Motives for Working in Partnership.....	131
4.3. Partnership Activities	132
4.4. Benefits of Working in Partnership	134
4.5. Key Issues	135
4.6. Network Structure.....	137
4.7. Who is Involved in the Partnership?	143
4.8. Governance	144
4.9. Other Networking.....	145
4.10. Size of Organisation	146
4.11. Embeddedness.....	147
4.12. Conclusions	147
5 Case Narrative 2 - Shire County.....	149

5.1.	Introduction: Shire County	149
5.2.	Motives for Working in Partnership.....	150
5.3.	Partnership Activities	151
5.4.	Benefits of Working in Partnership	153
5.5.	Key Issues	155
5.6.	Network Structure.....	157
5.7.	Who is Involved in the Partnership?	163
5.8.	Governance	165
5.9.	Other Networking.....	168
5.10.	Size of Organisation	169
5.11.	Embeddedness.....	170
5.12.	Conclusions	170
6	Case Narrative 3 - Urban.....	173
6.1.	Introduction: Urban	173
6.2.	Motives for Working in Partnership.....	173
6.3.	Partnership Activities and Benefits of Working in Partnership	174
6.4.	Key Issues	175
6.5.	Network Structure.....	175
6.6.	Who is Involved in the Partnership?	180
6.7.	Governance	181
6.8.	Other Networking.....	182
6.9.	Size of Organisation	183
6.10.	Embeddedness.....	183
6.11.	Conclusions	184
7	Discussion	185
7.1.	Introduction.....	185
7.2.	Effectiveness	187
7.3.	Network Structure	199
7.4.	Governance	213
7.5.	Maturity.....	224
7.6.	Context	231
8	Summary and Contribution	234
8.1.	Introduction.....	234
8.2.	Research Summary.....	234
8.3.	Academic Contribution.....	237
8.4.	Implications for Policy and Practice	240
8.5.	Research Quality	242
8.6.	Strengths and Limitations	244
8.7.	Implications for Future Research.....	247
	Appendix 1: Systematic Literature Review Protocol	250
	Appendix 2: Systematic Literature Review – searches and results	259
	Appendix 3: Social Network Questionnaire	262
	Appendix 4: Abstracts of Articles and Conference Papers by the Author	264
	References	271

List of Tables and Figures

Tables

Table 1 The Systematic Review Stages and Phases	17
Table 2 Bibliographic Databases Considered for Use in the Review.....	19
Table 3 Summary of the Process Used to Select the Articles for Inclusion in the Review.....	21
Table 4 Objectives of the Local Government Modernisation Agenda.....	24
Table 5 Central Government Initiatives Allied to the Modernisation Agenda.	29
Table 6 Priority Service and Transformation Outcomes for Local e-government ..	42
Table 7 National Projects	45
Table 8 A Typology of Evidence-Based Innovations	69
Table 9 Factors Affecting the Likelihood of Adoption.....	71
Table 10 A Directed, Binary Relationship, e.g. Showing Whether One Organisation has Provided Advice to Another	78
Table 11 An Undirected Valued Relationship e.g. Showing the Level of Communication Between Friends.....	78
Table 12 Centrality Measures in Social Networks	80
Table 13 Quality Criteria for Case Study Research.....	95
Table 14 A Generalizability Framework: Four Types of Generalizing.....	97
Table 15 Characteristics of the Three Case Study Partnerships	105
Table 16 Questions Used in the Social Network Questionnaires and Responses	113
Table 17 Coding of Social Network Data.....	115
Table 18 Interview Schedule for the Metropolitan Partnership	119
Table 19 Interview Schedule for the Shire County and Urban Partnerships.....	122
Table 20 Metropolitan: The Role of Those Involved in the Partnership	144
Table 21 Metropolitan: Involvement in National Projects and Regional e-Government Activity	145
Table 22 Shire County - Most Active Individuals (excluding staff team)	163
Table 23 Seniority of Those Involved in Shire County Partnership Board	164
Table 24 Shire County: Departmental Affiliations of the Partnership Board	164
Table 25 Shire County: Involvement in National Projects and Regional e-Government Activity	168
Table 26 Seniority of Those Involved in the Urban Partnership.....	181
Table 27 Departmental Affiliations of the Urban Partnership.....	181

Table 28 Urban Partnership: Involvement in National Projects and Regional e-Government Activity	183
Table 29 Priority Areas for Local e-Government.....	190
Table 30 What E-government Can Contribute Towards the Key Purposes of Local Government.....	191
Table 31 Effectiveness of the Three Case Study Partnerships	193
Table 32 Summary of Partnership Effectiveness.....	198
Table 33 The Relationship Between Interconnectedness and Effectiveness	205
Table 34 Prestige (Strength of Incoming Ties)	208
Table 35 The Relationship Between Network Structure and Effectiveness	213
Table 36 Directorates Represented in the Case Study Partnerships.....	221
Table 37 Seniority of Those Involved in the 3 Partnerships.....	222
Table 38 Number of People in Other Organisations Each Person has Worked With Before.....	227
Table 39 QAP Correlation Between Previously Working Together and Current Relationships (Pearson's correlation statistics)	228
Table 40 The Relationship Between Maturity and Effectiveness.....	231
Table 41 Research Quality Assessment.....	243

Figures

Figure 1 Key Components of Electronic Local Government.....	36
Figure 2 A Preliminary Model of Network Effectiveness	64
Figure 3 Social Connections in an Alliance	82
Figure 4 Four Paradigms for the Analysis of Social Theory.....	91
Figure 5 Coding of the Case Study Data, Clustered by the Main Themes (NVivo model)	127
Figure 6 Model of Partnership Effectiveness	128
Figure 7 Metropolitan Partnership Structure.....	130
Figure 8 Metropolitan: Communication More Often Than Monthly	138
Figure 9 Metropolitan: Seeking Information.....	139
Figure 10 Metropolitan: Knowing the Skills of Others	140
Figure 11 Shire County Partnership Structure.....	149
Figure 12 Shire County Partnership Board: Communication More Often Than Monthly.....	157
Figure 13 Shire County Partnership Board: Seeking Information	159
Figure 14 Shire County Partnership Board: Knowing the Skills of Others	161

Figure 15 Urban Partnership: Communication More Often Than Monthly	176
Figure 16 Urban Partnership: Communication at Least Monthly	177
Figure 17 Urban Partnership: Seeking Information.....	178
Figure 18 Urban Partnership: Knowing the Skills of Others.....	179
Figure 19 Model of Partnership Effectiveness	186
Figure 20 Ties Between Organisations.....	202
Figure 21 Metropolitan: Communication More Often Than Monthly	210
Figure 22 Shire County Partnership Board: Communication More Often Than Monthly	211
Figure 23 Urban Partnership: Communication More Often Than Monthly	212
Figure 24 Previously Worked Together - A Comparison of the Three Case Studies	226
Figure 25 Model of Partnership Effectiveness	235

Abbreviations

BVPI	Best Value Performance Indicator
CLG	Communities and Local Government (government department responsible for local government from 2005)
CPA	Comprehensive Performance Assessment
CRM System	Customer Relationship Management System
CSCI	Commission for Social Care Inspection
IDeA	Improvement and Development Agency
IEG	Implementing Electronic Government
LSP	Local Strategic Partnership
LUBS	Leeds University Business School
ODPM	Office of the Deputy Prime Minister (government department responsible for local government until 2005)
SME	Small and Medium Enterprises

Glossary of Council Types ¹

County Council	Mainly operate in rural areas, alongside district councils. Responsible for about 80% of services including education, transport and social services.
District Council	Mainly operate in rural areas, alongside county councils. Responsible for about 20% of services including housing, leisure and environmental health.
Metropolitan Council	Single tier council, which provides all local services in its area (can be called metropolitan, borough or city)
Unitary Council	Single tier council, which provides all local services in its area

¹ Source: <http://www.idea.gov.uk> (accessed 16/04/2007)

1 Introduction

1.1. Motivation for Current Study

An increased role for electronic government is a key element in the UK local government modernisation agenda, with the aim of improving local government efficiency and service delivery and increasing the accessibility and responsiveness to local citizens. Local authorities have been encouraged by the Government to develop e-government solutions in partnership with others to improve and join up customer service, maximise efficiencies and economies of scale and enhance organisational and individual learning. The research sets out to examine how local authorities and other public organisations work together locally on e-government, addressing the research question: “How can local authorities and their partners work together to successfully implement electronic government?”

The research examines the network of relationship between individuals and organisations involved in sub-regional e-government partnerships in England. These partnerships, which have received funding and encouragement from the UK government, variously involved officers from different departments within a number of local authorities, councillors and other public organisations operating locally such as police, fire and health services. In the UK and elsewhere there is increasing emphasis on public sector organisations working together in local partnerships, but partnership working is not always easy and can be challenging for the individuals and organisations involved. The research explores how public sector organisations work together effectively to develop e-government.

There is a growing body of research on local public sector partnerships, concentrating on neighbourhood partnerships and local strategic partnerships. There has however been no research into partnerships between public organisations in a sub-region and no research into e-government partnerships.

1.2. Outline of the Thesis

Chapter 2 is a literature review. It starts with an outline of the systematic literature review methodology which has been followed and then reviews literature in five

themes: local governance and modernisation; electronic government; public sector partnerships; dissemination of best practice in the public sector; and the importance of social networks to inter-organisational partnerships.

Chapter 3 describes the research design and methodology. It outlines the positivist philosophy which guides the research, stresses the importance of researcher pre-understanding and describes the generalisability of the research. There is a commitment to ensuring that academic research is made relevant to public policy and is fed back in a relevant and timely fashion to practitioners and policy makers. The research focuses on three of the 101 partnerships funded by the UK Government's e-government partnership programme. They were chosen to represent a diversity of geography, size and type of local authority, culture of partnership working and structure. Their activities include sharing information, identifying opportunities for new shared business initiatives and overseeing a number of shared e-government projects. Comparative case studies were undertaken using a mixed methods approach. The case studies were guided by a research protocol based on the themes identified in the systematic literature review. In each case study social network data was collected from all participants using a short email questionnaire to ascertain who they dealt with in relation to e-government. This data was analysed using Ucinet and then used during qualitative interviews to generate discussion on why the network looks the way it does and learn more about the context and the activity of the partnership. The qualitative data was analysed using NVivo.

Chapters 4, 5 and 6 are the case narratives for each of the three case studies, referred to here as the Metropolitan, Shire County and Urban partnerships.

Chapter 7 discusses the research findings, developing a model of local e-government partnership effectiveness, which identifies four themes contributing to partnership success: network structure, governance, maturity and context. The three case studies are examined against this model.

Chapter 8 offers a brief summary of the research, sets out the academic contribution and outlines some implications for policy and practice. It examines the

strengths and limitations of the study and suggests some implications for future research in this field.

2 Literature Review

2.1. Introduction

A systematic review of the literature in relevant areas of study will provide a base of knowledge to inform the design and execution of the field research element of the PhD. The review addresses the research question: “How can local authorities and their partners work together to successfully implement electronic government?” The original objectives of the review were to:

1. Examine the changing nature of local governance and the modernisation agenda.
2. Gain an increased understanding of electronic government.
3. Identify how e-government initiatives can impact on citizens’ quality of life.
4. Examine the issues relating to the diffusion of innovations in public sector organisations.
5. Identify how social network analysis can be used as a tool to describe and evaluate electronic government partnerships.

The local governance and modernisation literature provides an overview of the academic and practitioner debate on the current position of UK local government, which is the setting for the introduction of local e-government. It also provides a rich source of knowledge on issues of partnership and participation, which are important themes both for local government in general and for e-government in particular. The academic electronic government literature provides some understanding of the factors contributing to the successful introduction of information systems and the potential effects they can have. The government-produced literature on e-government provides an overview of UK policy in this arena. The quality of life literature helps identify what factors contribute to quality of life and identifies some ways in which it can be measured, suggesting possible impacts that e-government can have on quality of life. The diffusion of innovation literature examines the factors which contribute to the spread of best practice and

identifies the characteristics which impact on whether and when an organisation introduces new ideas. This aids understanding of the adoption of e-government by local authorities. The literature on the use of social network analysis to examine relationships between organisations informs the development of the research methodology.

The systematic review was completed in autumn 2005. In the intervening period, many other articles, books and reports have been studied, and the literature review presented here includes a wider range of texts than those studied for the original systematic review. The literature on quality of life has proved to be of less relevance than anticipated and is not included in this review, although there is some reference to it in the Discussion chapter when considering effectiveness. A separate section has been added on partnership working. The literature on partnership working includes studies of local public partnerships and also other organisational collaborations such as alliances, partnership and joint ventures. It helps clarify the role of social networks in organisational collaborations and identifies the issues arising from partnership working.

This chapter first describes the systematic literature review methodology and then reviews literature from five themes: modernisation and local governance, e-government, partnership working, dissemination of best practice and inter-organisational social networks.

2.2. Literature Review Methodology

2.2.1. Systematic Reviews

Reviews have long been included in social science research. It is usual, at an early stage of any research project to explore what others have written on the topic. The terms used to describe these reviews include literature reviews, scoping studies, briefing papers and rapid reviews (Boaz et al. 2002; Tranfield et al. 2003).

Systematic reviews were developed from the late 1980s onwards in the medical and healthcare research fields to synthesize the available evidence on medical interventions and ensure that patients received the most effective treatments (Tranfield et al. 2003). Over the following two decades, the systematic review has been adopted in many other research domains including social policy, criminal

justice, regeneration, nursing, housing, social care, education welfare policy, urban policy and, more recently, management (Boaz et al. 2002; Tranfield et al. 2003).

The distinctive feature of a systematic review, when compared to other types of research review, is that a systematic review is carried out to agreed standards.

Boaz et al (2002) identify seven standards for reviewing data systematically:

1. Using protocols to guide the process. A protocol is a project management tool used by the reviewer(s) to plan the different stages of the review. It is a detailed description of how the review will be carried out and promotes transparency, transferability and replicability.
2. Focusing on answering a specific question(s).
3. Seeking to identify as much of the relevant research as possible. Research databases are used to conduct wide-ranging searches of the available literature, with the aim of locating as much of the relevant research as possible, across a broad spectrum of research fields.
4. Appraising the quality of the research included in the review. Explicit inclusion and exclusion criteria, clearly stated in the protocol, are used to systematically focus the study onto the most relevant articles. Quality assessment criteria are used to focus on those which are most methodologically robust.
5. Synthesising the research findings in the studies included. In medicine and healthcare research, meta-analysis is used to synthesize quantitative findings from multiple studies. In social science research, where the review will include a range of research methodologies, narrative synthesis has more often been used. This can include an exploration of similarities and differences between studies, an assessment of methodological effectiveness and the use of tables to record and compare the studies. Computer software packages suitable for analysing text are sometimes used.
6. Aiming to be as objective as possible about research to remove bias. In social science research it may be more appropriate to explicitly acknowledge the effects of bias.
7. Updating in order to remain relevant. Detailed records are maintained of the review process, allowing it to be updated or repeated.

The use of systematic reviews in management research is still in its infancy. A prototype methodology has been developed by Tranfield, Denyer and Smart at the Cranfield School of Management (Tranfield et al. 2003). The methodology has been adopted in the production of three linked reviews of the evidence on innovation and productivity performance in the UK, conducted by the Advanced Institute of Management Research (Denyer and Neely, 2004; Edwards et al. 2004; Leseure et al. 2004b; Pittaway et al. 2004). The current review attempts to follow the methodology described by Tranfield, Denyer and Smart and implemented in the three recent reviews. It has also been informed by the work of the ESRC UK Centre for Evidence Based Policy and Practice (Boaz et al. 2002). The methodology assumes that the review is conducted by a team of researchers, which allows for the introduction of a number of checks and balances to encourage consistency and transparency. The current review has been conducted by a lone PhD researcher with the support of supervisors and advisors, rather than by a team of scholars, requiring the methodology to be adapted accordingly.

2.2.2. Literature Review Methodology

The review followed the stages and phases outlined in Table 1.

Table 1 The Systematic Review Stages and Phases

Stage I – Planning the Review	
Phase 0	Identification of the need for a review
Phase 1	Preparation of a proposal for a review
Phase 2	Development of a review protocol
Stage II – Conducting the Review	
Phase 3	Identification of research
Phase 4	Selection of studies
Phase 5	Study quality assessment
Phase 6	Data extraction and monitoring progress
Phase 7	Data synthesis
Stage III – Reporting and dissemination	
Phase 8	The report and recommendations
Phase 9	Getting evidence into practice

Source: Tranfield, Denyer and Smart (2003) p 214

The first, preliminary stage, included identifying the research question and the review objectives (see above), learning about the conduct of systematic reviews and developing a protocol to be used in guiding the review (Appendix 1). Stage 2,

the conduct of the review and Stage 3, reporting and dissemination are outlined in the detailed steps below.

2.2.2.1. Identification of the research (Phase 3)

Identification of Keywords.

Keywords were identified for each of the objectives of the review. The first keywords were located by reading a sample of key articles and books in relevant research fields. These were entered into the Web of Science Social Citation Index to identify articles, and from them find other related keywords. This initial keyword list included: modernisation, local government, electronic government, quality of life, diffusion, innovation, social networks, and organisations. The identified keywords were subject to a brain-storming session between the researcher and lead supervisor, resulting in some additional terms being added. These included: social inclusion, social exclusion, public sector.

Boaz et. al. (2002) follow Oakley in advocating the involvement of users in defining the concepts to be used in systematic reviews (Boaz et al. 2002). It was not possible to involve local authorities or their citizens at this stage of the research, because the empirical phase of the project had not yet started. A policy advisor and a researcher from the ODPM, who act as research advisors to the project, were asked for comments on the protocol document. The ODPM (now Communities and Local Government) will be one of the end users of the research outcomes from this project. One of their suggestions was to include “governance” in the list of keywords.

Electronic Databases

The basic search string “electronic government OR social network* OR diffusion of innovation*” was entered into seven databases. These seven were identified as the most appropriate for this review following discussion with the business librarian at the University of Leeds Library. The databases and the number of articles found using the basic search string are shown in Table 2.

The three databases with the highest volume of citations were chosen for use in the review: Web of Science (Social Science Citation Index), Business Source

Premier and Proquest ABI/INFORM global. PsychINFO was not included, despite having the largest volume of citations, because a scan of the articles suggested that the focus of the studies appeared to be on social networks and the diffusion of innovations among individuals rather than organisations. PAIS and ASSIA, because of their public sector specialism, were considered as potential additional databases despite the relatively small number of results. However, some exploratory searches suggested that there was extensive duplication between them and the Web of Science (Social Science Citation Index), so this was not pursued further.

Table 2 Bibliographic Databases Considered for Use in the Review

DATABASE	Number of articles found using basic search string "electronic government OR social network* OR diffusion of innovation*"
Web of Science (Social Science Citation Index)	4359
Business Source Premier	2766
Proquest ABI/INFORM global	1419
PsychINFO	4698
ASSIA	1229
Public Affairs Information Service	713
INGENTA	542

2.2.2.2. Selection of Studies (phase 4)

Search Strategy

Search strings were constructed for each of the research objectives, using a combination of the keywords and the automatic inclusion/exclusion criteria (see below). For example, the two search strings for the first objective, "examine the changing nature of local government and the modernisation agenda" were:

1. ((Modernis* AND (local government OR local authorit* OR local council*)) NOT (election* OR parish OR devolution OR international development))
2. (local governance AND (UK OR United Kingdom OR England OR Scotland OR Wales OR Ireland)).

These search strings were entered into the Web of Science (Social Science Citation Index). The researcher and the lead supervisor conducted the Web of Science searches together, to establish a consistent approach towards the inclusion and exclusion of articles. An iterative process was used to define the search strings and the automatic inclusion/exclusion criteria, gradually amending the searches from the most basic to the more complex in response to the quality of the results received. The agreed search strings were then entered into the other two selected databases, adopting the agreed inclusion and exclusion criteria. Identical search strings were used in all three databases, with minor amendment to reflect the differing conventions used. A full listing of the search strings and the results from each database is included as appendix 2.

Inclusion and Exclusion Criteria

The citations identified from the bibliographic databases were reviewed according to the manual inclusion and exclusion criteria in the protocol (appendix 1). This was done in two stages. During the first stage the results of each database search were scanned by title and abstract to eliminate any articles which were clearly covered by the exclusion criteria. For the Web of Science (Social Science Citation Index) searches, this scanning was done jointly by the researcher and lead supervisor. The same conventions were then used for the results of the other two databases, this time by the researcher alone.

The database results were imported into Procite bibliographic software. The articles were grouped together in themes to reflect the research objectives:

Modernisation and local governance

E-government

Partnerships

Diffusion of Innovations

Social Networks and organisations

Duplicates, reviews and articles without abstracts were discarded. A thorough examination of the titles and abstracts against the inclusion/exclusion criteria was undertaken and those which failed to satisfy the criteria were discarded.

Document selection

The remaining abstracts were graded by the researcher, using the inclusion and exclusion criteria, into three lists, A (should be in shortlist), B (uncertain) and C (should not be in shortlist). The abstracts on the B list were reviewed by the lead supervisor, who recommended some additional articles be transferred to the A list.

A list of additional articles, books and reports was suggested by the researcher, including key texts, useful articles and government reports and evaluations. The complete A list, together with these additional titles was circulated to the local supervisors, seeking their opinion on the final list. A small number of additional texts were added at this stage.

2.2.2.3. Study Quality Assessment (phase 5)

The articles in the A list, together with the additional titles were reviewed using a data extraction tool devised by the researcher (included in the review protocol, appendix 1). The data extraction tool includes the quality assessment criteria used by the Advanced Institute of Management Research reviewers. The articles were reviewed in the groups derived from the research objectives.

Table 3 Summary of the Process Used to Select the Articles for Inclusion in the Review.

Stage	Included	Excluded	Duplicates
Database searches	733		
Title and abstract analysis stage 1 (brief)	388	273	72
Title and abstract analysis stage 2 (full)	297	83	8
A ranked	89		
B ranked		73	
C ranked		135	
Ranking of B list by supervisor (20 added)	109		
Applying the quality assessment criteria	78	31	
Total	78		

2.2.2.4. Data extraction and synthesis (phases 6 and 7)

In addition to acting as a judge of the quality of articles, the data extraction tool serves as a useful way of analysing and summarising articles. For each article, a short record has been maintained, based on the headings used for data extraction.

This allows easier comparison of the research and acts as an on-going record of study.

Narrative synthesis has been used to analyse and summarise the literature. This has been done manually, noting some keywords from each article and using these keywords to develop themes or subject areas. Themes were combined to develop different sections of the review.

2.3. Modernisation and Local Governance

2.3.1. Introduction

Much has been written about the changes relating to UK local government introduced by New Labour since 1997. Best Value, public service agreements, beacon councils and an array of inspection regimes have been introduced in an attempt to improve public services and make them more accountable to users and citizens. Alongside these service improvements, councils have been urged to become strategic leaders of the communities they serve, to listen to local views and drive forward change, playing a coordinating and enabling role. This campaign for democratic renewal is centred on the belief that, regardless of who delivers local services, the unique role for local government lies not in the new managerialism of the conservative era, but in its democratic mandate.

“At the heart of local government’s new role is leadership ... It will mean councils using their unique status and authority as directly elected bodies to develop a vision for their locality ... provide a focus for partnership (and) guarantee quality services for all.” (Tony Blair 1998, quoted in Lowndes 1999 p125)

Local democratic renewal encompasses both increased public participation and new political systems to promote community leadership.

2.3.2. The Local Government Modernisation Agenda

A study of published and unpublished central government reports and papers, together with a survey of local and central government senior officers identified eleven key policy instruments and five main policy objectives of the local government modernisation agenda (Cowell and Martin, 2003). Table 4 illustrates that there is considerable overlap between the policy objectives. For example, Best Value is intended to lead service improvement, but at the same time raise public confidence in local authorities and put councils more in touch with citizens. This section outlines three central objectives of the local government modernisation agenda: service improvement, political change and community governance.

Table 4 Objectives of the Local Government Modernisation Agenda

Source: Cowell and Martin, 2003 p.165

Policy instrument	Policy objective				
	Service improvement	Community leadership	"in touch"	Local accountability	Public confidence
Best Value	•		•		•
Beacon Council scheme	•				
E-government targets	•		•		
Public Service Agreements	•				
Local Strategic Partnerships	•	•			
Power to promote well-being		•			
Community Strategies		•	•		
New political structures			•	•	•
New constitutions				•	•
New ethical framework				•	•
Improved voting arrangements				•	•

• indicates policy instrument likely to contribute to achievement of policy objectives.

2.3.2.1. Service Improvement

The introduction of Best Value was an early priority for New Labour. Abolition of the previous government's Compulsory Competitive Tendering regime had been included as a manifesto pledge during the 1997 general election, and by Spring 1998 forty pilot Best Value programmes had been established (Wilson, 2001).

Each local authority is now expected to adopt Best Value in all services, examining some of its functions each year over a five-year rolling programme (McAdam and Walker, 2004). When undertaking a review, local authorities must adhere to what have come to be known as the 4Cs: *challenge* why and how a service is being provided; *compare* with the performance of others; *consult* citizens, users and other stakeholders; consider using a *competitive* process where appropriate (Geddes and Martin, 2000; McAdam and Walker, 2004). Best Value shares some elements of the conservative government's compulsory competitive tendering: an

emphasis on efficiency and value for money, combined with a central inspection regime, but Geddes and Martin (2000) identify three key differences. Firstly, Best Value has allowed for greater collaboration with local authorities, trade unions, voluntary organisations and business in its introduction and planning. Secondly, there is an acceptance that successful local authorities can play a service delivery role, rather than the previous emphasis on the private sector. Thirdly, there has been no prescriptive government guidance on Best Value, allowing a number of different local interpretations to emerge.

Best Value has more often been applied to individual services rather than attempting cross-cutting themes and this has tended to encourage a narrow departmental focus or “silo” mentality (McAdam and Walker, 2004). For example, a service specific approach to best value reviews has led local authorities to review the delivery of their social care services rather than examine their wider responsibility for the health and well-being of local citizens (Snape, 2003). More recently, the Government has introduced a requirement that each council includes some cross-cutting reviews within its annual programme.

Local authorities can apply to sign up to public service agreements with central government. Successful local authorities are asked to select a number of targets to work towards within a set period. These targets are usually selected in conjunction with other local partners. In return they are provided with a grant and possibly some freedom from statutory constraints. If the targets are achieved within the agreed period, substantial financial rewards are available (Snape, 2003; Wilson, 2001).

Under the beacon council scheme, local authorities can nominate excellent and innovative services or initiatives against a number of centrally chosen themes. Selected councils are then provided with funding to disseminate best practice to others through publications, conferences, open days and seminars (Rashman and Hartley, 2002; Wilson, 2001). The scheme encourages councils to develop cross-cutting approaches and strategies (Snape, 2003). However, it is a voluntary scheme (Snape, 2003) and may lead to disenchantment among those councils who repeatedly fail to achieve beacon status (Wilson, 2001).

Local authorities are subject to an intensive national regime of audit and inspection. A documentary study of government policies in 2000 found that councils were subject to six separate inspection processes (Cowell and Martin, 2003). Local government senior officers, interviewed as part of the study, identified the integration of the performance management and inspection regimes to create a combined set of clear targets as one of their key demands to enable local authorities to work in a more joined up fashion. Unless that happens, local authority services are reporting to specific ministers and departments, each of which has their own cultures, standards and regulatory frameworks. This mitigates against joined up working (Cowell and Martin, 2003). Performance is measured in a number of different ways. For example, the Council for Social Care Inspection assesses the performance of care services for adults and children, awarding between 0 and 3 stars. Progress in meeting e-government targets is measured by Investing in Electronic Government (IEG) Statements, in which local authorities must score themselves as red, amber or green against a list of priority outcomes. Best value performance indicators measure local performance against national indicators, drawing information from other performance management systems such as the social services inspectorate. The overall performance of local authorities is measured by the comprehensive performance assessment (CPA) framework, overseen by the Audit Commission. It draws on a range of information including performance indicators, inspection reports and stakeholder opinions to reach a single judgement about local performance, summarised in ratings: 4 stars, 3 stars, 2 stars, 1 star or 0 stars. The assessment changed in 2005 to the star rating system from the previous categories of excellent, good, fair, weak and poor. Local authority funding, reputation and flexibility, together with the careers of individual officers and councillors, depend on these ratings (Snape, 2003).

2.3.2.2. New Political Structures

Alongside the service improvement agenda outlined above, new political arrangements have been brought in since 1997. Local authorities were required to introduce new political structures by the Local Government Act 2000. There were two elements to the changes. The first requires a separation of powers between the executive and assembly. The executive or decision making structure can

comprise: a cabinet; a directly elected mayor with a cabinet; or a directly elected mayor and a council manager. The second element is the development of a number of overview and scrutiny committees where councillors outside the executive examine debate and ultimately challenge the decisions taken by officers and the political leadership. The Local Government Act 2000 permits local choice between the various models and allows for considerable variation in the balance of power between the executive and the assembly (Hambleton and Sweeting, 2004). Supporters argue that the benefits of the new political arrangements will be bold political leadership, clarity of where power lies and accountability (Hambleton and Sweeting, 2004). By contrast, others view the changes as unduly prescriptive, introducing a Westminster model, with a powerful cabinet taking decisions behind closed doors, centralising power in the hands of a small elite and moving away from the consensus politics of the committee system (Midwinter, 2001).

When offered a choice of executive approaches, most local authorities have adopted a cabinet model, consisting of a leader and a small number of leading councillors, each of whom has responsibility for a defined theme or service. Directly elected mayors have not proved popular with either councils or the public. Only 12 out of 389 local authorities in England have chosen to adopt a mayor, all of these, with the exception of London, being outside the major cities. Hambleton and Sweeting (2004) anticipate an increase in the number of directly elected mayors, but this seems to be based on speculation rather than empirical evidence.

The Government's intention is that councillors outside the executive will be freed up from their role on council committees to focus on the needs of their local communities. It is hoped that this will increase public trust in local authorities by making it clear where power and accountability lies and ensuring that councillors are in touch with their constituents. The overview and scrutiny role offers the potential for non-executive councillors to examine cross-cutting themes, such as crime and community safety, regeneration or young people, delving into the decision making and service delivery of the council and its partner organisations. Snape (2003) suggests that examples such as Bristol's review of the impact of regeneration on health show the potential for overview and scrutiny to go outside the narrow focus of the traditional committee system. But she goes on to state that,

without additional financial or officer support and with few real powers or sanctions, overview and scrutiny may struggle to be so effective or innovative. Overview and scrutiny committees meet in public and can co-opt non-councillors, which opens up the possibility of citizen participation in the process. However, a study of citizen participation in Scotland found little evidence of public participation in the scrutiny of council services (Orr and Mcateer, 2004).

2.3.2.3. Community Governance

Interwoven with the service improvements and political changes outlined above, is a new emphasis on community governance. Community governance is a term used in the literature to describe those aspects of the modernisation agenda which focus on the problematic issue of partnership and citizen participation in decision taking (Cochrane, 2004; Skelcher, 2003; Snape, 2003). The well-being of local citizens increasingly relies on the actions of many others beyond local government, including central government departments, statutory organisations such as the police and health services, businesses, schools and voluntary organisations. This “congested state” (Cowell, 2004 p498) raises difficult issues relating to accountability, democracy and participation. The measures introduced in an attempt to ease the congestion include Local Strategic Partnerships, community strategies and the power of well-being and these are briefly introduced here.

Local Strategic Partnerships (LSPs) are high level, council-wide partnerships of the major local organisations, together with some community representation. Their twin aims are to engage citizens in decisions on public services and to encourage organisations to work together to improve public services. Additionally, they are required to act as an overarching partnership, co-ordinating other local initiatives. They set out to improve communication between national, regional, local and neighbourhood levels. Local Strategic Partnerships are compulsory for those 88 areas in receipt of neighbourhood renewal funding and have been encouraged in other areas. Local authorities, in collaboration with LSPs, are required to develop community strategies that aim to:

“coordinate the actions of the council, and of the public, private, voluntary and community organisations that operate locally ... so that

they effectively meet community needs and aspirations” (government guidance, quoted in Cowell, 2004 p.498).

Local authorities have been granted the power to undertake any action to promote the economic, social and environmental well-being of their area. The power of well-being is intended to encourage a community leadership role for local authorities, allowing them to get involved in wide-ranging concerns beyond those for which they are directly responsible. There are no examples in the reviewed literature of the use of this power and some indication that it has not been used widely (Snape, 2003). This is perhaps because local authorities can play a leading role in improving the economic, social and environmental well-being without use of the power. The power does not allow councils to raise funds by tax, borrowing or charges (Wilson, 2001).

Table 5 Central Government Initiatives Allied to the Modernisation Agenda.
Source: adapted from Cowell and Martin, 2003, p166

Theme	Initiatives
Regeneration initiatives	Single Regeneration Budget, Urban Regeneration Companies, the New Deal for Communities
Local service coordination initiatives	Health, Education and Employment Action Zones, Healthy Living Centres, Learning Partnerships, Neighbourhood Management
Community-centred initiatives	Sustainable Local Communities (Local Agenda 21 strategies), Local Area Forums, Active Community Programmes, Community Champions, Neighbourhood Wardens
Programmes focussed on specific client groups	13 separate initiatives including Better Government for Older People, Ethnic Minority Achievement Grant, Sure Start and Sure Start Plus, Connexions Service, Excellence in Cities
Measure to encourage investment in services	Invest to Save, Private Finance Initiative
Key sectoral policies	21 separate initiatives including Care Trusts, National Service Frameworks, National Grid for Learning, Crime and Disorder partnerships, Community Legal Service Partnerships
Improved management and political leadership.	Local Government Improvement Programme, IDeA Performance Support Unit, IDeA Leadership Academy

Alongside the changes associated with the modernisation agenda, there have emerged a number of allied central government initiatives requiring local government to work in partnership with others. These include regeneration initiatives, health and education action zones, programmes focussed on particular

client groups such as Sure Start or Connexions, and sectoral policies such as the National Service Frameworks or the Crime and Disorder Partnerships. Cowell and Martin's (2003) study of published and unpublished central government reports and papers, together with a survey of local and central government senior officers identifies these additional initiatives which have impacted on local government (Table 5).

Local government is a key and often leading partner in these initiatives. Local citizens will experience them as part of the package of measures delivered locally, without necessarily distinguishing their origin or purpose. Many of the issues and tensions outlined in the next section are relevant just as much to these allied initiatives as to the core modernisation agenda.

2.3.3. Modernisation and Local Governance: Conclusions and implications for empirical research

Having reviewed the literature on modernisation and local governance, the issues of particular relevance to the study of local e-government partnerships will now be explored.

The research included in this review suggests that local authorities continue to operate mainly through individual services such as housing, education or refuse collection, rather than addressing broader issues such as community safety or public health (Cowell and Martin, 2003; McAdam and Walker, 2004; Snape, 2003). This narrow approach, it is suggested in the literature, has been compounded by the "silo" approach of national government, with separate local services answerable to different government departments, each with its own priorities, desired outcomes and inspection frameworks (Cowell and Martin, 2003; Geddes and Root, 2000). Silos may act as barriers to knowledge sharing, dissemination of best practice and to service improvement. Research into the social networks involved in e-government will help shed some light on the extent to which silos still operate by exploring the relationships between individuals in different council departments and also their relationships with others within their profession from other councils and public organisations. Another aspect to the research will be a consideration of the extent to which short-term, innovative e-government projects

are linked into mainstream local authority services, ensuring that the learning from them is taken forward on as broad a front as possible.

New political arrangements, brought in since 1997, include increased powers for the executive decision making structures, most often a cabinet, and the development of a number of overview and scrutiny committees where councillors outside the executive examine decisions taken by officers and the political leadership. The literature highlights a changed role for councillors, both for the small group of cabinet members who are expected to fulfil a bold community leadership role, and the majority of councillors outside the executive whose focus is expected to be directed towards the needs of their local communities (Copus, 2003; Hambleton and Sweeting, 2004; Midwinter, 2001). This research into e-government networks will explore the extent to which councillors are involved in those networks and the roles they play. It will also consider the effect of councillor participation. For example, the extent to which the diffusion of e-government innovation is influenced by existing networks between councillors or by officer-councillor relationships, and the effect of a commitment of council leaders to e-government.

Partnership working is a key feature of the local government modernisation agenda and it is also an element of other central government initiatives affecting local government. Increasingly local agencies are required to work together to join up services, tackle difficult issues and share information.

2.4. Electronic Government

2.4.1. Introduction

A basic definition of electronic government is: “e-government is composed of government agencies using computer technologies to provide information and services to citizens” (Hinnant and O’Looney, 2003 p.436). This basic definition is shared throughout this field of study, but it can be expanded to include three additional elements beyond the simple provision of information and services using new technology. Firstly, there can be a transformational effect on the role of citizens, providing “opportunities for online political participation” (McNeal et al. 2003) and helping to “empower citizens” (Ho, 2002). Secondly, e-government can “transform government itself” (Moon and Norris, 2005) by changing the way local government organises itself and altering its relations with its partners and citizens. Thirdly, rather than simply providing existing services through new access points, e-government offers the opportunity to provide more effective and efficient services (Ho and Ni, 2004). A definition which incorporates all these elements could be:

E-government is the use of computer technologies by government to transform the provision of services and information, improve internal organisation, encourage citizen participation and promote sharing between partners.

Implementing e-government has implications for all parts of local government. The issues which need to be thought about and addressed include:

- Service delivery – identifying the key areas for electronic service delivery;
- Access channels – considering current and future demand by different stakeholders for access by telephone, face-to-face contact, website, mobile phone etc;
- Front end systems – re-engineering to manage customer interaction;
- Back-end systems
- Front end/back-end integration – ensuring the integration of ICT systems;
- Sharing data and services with partner organisations;

- Citizen use of e-government – local government needs to be conscious of: citizen awareness and interest in e-government, access to appropriate technology, ICT skills and usability (Beynon-Davies, 2005).

Norris and Moon (2005) offer a guiding framework to the adoption of new technologies in public organisations, in which they identify three dimensions of the adoption process:

- The input dimension, including all of the internal and external factors which influence the adoption of e-government;
- The adoption decision;
- The impact dimension, including all the outcomes of e-government, both in terms of organisational outputs and organisational change.

Their framework offers a useful way of exploring the e-government literature, which tends to have as its focus either the factors influencing adoption (the input dimension), or the consequences of e-government (the impact dimension) or both. This section looks first at the input dimension, then the impact dimension of e-government, and then describes the UK e-government strategy.

2.4.2. The Input Dimension

According to Norris and Moon's guiding framework (2005), the input dimension includes all the internal and external factors which affect a council's decision to adopt some aspect of e-government. There is a distinction in some parts of the literature between two phases of the input dimension; firstly the adoption of basic aspects of e-government, such as a website providing information and secondly, the adoption of more advanced forms of e-government. The distinction between these two phases of e-government has been described as "cataloguing" and "transactions" (Reddick, 2004), a distinction between provision of an on-line descriptive catalogue of information and services, and a more advanced ability to undertake transactions on-line, such as submission of a planning application or payment of taxes, fines and rents. Adopting a similar approach, Kaylor et al. (2001) identify a four point scale for use by smaller cities to identify how sophisticated their websites are. The four stages are: provision of information; an email link to relevant

contacts; downloadable forms; and transactions. A similar scale is suggested by Holden et al (2003). This movement of local governments from the provision of online information to the provision of transactional services can be seen as a reflection of their movement from a “hierarchical paradigm” focussing on the administration of a number of separate services, to an “e-government paradigm” focussed on the needs of customers (Ho, 2002).

E-government has the potential to go even further, beyond providing information and enabling transactions. This suggests a more radical scale by which to measure the use of ICT in relations between government and citizens, ranging from providing information and enabling transactions through to providing insight on customer needs and even facilitating citizen/government co-production of services (King, 2007; King and Cotterill, 2007). In this model, local authorities and citizens can have three possible relations:

- An informational/transaction relationship
- An insightful relationship: council driven, in which ICT is used to target services to specific groups of customers, based on the information already held on them.
- An insightful relationship: citizen driven, in which ICT is used to empower citizens, e.g. providing a “shared information platform” between social care users, professionals and third parties to enable co-production; or providing community portals and information access to enable citizens to challenge council performance (King, 2007 p59-60).

Research into the adoption of e-government among local governments suggests that there are a number of influential factors. The factors influencing the adoption of basic e-government applications such as a website include population size (Holden et al. 2003; Moon and Norris, 2005; Norris and Moon, 2005), metropolitan status (Holden et al. 2003; Norris and Moon, 2005), political support (Ho and Ni, 2004) including the council’s attitudes to privacy and security issues (Beynon-Davies and Martin, 2004) and staff workloads (Ho and Ni, 2004). Peer pressure from other local governments and demand from constituents surprisingly do not appear to affect adoption (Ho and Ni, 2004). There are differences within the

literature on whether technical and financial capacity or form of government affects adoption.

UK local councils have been working on the adoption of e-government for some years now and are beyond the early stage of website provision. It is therefore of more interest for this study to examine the factors that influence the adoption of more sophisticated e-government solutions. These include: professionalism and attitude of the council leadership (Hinnant and O'Looney, 2003; Ho, 2002; McNeal et al. 2003); participation in wider networks beyond the immediate locality (McNeal et al. 2003); extent of support from other departments outside the ICT section (Ho, 2002; Melitski, 2003); existence of in-house ICT support staff (Melitski, 2003); how long the local council has operated a website (Ho, 2002; Moon and Norris, 2005); existence of a local e-government strategy (Melitski, 2003; Moon and Norris, 2005); population size (Ho and Ni, 2004; Norris and Moon, 2005); staff workloads (Ho and Ni, 2004). Opinions differ on whether financial and other resources have an impact on the development of advanced local e-government. Many of these factors will be explored during the research.

2.4.3. The Impact Dimension

The impacts of e-government are often summarised in terms of transforming relationships between local government and citizens (G2C) and local government and business (G2B) and improving the connectivity of different wings of government (G2G) (Fountain, 2001; Reddick, 2004). Potential benefits include improved services, cost savings on transactions with citizens, more efficient procurement, lucrative new markets for private vendors and better joining up of local government with other public sector partners (Fountain, 2001). Another benefit is that e-government can potentially "reinvigorate the democratic process and re-engage citizens positively in political life" (McCullough, 2003). These potential impacts of e-government on local government are summarised in Figure 1.

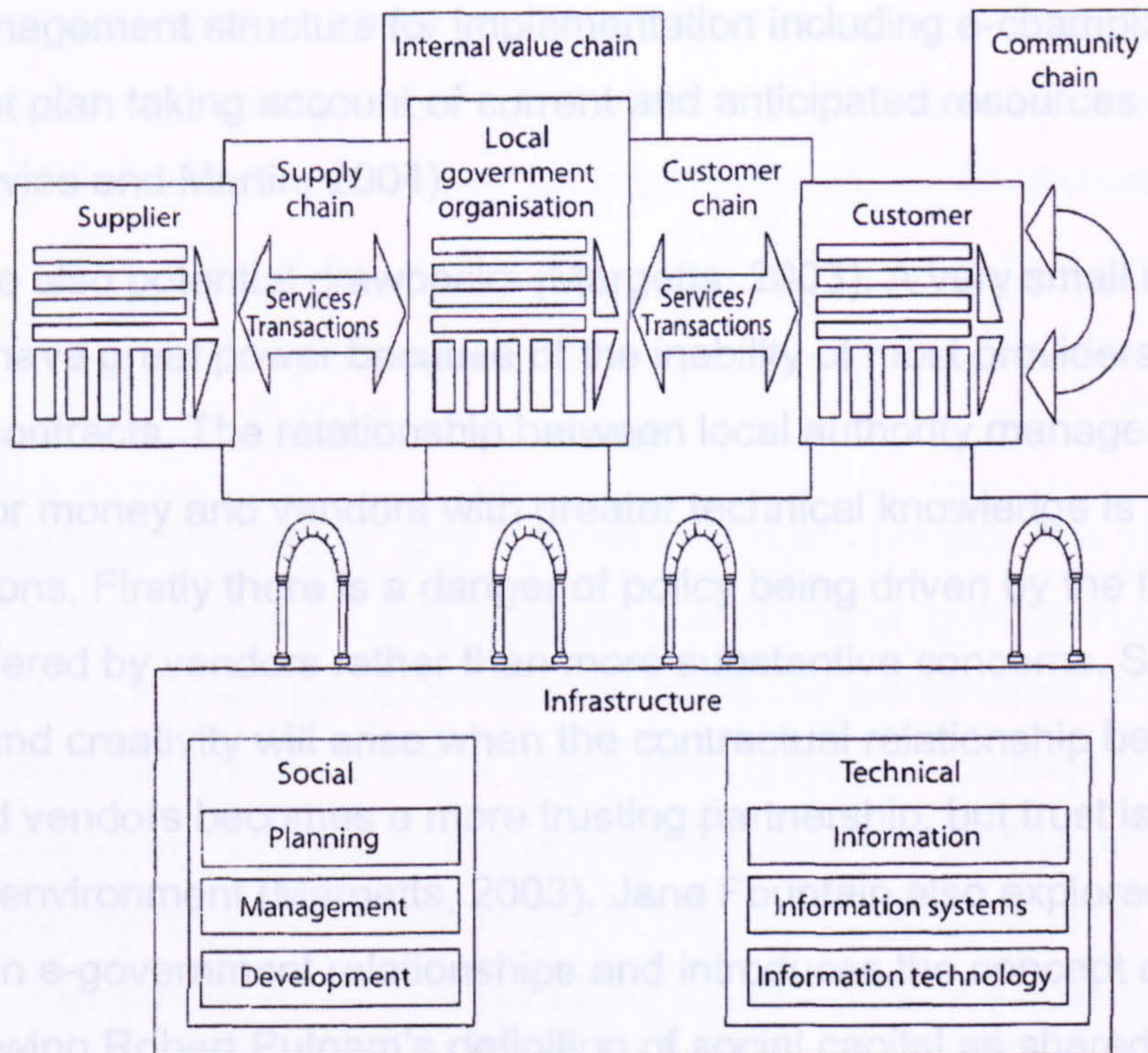


Figure 1 Key Components of Electronic Local Government
(Beynon-Davies and Martin, 2004 p222)

The model indicates that ICT can potentially impact on four different relations of local government:

- The supply chain (G2B), including e-procurement and communication with business;
- The customer chain (G2C), including websites for citizens, customer relationship management systems and contact centres;
- The internal value chain (G2G), including the infrastructure for internal communication between staff and communication with other levels of government;
- The community chain, including consultation with citizens and community forums.

E-government implementation across these four channels is dependent on the development of a sound infrastructure: a clear strategy linked to wider council

plans; a management structure for implementation including e-champions; and a development plan taking account of current and anticipated resources and skills (Beynon-Davies and Martin, 2004).

But there are also potential drawbacks (Margetts, 2003). A very small number of companies have great power because of the inability of most providers to bid for such large contracts. The relationship between local authority managers concerned with value for money and vendors with greater technical knowledge is problematic for two reasons. Firstly there is a danger of policy being driven by the technical solutions offered by vendors rather than more substantive concerns. Secondly, innovation and creativity will arise when the contractual relationship between councils and vendors becomes a more trusting partnership, but trust is difficult to build in this environment (Margetts, 2003). Jane Fountain also explores this issue of trust within e-government relationships and introduces the concept of social capital, following Robert Putnam's definition of social capital as shared aims, values, expertise and knowledge. For Fountain, social capital is a necessary substitute for the hierarchical discipline that is absent from networks. Social capital has to be built and nurtured; it cannot be forced from above.

The major challenge for electronic government is not the technical aspect, but the amount of institutional re-organisation that is required. Fountain (2001) describes a "technology enactment framework" which distinguishes between objective technology (tools, systems, equipment) and enacted technology (the practical implementation). Enacted technology is conditioned by how the tools and systems are used by staff on the ground, the institutional arrangements in place and the nature of the organisation. She contrasts her perspective with a range of other models:

- Technological determinism focuses on the effects of technology without recognising the role of people. Its' flipside is those who fear that technology is advancing, unstoppable by people.
- A rational-actor perspective sees that individuals will rationally over time make the correct choices to introduce the best technologies.

- Incrementalism sees policy makers taking small steps towards technology, which protects against big errors of judgement. This ignores the fact that one decision on technology can commit an organisation to a certain course.
- Systems analysis often sees social systems as lagging behind technical change, ignoring social processes and implying a normative judgement that people should keep up with the technology.

Electronic government is much more than an administrative tool; it is very political. Fountain has observed that “IT is enacted by governments to support dominant societal values” (p.32), so the introduction of electronic government has been done with a different emphasis of control or information-giving in countries with different regimes. Decisions on the introduction of e-government are political in that they are likely to affect wider organisation and service provision within the local authority. For example, investment in ICT solutions may make it difficult to justify continued funding of face-to-face services. Fountain’s theory builds on earlier work in the fields of ICT and government, and the adoption and diffusion of innovations (Danziger, 2004; Norris, 2003). Her contribution has been seen in contrasting lights: as an advance which adds a richer consideration of the issues (Danziger, 2004) or a repackaging without sufficient acknowledgement of previous work, particularly Roger’s (2003) work on the diffusion of innovations (Norris, 2003).

Empirical studies, mostly from the USA, suggest that e-government has not yet achieved many of these potential benefits. Although ICT has the potential to be transformative, empirical research on the uses of ICT by government shows that it has not been (Norris, 2003). In national surveys of local governments, few report any impact of the introduction of e-government. Of those who do report impacts, most report changes in staff roles and workloads, together with changed business processes (Norris and Moon, 2005). Few report any financial savings arising from e-government (Moon and Norris, 2005). While e-procurement (G2B) is fairly advanced in most US cities, and there is increased on-line collaboration between governments (G2G), services for citizens (G2C) are still at a fairly low stage of development (Kaylor et al. 2001). A study of Welsh local councils found internal government interactions to be the most advanced, followed by interactions with customers and lastly with businesses (Beynon-Davies and Martin, 2004). E-

government projects aimed at citizens tend to offer access to services and information rather than an opportunity to participate or access information on council performance (Beynon-Davies and Martin, 2004), treating people as customers or users rather than citizens (Ho, 2002). King's study of the implementation of customer relationship management (CRM) systems by local authorities indicates that there has been a focus on providing better access through a range of channels to the same existing range of services. The emphasis has been on resolving enquiries quickly and efficiently. Much less attention has been paid to organisational transformation, joining up across traditional silos (King, 2007)

McNeal et al found that the involvement of state officials in professional networks was an indicator of e-government innovation, but that access to resources and citizen-related factors such as education level, voter turn-out and rate of internet use do not drive e-government implementation (McNeal et al. 2003). They conclude that e-government is largely an administrative reform, driven by officials seeking efficiency, rather than a mechanism for democratic participation. Local government has three distinct roles in its locality: as the champion of *local democracy*, the focus for *public policy making* and as a *provider of services* (Pratchett, 1999). Pratchett's case study of an English local authority found that ICT policy making tends to be closed and exclusive, with an emphasis on efficiency savings and developing technology to support existing service delivery functions and a neglect of the local democracy and policy making roles of councils.

E-government has the potential to widen access to services and information and can raise take-up, interaction and democracy. But there are gaps in this access: "an economic gap, a racial gap, a geographic gap, and a disability gap" (Jaeger and Thompson, 2004 p26). This inequality is partly due to a lack of access to technology, for example access to computers and availability of the internet (Lee-Kelley and James, 2003). It may also be influenced by "information poverty", lacking the necessary information, skills and guidance or being overburdened with information (Jaeger and Thompson, 2004). Information poverty can lead to a lack of awareness of e-government, a hesitance about use and a lack of trust among some social groups (Jaeger and Thompson, 2004).

2.4.4. UK Electronic Government

The UK Government's national strategy for local e-government was published in November 2002, following a period of consultation with local authorities and others (ODPM, 2002). It identified three central themes of local e-government, which are outlined below, together with some of the illustrations given in the strategy.

i. Transforming Services

- Offering citizens the convenience of booking services, reporting faults or making payments through the internet, digital TV, kiosks or over the phone, including out of office hours.
- Provision of one-stop-shops or home visiting, with staff that can access information, update information, take payments and book services electronically.
- Sharing of information within and between councils and other organisations, to allow clusters of services to be offered in ways that make sense to people.
- Use of technology to overhaul the "back office", for example, ensuring that a citizen's change of address, once reported, is recorded across different departments.
- Use of e-procurement.

ii. Renewing Local Democracy

- Democratic Engagement and participation, use of new technology to encourage local citizens to participate in local debates and service planning.
- Providing councillors with easier access to information and ensuring they are accessible to their constituents by email or on-line discussion forums.
- Electronic voting.
- Adopting approaches which overcome obstacles to participation some people might face due to social exclusion.

iii. Promoting Economic Vitality

- Providing information to business about what support is available locally and what licenses and permissions they may need.
- Use of the internet for marketing the local area and attracting investment.
- Local councils working with post offices, banks, supermarkets or the voluntary sector to bring together services and manage customer relationships.
- Promoting sustainable economic development.

In 2002 a local e-government target was set.

“Central and local government have adopted the target of making all services available electronically by December 2005. This does not mean that all services should be provided on the web, to the exclusion of other ways of delivering them. It does mean that we should use internet technologies to make services available in people’s homes, on websites, over the telephone and at council offices and one-stop-shops, in ways that are convenient and helpful to users” (ODPM, 2002 p.7).

The target was later expressed as:

“... to achieve 100% capability in electronic delivery of priority services by 2005, in ways that customers will use” (ODPM, 2004a p3)

The target was measured by Best Value Performance Indicator 157 (BVPI157) which required all local authorities

“to measure the number and types of interaction that are enablers for electronic delivery as a percentage of the types of interaction that are legally permissible for electronic delivery” (ODPM, 2005b p10).

There were a number of elements within the UK approach to local e-government, as follows:

Priority Outcomes From the outset, local authorities were guided to focus their development of e-government on the seven service delivery priorities agreed between local and national government in July 2002:

1. Raising standards across our schools
2. Improving quality of life for children, young people, families at risk and older people
3. Promoting healthier communities
4. Creating safer and stronger communities
5. Transforming our local environment
6. Meeting local transport needs
7. Promoting local economic vitality (ODPM, 2002)

Within this broad framework, local authorities were left to determine their own approach to e-government implementation. An evaluation of local e-government implementation in 2003 found that “central government has not, in general, been legislative, but rather has been concerned with setting broad targets and providing resources” (Centre for Urban and Regional Development Studies, 2003). By 2004 the public service delivery priorities were translated into a set of 14 priority areas; 10 priority service areas and 4 cross-cutting transformation areas (Table 6).

Table 6 Priority Service and Transformation Outcomes for Local e-government

Priority Service Areas
Schools – To help raise education standards and allow e-enabled processing of pupil support services to the public
Community information – to deliver integrated information about services for the community, delivered by local and regional partnerships where appropriate and connected to a national infrastructure
Democratic renewal – to promote greater public involvement in local decision making and to enhance the representative role of councillors in the community through the use of technology
Local environment – to help improve the quality, cleanliness and safety of our public space by using technology to integrate relevant functions more closely.
E-Procurement – to support business improvement through cost effective and efficient purchasing of goods and services through corporate implementation of e-procurement. Working with local suppliers to equip them to take advantage of e-procurement services.
Payments – to support service improvement and collection efficiency by providing for all payments to the council for goods and services to be made online or by telephone.
Libraries, sports and leisure – to provide easy and convenient access to a range of online information to encourage productive use of leisure time and healthier lifestyles, including e-enablement of local library, sports and leisure facilities.

Transport – to meet transport needs more effectively through the provision of real time local transport information and utilising technologies to improve traffic and transport management.
Benefits – to meet the needs of claimants and their agents through the provision of online access to the Housing and Council Tax Benefit claim process, or via intermediated technology in their homes.
Support for vulnerable people – to meet the needs of vulnerable children and adults and their carers by increasing the accessibility of services, offering quick, comprehensive assessment and reducing risk by improving communication and access to information between agencies.
Transformation Priority Areas
Supporting new ways of working – active policy and practice enabling council members and staff to work from home or away from the office base.
Accessibility of services – all council services are supported outside of standard working hours via the Internet or telephone contact centres.
High take up of web-based transactional services – development of web based services as a major access channel for interactions between the citizen and the council.
Making it easy for citizens to do business with the council – systems are in place to ensure effective customer relationship management.

Source: (ODPM, 2004b p9-18)

Against each priority area, the ODPM set a number of priority e-government outcomes. For example, the priority outcomes relating to Support for Vulnerable People included provision of information about local care services; remote access for staff to information about care packages; joined up approaches to supporting children at risk, joint assessments of the needs of vulnerable people; and targets for customer satisfaction. (ODPM, 2004b)

IEG Statements Each local authority was required from 2001 to submit an annual Implementing Electronic Government (IEG) statement, in which they set local e-government targets and monitored progress in achieving them. Councils demonstrating adequate progress were awarded an annual grant for e-government implementation (£200,000 in 2002/3 and 2003/4, £351,000 in 2004/5 and £150,000 in 2005/6). From 2003 local authorities were required to submit a standardised report indicating progress toward the delivery of the key priority services and technical building blocks (ODPM, 2003). The IDeA produced an Electronic Service Delivery (ESD) Toolkit (www.esd-toolkit.org) for measuring and recording the e-enablement of services, which local authorities were earlier strongly encouraged to

use, and later required to adopt. Since IEG 4 in 2004/5, all councils were required to input and maintain IEG data in real time via the esd-toolkit (ODPM, 2005b).

From 2004 (IEG4) local authorities were required to directly report on progress in achieving the priority outcomes in their IEG statements. They were asked to score themselves as red, amber or green against each of the priority outcomes and funding for e-government implementation is dependent on successful progress.

Outcomes were grouped as follows:

Required Outcomes – specific on-line facilities which must be in place in every area of the country by the end of December 2005 and where applicable, available 24 hours a day (Green status by December 2005);

Good Outcomes – all local authorities were expected to commit to these, but the precise approach to achieving them could be determined locally (Amber by December 2005, Green by April 2006)

Excellent Outcomes – high performing authorities achieving the required and good outcomes were asked to agree targets for promoting take-up of e-services, and in return were awarded greater discretion in applying their IEG grant monies.

National Projects 22 national projects were established in 2002 to develop and disseminate best practice solutions for local authorities (Table 7). Each national project was a partnership between councils and was expected to cover either a priority service (e.g. schools admissions, planning services) or a technical building block (e.g. smart cards, customer relationship management, websites etc.). The aim was to ensure that local authorities had access to key service improvements and building blocks without having to build them from scratch (ODPM, 2003). The ODPM reported in 2005 that the national projects had produced over 250 products, many of which were assisting councils to reach e-government targets. 47% of local authorities have found national projects to be critical to their delivery of e-government (ODPM, 2005b). Since October 2004 the National Projects Roll Out and Dissemination Programme (ROADS) has conducted a drive for take up of the products, including a web portal, conferences and workshops.

Table 7 National Projects

<p>Customer Relationship Management (CRM) Providing support, advice and guidance to help Council deliver citizen focussed services.</p> <p>Digital TV (DigiTV) Complementing your channel strategy and helping to bridge the digital divide.</p> <p>e-Benefits A solution to benefit all</p> <p>e-Citizen (Take-up and marketing) Enabling local authorities to increase take-up of e-services</p> <p>e-Fire Efficiently managing information and providing transactional fire-related services</p> <p>e-Pay Taking payments online</p> <p>e-Procurement (NePP) Delivering e-Procurement</p> <p>e-Trading Standards National (e-TSN) Local Authority trading standards services – working together effectively.</p> <p>Enterprise Workflow Getting the right work to the right people at the right time – time after time.</p> <p>Environment and Community Online Residents' e-Services (ENCORE) Making local environment information easy to find.</p> <p>Framework for Information Sharing in a Multi-Agency Environment (FAME) Effective information sharing for improved service.</p> <p>Knowledge Management Creating a learning environment for local authorities.</p> <p>Local Authority Websites (LAWs) Helping local authorities deliver services online</p> <p>Local e-Democracy Staying ahead with community matters</p> <p>Local e-Government Standard Body (e-Standards) The national standards authority for local e-government</p> <p>Online Schools Admissions/Pan London School Admissions Putting the school admissions process online /Making schools admissions in the capital fairer.</p> <p>Planning and Regulatory Services Online (PARSOL) E-Planning and e-Regulation by Local Authorities for Local Authorities.</p> <p>Project Nomad (Mobile Technology) Keeping our Local Authorities mobile.</p> <p>Reducing Youth Offending Generic National Solution (RYOGENS) Helping young people – reducing youth crime</p> <p>Smartcards Discover a smarter way</p> <p>Valuebill (Council Tax/Business Rate Valuation) Joining up local and central government</p> <p>Working with Business Your business made easy</p>

Source: (ODPM, 2005b p15)

Partnerships Local and regional partnerships were awarded central funding to help councils develop e-government strategies, encourage joint service delivery and share good practice. In recent years, particular emphasis was placed on the importance of local authorities working together with others in their region (ODPM, 2005b).

Pathfinders 25 short term pathfinders, involving 110 local authorities were established in 2001-2 to develop a range of technical solutions and learning materials and disseminate these to others.

Support A range of support services have been provided to local authorities, including:

- A specialised web site www.localgov.gov.uk
- Regional centres of excellence and regional partnerships.
- Support by the IDeA Implementation Support Unit for struggling councils and by the IDeA Strategic Support Unit for those requiring specialist advice and guidance.
- A Local Government Standards Body.
- The development of national infrastructure including: Government Connect to support secure communication and authenticate identities; UK Online, a single point of access to government services; a National Land and Property Gazetteer, and the Directgov portal.

e-Innovations Fund The e-Innovations Fund was launched in September 2003 and awarded £14 million in two rounds to “cutting edge” projects. Its themes were: e-learning, bridging the digital divide, emergent technology for better government, e-business, efficient and effective government, inclusion through innovation, e-business and leadership.

Electoral modernisation During the 2003 local elections, 61 local authorities took part in electoral modernisation pilots. 17 tested e-voting through the internet, digital TV, telephone, text messaging and kiosks (ODPM, 2003). After that there were initially no further experiments with electronic voting (ODPM, 2005b) but during the 2006 and 2007 local elections a small number of pilot projects were conducted.

The development of e-government was regarded as an integral part of local government modernisation. The national e-government strategy placed e-government “at the heart of the drive to modernise government” (ODPM, 2002). It emphasised the need for e-government to be developed in the context of community planning, best value, comprehensive performance assessments and the new political constitutions. As already mentioned in section 2.3 of this chapter, a study of published and unpublished central government reports and papers, together with a survey of local and central government senior officers, identified e-government as one of the eleven key policy instruments of the local government modernisation agenda (Cowell and Martin, 2003). During 2004-5 some of the emphases of the e-government strategy changed, reflecting developments in the modernisation agenda. In particular, the 2004 Spending Review incorporated a target for local government “efficiency gains” of 2.5% per annum up to 2007-8 (ODPM, 2005b). Local authorities have been increasingly urged to use e-government to produce both cash savings and better services for less cost, reinvesting savings elsewhere.

Where the government previously required local authorities to set their own detailed priorities within a broad framework, from 2004 there was a requirement on local authorities to match their performance to the priority outcomes. This reflects a new comprehensive performance framework which, from 2005, will place “much greater emphasis on measuring authorities’ performance against the shared priority themes” (ODPM, 2005b). The national e-government strategy offers “choice within constraints”:

- Centrally set targets, but flexibility on the detail of how they are achieved;
- Local authorities encouraged to experiment widely, but with most funding going to the innovation leaders rather than those who are lagging behind;
- The national projects and central infrastructure constrain choice by shaping the overall direction of travel, but offer choice to local authorities who can pick and choose what to adopt (Pratchett and Leach, 2004).

2.4.5. Electronic Government: Conclusions and Implications for Empirical Research

E-government is a relatively new phenomenon and, while there has been some significant research, there are still considerable gaps in the literature. One of the factors identified as affecting the adoption of advanced forms of e-government is participation in wider networks beyond the immediate locality (McNeal et al. 2003). Additionally, Ho and Ni (2004) identify the effect of involvement in personal and professional networks on the diffusion of e-government as a key area for future research. This study will explore this further by investigating the effect of involvement in regional networks and national projects on the adoption of e-government.

Another factor affecting adoption of advanced e-government is the attitude of the council leadership (Hinnant and O'Looney, 2003; Ho, 2002; McNeal et al. 2003). This study will explore councillor involvement in e-government networks and will consider the effect of the council leadership standpoint.

The relationship between local councils and companies providing technical solutions is important to the development of e-government, as is the existence of trust within e-government partnerships (Fountain, 2001; Margetts, 2003). Beynon-Davies and Martin (2004) suggest the need for future research from the perspective of different stakeholders into the enablers and barriers to e-government development. This study will examine the different perspectives of everyone involved in e-government partnerships and consider the relationships between them.

The national e-government strategy is an integral part of the local government modernisation agenda. Working in partnership with others is an important feature of the UK local e-government strategy: partnerships were important to the national projects, regional centres of excellence and the regional partnerships, as well as the local partnerships which are the focus of this study. The issue of partnership working will be explored further in the following section.

2.5. Public Sector Partnerships.

Partnerships are growing phenomena in local public services: all local authorities are involved in a wide range of partnerships. Partnerships are a central feature of regeneration initiatives (single regeneration budget, new deal for communities), local service co-ordination (health action zones, neighbourhood management, crime and disorder partnerships) and improving provision to particular client groups (surestart, excellence in cities, connexions). Local strategic partnerships now exist as overarching partnerships in most areas.

Organisations collaborate together to gain access to resources, share risks, achieve efficiency, co-ordinate service delivery, encourage organisational learning and to address tricky issues – poverty, crime, economic development etc – which no one organisation can tackle alone (Huxham and Vangen, 2005 p5-7).

Partnerships are an important element of e-government. In 2002 the ODPM invited groups of local authorities and other public sector agencies to bid for funding to support working together on e-government. Between 2002 and 2005 101 local e-government partnerships were awarded a total of £68 million to work together using information and communication technology to deliver better government services (ODPM, 2005a p4). Some of these alliances were partnerships between a single local authority and the public agencies in their locality; most involved a number of neighbouring local authorities. The partnerships were expected by the Government to work on those priority outcomes which “demand an integrated or joined up approach” (ODPM, 2004b p6). In particular, partnerships were intended to ensure: joined up service delivery; efficiencies and economies of scale; and rapid roll-out of outputs from National Projects (ODPM, 2004b p6; ODPM, 2005b p17). Prospective partnerships developed their own project ideas and submitted bids to the ODPM. The successful bidders put forward a variety of different projects; the types of activities they undertook included:

- Shared websites, providing access to information from a number of sources in one place;
- The use of ICT to share information more easily between organisations;

- Joint procurement of ICT including customer relationship management systems, self-service kiosks and content management systems;
- Citizen smartcard schemes;
- Shared out of hours telephone services;
- Broadband access for citizens or businesses;
- Common housing registers;
- Common forms and e-transactions;
- Integration of Geographical Information Systems;
- Shared e-tendering systems (ODPM, 2005a).

This section brings together a variety of literature relevant to public sector partnerships and presents it in three parts. Firstly, network governance theory is introduced as offering a useful framework for thinking about how and why public organisations work together. Secondly, literature on local partnerships is explored, identifying some of the issues which contribute to effective partnership working and considering themes of citizen participation and accountability. Thirdly, social network studies of partnerships and inter-organisational alliances are reviewed to set this study in a wider context of inter-organisational research.

2.5.1. Network Governance Theory

Governance is a key theme in the literature. There are attempts to develop theories, models or frameworks to help explain or illuminate current notions of governance. Stoker (1998) suggests that a governance perspective can offer a valuable “organising framework” or “map” to the changing world of government. The post war approach to local government was dominated by professionalism and party partisanship, with services delivered by professional bodies and hierarchical departments. During the 1970s and 1980s this approach was challenged by the ideas of new public management, which placed emphasis on consumer choice and managerialism, with services being increasingly delivered by the private sector or arms-length public agencies. By contrast the network governance perspective, which has grown during the 1990s and 2000s, focuses on identifying and

addressing more effectively the problems that citizens most care about, by all relevant stakeholders working together. These three world views offer visions of how local government should operate and there is overlap between them: both traditional local government and new public management approaches continue to have an impact (Stoker, 2004).

There is considerable debate about the nature of network governance, but for this study, the features that seem important and relevant are as follows:

- There is an interdependence between a wide set of institutions and actors, drawn both from within and beyond government (Rhodes, 2007; Stoker, 1998). “Governance is broader than government” (Rhodes, 2007 p1246).
- The boundaries between organisations in these autonomous, self-governing networks are unclear and complex (Rhodes, 2007; Stoker, 1998) and it can be hard to identify where power and responsibility lie (Lowndes and Sullivan, 2004; Stoker, 1998).
- Network members have continuous relationships, based on the need to negotiate common goals and exchange resources. These relationships are underscored by trust and are based on rules which are negotiated and agreed by participants (Rhodes, 2007).
- “The capacity to get things done which does not rest on the power of government to command or use its authority” (Stoker, 1998 p18).
- Within a governance framework local councils have a unique steering role: providing an infrastructure so organisations can work together, giving community leadership, promoting high standards of conduct and ensuring the representation and participation of a range of communities (Sullivan, 2003). This ability to steer is indirect and imperfect (Rhodes, 2007; Stoker, 1998).
- The actions of local governance are driven by the aim of delivering “public value”. The public sector is unlike the commercial sector with its focus on buying and selling. All service providers should be committed to a public value ethos of performance, accountability, accessibility, responsible employment and community well-being (Stoker, 2006).

2.5.2. Local Partnerships

There is a body of local governance literature which focuses on the internal dynamics of partnership working, the relationships between organisations involved in local governance arrangements. Empirical research exploring the internal dynamics of regeneration partnerships and action zones indicates that the activities and success of those initiatives are affected by the actions of individuals involved with them (Painter and Clarence, 2001; Raco, 2002) and the organisational practices of their organisations (Lowndes and Sullivan, 2004; Raco, 2002). A review of the research on urban development corporations identifies “the key role that organisational practices and actors, working in particular socio-political contexts, can exert on the political processes of local governance” (Raco, 2002 p442). Key individuals, both within the partnership and in the wider environment, play an important role in developing a network of influence for the partnership, establishing its legitimacy and making the partnership work effectively (Cowell and Martin, 2003; Raco, 2002). The character, local standing and politics of the chair and chief executive of the partnership are important in this respect, but so are the actions of other leading local figures, whether or not they are directly involved (Raco, 2002). Well-established local “brokers” can help ensure that people get on board with a new partnership (Painter and Clarence, 2001). Partnerships work most effectively if the representatives involved are sufficiently senior within their own organisations to speak confidently and commit to decisions without having to constantly refer back (Painter and Clarence, 2001). Staff working to deliver partnership projects can influence the activities and success of those projects, particularly where they bring experience and contacts from social networks they are already involved in. This can change how the partnership policies are implemented and can lead to policy changes. Raco (2002) found that planning officers working for a partnership which expressed hostility to small and medium enterprises (SMEs) used their “discretion” and “autonomy” to help SMEs get grants and planning approval. Their ability to achieve this resulted from an understanding of the SME sector and relationships with local authority planning officers and businesses developed earlier in their careers.

It takes time to establish the relationships and understanding required for effective partnership working. Painter and Clarence (2001) found that emerging action zone partnerships were more effective in bringing organisations together if they were based on pre-existing collaborative arrangements or had boundaries which were co-terminus with existing organisations with a history of working together. Partner organisations will have different traditions, attitudes and ways of arriving at decisions. They may often distrust one another.

“Research on social care partnerships, for example, revealed that health personnel mistrusted what they saw as the “political” approach of the local authority, while councillors were reluctant to share power with “quangos” and user representatives were admonished for introducing “personal” issues into policy debate” (Lowndes and Sullivan, 2004 p.65).

While local authorities are required by legislation, financial incentives and performance indicators to work in partnerships, other public sector providers are encouraged to get involved, but are primarily driven by national objectives and targets from their own government departments (Geddes, 2006).

A study of US community security partnerships between the police and community organisations found that, in an attempt to cope with the difficulties of working in partnership, some partnerships develop elements of a formal structure with its own norms and routines, comparable with a hierarchy (Thacher, 2004). Individuals may start to feel they have more in common with others in the partnership and no longer feel comfortable in their own organisation, so they develop a support network in the partnership. Rules are developed to deal with conflict. Staff are trained in the ethos of the partnership. Thacher suggests that research on partnerships should include organisational concepts like structure, management and control systems as well as network concepts like trust and reciprocity.

A qualitative case study of a regeneration partnership identifies two senses in which informal networks are important to partnerships. Firstly, the importance of previously knowing each other or knowing of each other. Secondly, “the cultural capital that people bring with them from previous experience in the field” (Clegg and McNulty, 2002 p596): organisational and professional loyalties, commitment to

shared issues and identities based on gender and ethnicity. This concept of cultural capital may have relevance to the study of e-government partnerships. Pratchett has identified within local councils an ICT policy network in which ICT staff have more in common with other ICT professionals than with other local government staff. ICT staff share an “underlying value system” which sees the role of ICT in organisations as improving service delivery and providing management information, with an emphasis on performance and efficiency (Pratchett, 1999). This concept of a shared “underlying value system” is similar to Clegg and McNulty’s concept of “cultural capital”.

None of the studies which undertook research with councillors explored their role in devolved governance arrangements such as local partnerships and area-based regeneration initiatives. Pearce and Mawson (2003) describe the need to enhance and legitimise the role of councillors as a key issue for the success of these local partnerships, which suggests that further research is needed on the part that councillors can play in partnerships.

After studying many collaborations in the public and private sector, Huxham and Vangen (2005) identify a number of themes which are relevant to partnerships:

Common Aims. Each organisation will have its own aims, some of which will be explicitly stated, but some aims may be based on assumptions that are not clear to others, or may even be deliberately hidden. Reaching agreement on common aims is always difficult, because of the wide variety of interests among members. There is a dilemma between striving for “clarity of purpose” and yet not wanting to “unearth irreconcilable differences” (p62).

Power. In any collaboration there is not one powerful organisation, but rather a number of “points of power”, which shift and change over time. These points of power include the naming of the collaboration, deciding who to invite, the choice of Chair, applying for funding. Different actors will have more or less power at different points.

Trust. In collaborations, organisations often have little choice of partners, so trust is not a pre-condition; it must be built. Two factors are important in building trust:

firstly, knowledge of the reputation or past behaviour of the collaborator; secondly, having sufficient trust to take a risk on the collaboration.

Complexity. Many organisations are involved in multiple collaborations. It can be unclear to participants who precisely are involved in any particular collaboration and which organisation or partnerships they are representing.

Change. Government policy changes; partner organisations review and alter their policy; the personnel involved in the collaboration turn over. All this change will alter the purpose and activity of the collaboration.

Leadership. Leadership does not just rest in individuals. There are three elements to collaborative leadership - structures, processes and participants - with the structures and processes being just as important as the people in influencing outcomes. All three leadership elements often lie outside the control of the members of the collaboration: customers, local public figures, funders and government bodies all have influence.

Leadership within partnerships. Those who lead within partnerships are most successful when they combine nurturing with manipulation to drive things through.

Values, norms and culture. These vary between organisations and can make communication difficult and compromise is needed over differences in employment practices, professional ethics etc.

Accountability. Individuals are accountable both to their own organisation and the collaboration: decision making can be cumbersome if there needs to be continual checks with all the partners.

Collaborations are messy and complex. There are many tensions between and within the themes, which are difficult to resolve. Collaborations do not stand still, but are dynamic. Plans can often be thwarted and result in unintended outcomes (Huxham and Vangen, 2005).

2.5.2.1. Citizen Participation in Local Partnerships

The involvement and participation of local people is a feature which runs through much of UK local government policy. Participation supports both the service improvement and democratic renewal elements of the modernisation agenda

(Lowndes and Sullivan, 2004). User and citizen involvement is also a key feature of many of the centrally driven partnership initiatives which impact on local government, such as New Deal for Communities, action zones and Sure Start.

Public participation occurs at a number of different levels, ranging from receiving information to being a member of a strategic partnership board. Leach and Wingfield (1999) use Arnstein's ladder of participation as a model, ranging initiatives from "tokenism, through information provision and consultation, to shared or delegated power over certain decisions" (p 47). Their study of eleven local authorities found that public participation had increased at all levels of the ladder. Conventional consultation processes were predominant, but the use of more innovative and deliberative processes was growing rapidly. Lowndes and Sullivan (2004) identify six key purposes of citizens' participation within government policy, each of which offers a different level of participation:

- Citizen participation for governance, involvement in partnership boards;
- Community Development;
- User involvement in decision making about services;
- Communication strategies to provide information;
- Community and user involvement in generating evidence and knowledge;
- Citizen empowerment; programmes to build social capital or reduce social exclusion.

Some pitfalls or barriers to citizen participation in partnerships are identified in the literature. Local authority staff may lack the skills to facilitate effective participation. Often staff undertake participation as an additional role outside the central focus of their job. The result of national and local pressure can lead them to organise high-profile, visible, one-off events involving a wide range of actors, which do not allow time for extended and meaningful deliberation (Cowell, 2004). Much of the drive to involve citizens comes from short-term initiatives such as regeneration projects. The temporary nature of these partnership initiatives and the poor links between them may lead to a feeling of consultation overload (Lowndes and Sullivan, 2004) and may limit the investment of time and energy people are willing to give (Pearce

and Mawson, 2003). Building the trust and skills needed for participation takes time, which partnerships often do not have (Lowndes and Sullivan, 2004). Local partnerships made up of a number of different organisations may lack a clear identity with which to attract the involvement of sceptical citizens (Lowndes and Sullivan, 2004).

The participation of community representatives in strategic partnerships raises a number of issues and tensions which are discussed in the literature. Community members are now involved in an array of strategic partnerships including Local Strategic Partnerships and New Deal for Communities. Lowndes and Sullivan (2004) discuss whether local partnerships are a form of “new corporatism”, where “business”, “the community” and “the public sector” sit down together “with cappuccino and croissants perhaps replacing the beer and sandwiches of an earlier era” (p.60). This model of partnership is inclusive of the community who have previously been excluded and aims for a consensus around shared decisions. However, Lowndes and Sullivan identify a number of shortcomings. It may be unclear who, in a diverse community, is represented by community leaders and how they are held to account. Less powerful sub-groups and those who are socially excluded may be marginalised. Despite an appearance of equality, there is an unequal balance of power between community and professional representatives, reflected both in different skill levels and in the resources they bring to the table. A wish to achieve consensus within partnerships may lead to attempts to buy-off or professionalise community representatives (Lowndes and Sullivan, 2004). Public interest in getting involved with strategic partnerships can be fragile and community leaders may lack the capacity to play a full role (Pearce and Mawson, 2003). A long-term commitment from government to build community capacity is needed to make this a success. Participation is often limited to “a small cadre of activists” who may lack the experience to make a forceful contribution (Geddes, 2006 p86).

The growing numbers of organisations involved in the planning and delivery of local services may mitigate against citizen and user involvement. Local government engagement with communities may be ineffective in improving

services in a context where more services are delivered by not-for-profit and private companies (Orr and Mcateer, 2004).

2.5.2.2. Partnerships and Accountability

The involvement of “many hands” in local decision making and service delivery raises important issues of public accountability (Sullivan, 2003). When dealing with a partnership or a service provided by multiple organisations, it may be difficult for citizens to identify where power and accountability lie (Lowndes and Sullivan, 2004).

“In the twenty first century the solution has been to create an overarching local strategic partnership to co-ordinate the activities of the multiplicity of actors, leaving the question of democratic control and legitimacy unanswered” (Skelcher, 2003 p11).

Partnerships covering a sub-region – like those in this study of e-government partnerships – raise even more complex issues than local strategic partnerships, because there are no decision making structures in most urban areas at the sub-regional level. A sub-regional partnership has no direct accountability routes to citizens and could easily become a remote and unaccountable forum of officers. Within LSPs Sullivan (2003) identifies two key challenges relating to accountability: firstly, “to develop mechanisms for accountability that can accommodate the achievements of the whole as well as the parts” and secondly, “to develop and embed ways of working that enhance the capacity to behave responsibly within and beyond organisations” (p 357). She examines the extent to which the modernisation agenda has engaged with these challenges. The overview and scrutiny process offers a potential to enhance accountability, but it is under-resourced and is not backed up by any sanctions. Within LSPs, Sullivan identifies three lines of accountability: vertical accountability upwards to central government; vertical accountability downwards to citizens; and horizontal accountability sideways to partners. There are tensions between these different forms of accountability. Firstly, LSPs agree targets with the government, but the actions to meet those targets will be carried through, not by the LSP as a whole, but by partner organisations, which will have differing accountability mechanisms.

Secondly, for LSPs in receipt of neighbourhood renewal funding, their primary accountability is likely to be to the government. Thirdly, within partnership boards, professionals and elected citizens will be subject to very different forms of accountability (Sullivan, 2003). Beyond LSPs, in the wider context of UK local governance there will be many other layers of accountability, including to European institutions, national parliaments, regional government, neighbourhoods and communities of interest or identity. Governance exists in a “multi-level” environment (Skelcher, 2003; Smith and Sullivan, 2003; Sullivan et al. 2004).

The modernisation agenda has encouraged the primacy of the accountability to the centre by its emphasis on audit and inspection (Cowell and Martin, 2003; Geddes, 2006; Sullivan, 2003). Sullivan suggests that a more balanced form of accountability could be established if local government focussed on the core values which are the key contribution it can bring to local governance: service co-ordination, representation, conduct and standards and public participation. In practice, local government could be made more accountable to local citizens by ensuring LSP plans are subject to public scrutiny, allowing greater local freedom to determine priority outcomes, developing more individual responsibility within partnerships and promotion of a culture of local accountability (Sullivan, 2003). However, central government would be challenged by greater horizontal joining up, and it may be seen as unacceptable if it results in policies which differ from national priorities (Cowell and Martin, 2003). A clearer role for elected councillors in local partnerships would aid accountability (Pearce and Mawson, 2003).

2.5.3. Social Network Studies of Partnerships and Inter-Organisational Alliances.

Borgatti and Foster’s review of network studies in organisational research identifies eight categories of network studies (Borgatti and Foster, 2003):

1. **Social Capital** – Focuses on the value of a person’s ties or network position to significant outcomes such as power, leadership, mobility or employment. Two alternative strands are identified:
 - a. Research equating social capital with a lack of ties among an actor’s alters; suggesting that people or organisations can be in

an advantageous position if they surround themselves with alters who each provide unconnected or separate sources of support and information. e.g. Burt's work on structural holes (Burt, 1982).

- b. Research equating social capital with a dense interconnectedness among group members, suggesting that people or organisations are well-supported and well-informed if they are surrounded by alters between whom there are strong and numerous connections (Putnam, 2000)
2. **Embeddedness** – economic behaviour is embedded in a context of social networks. Embedded ties, i.e. close and exclusive business relationships, are linked to performance benefits.
3. **Organisational Networks** – Inter-organisational networks are viewed as semi-autonomous bodies, relying on trust and social relationships, in contrast to relations based on market forces or hierarchy. The term “network organisation” is used variously by writers to describe: “a logic of governance, a collection of semi-autonomous firms, or an organisation with “new” features” (Borgatti and Foster, 2003 p995).
4. **Board Interlocks** – Explains firm activity by examination of the ties created by a member of one organisation sitting on the board of another.
5. **Joint ventures and inter-firm alliances** – Studies variously explore: the effect of alliances on outcomes such as performance or innovation; what motivates firms to enter into alliances and choose alliance partners; what can be learned from alliance partners.
6. **Knowledge Management** – Explores the effects of social networks on knowledge. Two research threads are identified:
 - a. **Communities of practice**, i.e. knowledge emerges from the interaction of individuals working together;
 - b. **Transactive memory**, i.e. knowledge is distributed in different minds and to share it effectively, individuals need to know who knows what.

7. **Social cognition** – Focuses on the respondent's perception of the entire network they are in, rather than their own individual ties.
8. **Group processes** – Focuses on the relationship between network ties and physical proximity, similarity of beliefs, shared attitudes, and amount of interaction. One example is homophily, the tendency of people to interact more often with others similar to themselves. Within the research literature this can be viewed as both positive (helps transmission of tacit knowledge) and negative (limits access to new ideas and may lead to an us and them mentality).

This study of local e-government partnerships lies primarily within Borgatti and Foster's organisational networks stream, but also explores concepts arising in a number of the other approaches, particularly embeddedness and joint ventures.

The literature included in this review covers a variety of different inter-organisational settings. A number of articles explore inter-firm alliances in a range of industries: the international computer industry (Hagedoorn and Duysters, 2002), the global chemicals industry (Ahuja, 2000), the new materials, industrial automation and automotive products industries (Gulati and Gargiulo, 1999), small and mid-size firms in the north east US (BarNir and Smith, 2002), new product alliances (Rindfleisch and Moorman, 2001) and strategic alliances (Cross et al. 2002; Hutt et al. 2000; Olk and Elvira, 2001). Others explore the spread of knowledge through social networks (Cross et al. 2001), including the adoption of new organisational forms (Lee and Pennings, 2002). Provan and Milward (1995) is the only study in this review to use social network analysis in research with public sector networks: US community mental health partnerships.

Different methodological approaches can be used to examine inter-organisational social networks. Work ranges from studies which are very mathematical to others which are more descriptive and qualitative. Of the articles examined for this review, over half use variable statistical analysis on medium to large data-sets. Most of the others adopt a case study design.

Variable analysis

Within the quantitative stream of research, there are two general approaches to examining inter-organisational networks. One response has been to restrict

research to ego-centric networks, using postal questionnaires to collect data from a random sample of organisations (BarNir and Smith, 2002; Rindfleisch and Moorman, 2001). These studies collect data on the ego networks of each organisation and compare the number and strength of their ties with those of other organisations. No information is gathered on the relationship ties between the different organisations in the sample. The interest is in comparing the networking of different organisations rather than examining their relationships with each other. This approach does not use social network analysis, although it makes extensive use of social network concepts such as embeddedness, propensity to network, network prestige and strength of tie.

The second approach has been to examine networks between organisations in a specified industry, using information gathered from industry and university data banks, business print media and government publications (Ahuja, 2000; Gulati and Gargiulo, 1999; Hagedoorn and Duysters, 2002; Lee and Pennings, 2002). Information is gathered on the alliances between all firms in the sector, or more usually, all leading or significant firms in the sector. These studies combine social network analysis with variable analysis. They may use social network analysis to examine the structure of the industry; for example, Gulati and Gargiulo (1999) use social network analysis to identify that within each sector they examine, there is a core-periphery structure. An approach common to all of them is the use of social network analysis to calculate network variables, which are then used as independent variables for statistical analysis. Network variables used in this way include the centrality of the firm in an industry network (Ahuja, 2000; Gulati and Gargiulo, 1999; Hagedoorn and Duysters, 2002) and number of ties (Hagedoorn and Duysters, 2002; Lee and Pennings, 2002). These network measures are used alongside attribute variables (size, resources, geographical proximity) in variable analysis models to identify factors affecting alliance related outcomes. These outcomes include: whether an alliance is formed (Gulati and Gargiulo, 1999), technological performance (Hagedoorn and Duysters, 2002), number of new alliances (Ahuja, 2000) and adoption of a new form of organisation (Lee and Pennings, 2002). Some of these studies include a longitudinal element, showing

how inter-firm alliances have changed over time (Ahuja, 2000; Gulati and Gargiulo, 1999).

Case Studies

Social Network Analysis has been used effectively to examine data collected during case study research (Cross et al. 2002; Cross et al. 2001; Hutt et al. 2000; Provan and Milward, 1995). It can “provide a vivid and comprehensive portrait of the intricate web of relationships that forms in a working alliance and ... examine the flow of communications within and across the partnering organisations” (Hutt et al. 2000 p52). Hutt et al studied the network of relationships between two US firms that formed a strategic alliance to develop a co-branded product (Hutt et al. 2000). The study focussed on the relationships between individuals. Eighteen managers were initially interviewed to identify the key issues and the people involved. This was followed by a postal survey of the “primary alliance participants” and a personal interview with each.

Provan and Milward’s research on the community mental health systems in four US cities is very interesting and raises some potentially important issues for this research (Provan and Milward, 1995). The four cities were selected because two were high spenders on mental health services and two were low spenders. Data was gathered from each agency by a postal questionnaire, followed by an in-depth interview. A lot of follow up was done to elicit a very high response rate. The questions focussed on service delivery rather than friendship ties or broader organisational links, with the aim of examining the “service implementation network” rather than the friendship network or broader organisational network. Linkages were validated in two ways: both by interviewing two representatives from each firm together, usually a service professional and a manager, and by requiring linkages to be mentioned by both sides before being reported. The study included a measure of network effectiveness for each of the four cities, which resulted from interviews with a random sample of clients, families and support workers. Factor analysis was used to develop satisfaction scores. Provan and Milward compared the output from their social network analysis on network integration with the satisfaction scores to examine the relationship between the integration of mental health partners and service effectiveness.

A preliminary model of network effectiveness is outlined in the paper, including concepts of “network integration”, “external control”, “system stability” and “resource munificence” (Figure 2).

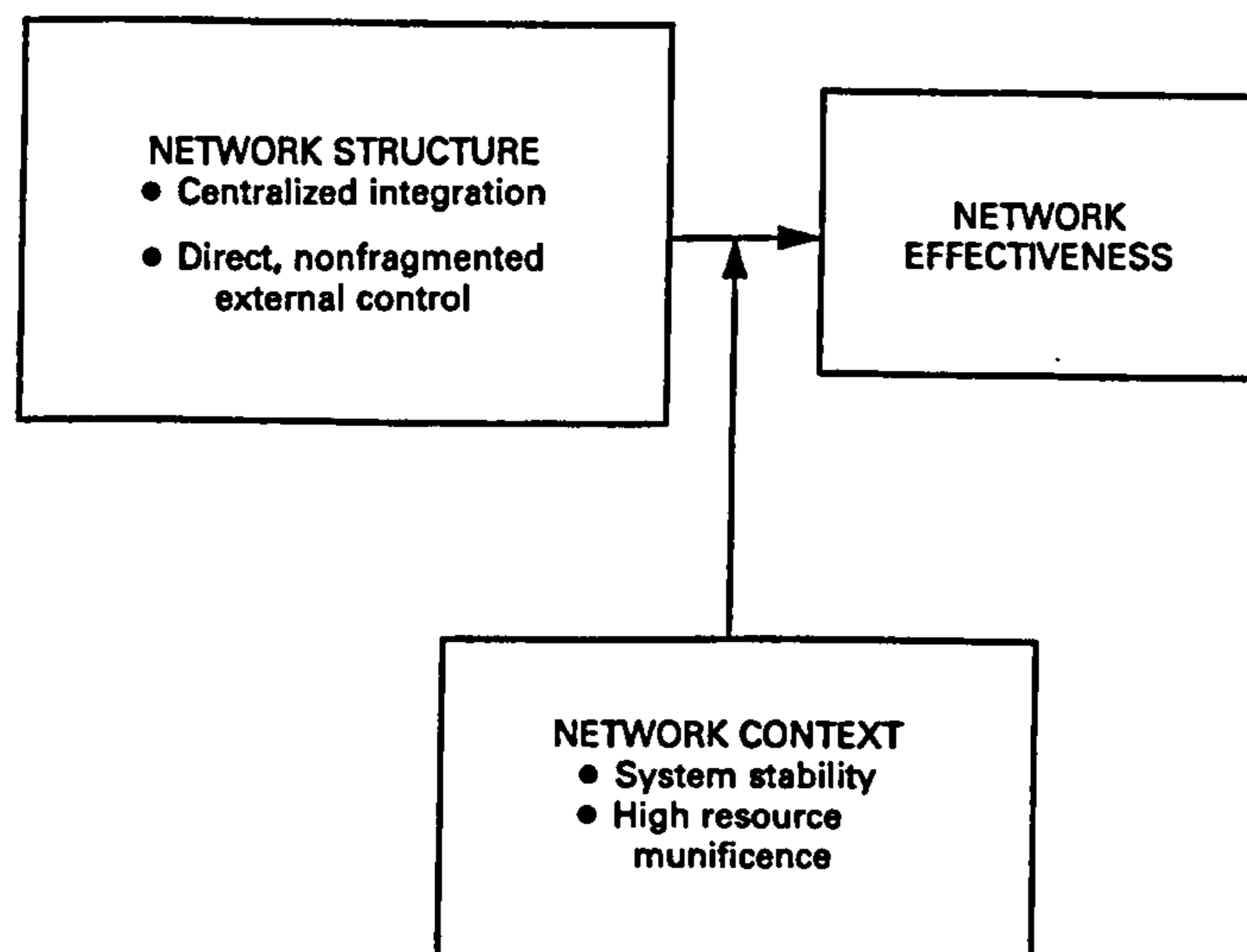


Figure 2 A Preliminary Model of Network Effectiveness
(Provan and Milward, 1995 p24)

Cross et al (2001) undertook social network analysis case studies in a number of firms, examining the role of informal social networks in the flow of information across the firm. Their intention in each case study is to make hidden networks of knowledge creation and sharing more visible, so organisations can take action to change and improve their internal collaborative relationships. Cross et al (2002) use examples from a number of case studies to demonstrate the usefulness of social network analysis as a diagnostic tool. In each case study, network diagrams have been presented to group members to identify issues, define solutions and gain agreement on actions for improvement. “One of the most powerful ways to apply SNA as a diagnostic tool and a catalyst for change is to put people’s names on a network diagram and make the diagram available to all group members as a basis for dialogue” (Cross et al. 2002 p28). The article identifies the use of social network analysis as a diagnostic tool to be particularly useful in: promoting collaboration between strategically important groups; supporting collaboration across boundaries; and ensuring integration after restructuring.

Network Antecedents and Outcomes

A number of studies examine the antecedents of networks; the organisational factors affecting the formation of networks. All of these focus on the formation of strategic alliances between firms. When entering into a strategic alliance firms rely on information from their network in deciding who to ally with. Firms choosing an alliance are strongly influenced by interdependence – the need to co-operate to procure resources and reduce uncertainty – so they build ties with organisations that have complimentary resources and capabilities, but the decision on *who* they make alliances with is influenced by network factors. These network factors include the number of prior alliances between them, the extent to which they share ties with others and the position of the potential partner in the network: firms tend to make alliances with others in a similar position in terms of centrality (Gulati and Gargiulo, 1999). Similarly, firms who are more central in an industry are more likely to make alliances (Ahuja, 2000). The number of alliances a firm enters into is influenced by the personal inclination of senior executives to maintain social contacts, the strength of their ties to others and the prestige of persons in the executive's personal network (BarNir and Smith, 2002).

In contrast to these studies which focus on the organisational characteristics which explain network involvement, Provan and Milward (1995) – uniquely in this review – examine network outcomes. They focus on the effectiveness of the whole network and seek to identify the likely factors which contribute to that effectiveness.

2.5.4. Public Sector Partnerships: Conclusions and implications for empirical research

Network governance theory offers a useful framework to consider current approaches to governance and sets a context for the study of local partnerships.

Research exploring the internal dynamics of partnership working indicates the importance of individuals to the activities and success of partnerships. The activities, influence and legitimacy of the partnership will be affected by the standing and activity of not just the partnership leaders, but also by other local leading figures and “brokers” (Painter and Clarence, 2001), funders and government bodies (Cowell and Martin, 2003; Huxham and Vangen, 2005; Raco,

2002). Partnerships need leaders within who will drive things forward using both encouragement and manipulation (Huxham and Vangen, 2005). Partnership success and activity will also be influenced by the seniority of the individual representatives and their capacity to commit to decisions on behalf of their organisation. Staff working on partnership projects bring with them their own social networks or contacts, which can influence the introduction and implementation of policy (Raco, 2002). Local government ICT staff share a set of underlying values or cultural capital which sees the role of ICT in organisations as to improve service delivery and provide management information (Pratchett, 1999). Collaborations are messy, complex and dynamic, facing a web of different themes which are difficult to resolve (Huxham and Vangen, 2005). The impact of these issues on local partnerships will be explored in the empirical study.

In relation to citizen participation, local e-government has the potential benefit of raising participation levels in society, by improving access to local decision making and services, but it also brings a potential danger of raising a digital divide between those with access to new technology and those without. Social network analysis of e-government partnerships can identify the extent of any citizen participation in e-government and examine whether their participation is as users, consumers or citizens.

The involvement of “many hands” in local decision making and service delivery raises important issues of public accountability (Sullivan, 2003). It can be hard for citizens to see exactly where power and responsibility lie (Lowndes and Sullivan, 2004). The reviewed literature on public partnerships focuses on local partnerships: local strategic partnerships, action zones and regeneration areas. Sub-regional partnerships potentially raise even more complex issues of accountability because, since the abolition of the metropolitan councils in the 1980s there is no decision making structure (outside London) in most urban areas at sub-regional level. The accountability of partnerships to government, other public bodies and citizens will be explored.

Social network analysis is a useful tool for exploring partnerships and the case study approaches (Cross et al. 2002; Hutt et al. 2000; Provan and Milward, 1995) combining social network analysis with qualitative research seems particularly

appropriate for this study. Few network studies examine the factors contributing to effective network outcomes. The exception is Provan and Milward's study identifying network factors which influence the outcomes of mental health partnerships: this approach will be explored further in the current research study. No examples of social network analysis being used to explore the relationships within local e-government projects have been found to date. A review of public sector articles in the British Journal of Management found only two articles on local government and identified inter-agency and interorganizational working as an important area for future study (Ferlie et al. 2003).

2.6. Dissemination of Best Practice

2.6.1. Evidence-based Policy and Practice

The requirement for policy and practice to be based on evidence of what works is becoming a growing feature in both government and academic circles. This emphasis on what works is driven in part “as a response to the poor utilisation of academic research in practice” (Leseure et al. 2004a p13), but also by government policies which require that public organisations implement best practice both in their service delivery and their methods of organisation. “Finding out ‘what works’ has once more become part of the mission of government” (Boaz et al. 2002 p1). A focus on identifying and spreading best practice is evident in a number of initiatives relating to local governance including health and education action zones, New Deal for Communities, public service agreements and beacon councils. Running through all of these is a requirement to identify effective approaches to service delivery and then spread the ideas throughout the local authority and to other councils. The local e-government strategy is being driven forward by national projects developing key electronic services and building blocks; pathfinder projects developing new ways of implementing e-government; partnerships to develop joined up solutions and build local capacity; and e-innovations to drive forward cutting edge projects. A key element of all these initiatives is the identification of best practice relating to local e-government and dissemination to other local authorities (ODPM, 2003). “Best practice is a relevant example that yields better results than any known alternative” (Szulanski, 2003 p11).

2.6.2. Diffusion of Innovations

Research into the adoption of e-government by local authorities can learn a great deal from the academic literature on the diffusion of innovations, which examines the factors contributing to the spread of best practice and identifies the characteristics which impact on whether and when an organisation introduces new ideas. The diffusion of innovation literature suggests a number of points relating to the adoption of best practices by organisations which will be explored during this study. An innovation is “an idea, practice, or other perceived as new by an

individual or other unit of adoption” (Rogers, 2003 p35). “Diffusion is the process by which an innovation is communicated to and adopted (or rejected) by members of a social system” (Nutley and Davies, 2000 p36). The stages of the diffusion process can be summarised as:

Agenda-setting: identifying the need or problem and searching for possible solutions;

Matching: determining the suitability of an identified innovation as a solution;

Redefining/restructuring: revising the innovation or the organisational structure to ensure a close fit;

Clarifying: ensuring the new idea is understood and accepted;

Routinising: embedding the innovation in the organisation, so it loses its separate identity (Rogers, 2003 p422-432).

In management research innovations are sometimes classified by type, e.g. “product”, “process” and “administrative” innovations (Burgess et al. 2005). In public services it can be difficult to distinguish between products and processes, so an alternative typology, distinguishing between new/existing services and new/existing customers, is useful (Table 8).

Table 8 A Typology of Evidence-Based Innovations
(Nutley and Davies, 2000 p36)

Innovation Types	Description	Examples
Developmental Innovations	Existing services to an existing user group are modified or improved	The introduction of new classes of drugs for existing patients with chronic diseases such as gastric ulcers, depression or hypertension
Expansionary Innovations	Existing services are offered to new user groups	The provision of contraceptive services to young people to reduce teenage pregnancies
Evolutionary Innovations	New services are provided to existing users	“What works” research in probation has led to the development of new supervision programmes for existing offender groups
Total Innovations	New services are provided to new groups	Repeat victimisation research led to new services being offered by the police to a new client group (victims)

The diffusion of innovations typically follows an S shaped curve: a small minority of “innovators” take on the innovation, followed by larger numbers of “early adopters”, then the “early majority”, followed by the “late majority”, with a few “laggards” being the last to adopt (Rogers, 2003 p273). This S shaped diffusion has been found to apply to the adoption of city structures (e.g. mayors or council managers) by US local government (Frederickson et al. 2004).

The process of diffusion lies on a continuum from very centralised to very decentralised (Rogers, 2003). In a public sector context this continuum can be interpreted as ranging from a top-down government initiative to bottom-up peer learning. A centralised system provides quality control and can diffuse innovations for which there is as yet no felt need, but it may face user resistance and not be adapted to local circumstances. A decentralised system is likely to be perceived well by users and be adapted better for local circumstances, but there is a lack of quality control and a dependence on users being able to find appropriate innovations (Nutley and Davies, 2000). The process of UK e-government diffusion appears to combine a centralised and decentralised approach, with priority outcomes being set and monitored centrally and funding being provided to national projects and e-innovations to develop options; but with local flexibility on which options to adopt to achieve the required outcomes (Pratchett and Leach, 2004).

The diffusion of innovations is not always positive and beneficial and the process is not always rational: adoption may be a response to the latest fad rather than evidence-based or it may be driven by the need to seek legitimacy (Nutley and Davies, 2000). A study of policy transfer between British urban regeneration partnerships presents an interesting picture of an unexpected role for central government: it found that an important motive for learning about the activities of other partnerships is to see what the government is likely to fund. While regeneration managers go to local and regional neighbours to pick up on activity they can see works, they are also seeing what competition they are facing which the same regional office of the national government will be looking at (Wolman and Page, 2002).

Knowledge about good practice is “sticky”, in the sense that it is hard to pass on, but also that the transfer process is awkward, stubborn and unpleasant (Szulanski,

2003 p13). Predictors of how “sticky” knowledge will be adopted include the “absorptive capacity” of the recipient (skills, prior knowledge, relevant experience, awareness of complimentary expertise); “causal ambiguity” (not understanding fully what the best practise can do); “arduous relationship” (strength of tie); and “recipient motivation” (Szulanski, 2003).

The factors which can affect the adoption of an innovation and some examples from the reviewed literature are included in Table 9.

Table 9 Factors Affecting the Likelihood of Adoption

Factors Affecting the Likelihood of Adoption (Nutley and Davies, 2000 p38)	Examples from the reviewed literature
Adopter Characteristics	<p>Local councils that are better resourced, have strong managerial leadership and are responsive to users are more likely to value management reform; councils that value management reform and are better resourced are more likely to take action to implement it (Walker and Enticott, 2004).</p> <p>Geographical Information Systems are more likely to be adopted by: individuals with compatible computer experience who have had exposure to the technology; and organisations where there is senior level support and an absence of conflict and instability (Nedovicbudic and Godschalk, 1996).</p> <p>Lasting change in public organisations requires: political and managerial leadership, transformed relationships with other stakeholders, a “culture of innovation”, and an awareness that each council has a distinctive history and culture (Rashman and Hartley, 2002)</p>
Social Network	<p>Local councils that are involved in professional networks are more likely to value management reform (Walker and Enticott, 2004).</p> <p>Geographical Information Systems are more likely to be adopted by individuals engaged in active networking (Nedovicbudic and Godschalk, 1996).</p> <p>County councils are more likely to adopt a county impact fee (requiring developers to contribute to infrastructure costs) if cities in the county have already adopted (Benton and Daly, 1996)</p>
Innovation Attributes	<p>Geographical Information Systems are more likely to be adopted by individuals who perceive a relative advantage (Nedovicbudic and Godschalk, 1996).</p> <p>It is difficult for producers and users of information about innovations to assess its validity (Wolman and Page, 2002)</p>

<p>Environmental Characteristics</p>	<p>Local councils with a high level of deprivation are more likely to value and introduce management reform (Walker and Enticott, 2004).</p> <p>Geographical Information Systems are more likely to be adopted by local authorities with a large population size and where external funding is provided (Nedovicbudic and Godschalk, 1996).</p> <p>County councils are more likely to adopt a county impact fee if population change is high (so lots of new building), it is election year (so other taxes are unpopular), and per capita income is high (Benton and Daly, 1996).</p>
<p>The character of those promoting the adoption</p>	<p>Directors of regeneration partnerships seeking information on urban regeneration policy find contact with peers a trustworthy source and formal mechanisms less useful. Local and regional neighbours are the most usual source. Those who disseminate information frequently shape it to support their own objectives (Wolman and Page, 2002).</p> <p>Local councils are more likely to take action on management reform if required to do so by government policy (Walker and Enticott, 2004).</p> <p>Geographical Information Systems are more likely to be adopted if there is a state government mandate to do so (Nedovicbudic and Godschalk, 1996).</p> <p>Similarity of geography and political organisation encourages learning between councils (Rashman and Hartley, 2002)</p> <p>US state government innovators are more influenced by informal contacts with their professional peers, interest groups and citizens and less by formal contact with legislators, professional associations and other parts of government.</p>

Not all the findings in Table 9 will necessarily apply to the diffusion of e-government. But, from the information in the table, it might be expected that the adoption of e-government will be aided in councils that have technically competent staff, exposure to appropriate solutions and support from managers and politicians. Active networking will be beneficial, particularly informal networking with peers, including local and regional neighbours and those in similar councils. The relative benefits of adoption need to be clear to participants. Councils with a large population size are more likely to adopt, perhaps because they have more financial and staff resources and greater spare capacity. Government policy and additional funding will help encourage adoption.

2.6.3. Organisational Learning

A number of studies focus on organisational learning, emphasizing that change is a *process of learning* about new ideas (Nutley and Davies, 2000; Rashman and Hartley, 2002; Wolman and Page, 2002). Wolman uses the term “policy transfer” in preference to “policy diffusion” to emphasise that it is a learning process to acquire and use knowledge about policies used by governments elsewhere (Wolman and Page, 2002 p478).

Rogers (2003) identified a number of factors which affect organisational innovativeness. Centralisation is “the degree to which power and control in a system are concentrated in the hands of relatively few individuals” and it is associated with a lack of innovativeness. Interconnectedness is “the degree to which the units in a social system are linked by interpersonal networks”. This study is interested in two aspects of interconnectedness; the extent to which the organisations working in e-government partnerships are interconnected and the extent to which those attending the partnership are interconnected with other departments in their organisation (Rogers, 2003 p412).

Researchers have consistently identified size as an important predictor of organisational innovativeness. For example, the review of e-government literature in this paper has already identified that larger governments are more likely to have implemented advanced forms of e-government, such as on-line transactions and payments for services. “The finding that larger size is related to organizational innovativeness might seem surprising, given the conventional business wisdom that smaller companies can be more flexible in their operations and freer of stifling bureaucracy” (Rogers, 2003 p410). Rogers suggests that size acts as a surrogate for a combination of other characteristics or “lurking variables” such as the availability of slack resources, technical expertise and structural characteristics, which have received less attention or study.

There are a number of enablers and barriers to organisational learning between councils. A study of learning through the Beacon council scheme (see section 2.3.2.1 in this chapter for more details on the Beacon scheme) found that councils actively seek out others with similar geographical and political characteristics who they anticipate will have a common perspective and comparable conditions. District

councils are particularly concerned to seek out other districts. Having a clear framework for learning and an understanding of how learning will contribute to corporate goals is important. Barriers to learning include “initiative fatigue”, particularly for district councils and prioritisation of resources. Capacity and competence may be an issue for under-performing councils. Lack of political support from councillors is a particular concern because the Beacon scheme is seen as mainly a managerial concern with service improvement. There is a tension between the competitive process to choose Beacon councils and the expectation that it will result in collaborative learning (Rashman and Hartley, 2002). Both producers of information and those who receive it may lack the means or ability to assess its validity and may not even recognise validity as an important issue (Wolman and Page, 2002).

Organisational learning can be facilitated or impeded by the structures, processes and cultures of organisations (Nutley and Davies, 2000): teams and workgroups help, as do distributed leadership styles (Rashman and Hartley, 2002). Incentives to learn and access to up-to-date information are important. Networking is helpful and research and development departments play an important role (Nutley and Davies, 2000). Encouraging the adoption of these features which encourage organisational learning might enable organisations to respond better to evidence of best practice (Nutley and Davies, 2000). In a study of the flow of knowledge within organisations, four features were found to characterise effective relationships for the exchange of knowledge: knowing what another person knows; having timely access to them; the willingness of the person to engage in the problem rather than just dump information; and a degree of safety in the relationship (Cross et al. 2001).

There is a distinction between explicit knowledge which can be transmitted through formal language and tacit knowledge which is transmitted through shared experience and practical action: these different learning styles need to be taken account of in attempts to transfer knowledge between organisations (Rashman and Hartley, 2002). There can be a gap between people’s belief in the need to learn from others and their actual practice in taking action to adopt. A majority of regeneration partnerships regard learning from other partnerships as important, but

only a small minority say they use it as a significant part of their decision making (Wolman and Page, 2002). There is a tension between managerial “values” and “actions” (Walker and Enticott, 2004).

People with different roles in an organisation may have different attitudes to organisational learning. A study of UK local councils found that service managers were influenced by a wider range of factors than more senior managers when considering the adoption of new management reforms, so it makes sense to conduct research with a range of people (Walker and Enticott, 2004). Different systems and methods of knowledge transfer may be needed for policy makers, political leaders and managers (Rashman and Hartley, 2002).

An emphasis on organisational learning allows for local invention and experimentation, which may be impeded by a more centralised top-down model:

“An approach that casts the practitioner as problem solver ... may be better suited to the development of organisational learning than the top down implementation of detailed guidelines and protocols” (Nutley and Davies, 2000 p40).

The diffusion of innovation literature stresses the importance of *innovation champions* who throw their weight behind an innovation and drive it forward. They are unlikely to be the most innovative person in the social system (who is sometimes distrusted by others for being eccentric) and they may not necessarily be particularly senior, but they occupy a linking role between people, understand the aspirations of others and have suitable interpersonal and negotiating skills. Another key role is the *opinion leader*, an informal leader who can influence the attitudes and behaviour of others in the social system. Opinion leaders are competent, accessible to others and conform to system norms, so they are able to bring people with them. They sit at the centre of the group’s communication network and act as a social model. They will not always accept innovation, but if they do, others will follow (Rogers, 2003).

2.6.4. Dissemination of Best Practice – Conclusions and Implications for Empirical Study

Local e-government partnerships are intended to ensure joined-up service delivery at a local level, efficiencies and economies of scale and rapid roll-out from national projects (ODPM, 2004b p6; ODPM, 2005b p17). Their ability to achieve this will be affected by their adoption of new technologies, new approaches to service delivery and new ways of working together.

Looking at the factors affecting adoption in Table 9, the national e-government strategy incorporates a number of elements which should aid councils in adopting e-government:

- The web-based material and the showcase events for the national projects may help ensure that staff have exposure to relevant technologies. They may also offer some validity for their products, although it is unclear whether this is widely felt.
- The allowance for local flexibility in achieving the priority outcomes allows for the distinctive character of each council and may encourage suitable adaptation, but the centralised elements may lead to user resistance.
- The local e-government partnerships can act as a forum for formal and informal networking with peers in neighbouring authorities, which, from the review is the preferred method.
- The e-government strategy is backed by government policy and funding, which is likely to encourage adoption.

The reviewed literature suggests that adoption of best practice in e-government may be affected by local factors including population size, resources, extent of leadership support, technological experience and socio-economic profile.

E-government partnerships may aid learning between organisations about e-government solutions, helping each other assess the validity of the alternative solutions on offer. They may also contribute to learning about the process of partnership working.

2.7. Social Network Analysis

The systematic literature review focuses on two areas of social network analysis. Firstly, how social network analysis has been used to undertake research into relationships between organisations, including partnerships, alliances and joint ventures. This has already been described in section 2.5 on partnerships. The second area is the theory and method of social network analysis in social research and the key concepts that are adopted, which are addressed in this section. There are close links between the social network literature and the diffusion of innovation literature, in terms of the concepts and approaches used. For example, Rogers is a leading author inspiring both the social network and the diffusion of innovation fields of study.

2.7.1. Social Network Analysis: Theory and Method

Social network analysis is used to explore relational data. It focuses on a set of actors and the relations between them. It can be used to analyse data from a range of sources including surveys, documents, interviews or participant observation. The origins of social network analysis lie in work done by psychologists and anthropologists in the 1930s and 1940s using sociograms to explore ties of friendship, community and kinship. A sociogram is a map in which nodes representing individuals or organisations are connected by edges representing their relationships with one another. A team from Harvard University (Granovetter, Lee and others) introduced mathematical concepts, primarily graph theory, to allow statistical analysis of network structure. Social network analysis has been used in a number of disciplines including sociology, health, psychology and management.

The process of social network analysis is described in some detail by Scott (2000) and Wasserman and Faust (1994). Relational data is organised in matrices, indicating the relationships between each of the cases. Many of the conventions of variable analysis apply, but there are some important differences. The levels of measurement are directed/undirected and binary/valued rather than nominal, ordinal or interval. Relationships are always shown in the matrix as from the row to the column, so a directed matrix will be asymmetrical across its diagonal, allowing exploration of non-reciprocal relationships.

A directed, binary relationship, e.g. showing whether one organisation has provided advice to another:

Table 10 A Directed, Binary Relationship, e.g. Showing Whether One Organisation has Provided Advice to Another

	Esso	Mobil	Adoil	Oil Co.
Esso	0	1	1	0
Mobil	1	0	1	0
Adoil	0	0	0	0
Oil Co.	0	0	0	0

An undirected valued relationship e.g. showing the level of communication between friends:

Table 11 An Undirected Valued Relationship e.g. Showing the Level of Communication Between Friends

	Peter	Liz	Tony	Ahmed	Lee
Peter	0	4	1	0	0
Liz	4	0	4	0	0
Tony	1	4	0	0	2
Ahmed	0	0	0	0	3
Lee	0	0	2	3	0

Data can be collected on the attributes of the actors, such as age, organisational affiliation, ethnicity, and stored in an attribute matrix.

A number of key concepts which lie at the heart of the social network approach will be important to this study:

Actor An actor is a social entity. Within the reviewed literature, actors are variously *individuals* involved in building a strategic alliance (Hutt et al. 2000), *organisations* working together to deliver health services (Provan and Milward, 1995) or *firms* within an industrial sector (Gulati and Gargiulo, 1999). For this study, actors could be either the individuals involved in local e-government partnerships or the organisations involved. It has been decided that the actors will be individuals, because this allows for the study of relations within organisations as well as between them and it avoids the difficulty of ensuring an accurate representative voice for each organisation.

Relation A relational tie is a linkage between a pair of actors. A relation is the collection of ties of a specific kind among members of a group (Wasserman and Faust, 1994 p20). There are many possible types of relation. Examples from the reviewed literature include communication and friendship (Hutt et al. 2000), referrals of clients and contractual arrangements between agencies (Provan and Milward, 1995), communication, information-seeking, problem solving and knowledge of another's skills (Cross et al. 2002).

Social Network A social network is a set of actors and the relations between them. For this study, the social network consists of individuals from all of the organisations involved in a local e-government partnership. The relationships explored in the study are those directly concerned with e-government, rather than friendship or other work relations. For example, participants were asked "How often do you typically communicate with the following people *about e-government*".

Sampling Strategies

There are three possible sampling strategies in social network analysis. Firstly, some focus on ego networks, identifying an individual and asking about the actors and ties in that individual's social network. The research taking this approach typically compares the ego networks of a number of actors to identify the consequences of network ties for alliance formation (BarNir and Smith, 2002; Rindfleisch and Moorman, 2001) or the factors affecting knowledge acquisition (Cross et al. 2001). Secondly, there is snowball sampling, where initial informants are asked to list those in their social network and then those named are asked for further contacts and so on until a complete network is built. There are no examples of this being used as a primary sampling method in the reviewed literature. Thirdly, the most prevalent approach is positional sampling, the selection of actors by whether they belong to a specific structure or organisation of interest. They can be identified by talking to key informants (Hutt et al. 2000) or using an existing dataset (Ahuja, 2000; Gulati and Gargiulo, 1999; Hagedoorn and Duysters, 2002; Lee and Pennings, 2002). Provan and Milward (1995) use an interesting combination of positional and snowball sampling: using key informants to identify a list of actors and then contacting those on the list to ask for any additional actors.

This combined approach will be used in this study to identify a list of those involved in e-government partnerships.

Centrality Centrality is a measure of a person's position within the network, the extent to which they are more or less a central player. There are several different measures of centrality, and their suitability depends on the nature of the network relation under examination and the type of data being explored (Table 12).

Table 12 Centrality Measures in Social Networks

Centrality Measure	Description	Data requirements
Degree Centrality	Measures the number of relationship ties each actor has. An actor with a high level of degree centrality is "where the action is" (Wasserman and Faust, 1994). A useful measure of power and leadership.	Suitable for both valued and binary data; directed and undirected
Closeness Centrality	Measures the distance each actor is from all others. Actors with high closeness centrality can quickly interact with others.	Suitable for both valued and binary data; directed and undirected
Betweenness	Measures how often an actor lies along the shortest path between two other actors. A useful measure of the potential for an actor to be a gatekeeper, controlling the flow of information.	Suitable for both valued and binary data but cannot be used on directed data.
Eigenvector	Similar to degree in that it measures the number of relationship ties each actor has, but is more sophisticated in that it also takes into account how well-connected each of those actors are. Useful for measuring popularity or power.	Suitable for both valued and binary data but cannot be used on directed data.

Table compiled from information in Wasserman and Faust 1994

For a full review of centrality in social networks see Freeman 1979. Degree centrality was chosen as a suitable measure of centrality in this network study. It measures the number of relationship ties each actor has. An actor with a high level of degree centrality is "where the action is" (Wasserman and Faust, 1994 p179). It can be a useful measure of power and leadership. Cross et al. (2002) stress the importance of interpreting centrality. Often people are central for legitimate reasons such as workflow demands or unique expertise. Alternatively, a person may be very central because they are overburdened by work or tend to hoard information.

Prestige is a centrality measure suitable for use with directed data; it measures actor in-degree, the number of in-coming ties and organisation has to others. An actor with high prestige is approached by many others in its network (Wasserman and Faust, 1994 p174-175). Group prestige is a measure of how variable or heterogeneous the actor prestige scores are.

$$\text{Group prestige} = \frac{\text{sum of the differences between the prestige of most central actor and other actors}}{\text{sum of the maximum possible number of differences between the prestige of the most central actor and other actors}}$$

Group prestige is a largely untested measure (Wasserman and Faust, 1994 p202).

Density Density is a measure of how close-knit or cohesive a network is. It measures the number of relational ties as a fraction of the total number of possible ties. The density of a social network takes a value between 0 and 1, with 0 indicating no relationship ties between the actors and 1 indicating a completely linked network. Density values are difficult to interpret; larger networks will have lower density than smaller ones, with the same number of relationship ties. It can be most useful when comparing very similar populations. The sole example from the literature is the calculation of density scores for networks of mental health service providers across four similar cities, to compare their cohesiveness (Provan and Milward, 1995). Density could be a useful measure of the cohesiveness of the sub-regional e-government partnerships within this study.

Boundary Spanners In their study of an alliance between two firms, Hutt et al (2000) identified those who were "in the know" (p56). These are the boundary spanners, those with close ties both within their own firm and to those involved in the alliance (Figure 3). A study of boundary spanners involved in a range of local partnerships in the UK identified a number of skills, abilities and characteristics required to fulfil the role (Williams, 2002). Boundary spanners need the ability to build sustainable relationships, including communication skills, conflict resolution, an easy and inviting personality and being trustworthy. They manage through influence and negotiation, using persuasion and diplomacy. They have the experience, knowledge and understanding to manage complexity. They have a clear understanding of the various roles, accountabilities and motivations of others in the partnerships.

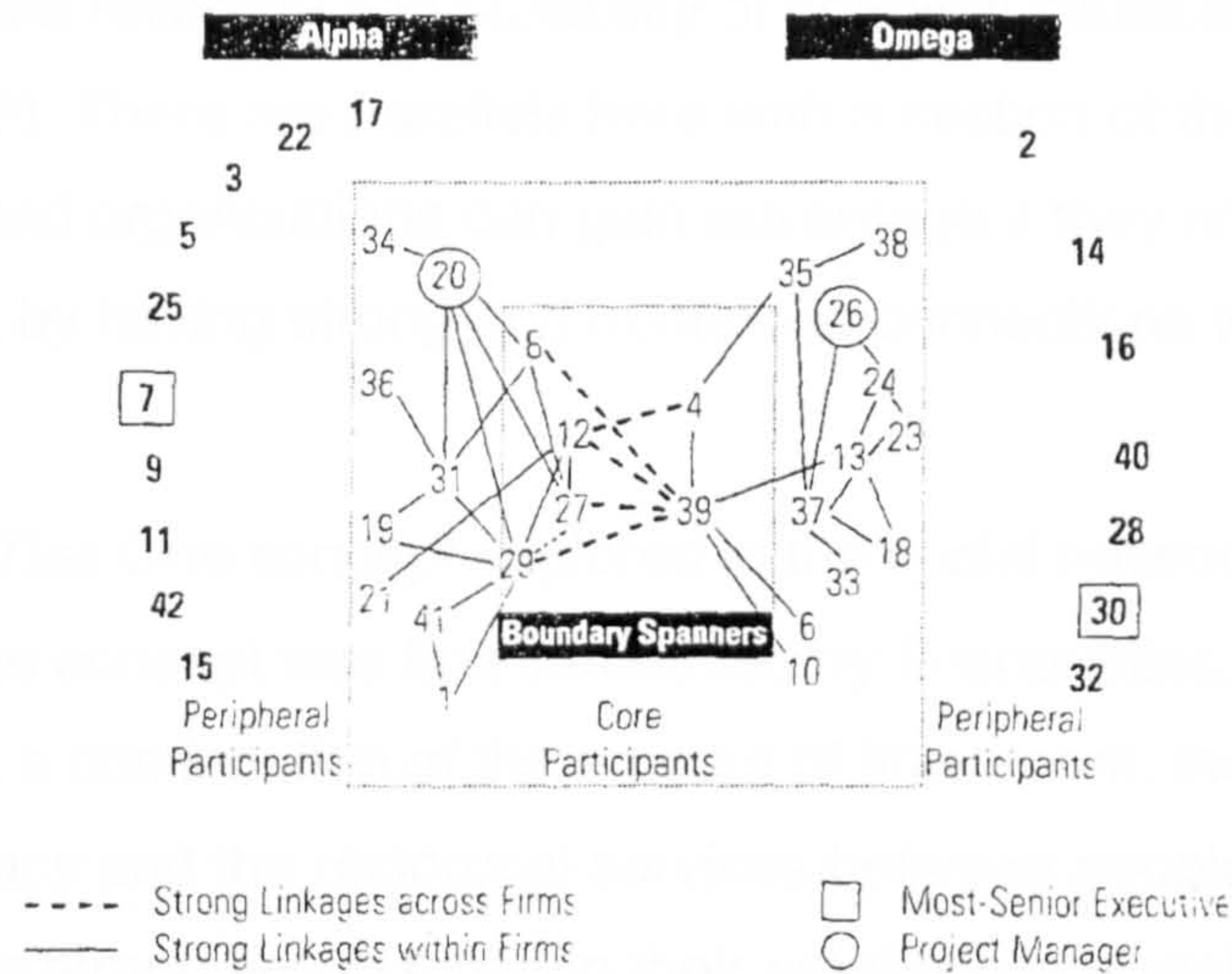


Figure 3 Social Connections in an Alliance
(Hutt et al. 2000 p56)

Embeddedness A common thread running through the literature on inter-organisational ties is the idea that economic action is embedded in social networks. “Beneath the formalities of contractual arrangements, multiple informal interpersonal relationships emerge across organizational boundaries, which facilitates the active exchange of information and the production of trust that foster interorganizational cooperation” (Gulati and Gargiulo, 1999 p1445). Embeddedness acts as a theoretical framework for some inter-organizational studies. “Economic activity cannot be analyzed without consideration of the social context in which it occurs” (BarNir and Smith, 2002 p220). The concept of embeddedness was developed by Granovetter and is now a key concept of social network analysis (Granovetter, 1985). Most people working within organisations are embedded in a varied social network. Within local government, for example, one individual can build up a rich social network by having worked for a number of different local authorities, perhaps having worked for another public body or a private firm, being involved in local, sub-regional or regional partnerships, joining a trade union and/or a profession association, plus relationships outside work including friendships and membership of community organisations or clubs. When deciding who to trust, people rely on their own past experience of interacting with a person, or they take recommendations from others who they know well. Research suggests that managers rely on their social network to find *trustworthy* and *timely*

information about the reliability and suitability of potential alliance partners (Gulati and Gargiulo, 1999). There are parallels here with a section of the social capital literature: people and organisations can gain advantage if they are well-supported and well-informed, by having strong and numerous connections with others (Putnam, 2000).

Strength of Weak Ties One concept explored in the social network literature is the strength of ties. The concept was first introduced by Granovetter, who defined the strength of a tie as a combination of the amount of time spent, the emotional intensity, the intimacy and the reciprocal services between people (Granovetter, 1973). People have strong ties to those in their established social group - homophilous ties - and generally people in that group all have strong ties between them. But people also have weak ties, ties to people outside their social circle, people with different perspectives, heterophilous ties. Granovetter's study of how people find out about new jobs discovered that information about new job opportunities more often comes through weak ties: weak ties can provide new unknown sources of information, unlike the strong ties which tend to be with people who are homophilous and have access to very similar information to one another. He introduced the concept of "the strength of weak ties", emphasizing that weak ties play an important role in linking social groups and can contribute to cohesion in society. A number of studies have found that people tend to find new and innovative opportunities via weak ties to people who are different rather than via strong ties to people like them (Gulati and Gargiulo, 1999; Rindfleisch and Moorman, 2001; Rogers, 2003). Perhaps an effective local partnership needs to include these weak ties between a range of people with different perspectives, rather than being confined to a group of like minded people with strong ties between them.

2.7.2. Social Network Analysis: Conclusions and Implications for the Empirical Research

Social network analysis is potentially a useful methodology for research into local e-government partnerships. Sociograms are an effective way of presenting complex relational data which could not so easily be conveyed textually or verbally, both giving the research a vivid portrait of the partnership and acting as a useful

starting point for discussion with participants. Social network analysis can explore a variety of relations: directed (e.g. seeking information); undirected (e.g. previously worked together); binary relations (e.g. knew before yes/no); valued relations (e.g. communicates daily/weekly/monthly). The measurements which seem particularly relevant to a study of local partnerships are:

- **Centrality:** Who are the leaders, the isolates and what are their characteristics? Comparison of the degree of centralisation of different partnerships and study of the implications for their activity
- **Density:** Comparison of the density or cohesiveness of local partnerships: what are the implications for their activity of a dense or loose structure?
- **Boundary spanners:** exploring the linking role that people occupy between organisations.
- **Embeddedness:** To what extent are current relations embedded in previous relations and what implications does this have?

While social network analysis has been used frequently to study alliances in the private sector, its use in the public sector is more limited. Only one example of the use of social network analysis in the study of local public sector networks was included in this review, a study of US community mental health networks (Provan and Milward, 1995). This study will adopt a similar approach to Provan and Milward. It will combine a social network questionnaire with in-depth interviews, also used by Hutt et. al (2000) and Cross et. al. (2001). Like the Provan and Milward study, it will focus on e-government activity rather than friendship or other ties, combine positional and snowball sampling and will explore the concept of network integration using measures of centralisation and density. There will be differences because Provan and Milward's study was of a network between service providers rather than the more formal partnerships seen in e-government. The study will follow Cross et. al's approach of using sociograms in interviews to help identify issues, generate discussion and provide further detail.

2.8. Conclusions from the Literature Review

The systematic literature review has explored a number of themes relating to local e-government partnerships. The local governance literature has provided an outline of the policy context of the local government modernisation agenda. The e-government literature has provided an overview of the national e-government strategy and has outlined the factors which contribute to successful e-government implementation and the potential impact of e-government. The partnerships literature has explored network governance theory, examined issues relevant to local partnerships and draws on social network studies of inter-organisational alliances. The literature on the dissemination of best practice suggests some of the ways local e-government partnerships might aid the dissemination of best practice and identifies some of the issues surrounding organisational learning. The social network literature has helped develop the research methodology and looks at the importance of social networks to inter-organisational partnerships.

The research question is “How can local authorities and their partners work together to successfully implement e-government?” A number of subsidiary research questions are suggested by the literature:

1. How important to the development of e-government solutions are:
 - a. Involvement in wider networks such as national projects or regional organisations?
 - b. Organisational characteristics such as: leadership attitudes to change; interconnectedness; centralisation?
2. To what extent do “silos” still operate within local government? How well do departments work with each other to improve service delivery? What role do ICT specialists play?
3. What is the role and importance of innovation champions in e-government networks?
4. What is the extent and nature of any citizen or councillor participation in the development of e-government?

5. How important is citizen quality of life as an outcome of e-government, relative to other considerations such as service delivery, administrative efficiency or cost savings?
6. What impact do the role, standing, activities and influence of individuals have on the success of e-government partnerships?

The following concepts arose from the literature review:

i. Connectedness

Organisational innovativeness is linked with interconnectedness (Rogers, 2003). The success of a local initiative is influenced by the actors involved in the partnership (Painter and Clarence, 2001; Raco, 2002) and their relationships with one another (Lowndes and Sullivan, 2004; Painter and Clarence, 2001). The adoption of innovative e-government solutions has been found to be affected by relationships between the ICT section and other departments (Ho, 2002; Melitski, 2003). For e-government to be successful in transforming services and taking a customer-focussed approach, an inter-departmental and inter-organisational approach is needed. This approach requires a move away from a perceived operation of local government through individual services such as housing, education or social services (Cowell and Martin, 2003; McAdam and Walker, 2004; Snape, 2003). E-government offers a potential of raising citizen participation levels (Ho, 2002; McNeal et al. 2003). The research will explore how connected the partnership is, including an examination of the relationships between departments within the local authority and other public organisations and private sector companies. It will also explore the extent and nature of any citizen or councillor involvement.

ii. Leadership

The role of leadership is important to local partnerships (Cowell and Martin, 2003; Painter and Clarence, 2001; Raco, 2002). Three issues of leadership will be explored in this study. Firstly, the successful adoption of e-government is influenced by the attitude of the council leadership to change through e-government (Hinnant and O'Looney, 2003; Ho, 2002; McNeal et al. 2003; Rogers, 2003) and to privacy and security issues (Beynon-Davies and Martin, 2004). Senior

management play a key role in determining goals, signifying the importance of the network, creating a clear identity and galvanising support (Hutt et al. 2000).

Secondly, the existence of an effective broker or champion who plays a linking role between organisations has been found to encourage successful innovation (Rogers, 2003). Thirdly, the participants need to be sufficiently senior within their own organisations to commit to decisions without having to constantly refer back (Hutt et al. 2000; Painter and Clarence, 2001).

iii. Centralisation

Inter-organisational networks for public service delivery have been found to be most effective when they are co-ordinated by a core agency (Provan and Milward, 1995). The research will examine who plays central roles in the local case study network and the extent to which the network is centralised around a single core agency. It will also examine whether there is any core: periphery structure to the network (Hutt et al. 2000). The role of boundary spanners will be considered; those who play a mediating role between individuals and organisations involved in the network (Hutt et al. 2000).

iv. Adoption of best practice

“Best practice is a relevant example that yields better results than any known alternative” (Szulanski, 2003 p11). Factors which encourage the adoption of best practice by local councils are likely to include: managerial and political support, active networking, exposure to appropriate solutions, population size, government policy and funding (Burgess et al. 2005). The research will explore how and where local networks seek out best practice, considering in particular the role of: involvement in national projects; access to products developed by national projects or e-innovations; regional and sub-regional networks; advisors; national guidance and links with other local authorities or public and private bodies.

v. Involvement in wider networks

Networking can lead to greater innovativeness in organisations (Lee and Pennings, 2002; Pittaway et al. 2004; Rogers, 2003) and participation in networks beyond the immediate locality influences the adoption of e-government solutions (McNeal et al. 2003). The research will explore the extent to which the case study networks

have participated in national projects, regional networks or alliances with other local authorities. It will examine the extent to which this involvement has influenced their local e-government development.

vi. Embeddedness

Two aspects of embeddedness are of relevance here. Firstly, inter-organisational networks are more likely to be successful if they are based on pre-existing collaborative arrangements between organisations used to working together (Painter and Clarence, 2001). Secondly, relationships between individuals and organisations will be stronger if there are existing interpersonal ties between network members (Hutt et al. 2000). The research will consider both of these aspects of embeddedness by looking at the extent to which the current network is based on pre-existing partnerships and the existence of any previous working relationships between the individuals involved.

These subsidiary research questions and key concepts are identified in the case study protocol (see Methodology Chapter) to be explored in the empirical research.

It is anticipated that this study will contribute to knowledge in the following areas:

E-government Partnership working is an important way of joining up service delivery, sharing costs and sharing skills and knowledge. There have been no published studies to date on local e-government partnerships.

Local governance There have been a number of studies of local partnerships (e.g. LSPs, new deal for communities, community safety) but no published articles on the particular issues facing sub-regional partnerships and very few using a methodology of social network analysis.

Partnerships The study will build on the research by Provan and Milward (1995) on community mental health networks, exploring the factors that contribute to partnership effectiveness.

Methodology The approach of combining social network analysis and qualitative research has not been used extensively and there may be lessons arising from the study for its future use.

Additionally, the research will produce a report for policy makers and practitioners involved in the local e-government partnership programme.

3 Research Design and Methodology

3.1. Introduction

The research addresses the research question “How can local authorities and their partners work together to successfully implement electronic government?” This chapter describes the philosophical approach, research design and methodology that have been adopted to address the research question. Section two sets out the research philosophy and explores the principles which guide the research. Section three describes the research design. It explains the decision to focus on e-government partnerships, outlines the research aims and describes the case study methodology. Section four is the Research Protocol: the protocol outlines the research framework, field procedures and research questions for the case studies. Section five describes the research methods, social network analysis and qualitative research; it outlines how the research was done and how the data was analysed.

3.2. Research Philosophy

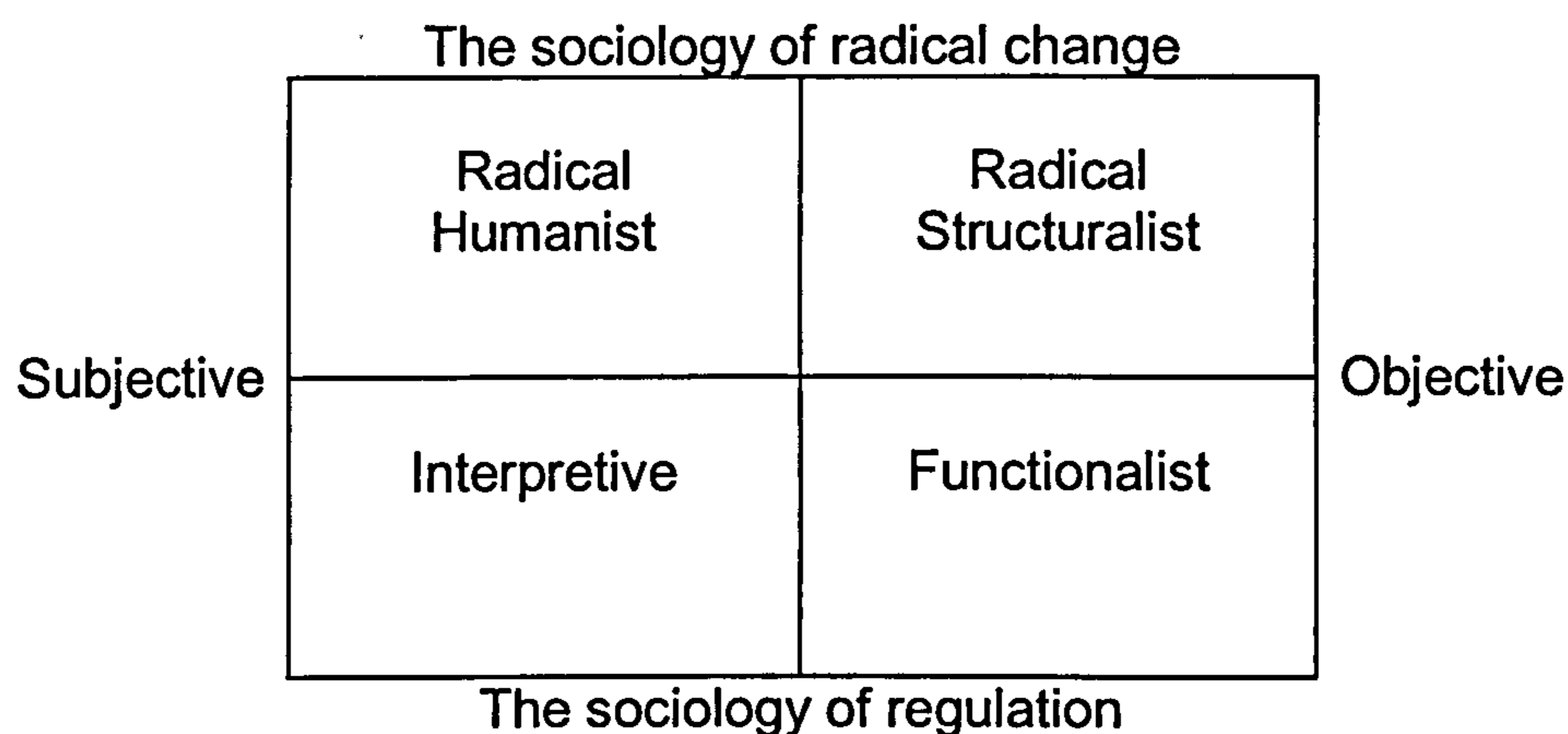
Research on how organisations work together to implement e-government could be undertaken in many ways. Indeed, a number of alternatives were considered at the outset of this research, including a sample survey of local authorities or a comparative study of two national projects, before deciding to adopt the current approach. The fundamental research outlook is one of pluralism: there are many ways in which any topic can be studied and no single approach is universally valid:

“Pluralists believe that different approaches can be brought to bear on the same problem domain and there exists no single universally valid way to delineate objects of study or match the strengths and weaknesses of different research approaches with contingent features of the object of study” (Gable, 1994 p115)

Pragmatic decisions on how to approach a research topic need to be taken, based on factors which include researcher specialism and preferences, suitability of the approach for the topic of study and access. Having stated that a number of

approaches are possible, the perspective guiding this research lies within the functionalist paradigm. According to Burrell and Morgan, social science research can be classified into one of four research paradigms, as shown in Figure 4.

Figure 4 Four Paradigms for the Analysis of Social Theory
(Burrell and Morgan, 2000 p22)



The four paradigms are defined by Burrell and Morgan according to two dimensions: the subjective/objective dimension and the radical change/regulation dimension. Functionalism is characterised by: a concern for providing rational explanations of the status quo; the generation of knowledge which can be put to use; and providing practical solutions to practical problems. The functionalist paradigm has its origins in sociological positivism, but has been influenced intellectually from two different theoretical traditions - interpretivism and Marxism/critical theory – so there is significant variation within the functionalist paradigm (Burrell and Morgan, 2000). The philosophical approach of this study is firmly situated in the functionalist paradigm, but is influenced by interpretive thought.

The research *ontology* is realist, in the sense that “the social world exists independently of an individual’s appreciation of it” (Burrell and Morgan, 2000 p4). Individuals and researchers can attribute meaning to the social world and interpret

it, but beyond those meanings there is a social world that has an independent existence.

The research *epistemology* is positivism, according to the criteria used by Dubé and Paré to identify positivist research (Dubé and Paré, 2003). Firstly, while there are no formal hypotheses, there is a clearly defined framework of concepts and questions to guide the research (see Research Protocol page 107). Secondly, appropriate measures have been used for the constructs (see the case narratives chapters and the Findings chapter). Thirdly, the research explores the theory relating to e-government partnerships and sets out to test that theory and build a new model of partnership effectiveness. Fourthly, the research approach demonstrates a concern with validity and reliability issues, for example, by conducting a pilot study, method triangulation and circulating case narratives to participants for project review.

The research's *view of human nature* is that people are social beings who are part of organisations, a society and an environment which strongly influence their beliefs and actions.

The research *methodology* is nomothetic in that it has followed systematic protocols (both for the literature review and for the case studies) and seeks to draw conclusions of wider relevance, but the research is also influenced by a more ideographic approach, for example by combining qualitative and quantitative research methods and using a case study approach to look at the topic in some depth.

3.2.1. Role of the Researcher

The researcher's attitudes, preconceptions and prejudices will affect the way that material is collected, organised and documented. Gummesson stresses the importance of "preunderstanding" to management research: the knowledge, attitudes, commitment and personal experience that the researcher brings to the project (Gummesson, 2000 chapter 3). Preunderstanding enables researchers to weigh up the relative importance of different findings, choose appropriate methods, be aware of access issues and take a wider view of the solutions adopted by

participants. He identifies three types of knowledge and personal attributes that contribute to preunderstanding:

General knowledge of theories and techniques The completion of the systematic literature review has helped to develop knowledge of the subject areas and theories relevant to e-government partnerships. Suitable research methods have been learned through training courses, a pilot study and experience of previous research projects.

Specific knowledge of institutional conditions and social patterns Knowledge of the culture and concerns of local government has been developed during many years working for local councils before commencing this study. However, having had no previous contact with ICT professionals or e-government, steps have been taken to expand on this area of knowledge by: reading selected texts from the Information Systems field and the national e-government policy documents; talking to a number of people involved in this field including a Communities and Local Government (CLG) e-government advisor, an advisor from IDeA and the Head of e-Government for a large local authority; and attending a number of national and regional e-government events. Additional insight has been gained by talking to people involved in the pilot study. These activities have provided an overview of the culture and concerns surrounding e-government, but further insights were needed in respect of the individual case studies. The first steps in each case study were to meet with three or four key informants, look at the website and read any documentary information to gather different perspectives on the partnership and identify how best to approach the case study.

Personal Attributes Characteristics such as "intuition, creativity, vitality and human understanding" (Gummesson, 2000 p75) will be important in negotiating access, encouraging participation, arranging and conducting interviews, weighing up differing narratives and reporting findings. Some aspects of these attributes have been acquired, but they will be further developed during the research process.

3.2.2. The role of participants, practitioners and policy makers

Two principles relating to the role of practitioners and policy makers guide this research project: firstly the principle that working with a range of participants and

other practitioners and policy makers increases the reliability and credibility of the research and secondly, that public policy research should be fed back in a relevant and timely fashion to those it directly affects. A number of steps will be taken to maintain these principles, including:

1. The contribution of CLG advisors to the design of the systematic literature review and early discussion with CLG advisors, an IDeA advisor and other senior e-government figures on what aspects of e-government inter-organisational working to focus on and suitable sites to study.
2. Undertaking in-depth study with a small number of partnerships will allow the inclusion of a number of different perspectives. A social network survey will collect information from all participants and interviews will be completed with a range of people with differing roles in the partnership, seeking out "multiple interpretations" (Klein and Myers, 1999 p77) and exploring any contradictions between them.
3. A small number of key informants in each case study will be asked to provide background information on the partnership and influence the questionnaire design. All participants will be provided with information on the project at the start of each case study and will be asked to comment on who the other participants should be.
4. "Project reviews" (Dubé and Paré, 2003 p626; Yin, 2003 p159) or "Member checking", where "the actor is asked to review the material for accuracy and palatability" (Stake, 1995 p115) will occur at three stages of the research. Firstly, during all the in-depth interviews participants will be shown sociograms arising from the social network questionnaire and asked to comment on them. Secondly, the early findings will be presented verbally and visually to the partnership board of each case study and discussion of the findings will be encouraged. Thirdly, a detailed case study report and executive summary will be sent to participants in each partnership and comments will be invited.
5. A working paper has been written for the Local Governance and Quality of Life Postgraduate Research Programme, to appear on the CLG website.

6. A final written report will be provided to the public sector organisations who participated in the research and to the research funders, ESRC, CLG and PWC.

The purpose of these steps is to ensure the research is a reliable version of the evidence and is relevant to public policy. This is not intended to be co-constructed research and the conclusions and interpretations will be those of the researcher. The ethical implications of this stance are explored in section 3.3.7 of this chapter.

3.2.3. Research Quality

Table 13 Quality Criteria for Case Study Research
(Adapted from Gummesson, 2000 p186-187)

1. Readers should be able to <i>follow the research process and draw their own conclusions</i>
A well-written and intelligible report; a comprehensive account of the research process; a statement of the problem, purpose and research questions; a description of methods of data collection, coding, analysis and interpretation; a rich description of the cases; motives for selecting cases; limits of the research project; clear results and conclusions.
2. Researchers should present their <i>perspective and preunderstanding</i>
Personal and professional values and if these have changed; values of the system under analysis; theories and concepts and reasons for their being chosen; researcher prior experience and other pertinent information on the researcher.
3. The research should possess <i>credibility</i>
Correct data and correct rendering of informants' views; how analysis and interpretation are supported by data; demonstrates confidence in the theories, concepts and conclusions used or generated; avoidance of deception; conclusions should accord with one another; actors should recognise what is presented in the report; presentation of all relevant data and information; methods and techniques appropriate to the problem and research questions.
4. The researcher should have had adequate <i>access</i>
Use methods and techniques that ensure adequate access; provide an account of any access difficulties and how they might have impaired the research.
5. There should be an assessment on the <i>generalisability and validity</i> of the research
To what areas the results apply; how closely the research represents the phenomenon that the researcher aimed to study; if other research confirms the findings; if results bear out with extant theories and concepts
6. The research should make a <i>contribution</i>
Contribute to increased knowledge, deal with relevant problems, be of value to the scientific community, the client and the public, actively made available to the scientific community, the client and the public.
7. The research process should be <i>dynamic</i>
The researcher has: continuously learned through personal reflection and dialogue with others; demonstrated creativity and openness; the ability to switch between deep involvement and openness; an awareness of changes of research design, methods application etc during the research process.
8. The researcher should possess certain <i>personal qualities</i>
Commitment, integrity, honesty, conviction, flexibility and openness

For the study to be robust it must be associated with certain procedures of good research practice to ensure the validity, reliability, generalisability and credibility of the research findings. Throughout the study, attention will be paid in particular to the quality criteria developed by Gummesson, which is summarised in Table 13.

These quality criteria will be applied throughout the research project and will be evidenced in all chapters of this thesis. The criteria will be re-visited in the conclusion to check how successfully they have been applied.

3.2.4. Generalisability

“What relevance do the results have beyond the actual research?”
(Gummesson, 2000 p185)

It is important to be clear at the outset about the extent to which the research findings will be generalisable beyond the immediate settings in which the case study research is to be undertaken. Within the field of IS research, a survey of published articles (Chen and Hirschheim, 2004) found that case study research designs made up 36% of all articles, compared to 41% using survey research designs (p.197). Despite this high (and growing) adoption of the case study method, “the statistical, sampling-based conception of generalisability remains widely and inappropriately used in nonstatistical, nonsampling research associated with top IS journals and conferences” (Lee and Baskerville, 2003 p.222-3) with many researchers believing that a small sample size limits the generalisability of their findings. A number of authors have introduced broader conceptions of generalisability, beyond the statistical conception, of more relevance to qualitative and case study research (Gummesson, 2000; Lee and Baskerville, 2003; Stake, 1995; Yin, 2003).

Yin’s case study methodology has been widely adopted by social scientists (Yin, 2003). He describes two different types of generalisability or inference. The first is “statistical generalization” or “level one inference” (p.32), terms used interchangeably to describe the generalisation of findings from a sample to a wider population. Statistical generalisation is governed by a number of factors associated with survey and experimental research such as sampling procedures, confidence intervals and variation within the population. Yin argues that statistical

generalisation is inappropriate for use in case study research because the cases are not random samples of the population and none of the sampling procedures associated with survey research apply. Yin's second type of generalisation is "analytic generalization" or "level two inference" (p.33), where the researcher generalises from the empirical findings to develop or confirm a theory. Unlike statistical generalisation, analytical generalisation applies equally to survey, experimental and case study research designs. As with statistical generalisation, for analytic generalisation to be robust, it must be associated with certain procedures of good research practice to ensure the validity and reliability of the research. Lee and Baskerville (2003) build on Yin's earlier work to develop a generalisability framework in which they identify four types of generalisability (Table 14).

Table 14 A Generalizability Framework: Four Types of Generalizing
Adapted from (Lee and Baskerville, 2003 p. 233)

	Generalizing To <u>E</u> mpirical Statements	Generalizing To <u>T</u> heoretical Statements
Generalizing From <u>E</u> mpirical Statements	<p><u>EE</u> GENERALIZING FROM DATA TO DESCRIPTION</p> <p>Generalizing data to a measurement, observation or other description</p>	<p><u>ET</u> GENERALIZING FROM DESCRIPTION TO THEORY</p> <p>Generalizing measurement, observation or other description to a theory</p>
Generalizing From <u>T</u> heoretical Statements	<p><u>TE</u> GENERALIZING FROM THEORY TO DESCRIPTION</p> <p>Generalizing a theory, confirmed in one setting to descriptions of other settings</p>	<p><u>TT</u> GENERALIZING FROM CONCEPTS TO THEORY</p> <p>Generalizing a variable, construct or other concept to a theory</p>

Type EE generalisability involves generalising from empirical data to produce a measurement, observation or other description. An example of relevance to case study research would be the distillation of interviews, observations and other sources to produce a descriptive statement such as "people in this team value their

autonomy highly". Examples from other areas of research include the use of a sample mean to estimate a population mean or the development of a measurement score. Yin's statistical generalisation falls within this category (Lee and Baskerville, 2003 p.232-5).

Type ET generalisability involves generalising from empirical data to produce theoretical statements. This is synonymous with Yin's analytical generalisability. The data, be it from a survey, observations, case study or experiment, is analysed by the researcher to develop a theory which seems to explain the findings. In case study research a relevant example might be to use data to develop a theory explaining the effect of the social structure of an organisation on its employee's behaviour (Lee and Baskerville, 2003 p.235-7)

Type TE generalisability involves the use of theory developed in one setting to develop empirical solutions of relevance in another context. Lee and Baskerville believe the only way to do this effectively is to undertake research to test and confirm the theory in the new setting. Although not identified as such by the authors, this is similar to Yin's advocacy of the use of multiple case studies to test theory, drawing conclusions from the first before moving on to try to replicate them in other settings (Yin, 2003).

Type TT generalisability involves taking existing concepts, variables or constructs and from them developing a theory. It includes the formation of theory from the synthesis of ideas in a literature review (Lee and Baskerville, 2003 p.238).

Application of the conceptions of generalisation offered by Yin and Lee and Baskerville to the current research project suggests the following aspects of generalisation are relevant:

TT Generalising from the literature review to produce theoretical research questions and concepts (see the conclusions of Chapter 2 Literature Review).

EE Generalising from multiple sources of data in one setting to produce thick descriptive statements relevant to a particular case study (see case narratives in chapters 4, 5 and 6).

TE Confirming theory developed in one case study by testing it in a new setting. While the case studies were not undertaken far enough apart to draw conclusions

from one to test in the other, the data collection and analysis for each case study was done separately, so concepts developed from one setting were then explored further with reference to the next case study.

ET Generalising from a wealth of descriptive empirical data to develop a theoretical model (see Chapter 8 Discussion).

The systematic literature review, together with the in-depth case studies will provide a rich and detailed picture of the e-government partnerships under study which will be used to expand and further develop existing theories about how local authorities and other public sector organisations can successfully work together.

3.3. Research Design

3.3.1. Introduction

From the outset the intention of the research was to study how local authorities and others work together to deliver e-government, but the precise focus has shifted during the course of the research. The initial research plan focussed on the partnerships that had been developed around the Customer Relationship Management and Knowledge Management national projects, but this was abandoned at an early stage when it emerged that both national projects were coming to the end of their life so the only networks to study would be historical rather than existing ones. The focus moved on to individual local authorities. The intention was to identify local authorities as case studies and examine the network of people involved in the delivery of e-government projects relating to quality of life (Cotterill, 2005a). The local authorities were to be identified across two dimensions: performance on quality of life issues and involvement in national projects relating to quality of life (Cotterill, 2005b). A number of problems emerged relating to this research design, the most immediate being that, despite prolonged discussions with a number of local authorities, none were willing to participate: an in-depth study of a single authority would take up too much staff time. Other problems were the inadequacy of the available measures of council performance and the difficulty of assessing the relationship between e-government activity and citizen quality of life.

During discussions with one local authority about them joining the study, a key informant talked of the local e-government partnership they were involved in and suggested that the partnership would be a more interesting entity to explore in the research. This coincided with a suggestion from one of the CLG policy advisors to look at local e-government partnerships. After exploring this suggestion further, a number of advantages emerged:

- Relationships between local councils and public organisations in sub-regions are of increasing policy interest. Examples include shared services, city regions and joint procurement.
- The network of people involved in e-government relating to quality of life would be problematic to identify. The boundaries of a local e-government partnership can more easily be delineated.
- Local e-government partnerships were more willing to participate in the research, perhaps because firstly the involvement would be spread across the partnership rather than all the activity being concentrated in one council and secondly, the case study reports would be useful to them in demonstrating their partnership working, which is one measure of performance in the comprehensive performance assessment.
- Partnerships were currently operating and so the study would be contemporary rather than historical.

There were also some disadvantages to be overcome:

- The research focus would be on those directly involved in e-government partnerships and there would be less attention given to the roles of other actors such as officers in other departments, private sector partners and national projects, although steps were taken to include some information on the impact of these other roles.
- The effectiveness of individual councils can be measured, albeit imperfectly, by using proxy scores from the comprehensive performance assessment, the commission for social care assessment and progress towards the IEG priority outcomes. There are no similar performance measures of sub-regional partnerships. Initially this appeared problematic. It would not be until much later

in the research process, after the completion of the case studies that a measure of effectiveness would emerge (see Discussion Chapter.).

3.3.2. Research Aims and Objectives

The research addresses the question “How can local authorities and their partners work together to successfully implement electronic government?” Subsidiary questions to be explored are:

1. How important to the development of e-government solutions are:
 - a. Involvement in wider networks such as national projects or regional organisations?
 - b. Organisational characteristics such as: leadership attitudes to change; interconnectedness; centralisation?
2. To what extent do “silos” still operate within local government? How well do departments work with each other to improve service delivery? What role do ICT specialists play?
3. What is the role and importance of innovation champions in e-government networks?
4. What is the extent and nature of any citizen or councillor participation in the development of e-government?
5. How important is citizen quality of life as an outcome of e-government, relative to other considerations such as service delivery, administrative efficiency or cost savings?
6. What impact do the role, standing, activities and influence of individuals have on the success of e-government partnerships?

3.3.3. Case Study Methodology

It is appropriate to use a case study methodology for a research topic like this one where “a “how” or “why” question is being asked about a contemporary set of events, over which the investigator has no control” (Yin, 2003 p9). A case study approach examines in depth a small number of selected examples. Other potential methodologies would not have served so well. For example, a survey of all e-

government partnerships would have been possible and would have provided a useful overview of the topic, but would have lacked the depth and detail provided by using multiple informants and multiple data sources to form a detailed picture.

Case studies can be undertaken from a positivist or interpretive stance and either of those approaches can include either qualitative or quantitative methods or a mixture of both qualitative and quantitative (Eisenhardt, 1989; Stake, 1995; Yin, 2003). The methodology adopted here is the positivist case study using a combination of quantitative (social network analysis) and qualitative (interview, workshops, meeting observations, documents) methods. It is an explanatory and exploratory case study design, testing the concepts developed in the literature review to see which factors have an impact on partnership performance (Dubé and Paré, 2003).

3.3.4. Triangulation

Social Network Analysis is a useful tool to present a picture of the relationships within a local e-government network (Scott, 2000; Wasserman and Faust, 1994). However, it cannot provide details of *why* the network looks the way it does or the meaning behind the surface of relationships. This study draws on the learning from earlier studies (Cross et al. 2001; Hutt et al. 2000; Provan and Milward, 1995) which have used social network analysis and diagrams as tools to initiate discussion in qualitative interviews and workshops. This will help create a richer picture than can be found from social network analysis alone.

Considering data gathered by different methods offers the possibility of methodological triangulation, which can help minimise misrepresentation, reduce misunderstanding and build increased confidence in the interpretation of the research findings (Stake, 1995). Using a different method might confirm what was captured by the first method, add complexity to what had initially seemed simple, or change the interpretation radically (Stake, 1995). Combining qualitative and quantitative research can be particularly useful because they have different perspectives (Eisenhardt, 1989): in this study the social network analysis offers an overview of the partnership relations and the qualitative research helps with understanding the meaning and detail of those relations. Encouraging participants

to comment on the findings in meetings and reports – “member checking” – is another form of triangulation (Stake, 1995 p115-116).

3.3.5. Pilot Study

A pilot social network study was undertaken during June-July 2005. The purpose of the study was to enable the researcher to learn more about the practical application of social network analysis, including questionnaire design, selection of participants, coding of data, use of Ucinet software (Borgatti et al. 2002) for data analysis and production of appropriate reports. The research focussed on a small e-government project relating to knowledge management which developed licence free software linking community engagement with policy development in local authorities or multi-agency partnerships. The project was chosen because it involved a relatively small, but very diverse group of actors, including two local authorities, three consultancies, a national project, a regional organisation and a government department. A short questionnaire was developed for distribution to all members of the network. It was circulated and returned by email. Four questions asked about network relationships: communication, seeking information and advice, influence and previous contact. The remaining questions related to the respondent's involvement in the project and brief contact details. There are two practical lessons from this study which will inform future research in this area. Firstly, it is very important that the boundary of the network and the list of participants are established clearly from the outset. Consultation on the list of participants will be done on a wider scale in the main study to ensure agreement of all participating organisations. Secondly, all participants will be contacted before the questionnaire is circulated, providing brief details of the research topic and dealing with any queries or concerns. Full details of the pilot study are available in the progress report produced for the PhD transfer viva (Cotterill, 2005b).

3.3.6. Case Study Site Selection

Authors of texts on case study design offer suggestions on how best to identify suitable sites as cases. Yin (2003) advocates the use of “replication logic” to identify multiple case studies: once a theoretical framework has been established, cases are chosen which either predict similar results to one another (literal

replication) or predict contrasting results (theoretical replication) or both, depending on the subject of study. Eisenhardt (1989) emphasizes the importance of being clear on what population the selection is being drawn from: in this project, the population is sub-regional e-government partnerships in England which have received funding from the ODPM's Local e-Government Partnership Programme. Being specific about the population defines the set from which a selection is being made, controls for unwanted variation and helps define how the findings can be generalised. Eisenhardt proposes that cases be chosen using "theoretical sampling", where the researcher uses interim findings to direct the next stages of the work, choosing cases which seem to be theoretically useful e.g. those which replicate previous cases or extend emergent theory or fill theoretical categories or are examples of polar types (Eisenhardt, 1989; Glaser and Strauss, 1967). For Stake (1995) the starting point is to maximise what can be learnt, so in this project, the principle criterion is "which e-government partnerships will help us understand how partnerships can successfully implement e-government?" Stake advocates selecting a balanced selection which includes variety, for example by choosing two successful cases with different characteristics and two less successful cases, which differ on similar characteristics.

The three cases chosen for this study were not selected as systematically as suggested by these authors. After months of unsuccessful negotiation with a number of individual local authorities an important criteria for involvement was that partnerships were willing to grant access and had prospective key informants willing to open up discussions (Stake, 1995 p4). However, there is some clear logic to the selection of the cases: The similarities between the three partnerships indicate that they are drawn from a clearly defined population (Eisenhardt, 1989): successful sub-regional e-government partnerships funded by the ODPM's Local e-Government Partnership Programme. The differences between them indicate that there is evidence of replication logic and variety. The cases represent a diversity of geography, size and type of local authority, culture of partnership working and structure. While it was not possible to systematically follow any of the guidelines, the similarities and differences between the cases allow for the

exploration of how partnerships unfold in different environments. Table 15 provides a summary.

Table 15 Characteristics of the Three Case Study Partnerships

Case Study Pseudonym	Metropolitan	Shire County	Urban
Similarities			
Geographical Coverage	Sub-region	Sub-region	Sub-region
Purpose	Focus on e-government	Focus on e-government	Focus on e-government
Funding from ODPM Local e-Gov Partnerships Programme?	✓	✓	✓
Viewed as successful by CLG / IDeA advisors?	Yes	Yes. Awarded Beacon Status and Assoc. of Public Service Excellence award	Yes
Differences			
Local authority types	5 metropolitan councils: a mix of urban and rural.	1 county council, 1 unitary, 8 districts and 1 parish councillors association	10 metropolitan councils: predominantly urban.
Non-council involvement	A range of public sector organisations involved in discussions and project delivery	Fire and police services have limited involvement	A range of public sector organisations have limited involvement
Staffing structure	Employs no staff	A sizeable staff team	2 members of staff
Councillors involved	No	Yes	No
Region	The wider region has a strong reputation for e-government activity	The wider region is lagging on e-government activity	The wider region is the national leader in e-government activity

The three partnerships have been given pseudonyms in this report to protect the confidentiality of participants:

Metropolitan is a partnership of five metropolitan councils (see glossary for a list of council types). A range of other public sector organisations are involved in its discussions and project delivery, to varying extents. It employs no staff and has no

councillor involvement. It is situated in a region which has a strong reputation for e-government activity.

Shire County contrasts with Metropolitan. It is based in a shire county and is a partnership of one county council, one unitary authority, eight districts and the local parish councillors' association. There is some limited involvement by the fire and police services, but they are not involved in project delivery. It employs the largest staff team (six plus some consultants) and has councillors centrally involved on the board. It is situated in a region which is lagging on e-government activity.

Urban, like Metropolitan is a partnership of metropolitan councils. A range of other public sector organisations are involved, but to a lesser degree than Metropolitan. It employs a small staff team of two and has no councillor involvement. It is situated in a region which is the national leader in e-government activity.

3.3.7. Ethics

The ethical implications of social network research are similar to those occurring in all social science research, but there are a number of key differences (Borgatti and Molina, 2003). Anonymity at the data collection stage is not possible, because each actor needs to be provided with a list of the other actors in the network. Non-participation does not necessarily mean the person is excluded from the study, because others may provide information about their relationships. Identification of the individuals can be a powerful tool in enabling discussion about the network of relationships, but disclosure of names can have important implications for those individuals. Network surveys are fairly new, so respondents may not be as aware of the consequences of involvement as with established survey techniques, making informed consent more problematic.

Individuals are not named in any reports. Organisations are named in the workshops and case study narratives provided for each partnership. These have remained confidential to the partnership concerned. Every attempt was made to provide anonymity but, given the small number of people involved, it may be possible for those involved in the network to identify one another. A draft copy of the local case study narrative is made available to all participants, inviting comments. All factual comments are discussed with those who raise them and

resolved to their satisfaction. The local reports were not circulated by the researcher beyond the participants. A summary report of all three case studies will be made available to participants and circulated more widely. In this summary report and in any articles or conference papers, the names of local authorities and their partners will be omitted and every attempt will be made to ensure anonymity. Data is being kept securely and will not be disclosed other than in public reports of the project. No expenses were paid to participants.

A further ethical issue arises from the research being jointly funded by the Economic and Social Research Council (ESRC), Communities and Local Government (CLG) and Price Waterhouse Coopers. CLG is the government department responsible for overseeing all aspects of local government, including e-government. This has had some positive impact on the study. Firstly, it helped with access to the case study partnerships: it opened doors with some key informants who clearly wanted their project to be part of a CLG study. Many involved in e-government seem to know and respect a CLG policy advisor to the project, and that too helped with access. Second, it may encourage the participation of individuals in returning questionnaires and attending interviews: some respondents commented on the involvement of CLG or asked for further information. CLG funding was clearly stated in information provided to participants: to do otherwise would be dishonest. During exploratory discussions with key informants, the nature of the funding relation was clearly explained: CLG's primary interest in the project is in developing policy researchers by funding postgraduate study and they are not immediately directing the research project, but they will be given anonymised findings. Despite this, it is possible that participants may choose to enhance the activity of their partnership, to show it in a good light. To some extent this is a possibility in any research which will be publicly reported, particularly for local authorities, who exist in a climate of national audit and inspection (see section 2.3.2.1 of the literature review chapter).

3.4. Research Protocol

A research protocol was written to guide the case studies (Yin, 2003). The protocol includes five sections: research framework, site selection, field procedures, case

study questions and case study report. The protocol is reproduced in the following sections:

Research Protocol

Research Framework

Many factors can contribute to the development of successful e-government solutions. This research will focus on those factors arising from the networking activity of organisations working together to deliver e-government. The study focuses on the research question, "How can local authorities and their partners work together to successfully implement electronic government?" It also addresses the subsidiary research questions and the following concepts which arose from the literature review.

i. Connectedness

Organisational innovativeness is linked with interconnectedness (Rogers, 2003). The success of a local initiative is influenced by the actors involved in the partnership (Painter and Clarence, 2001; Raco, 2002) and their relationships with one another (Lowndes and Sullivan, 2004; Painter and Clarence, 2001). The adoption of innovative e-government solutions has been found to be affected by relationships between the ICT section and other departments (Ho, 2002; Melitski, 2003). For e-government to be successful in transforming services and taking a customer-focussed approach, an inter-departmental and inter-organisational approach is needed. This approach requires a move away from a perceived operation of local government through individual services such as housing, education or social services (Cowell and Martin, 2003; McAdam and Walker, 2004; Snape, 2003). E-government offers a potential of raising citizen participation levels (Ho, 2002; McNeal et al. 2003). The research will explore how connected the partnership is, including an examination of the relationships between departments within the local authority, other public organisations and private sector companies. It will also explore the extent and nature of any citizen or councillor involvement.

ii. Leadership

The role of leadership is important to local partnerships (Cowell and Martin, 2003; Painter and Clarence, 2001; Raco, 2002). Three issues of leadership will be explored in this study. Firstly, the successful adoption of e-government is influenced by the attitude of the council leadership to change through e-government (Hinnant and O'Looney, 2003; Ho, 2002; McNeal et al. 2003; Rogers, 2003) and to privacy and security issues (Beynon-Davies and Martin, 2004). Senior management play a key role in determining goals, signifying the importance of the network, creating a clear identity and galvanising support (Hutt et al. 2000). Secondly, the existence of an effective broker or champion who plays a linking role between organisations has been found to encourage successful innovation (Rogers, 2003). Thirdly, the participants need to be sufficiently senior within their own organisations to commit to decisions without having to constantly refer back (Hutt et al. 2000; Painter and Clarence, 2001).

iii. Centralisation

Inter-organisational networks for public service delivery have been found to be most effective when they are co-ordinated by a core agency (Provan and Milward, 1995). The research will examine who plays central roles in the local case study network and the extent to which the network is centralised around a single core agency. It will also examine whether there is any core: periphery structure to the network (Hutt et al. 2000). The role of boundary spanners will be considered; those who play a mediating role between individuals and organisations involved in the network (Hutt et al. 2000).

iv. Adoption of best practice

“Best practice is a relevant example that yields better results than any known alternative” (Szulanski, 2003 p11). Factors which encourage the adoption of best practice by local councils are likely to include: managerial and political support, active networking, exposure to appropriate solutions, population size, government policy and funding (Burgess et al. 2005). The research will explore how and where local networks seek out best practice, considering in particular the role of: involvement in national projects; access to products developed by national projects or e-innovations; regional and sub-regional networks; advisors; national guidance and links with other local authorities or public and private bodies.

v. Involvement in wider networks

Networking can lead to greater innovativeness in organisations (Lee and Pennings, 2002; Pittaway et al. 2004; Rogers, 2003) and participation in networks beyond the immediate locality influences the adoption of e-government solutions (McNeal et al. 2003). The research will explore the extent to which the case study networks have participated in national projects, regional networks or alliances with other local authorities. It will examine the extent to which this involvement has influenced their local e-government development.

vi. Embeddedness

Two aspects of embeddedness are of relevance here. Firstly, inter-organisational networks are more likely to be successful if they are based on pre-existing collaborative arrangements between organisations used to working together (Painter and Clarence, 2001). Secondly, relationships between individuals and organisations will be stronger if there are existing interpersonal ties between network members (Hutt et al. 2000). The research will consider both of these aspects of embeddedness by looking at the extent to which the current network is based on pre-existing partnerships and the existence of any previous working relationships between the individuals involved.

Data collection activities

It is anticipated that the research will include the following activities:

- Discussion with key informants to:
 - Identify the boundary of the partnership and identify a project implementation team to study (preferably one that is currently active and is developing a citizen-focused service or activity);
 - Establish a list of participants and gather contact details;
 - Identify a few key people it would be useful to talk to next;
 - Gather relevant documents;
 - Agree how best to present the research project to others in the partnership;
 - Production of a draft questionnaire for comments;
 - Establish the details of any partnership meetings.
- Interviews with a small number of key people to confirm the list of participants, consult on the questionnaire and gather different perspectives on the initiative.
- A very short written questionnaire sent to all participants in the partnership board and the project implementation team to ascertain who they deal with and the frequency, importance and closeness of those interactions.
- Construction of social network maps, using suitable software, to identify the community of practice active around the project and the relationships between actors.
- Follow up interviews with some participants.
- Initial feedback of findings to project managers to get feedback/corrections.
- Meeting(s) of the partnership board and the project implementation team.
- Production of final report.

Case Study Questions

The protocol for the case studies includes the following list of case study questions, which are primarily prompts to the researcher, rather than an interview schedule (Yin, 2003). The topics echo the concepts highlighted in the research framework.

	Source
<p>Background information Discover the story of the initiative. What is the problem it seeks to resolve? Which citizens is it targeted at and why does change need to happen? What are the anticipated benefits – improved services, better access, participation, quality of life, efficiency? Key milestones and timescales; key problems; disagreements. What drove the decision to introduce this change? How else could this have been done? Were other alternatives considered? What is the motive(s) behind the collaboration? What stage is the project at now? Have the participants changed?</p>	Interviews and reports.
<p>i Connectedness Which organisations/departments are involved in the partnership? Are any who need to be there missing and if so why? Examine the involvement (if any) of citizens and councillors. How connected is the network – explore the extent to which all network members are linked together and identify any isolates, cliques or sub-groups. Consider the density (mean number of links each organisation has with each other, compared to other networks) To what extent do silos still operate? How well do departments work with others to improve service delivery? What role do ICT specialists play? How well integrated is the private sector? What is the nature of the relationship?</p>	Interviews SNA SNA & interviews. SNA & interviews
<p>ii Leadership What is the attitude of the council leader and CEO and department heads to e-government change? How involved are they in this initiative? How does this impact on the partnership? What is the management structure for e-government implementation? Is there a local e-government strategy? How does it relate to this initiative? Relevance of any other local strategies and performance plans. Who are the local e-champions? What is their role and standing?</p>	Interviews SNA & interviews
<p>iii. Centralisation To what extent is the network centralised around a core agency or individuals? Is there a core-periphery structure? Who are the most central players in the network? Are there any boundary spanners who play a key mediating role in linking different parts of the network?</p>	SNA
<p>iv. Adoption of best practice What is the best practice of interest in this study? Where did the best practice ideas for this initiative come from? – is this a usual source for these organisations to turn to? Who was key to identifying and deciding to adopt? What other partners did they turn to for ideas?</p>	Interviews
<p>v. Involvement in wider networks How has the development of this initiative been influenced by involvement in wider networks such as national projects, regional organisations or professional networks?</p>	Interviews & SNA

vi Embeddedness

What is the history of these partners working together? How have any pre-existing collaborations between these partners influenced the current network?

Interviews
and reports.
SNA.

What is the extent of any pre-existing ties between these partners? Have these individuals worked with each other before?

Interviews

Where there was a choice (e.g., software companies, advisors) why were these partners chosen?

Interviews

Case Study Report

It is anticipated that the report of each case study will be structured as follows:

Acknowledgements, contents, tables and figures

A description of the partnership including its aims, objectives and activities.

How the research was done.

Findings:

- Partnership working

- How the organisations worked together

- Developing links across professional boundaries

- Impact on staff

- Citizen and councillor involvement.

- Role of leadership

- Network Structure

- Adoption of best practice

- Involvement with National Projects

- Links to other networks

- Embeddedness

- Impact on services: contribution to quality of life.

Recommendations

Conclusions

A separate executive summary will be produced.

3.5. Research Methods

Initial discussions with key informants for each case study took place in November and December 2005. These meetings provided an opportunity to discuss the research ideas, gain an initial impression of the partnerships, get preliminary agreement to go ahead and discuss who would be involved in the research (the boundary of the network). Very soon after these discussions, a research outline and timetable were produced for each partnership. This served both as a tool for the researcher and, once agreed with the key informant, it acted as a project description for participants. At the initial meeting, a small number of additional

people were identified, usually long-standing members who could give additional preliminary perspectives and offer comments on the research plans and questionnaire.

The research for the Metropolitan case study was conducted in February – March 2006, Shire County was conducted in May – July 2006 and Urban in April – July 2006. Initial discussions were held with the additional people who had been identified earlier to discuss the research idea, gather an initial impression of the sub-regional partnership and agree a list of participants. Relevant documentation was collected and studied. The original intention, set out in the research protocol was to study two networks in each sub-regional partnership, to explore relations at a strategic and operational level. The first would be the staff (if any) and those involved in the strategic partnership board. The second network would be those involved in a project implementation team, i.e. a more operational, citizen-focussed level of partnership working. As the negotiations with key informants unfolded it became apparent that there were no project implementation teams currently in existence in Metropolitan or Urban. Therefore, the four networks studied were the Customer Services Managers Group of Shire County and the partnership boards (including staff if any) in Metropolitan, Shire County and Urban. The criterion for inclusion was a current, on-going involvement. Snowball sampling was used to check the lists and identify any further participants (Milward and Provan, 1998): in each network the list of names, together with a project outline was circulated to all those suggested, asking for any comments, deletions or additions. Amendments were taken up where they were of people working for organisations based in the sub-region.

3.5.1. Questionnaire

A short social network questionnaire (Appendix 3) was circulated to those identified as being in the partnership. The questionnaire was circulated and returned by email, accompanied by an outline of the research project. A large scale survey of local government officers found that email surveys were more acceptable to participants than postal or internet surveys (Walker and Enticott, 2004). Those who did not initially respond received up to three email reminders and a phone reminder. One questionnaire was sent by post to someone without email access.

Table 16 Questions Used in the Social Network Questionnaires and Responses

		Case 1 Metropolitan	Case 2 Shire county	Case 3 Urban	Links to the concepts in Research Framework page 108
Q1	How often do you typically communicate with the following people about e-government?	✓	✓	✓	i, ii, iii
Q2	Who do you typically go to for information relating to e-government?	✓	✓	✓	i, ii, iii
Q3	Who typically comes to you for information relating to e-government?	✓	✓	✓	i, ii, iii
Q4	Who has most influence on e-government decisions in [insert name of sub-region]?	✓	✓		ii,
Q5	Who have you worked or collaborated with before joining the partnership?	✓	✓	✓	vi
Q6	About whom can you say "I understand what skills & knowledge this person has?"	✓	✓	✓	i, ii, iii
Q7	About whom can you say "I trust this person"		✓		
Q8	Please indicate the sub-regional e-government networks you have participated in during the last year	✓	✓	✓	v
Q9	Please indicate any other e-government networks you have participated in during the last year (national projects, regional network, other)	✓	✓	✓	v
Q10	What is your job function? Chief Executive/Councillor/ Director/Head of Service/ Manager/ Officer or Employee		✓	✓	i, ii, iii
	Contact details, role	✓	✓	✓	i
	Number of people in the network	36	31 board 17 CSM*	30	
	Number of questionnaire responses	32	24 board 16 CSM	24	
	Number of interviews	13	15	8	

* Questionnaires were circulated to both the Partnership Board and the Customer Services Managers group (CSM)

The wording of the questions was developed with reference to previous network studies (Cross et al. 2002; Hutt et al. 2000; Shaw, 2004), questions used in government surveys (The Question Bank, University of Surrey) and discussion with staff at LUBS. The questionnaire for the first case study, Metropolitan, included six questions about network relationships: frequency of communication, providing information, seeking information, influence, previous contact and knowledge of each other's skills. For each of these questions a list of all the participants was provided and respondents were asked to indicate the extent of their contact with each person on the list. The remaining questions related to the respondent's involvement in the project and brief contact details. The questionnaire included a brief introduction which served to explain the purpose of the study and assure participants that their responses would be treated confidentially. At a meeting to report the findings, those involved in the Metropolitan partnership raised the issue of trust, which they felt was an important question which had been left off their questionnaire. As a result of those discussions and having approached the key informants from Shire County, a question about trust was included in case study two. The key informants for Urban were wary of the questions about trust and influence, so these were omitted from the Urban questionnaire.

3.5.1.1. Data Preparation and Coding: Questionnaire data

When all the questionnaires had been returned for an individual case study, the information was first entered into Excel spreadsheets, using the coding guidance listed in Table 17. It was then copied and pasted into Ucinet 6 for analysis (Borgatti et al. 2002). In each study there were a small number of people who replied to the questionnaire stating they were no longer involved in the partnership and they were not included in the analysis. Among the respondents in the Urban study there were two people from regional organisations; a regional e-government group and a regional centre of excellence. They were excluded from the study on the basis that qualification criteria were to be working for organisations based in the sub-region.

Table 17 Coding of Social Network Data

No.	Question	Coding
Q1	How often do you typically communicate with the following people about e-government?	Daily 5 Weekly 4 2-3 times a month 3 Occasionally 2 Rarely 1 Never 0
Q2	Who did you typically go to for information relating to e-government?	X 1 Blank 0
Q3	Who typically comes to you for information relating to e-government?	X 1 Blank 0
Q4	Who has most influence on e-government decisions in [insert sub-region]?	Score 1 for each time listed. E.g. if actors a, b, c, d, e listed actor j as influential, then actor j has an influence score of 5.
Q5	Who have you worked or collaborated with before joining the partnership?	X 1 Blank 0
Q6	About whom can you say "I understand what skills & knowledge this person has?"	X 1 Blank 0

3.5.1.2. Missing data

The response rate to the questionnaire was maximised by improving on the questions used in the pilot, consulting with key informants on questionnaire design and chasing individuals to return completed forms. Despite this, of all the questionnaires circulated, some were not returned and a few respondents missed out some of the questions. This results in two types of missing data. The first is where a respondent fails to answer a question. The second is where none of the questions have been answered by a respondent who fails to reply. Missing data was dealt with differently for each of the questions:

Communication. The responses from the missing person have been computed using the responses made by others about that person. Although no information has been provided about how often person x communicates with person y, the responses from person y indicate how often person y says they communicate with person x. Given that communication is a reciprocal relationship, the data provided by person y has been used for person x. i.e. if person y says that they

communicate “very often” with person x, it has been assumed that person x communicates “very often” with person y. This was done by filling missing data with symmetric counterparts in Ucinet.

Information. Question 2 asks whether the respondent *seeks information*, and unlike communication, information is not a reciprocal relationship: if person y says they seek information from person x, it may be expected that person x provides information, but it would not then necessarily follow that person x seeks information from person y. To help minimise the affect of non-response, question 3 asks whether the respondent *provides information*. Where person x says they provide information to person y and person y has not responded, it will be assumed that person y seeks information from person x. This was coded by transposing the matrix for giving information and replacing the missing data for person y with the answer provided by person x, using the matrix algebra function in Ucinet:

Seekinfocorrected = replacena (seekinfo, giveinfo-Transposed)

Worked with before. As with communication, the responses from the missing person about previous contact have been computed using the responses made by others about that person. Previous contact is likely to be a reciprocal arrangement: if y says they have had previous contact with x, it can be expected that x would also have reported previous contact if they had returned the questionnaire.

For all remaining questions, the missing data was treated as missing.

3.5.1.3. Preliminary analysis of questionnaires

Frequent Communication The data from the question on communication was symmetrised so a link is only recorded when both people report that they communicate with one another. The data was dichotomised to create a symmetric, binary matrix where the relation is communication more often than monthly. The data was presented in a sociogram where each node represents an individual and the nodes are coloured by organisation. For Shire County, where councillors were involved in the partnership the nodes were also shaped to show who were councillors. Degree centrality was calculated. The information was used to identify the connectedness of the frequent communication network and the overall pattern

of connections. The isolates, boundary spanners and key individuals were identified and their characteristics (organisation, role, seniority) explored.

Seeking information Getting hold of accurate information in a timely fashion may be expected to help organisations work together. The matrix for seeking information is directed and binary. The data was presented in a sociogram where each node represents an individual and the nodes are coloured by organisation and sized by in-degree, i.e. the size of the nodes indicates how many people seek information from that person: a larger node indicates someone from whom many people seek information; the smallest nodes indicate someone who is not sought out for information by anyone. For Shire County the nodes were shaped to show who the councillors were. The information was used to indicate the overall pattern of the connections between individuals and organisations and also to identify the characteristics of the very central people who are sought out by many and those who are relatively isolated.

Knowing each others' skills Understanding each others' skills is an important element of partnership working. Whether or not people are currently in regular contact, if they are aware of each others' skills, they can quickly get together the right people for a particular project or can contact the people they need for advice or information. In general, as might be expected, people were well aware of the skills of those in their own organisation. These internal connections were omitted from the matrix, to focus on the awareness of skills of those in other organisations. The matrix for seeking information is directed and binary. The data was presented in a sociogram where each node represents an individual and the relation is knowing the skills of people in other organisations. The nodes are coloured by organisation and sized by how many people's skills the person knows: those who know the skills of lots of others will be indicated by large nodes; the smallest nodes indicate those who do not know the skills of any others. For Shire County the nodes were shaped to show who the councillors were. The information was used to explore the extent to which people in the network know the skills of others and to identify who are the very central people that a lot of others approach and who are relatively isolated.

Worked with before The data from the question on whether people had worked with each other before was symmetrised so a link is only recorded when both people report that they communicate with one another. The data was presented in a sociogram where each node represents an individual and the nodes are coloured by organisation. For Shire County, where councillors were involved in the partnership the nodes were also shaped to show who were councillors. The matrix can be correlated with the other matrices to see the impact of previously working together on current relationships.

3.5.2. Interviews

Semi-structured interviews can be an appropriate method to provide a rich picture of relationships and discuss why networks have the structure they have. The approach can encourage respondents to provide their own interpretation and meaning of their role, giving a deeper and more rounded insight than can be picked up from document study or social network analysis alone. The interviews may lead to new and unanticipated insights into the social networks involved in e-government. "Qualitative interviewing tends to be flexible, responding to the direction in which interviewees take the interview and perhaps adjusting the emphases in the research as a result of significant issues that emerge in the course of interviews" (Bryman, 2001). The interviews were semi-structured: a list of questions was prepared and generally this was followed, but where new issues arose from respondents, these were explored. Broad, open ended questions were used.

Interviews - Metropolitan

The first interviews were conducted with people from the Metropolitan partnership. The intention was to interview a cross section of those involved in the partnership, including people from a range of different organisations and those playing different roles in the partnership. A list of potential interviewees was drawn up. The first step was to identify the most central players in the partnership: this was done by calculating degree centrality in the communication network. The eight most central people were identified for interview. This list of eight was checked against the list of people who were regarded as influential by others and there was one person who

was regarded as very influential person but did not have a high centrality score. That person was added to the list of potential interviewees. This resulted in a list of nine potential interviewees, including people from five of the ten organisations (four councils and the police). For each of the remaining five organisations, one person was added to the list of interviewees, and where there was more than one representative, the most central of the participants was chosen. The final list included fourteen potential interviewees. One responded that they were not available during the period set aside for the interviews. Interviews were arranged with the remaining thirteen participants. There was at least one person interviewed from each organisation and they included people with all levels of involvement, from the most central to the most peripheral. They were all contacted by email or telephone to arrange a suitable time and venue. The interviews took place at a venue chosen by them, usually in their office or in a meeting room at their workplace. One interview was done with a group of three people from one organisation, who asked to be interviewed together.

An interview schedule was prepared (see below), with questions developed to address the case study questions which had been included in the Case Study Protocol (page 107).

Table 18 Interview Schedule for the Metropolitan Partnership

Interview Schedule for the Metropolitan Partnership	Links to the concepts in the Research Framework page 108
1. Introduction Partnership working in e-government 3 case studies 2006 PhD – Local Governance and Quality of Life Programme Research outline – run through	
2. Background information What are the motives behind the collaboration? What are the benefits of the collaboration? What are the key issues now?	
3. Embeddedness What is the history of these partners working together? How does this partnership relate to any other collaboration? Have the participants changed? Why were these partners chosen?	i, vi

Should any other organisations be involved?	
4. Connectedness What is your role in the partnership? How long have you been involved? Who else from your organisation is involved in the partnership? [check list] Are these ICT specialists or service specialists? Should anyone else be involved? How does Metropolitan e-government activity relate to your organisation's activity? Can you give an example of when a Metropolitan initiative has been taken up by your council? How has service delivery improved as a result?	i
5. Adoption of best practice Where do you/your organisation go to find out about best practice relating to e-government? Why? How useful? How often accessed	iv
6. Involvement in wider networks [Use questionnaire to discuss involvement in wider networks] <u>If: National Projects.</u> What is your role? What was the motivation for getting involved? Who decided to bid for it? Timescales of involvement. Who were the dominant individuals or organisations? Which people from the organisation were involved in the NP? (ICT staff departmental staff level of senior buy-in). Is the product useful to the organisation? How they got involved in dissemination of the ideas. How has any learning or products from the NPs been disseminated within the local network? <u>If: Regional Organisations.</u> What role do you play and who from the organisation is involved? What is the relationship with the region? <u>Other networks</u> What role do you play and who from the organisation is involved? What is the relationship with the Urban partnership?	v
7. Leadership Does your organisation have a local e-government strategy? [copy of strategy] How does it relate to this partnership? Relevance of any other local strategies or performance plans? How involved / aware are the leaders of your organisation of WY e-government activity? What is the attitude of your organisation's leadership to e-government?	ii
8. Discussion of the preliminary network diagrams.	i, ii

During the interviews, participants were shown the sociograms for frequent communication, seeking information and knowing skills and asked for their comments. The individuals being interviewed were identified on the sociograms so they were able to reflect on their own personal role in the partnership. Sociograms of individual ego networks were used in interviews with individuals to help them think about their own position in the partnership.

Interviews – Shire County

The interviews with Shire County participants took place a few weeks after the interviews with the Metropolitan partnership. The selection procedure varied

slightly to reflect the different make-up of the partnership, but it was guided by the same intention of interviewing a cross section of those involved in the partnership. The first step was to identify the most central players in the partnership: this was done by calculating degree centrality in the communication network of the partnership board, omitting the staff team because two members of staff had already been interviewed as part of the preliminary discussions with key informants. Of the top five officers in the centrality network, one had already left his post. The remaining four were identified for interview (although one had already been interviewed as a key informant and was not re-interviewed). The top three councillors were identified for interview (although again, one had already been interviewed as a key informant and was not re-interviewed). This list included three people from district councils and one from the City Council but nobody from the County Council or any of the borough councils. An officer from the County Council and a councillor from one of the borough councils were added to improve balance. Turning to the Customer Services Managers' Group, degree centrality in the communication network was again calculated and the two most central people were identified for interview. Three further people were identified: all from councils that were not already represented

The final list included sixteen potential interviewees, nine from the partnership board, five from the customer services managers group and two members of staff. One person did not respond to the request for an interview. Interviews were arranged with the remaining participants. There was at least one person interviewed from each council and they included people with all levels of involvement, from the most central to the most peripheral. They were all contacted by email or telephone to arrange a suitable time and venue. The interviews took place at a venue chosen by them, usually in their office or in a meeting room at their workplace.

The interview schedule that had been used in the Metropolitan interviews was adapted for the Shire County interviews. The questions were re-ordered to make the interviews flow more easily, for example the discussion on the social network diagrams was introduced at an earlier stage because they got participants engaged and talkative. Some questions were re-worded, for example the questions

in section 7 on leadership had confused some participants in Metropolitan and so were re-phrased, with the final question being moved to the section on Connectedness. Two additional questions were asked about who the key players and the less involved people were and why: this issue did come up in many of the Metropolitan interviews, during the discussion of the network diagrams. A question about the other people involved from the same organisation was omitted because the information was already available on the social network questionnaire.

As in the Metropolitan interviews, participants were shown similar sociograms for frequent communication, seeking information and knowing skills and asked for their comments.

Table 19 Interview Schedule for the Shire County and Urban Partnerships

Interview Schedule for the Shire County and Urban Partnerships	Links to the concepts in the Research Framework page 108
1. Introduction Partnership working in e-government 3 case studies 2006 PhD – Local Governance and Quality of Life Programme Research outline – run through	
2. Background information What are the motives behind the collaboration? What are the benefits of the collaboration? What are the key issues now?	
3. Connectedness What is your role in the partnership? How long have you been involved? (Use diagrams) Who are the key players who help the partnership work together? Why do they play that role? Who is less involved than they need to be? Why is that?	I, iii
4. Embeddedness What is the history of these partners working together? Have the participants changed? Should any other organisations be involved?	vi
5. Adoption of best practice Where do you/your organisation go to find out about best practice relating to e-government? Why? How useful? How often accessed	iv

<p>6. Involvement in wider networks How does this partnership relate to any other partnerships - in Shire County in the region, others [Use questionnaire to discuss involvement in wider networks]</p>	v
<p>7. Leadership How important is Shire County/Urban activity to your council's e-government work? How do the decisions of Shire County/Urban get implemented back at your council? Can you give an example of when a Shire County/Urban initiative has been taken up by your council? How has service delivery improved as a result?</p>	ii

Interviews - Urban

The interviews with Urban participants took place concurrently with the Shire County interviews. The selection procedure varied slightly to reflect the different make-up of the partnership, but it was guided by the same intention of interviewing a cross section of those involved in the partnership. The first step was to identify the most central players in the partnership: this was done by calculating degree centrality in the communication network of the partnership board, omitting the staff team because both members of staff had already been interviewed as part of the preliminary discussions with key informants. The five most central people were identified for interview (although three of these had already been interviewed as key informants and were not re-interviewed). One person was selected from among the councils in the bottom half of the group in terms of centrality and the most central of the other public sector representatives was added to the list.

The final list included nine potential interviewees, including people with differing levels of involvement, from the most central to those who were more peripheral. Two people did not respond to the request for an interview. Interviews were arranged with the remaining participants. Interviews took place with half of the councils involved and one other organisation. They were all contacted by email or telephone to arrange a suitable time and venue. The interviews took place at a venue chosen by them, usually in their office or in a meeting room at their workplace.

The interview schedule was the same as that used in the Shire County interviews.

<p>6. Involvement in wider networks How does this partnership relate to any other partnerships - in Shire County in the region, others [Use questionnaire to discuss involvement in wider networks]</p>	v
<p>7. Leadership How important is Shire County/Urban activity to your council's e-government work? How do the decisions of Shire County/Urban get implemented back at your council? Can you give an example of when a Shire County/Urban initiative has been taken up by your council? How has service delivery improved as a result?</p>	ii

Interviews - Urban

The interviews with Urban participants took place concurrently with the Shire County interviews. The selection procedure varied slightly to reflect the different make-up of the partnership, but it was guided by the same intention of interviewing a cross section of those involved in the partnership. The first step was to identify the most central players in the partnership: this was done by calculating degree centrality in the communication network of the partnership board, omitting the staff team because both members of staff had already been interviewed as part of the preliminary discussions with key informants. The five most central people were identified for interview (although three of these had already been interviewed as key informants and were not re-interviewed). One person was selected from among the councils in the bottom half of the group in terms of centrality and the most central of the other public sector representatives was added to the list.

The final list included nine potential interviewees, including people with differing levels of involvement, from the most central to those who were more peripheral. Two people did not respond to the request for an interview. Interviews were arranged with the remaining participants. Interviews took place with half of the councils involved and one other organisation. They were all contacted by email or telephone to arrange a suitable time and venue. The interviews took place at a venue chosen by them, usually in their office or in a meeting room at their workplace.

The interview schedule was the same as that used in the Shire County interviews.

3.5.2.1. Analysis of interview transcripts

Data collection and analysis overlapped during each case study (Eisenhardt, 1989). The first interviews were conducted in Metropolitan. Preliminary analysis of data began immediately after each interview: rough notes taken during the interview were written up and some of the information was entered into data shells (Miles and Huberman, 1994), which essentially summarise information from different participants in tables. Data shells were built up on a number of concepts including key issues, motives and benefits. They were a useful way of the researcher quickly building up a picture of the range of views on a particular topic. A presentation of the very early findings was made to a partnership board meeting: it concentrated on the social network analysis, looking at the role of the central players and interconnectedness, but it also included some very early analysis of the interview notes, exploring the motives of participants and the benefits from the partnership and identifying an overly ICT focus, legitimacy and leadership commitment as some of the key issues.

Most interviews were recorded on tape and later transcribed, using a transcription machine with headphones to play back the tapes and typing verbatim reports into Microsoft Word. Where taping was not practical because of background noise interviews were noted and the notes were transcribed as soon as possible afterwards. Transcription of the tapes started during the interview period and continued for some time afterwards. Interviews were transcribed in full. After transcription they were copied into NVivo software. Using NVivo, the interviews and the notes of the meeting with the partnership board were coded by a large number of concepts. Many of these concepts originated in the research framework of the research protocol (page 107) (e.g. leadership commitment, boundary spanners, ICT silos) but some new issues arose from the interview data; in particular, two concepts which seemed particularly important but had not featured in the protocol were the legitimacy and accountability of the partnership and the impact it was having, both on participants and more widely. The analysis was done alongside the social network analysis, the results from both sources informing and reiterating one another. A case narrative was written up for circulation to participants and in the process of writing that report, using NVivo, the large

number of concepts were clustered together into themes, which became sections of the report. The main themes at this stage were:

- Motives
- Legitimacy and Accountability
- Connectedness
- Role of Central Players
- ICT Silos
- Leadership
- Impact of the partnership

Legitimacy and accountability and the impact of the partnership were new issues that had not really been included in the research protocol, and adoption of best practice was not a key issue for the partnership.

Analysis and coding of the Shire County data followed a similar pattern: preliminary analysis of each interview was undertaken immediately and data shells were used to get an initial feel for the data. After the interviews and any meeting notes had been transcribed, they were coded according to the large number of concepts which had already been created, and which by now were sorted into the main themes that had arisen from Metropolitan. All of the themes continued to seem relevant to the data, including the new themes of legitimacy/accountability and impact that had arisen in Metropolitan. Some new themes emerged when looking at the Shire County data: the need for a vision and strategy, the role of councillors and the concept of a mature partnership. A verbal presentation to the Shire County partnership board around this time focussed on those themes.

At this point the focus switched back to the literature. While the original literature review had focussed on the strands of the systematic review (local governance, e-government, public sector partnerships, diffusion of innovations, social network analysis and partnerships), this time it was re-examined in the light of the data, “enfolding” the empirical findings in the literature review (Eisenhardt, 1989 p544); bringing together common issues from each of the review strands to develop a revised set of key themes. Meanwhile, a case narrative was being prepared for

Shire County participants. The re-examination of the literature, together with the data analysis led to a new set of themes, which became sections of the report.

Motives

Governance (incorporating legitimacy, accountability, the role of councillors and vision/strategy)

Connectedness

Role of Central Players

Who is involved? - ICT silos and seniority

Activities, benefits and successes.

The impact of the partnership, identified during the Metropolitan study was continuing as an important theme, and in particular at this stage there was a focus on the different types of impact: for participants and for citizens. The issues of leadership and accountability which had already been recognised were brought into a new theme of Governance, which included the new issues of councillor role, vision and strategy.

Analysis and coding of the Urban data followed a similar pattern: preliminary analysis of each interview was undertaken immediately and data shells were used to get an initial feel for the data. After the interviews had been transcribed, they were coded according to the large number of concepts which had already been created. By this stage the data for all three cases was sorted into five key themes.

Governance (incorporating legitimacy, accountability, the role of councillors, vision/strategy, ICT silos)

Connectedness (including the Centrality of key players)

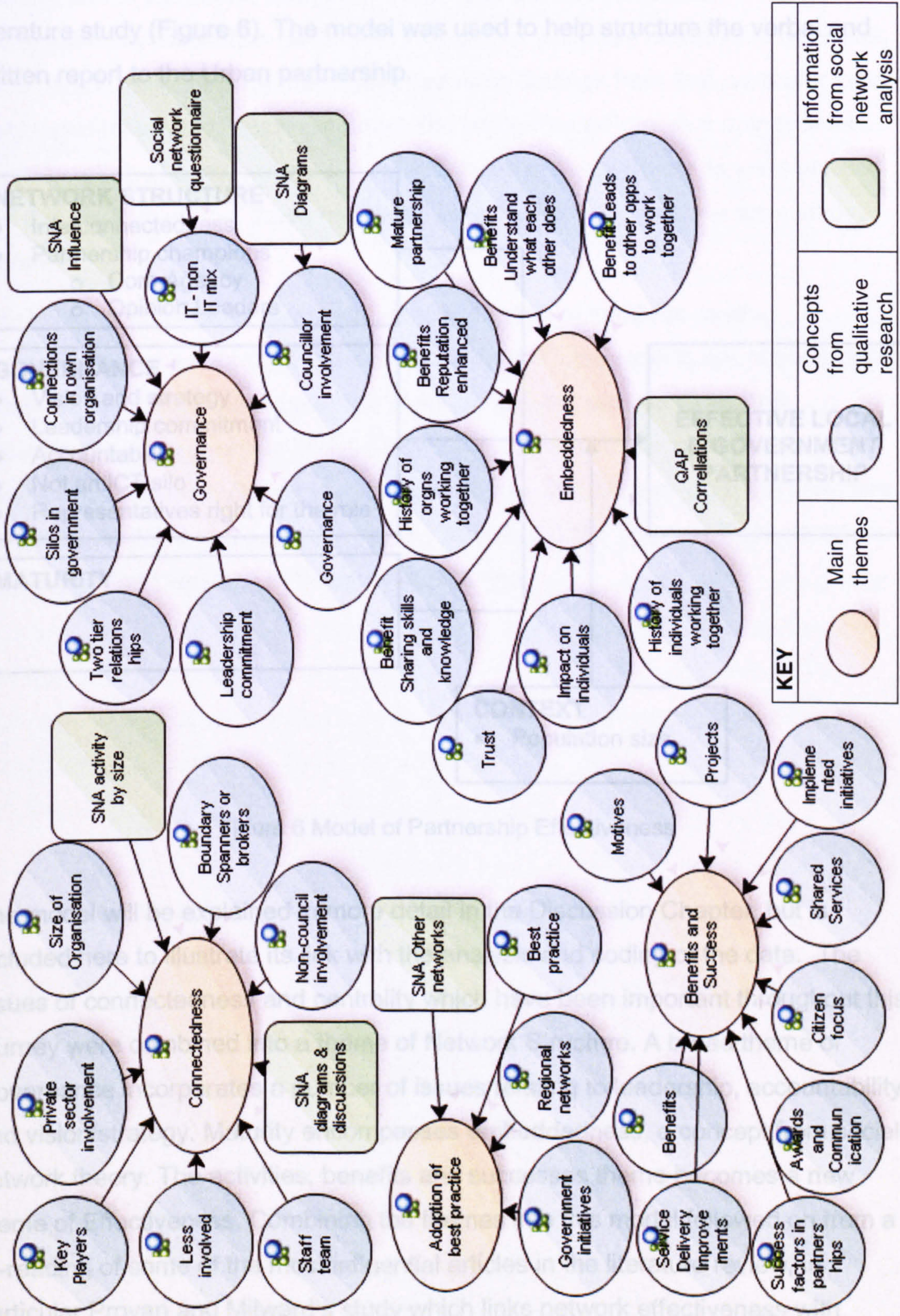
Embeddedness

Activities, benefits and successes

Adoption of Best Practice.

An NVivo model, produced at this stage of the analysis is reproduced as Figure 5 to illustrate the coding structure, although it should be noted that this is an example of the coding structure at one point in time: the structure has been fluid.

Figure 5 Coding of the Case Study Data, Clustered by the Main Themes (NVivo model)



While the coding of the Urban data was happening, a preliminary model of network effectiveness started to be developed, drawing on the case study data and the literature study (Figure 6). The model was used to help structure the written report on urban partnership.

While the coding of the Urban data was happening, a preliminary model of network effectiveness started to be developed, drawing on the case study data and the literature study (Figure 6). The model was used to help structure the verbal and written report to the Urban partnership.

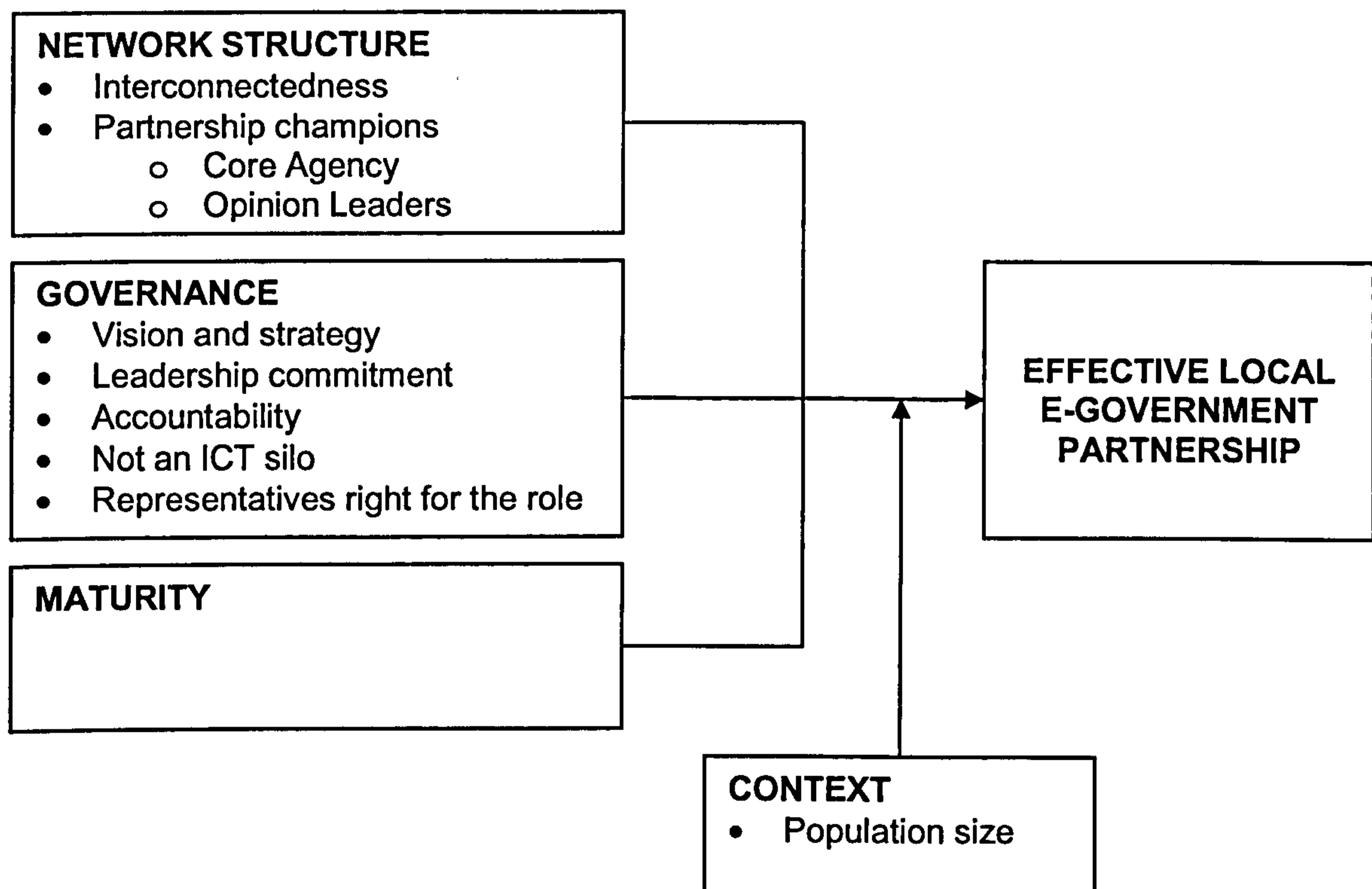


Figure 6 Model of Partnership Effectiveness

The model will be explained in more detail in the Discussion Chapter, but is included here to illustrate its link with the analysis and coding of the data. The issues of connectedness and centrality which have been important throughout this journey were combined into a theme of Network Structure. A broad theme of Governance incorporates a number of issues relating to leadership, accountability and vision/strategy. Maturity encompasses embeddedness, a concept from social network theory. The activities, benefits and successes theme becomes a new theme of Effectiveness. Combining the themes into this model followed on from a re-reading of some of the most influential articles in the literature review, in particular Provan and Milward's study which links network effectiveness with network structure. (Provan and Milward, 1995)

3.5.3. Case Narratives

Within each of the cases, data from the social network questionnaire and analysis of the interview transcripts were brought together in a case narrative (Eisenhardt, 1989) which described the preliminary research findings from that particular case. These preliminary findings were presented using PowerPoint to a management board meeting of each partnership, where many of the participants were present and the responses from those meetings were incorporated into the case study reports.

A detailed case narrative has been written for each of the three cases, accompanied by a very brief executive summary. These reports are confidential to those involved: individuals have not been named, but organisations and departments have been identified. The reports have been circulated to all participants with an invitation to make comments. The findings from the first case study are available in a separate paper (Cotterill, 2007). The next three chapters are anonymised versions of these case histories.

4 Case Narrative 1 - Metropolitan²

4.1. Introduction: Metropolitan

The Metropolitan E-government Partnership Board was formed in 2002. It was initiated by one local authority, who invited all the local authorities and other public bodies in the sub-region to take part. It initially focussed on a small number of projects funded by the ODPM's partnership programme. Since then it has developed into a board which provides a strategic and business focused lead for e-government project activity. Its activities include sharing information, identifying opportunities for new shared business opportunities and overseeing a number of discrete project groups. The partnership board's vision is to "bring together the power of our people, processes, systems and technology to cross geographical and organisational boundaries to deliver joined up, easily understood and accessible public services"³. There is a separate Heads of ICT Group which works closely with the partnership board. It is a long established group which had fallen dormant and was resurrected to co-ordinate the technical and infrastructure components of e-government. Reporting to these two boards are a number of working groups which are involved in the exploration or development of particular initiatives (Figure 7).

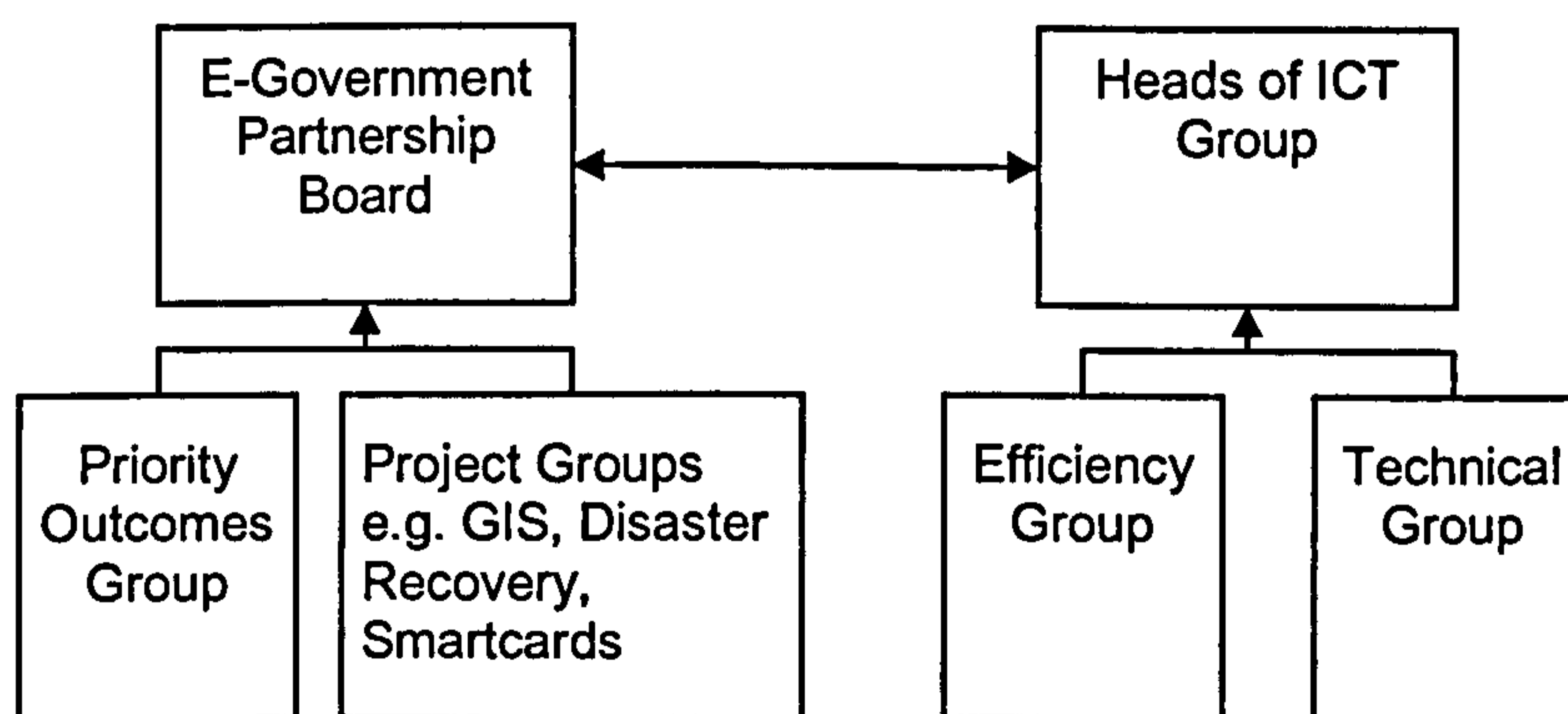


Figure 7 Metropolitan Partnership Structure

² This chapter is based on a report provided to the Metropolitan partnership and some of its contents were included in a paper presented at the Sixth International e-Government conference, Germany, 2007 (Cotterill and King, 2007)

³ *The e-Government Strategy for Metropolitan*, March 2004 p11

The research involved all those involved in the E-government Partnership Board and the Heads of ICT Group, plus some members of the various sub-groups. This included 36 people from ten organisations: five neighbouring local authorities (referred to here as council A, B, C, D and E) plus five public organisations operating in the area (police, fire and rescue service, health, passenger transport executive and an organisation delivering some of the shared service residual from the defunct county council). The research took place in February – March 2006.

Alongside this structure are two partnerships which are separate, but involve some of the same participants. There is a partnership of the emergency services which now includes some local authorities, looking at community safety issues. It has introduced public information channels to provide electronic information on community safety issues in public places and is developing a shared community information portal. The portal development is receiving some funding via the e-Government Partnership Board. Another Steering Group deals with ICT and regeneration issues and includes representation from each of the local authority ICT departments.

The E-government Partnership Board has a relatively unstructured and fluid agenda, so it is a forum where new ideas can easily be raised and discussed. Items which are first brought there can sometimes be referred for further exploration, either to one of the established sub-groups or to a small informal group of those most interested in taking it forward.

4.2. Motives for Working in Partnership

Participants report strong motives for working in partnership with one another. All of the organisations are looking to the partnership to offer economies of scale, including bulk purchasing, discounts from shared contractors and a combined approach to Government Connect, a national initiative to improve security and authentication between public bodies and citizens.

The participants are motivated by a desire to share knowledge and learn from each other; several spoke of the need to “avoid re-inventing the wheel”. One participant

from an ICT department felt that they were facing increasing demands from directorates, which could only be satisfied by sharing the knowledge and experience of others.

Many mentioned pressure from central government as a motive to work in partnership. It was widely felt that making a collective case to government was more effective than arguing a point as a single organisation.

“The other big advantage is the collective voice ... if we are all of the same mind we’ve more of a collective voice to argue the case”
(Information Officer, non-council).

Working together has enabled access to additional central government funding.

For non-Council participants, an additional motive is to seek better connections with local councils, either to negotiate co-location of staff or to increase take up of services by promoting each other’s activities.

“Getting involved in these sorts of partnerships is central to us because it allows more people in key positions in local authorities to be aware of us and for non-obvious connections to be made”. (Policy Manager, non-council)

Changes in leadership attitudes were important drivers for partnership working for two of the partners, whether due to a political change of attitude or in response to a need to raise Council performance.

4.3. Partnership Activities

Metropolitan has initiated a number of shared projects:

Microwave Network. One of the partnership’s early projects was to share capital resources to build a microwave network to enable secure communication between the partners. The microwave receivers have been placed on existing police masts, so after the initial capital investment, on-going costs are very low. The network is used extensively by the police and has been used to site police officers in council buildings. It was the basis of the home working pilot.

Business Access to Broadband The partnership has developed broadband access for small businesses in one rural area.

Shared business database The partnership is discussing the development of a shared business database and a single business account.

Home working A pilot project produced a network design and policy guidelines for staff working from home.

Discussions are underway in subgroups about shared approaches to **GIS** and **disaster recovery**.

Smartcards One of the councils and the passenger transport executive are working together to develop a smartcard, and a bid has been submitted to develop a shared proof of age card for young people.

Efficiency and savings The partnership has identified substantial efficiencies resulting from partnership working. £250,000 of efficiencies has been identified as arising from working together. In particular, the re-negotiation of training provision with a private provider was cited as leading to financial savings.

“We’d all bargain differently and we were all paying for the same courses fantastically different prices. We said, this is what we are paying and we went back to the organisations and said, now come on, this one’s the cheapest and all of us want cheaper than that, and we got it”
(Head of ICT, non council)

Government Connect The members of the partnership have submitted a joint bid to be early adopters of Government Connect, a national programme which sets out to improve transactions with citizens and public sector organisations, by introducing secure authentication and registration procedures. The joint approach, if approved, is regarded as likely to lead to substantial financial savings.

Some of the projects initiated by the partnership are reliant on take-up by other directorates for their success. The home working project, which has produced a network design and policy guidelines for home working has not yet been expanded beyond the small number of ICT people who took part in the pilot. The microwave

network, which allows communication between partners, has many potential applications which could be explored in the future.

Projects pursued by the partnership have typically involved a sub-set of the partners, encouraging those with an interest to get involved, rather than waiting for all partners to come on board.

“With a good partnership there should always be the ability to opt out as well as to opt in. Our partnership is not all or nothing, it’s ... if two or more, if you’re ready to go with something then we’ll move forward and if others want to come in later then that’s fine” (Council ICT Manager 1).

For example, current work to develop smartcards is focusing on one of the councils, council E and the passenger transport executive, with other partners hoping to learn from the planned pilot. Previous research supports this approach, “a better approach for complex projects is to start with a small number of partners, and then expand involvement once the project has taken shape” (ODPM, 2005a p16).

4.4. Benefits of Working in Partnership

Reported benefits of working together include sharing skills and knowledge, a better understanding of what each other does, and access to each others’ resources and expertise. Shared work on the priority outcomes is felt to have helped local authorities deliver on these national targets:

i. Skills and knowledge transfer

“It is very difficult to quantify the benefits of collaboration from a knowledge perspective, because, you know, having these discussions and understanding what others are doing, gives us some, maybe knowledge we wouldn’t have had to help feed in to what we are doing. It is like an intangible benefit” (Council Head of ICT 1)

ii. Understanding what each other does

Working in partnership has encouraged people to understand what each other does and helps with “identifying the right people to speak to so you are not just going in at the bottom getting lost, you are speaking to the right people there”

(Policy Manager, non-council). This has been helpful in improving referrals between organisations.

iii. Problem solving

Local authorities have discussed together how best to achieve the priority outcomes and the regional e-take up campaign has been helped by the existing relationships.

iv. Access to resources and expertise

Where there are areas of expertise in particular organisations, these can be shared with neighbouring organisations; “rather than bring in consultants for example, if we can provide similar skills on a low cost basis or on a swapping basis, that is an advantage” (Council ICT Manager 2). Larger authorities may have specific resources which they can share with smaller councils.

4.5. Key Issues

The partnership exists in a changing climate. The funding from the ODPM's Partnerships Programme, which has supported the partnership activities has ended. The national strategy for local e-government has reached the end of its term and local authorities now face new national priorities including the Transformational Government agenda, the drive for efficiency, a campaign to encourage citizen take-up and Government Connect. There is strong support amongst partners for continued working together on e-government and a commitment to develop further. It takes time to build the relationships and understanding required for effective partnership working; the structures and relationships are now well-established, which should make any future work together easier.

Two key issues have emerged relating to the structure of the e-government partnership. The first relates to the number of groups and their roles. Only one person interviewed thought there were too many groups. A more commonly raised issue was a lack of clarity about the remit of each group, “I find sometimes its easy to lose your bearings, to become a bit blurred, you're not quite sure where a particular piece of work will reside” (Council ICT Manager 2). For newer members,

particularly those not from local authorities, it can be hard to understand where to best get involved,

“I think there are things that we really need to be involved in, initiatives that are going on that we should be plugging into, that we can have, for a relatively small input we could have a major effect, but that we are not aware of it” (Policy Manager, non-council).

This picture is not surprising, given that the groups have evolved over time in response to changing priorities.

The second key issue relates to legitimacy and accountability, being clear how decisions are taken, what powers a body has to take decisions and who it is accountable to. This is particularly important in successfully developing shared services, which will impact on directorates and organisations beyond those represented in this partnership. Some of the projects initiated by the partnership are reliant on take-up by other directorates for their success. There are indications that these projects have not been adopted as widely as might have been anticipated. This makes it important to have clarity about how shared e-government initiatives are successfully planned and implemented, particularly when the partners work together to develop joint services for citizens, which will impact on directorates and organisations beyond those represented in this partnership. This issue is recognised and has already started to be addressed. The partnership now reports to the Chief Executives’ group, who have agreed to provide “strategic guidance and adjudication” on “cross-cutting projects”, i.e. those projects which impact on other directorates not represented here, such as housing, social services or planning ⁴.

“One of the reasons for that is because when you are looking at a shared services agenda, even when it’s very early days, you need the top level. So the idea is that business opportunities, technical opportunities come together, OK, and the opportunities are flagged up to

⁴ Heads of ICT and e-government partnership briefing document to Chief Executives (2005)

the top table and the top table then says, yes we like that one, or no we don't like that one" (Council ICT Manager 1).

"Heads of ICT Group is really doing something, you know, accountable, empowered to do something. I think that's important, if you get that from the top level then it's got some credence" (Council Head of ICT 2).

Further clarity about the powers of the e-government partnership bodies and their relationship with each other and other partnerships beyond e-government could be helpful.

4.6. Network Structure

4.6.1. Communication in the partnership

Everyone in the partnership was asked about the frequency of their communication with others: "How often do you typically communicate with the following people about e-government?" Figure 8 represents frequent communication between members of the partnership. Most members meet at monthly meetings, so "more often than monthly" has been chosen to represent frequent communication. The data has been symmetrised, so a link is only recorded when both people report a connection. Arrowheads are not shown because the relationship is non-directional. Each node represents an individual; the nodes are coloured by organisation.

The connectedness of the sociogram suggests that news and information about e-government can reach most participants. Of the 36 respondents, 20 communicate with three or more people each month. Within each local authority there is a high level of internal communication; with very few exceptions, most local authority representatives are in weekly or daily communication with their colleagues, allowing for a high level of information exchange and discussion.

Between organisations, a number of individuals play an important role as boundary spanners, i.e. they are in regular contact both with members of their own organisation and with at least one other organisation. Without these individuals their organisations would not be in such regular communication with others in the partnership. One person from Council B plays a particularly important role: he is in regular contact with six people from five different organisations.

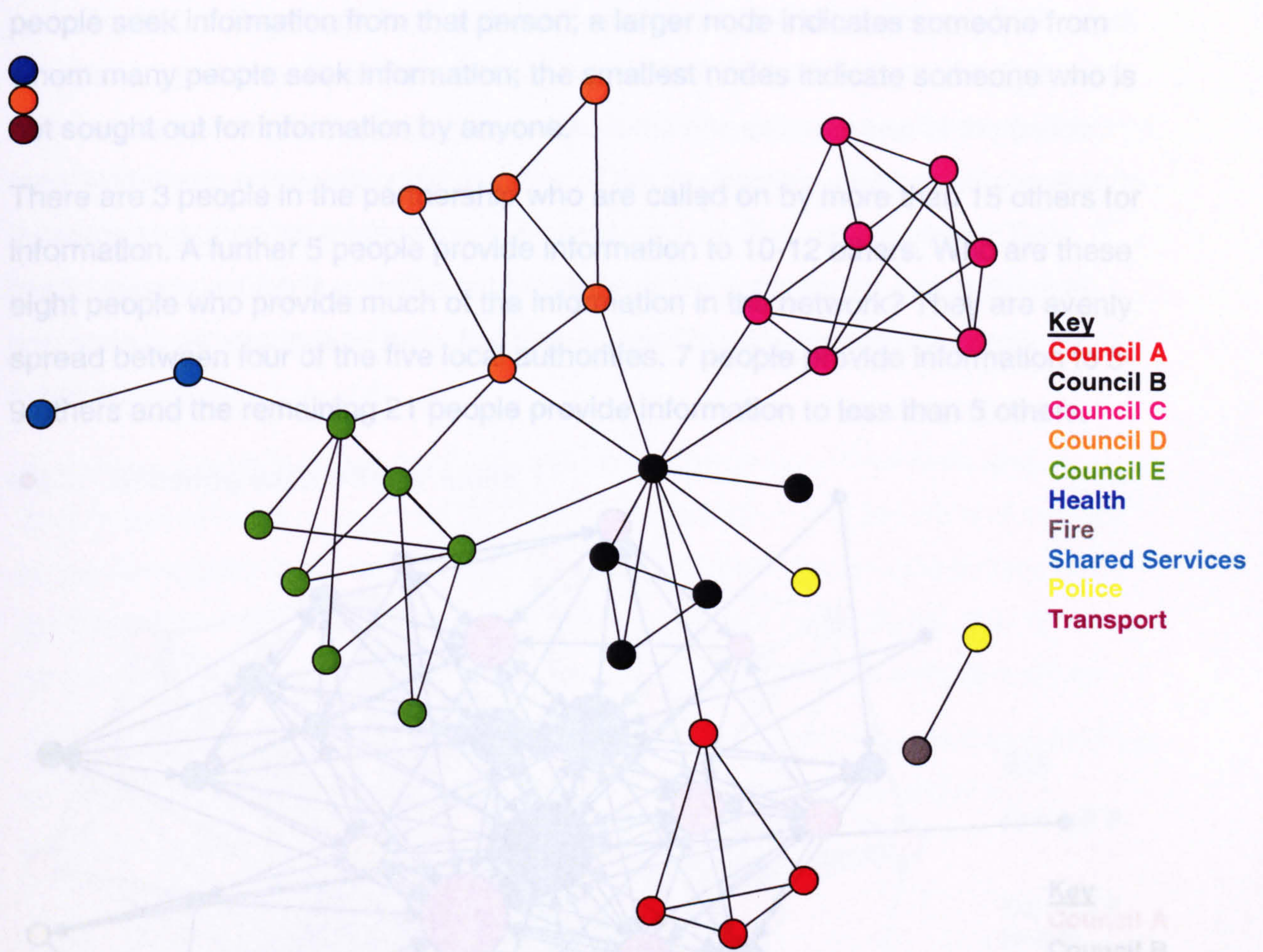


Figure 8 Metropolitan: Communication More Often Than Monthly

There are five isolated individuals who are not in regular (more often than monthly) communication with the main body of participants. Four of the five are from non-Council bodies. These five individuals do communicate with other members of the partnership, but the communication is not frequent.

4.6.2. Getting hold of information

Getting hold of accurate information in a timely fashion may be expected to help organisations work together. Participants were asked, “Who do you typically go to for information relating to e-government?” and “Who typically comes to you for information relating to e-government?” The results of these two questions, combined together, are shown in Figure 9. The lines represent information seeking. The nodes are coloured by organization. The size of the node indicates how many

people seek information from that person; a larger node indicates someone from whom many people seek information; the smallest nodes indicate someone who is not sought out for information by anyone.

There are 3 people in the partnership who are called on by more than 15 others for information. A further 5 people provide information to 10-12 others. Who are these eight people who provide much of the information in the network? They are evenly spread between four of the five local authorities. 7 people provide information to 5-9 others and the remaining 21 people provide information to less than 5 others.

2.3. Knowing each others' skills

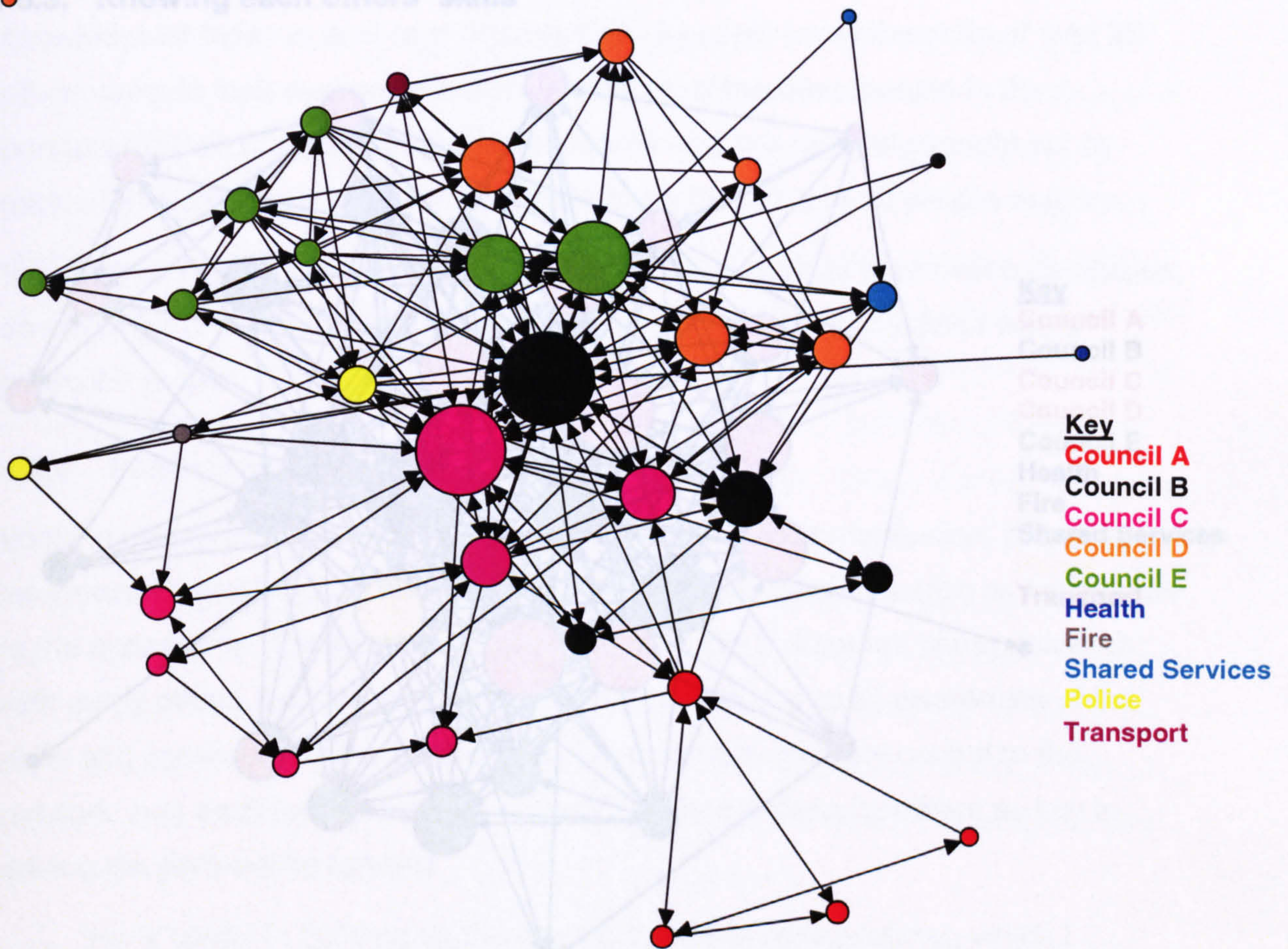


Figure 9 Metropolitan: Seeking Information (sized by in-degree)

Figure 10 Metropolitan: Knowing the Skills of Others (sized by in-degree centrality)

Moving on to those who are less central in the partnership, people in Council A rely for information on one person from Council A, who in turn goes for information to a number of others in the partnership. Among the non-Council organisations there is

some variation. Organisations who have been involved in the partnership for some time have a number of people who they can go to for information, and they tend to have contacts in a good spread of organisations. For example one of the police representatives, a long standing member of the partnership, goes for information to 9 people and provides information to 6 people across five organisations. The health service, which is a very recent addition to the partnership, has only one person to seek information from, but their contact is very centrally placed in the network.

4.6.3. Knowing each others' skills

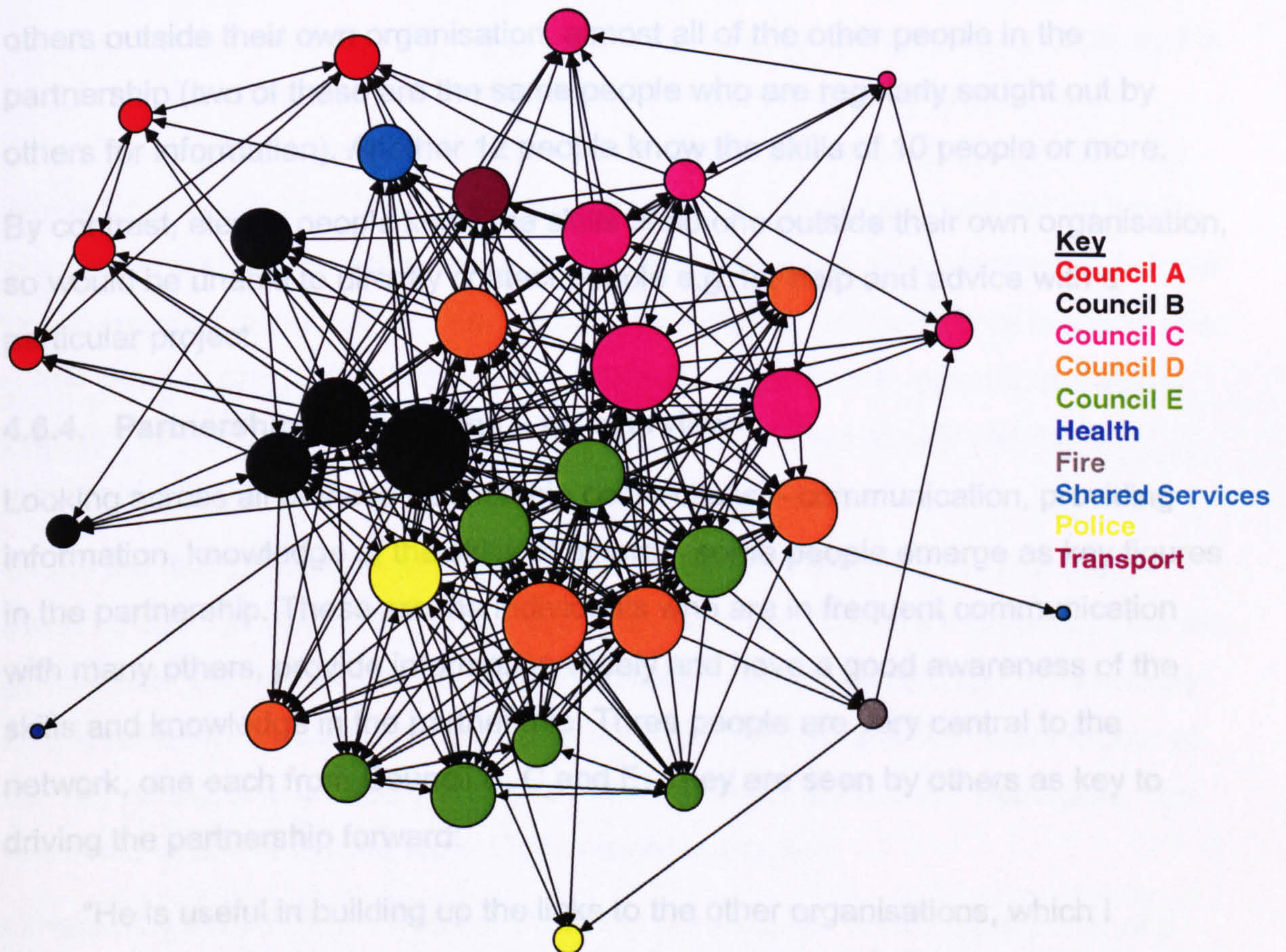


Figure 10 Metropolitan: Knowing the Skills of Others
(sized by in-degree centrality)

Understanding each others' skills is an important element of partnership working. Whether or not people are currently in regular contact, if they are aware of each

others' skills, they can quickly get together the right people for a particular project or can contact the people they need for advice or information. Participants were asked "About whom can you say "I understand what skills & knowledge this person has"?" Each node represents an individual. The nodes are coloured by organisation. The size of the node indicates how many people know the skills of that person: those whose skills are known by lots of others will be indicated by large nodes; the smallest nodes indicate those whose skills are only known by one other person in the network.

In general, as might be expected, people were well aware of the skills and knowledge of those in their own organisation. 3 people know the skills of over 20 others outside their own organisation, almost all of the other people in the partnership (two of these are the same people who are regularly sought out by others for information). Another 12 people know the skills of 10 people or more.

By contrast, eleven people know the skills of no one outside their own organisation, so would be unable to directly contact people e.g. for help and advice with a particular project.

4.6.4. Partnership connections – an overview

Looking across all of these partnership connections – communication, providing information, knowledge of the skills of others – some people emerge as key figures in the partnership. These are the individuals who are in frequent communication with many others, provide information widely and have a good awareness of the skills and knowledge in the partnership. Three people are very central to the network, one each from Council B, C and E. They are seen by others as key to driving the partnership forward:

"He is useful in building up the links to the other organisations, which I think is important in getting something forward like this ... you need somebody to be able to bring people together and embrace them and say we could do this together" (Council Head of ICT 1)

“[name] is a driver. If he was no longer involved the partnership would flounder... He is the most valuable resource” (Council e-government manager).

These three all seem to be supported by their organisations to play this role. Two are relatively senior in their organisations and the third, while more junior, has been encouraged by a senior manager to play an active role, having been freed up from other commitments to focus on the partnership. All three are perceived by others as approachable, likeable and knowledgeable. If these individuals left or reduced their commitment and were not replaced, the partnership would suffer. The person from council B plays a particularly important role in the partnership: he communicates frequently with many people, knows the skills of more people and is sought out for information by more people than anyone else. Of the ten most central people in the partnership, nine are from the four most active councils and one is from the Police. This police involvement was initially encouraged by having previously worked alongside one of the three key activists, who transferred to local government from the police. The police representative has been very involved over a few years in one of the partnership's projects, which may suggest that working together on a project strengthens a partnership more than simply sharing information and ideas.

Of the ten most central people in the partnership, nine are from the four most involved councils and one is from the police. All except one are members of the e-government Partnership, the longest established of the partnerships, so it is likely they have been working together for some time. They include the chairs of four of the key partnership groups. Among this central group, six are ICT managers, one is a Head of ICT and three are e-Government managers.

Others play a much less involved role in the partnership. These more peripheral players fall into three types. Firstly, there are some of the representatives from Council A; Council A has played a lesser role in the partnership until recently, partly because it has been focussing on a major internal reorganisation, outsourcing its ICT functions to a private sector partner, and partly because Council A's leadership has been less enthusiastic than others towards partnership working in general. The implementation of the new arrangements with the private

partner is now complete and this, together with some leadership changes, has placed Council A in a position where it has recently become more involved in the e-government partnership. It is anticipated that this involvement will increase further over coming months.

Secondly, there are some representatives who have played a small role, perhaps attending one of the sub-groups or participating in a particular project, or who have recently got involved in the partnership. Their organisations are fully engaged with the partnership and probably don't need them to be any more involved.

Thirdly, there are a few people in this peripheral category who are the sole representatives of their organisations in the partnership. If these organisations, particularly the fire service and the health service, are to be fully involved in the partnership, more needs to be done to engage with them. That said, the health involvement is in its earliest days and there have been recent personnel changes among the fire service representatives, with a longstanding member moving on to a new post. Other non-local authority organisations are very involved in the partnership. One of the police representatives is a key player and the representatives of shared services and transport are both fairly well connected. The transport representative is not in very frequent communication with others, but does exchange information with five people from three different organisations and knows the skills of eleven others. For the local authorities, their knowledge of the partnership is spread among a group of people, but for these other organisations, it all rests with one individual. This reliance on one person makes their involvement vulnerable to changes in role or moves to new employment.

4.7. Who is Involved in the Partnership?

The partnership involves 29 officers from 5 local authorities and 7 people from 5 other public organisations (fire, police, health, shared services and transport). 26 of the 36 participants are members of ICT departments (see Table 20). The remainder are a mixture of policy, communications and e-government managers. All of the organisations that have more than one person involved send at least one non-ICT representative. There are very few people who work in customer services or citizen-facing departments. There is no direct involvement of citizens or

councillors. One person is from the private sector, a Head of ICT for one of the councils.

Table 20 Metropolitan: The Role of Those Involved in the Partnership

Role	Number of people
ICT Department	21
Head of ICT	5
e-Government	4
Communications	4
Policy	2
Total	36

4.8. Governance

Partnerships rely for their success on a commitment at the highest level. "This means the chief executive, with political approval, supporting the partnership approach in his/her own organisation and ensuring that the support is cascaded down through their organisation" (ODPM, 2005a p15). Senior management play a key role in determining goals, signifying the importance of the network, creating a clear identity and galvanising support (Hutt et al. 2000). This study has focussed on those directly involved in e-government partnerships and so cannot comment in detail on the attitudes of chief executives. However, a few pertinent points arise from the research which can confirm the importance of having leadership commitment from the top. The initiative for setting up the local partnership came from one of the local authority chief executives. All of the chief executives meet together on a board, to which this partnership reports.

Changes in leadership attitudes were important drivers for partnership working for two of the partners. A senior officer from one council was clear that changes in the political leadership of his council, together with a change of chief executive meant that he was now getting much more encouragement than previously to be involved in partnership with other councils. An e-government manager from another council perceived a changed attitude to partnership working from his council leadership following the award of a poor rating in the comprehensive performance assessment: there was a drive to raise performance by sharing the knowledge, skills and expertise of others.

Successful partnerships rely on leaders within the group to ensure that meetings are well structured, decisions are followed up on and regular communication is maintained between meetings (ODPM, 2005a). Leadership roles are spread between the four most active local authority partners, with each taking on the chair of one of the partnership groups. The chairs provide leadership and continuity for the groups which helps keep them focussed. They are all among the group of boundary spanners in the partnership, in regular contact with others.

“We used to have some years back Heads of IT meetings which were nothing on the lines of this, it was just more informal and we used to rotate the chair and it really didn't work and it collapsed really to be honest and we stopped meeting” (Council Head of ICT 1).

In some partnerships a co-ordinating role has been provided by funded dedicated programme management support, either by appointing staff or via consultancy. This partnership has decided not to go down this route.

4.9. Other Networking

The research explored the extent to which participants were involved in other e-government networks such as national projects and regional organisations. Of the 36 people involved in the partnership, 19 were involved in a national project in the previous year. There was involvement in 11 different national projects including NOMAD (2), Smartcard (2), Knowledge Management (2) and the Single Business Account (2). 8 people attended national project dissemination events or expos. There was also involvement with Government Connect and the national e-government take-up campaign.

Table 21 Metropolitan: Involvement in National Projects and Regional e-Government Activity

	Involved in National Project in last 12 months	Involved in regional activity in last 12 months
Metropolitan participants	19	17

The impact that this involvement has had on partnership activity is difficult to assess from the data, but the Smartcard and Single Business Account national projects are both relevant to projects initiated by the partnership and the local authorities have made a joint bid to be adopters of Government Connect, which suggests dissemination of information through the partnership. Interviews indicate that the documentation and best practice from the national projects has been of greater use than the software products, and the national project expo events have encouraged useful discussion and learning between all the attending local authorities, not just those directly involved in the national projects. One respondent felt that national projects could have made better use of local partnerships when consulting about their products.

17 people from the Metropolitan partnership were involved in regional e-government activity. The regional e-government group was widely regarded as a useful and informative group. There are close ties between the Metropolitan partnership and the regional group, with a regional representative regularly attending the partnership meetings. Socitm (the Society of IT Managers, a national organisation) was widely mentioned as a valued source of best practice.

4.10. Size of Organisation ⁵

Among the local authority partners, the smaller councils appear to make a larger contribution to the activity. Of the 10 key activists in the partnership 7 are from the three local authorities with the smallest resident populations and one is from the police. Of the 3 people who are at the forefront of activity in the partnership, there is one each from the three authorities with the smallest resident populations. This may be because smaller councils can see more gains from the economies of scale and sharing of knowledge offered by e-government partnerships. For example, in relation to discussions about a shared approach to disaster recovery, "Council D is a large City Council so they have resources that we can use and they are quite happy to share" (Council ICT Manager). E-government research suggests that population size is a factor in adopting e-government, with large councils being

⁵ Source of population information: ONS mid year population estimates 2004
www.areaprofiles.audit-commission.gov.uk accessed 09/11/2006

more likely to adopt more sophisticated approaches (Ho and Ni, 2004; Norris and Moon, 2005), so it may be that the smaller councils lack the capacity to go it alone and are more likely to seek out partnerships.

4.11. Embeddedness

The literature indicates that partnership arrangements are influenced by social connections (BarNir and Smith, 2002; BarNir and Smith, 2002; Gulati and Gargiulo, 1999). Therefore, it might be anticipated that a partnership would benefit if the actors had previously worked or collaborated with one another prior to joining the partnership. In Metropolitan there is a strong history of working together. 26 of the 36 actors (72%) have worked before with at least one person from outside of their own organisation. Of these, there are 7 people who have worked before with more than 5 others in the partnership. This has helped develop trust between members.

4.12. Conclusions

There is strong support within this sub-regional partnership for continued work together on e-government and a commitment to develop further. It takes time to build the relationships and understanding required for effective partnership working. The structures and relationships are now well-established, which should make any future work together easier. Some benefits have already been seen and more are anticipated by the participants. The partnership is reliant on a small group of people to drive it forward. There is also a larger group of boundary spanners, those with close ties both within their own organisation and to those involved in the partnership.

The e-government activity initiated by the sub-regional partnership will impact on directorates and organisations beyond those who attend the partnership. If the activities are to be relevant and successful, the partnership needs to adopt a shared strategy, have clear lines of accountability and the relationship to other partnerships in the sub-region (and beyond) will need to be established. These issues will increase in urgency with the growing emphasis on shared services. Leadership is important to partnership activity, both in terms of commitment from chief executives and the need for leaders on the ground to drive the partnership activities forward. In this study, smaller councils appear to play a greater role in the

partnership than larger authorities, possibly because they lack the capacity to develop e-government solutions on their own.

The findings from this first case study suggest that social networks can have some effect on the adoption and implementation of e-government. The case study throws up some possible answers to the questions arising from the literature review.

Participation in this local e-government partnership has contributed to: the sharing of knowledge and expertise among organisations; better awareness of what each other does; and substantial savings through joint procurement. A small number of shared projects have been introduced and it seems that the foundations have been set for further initiatives. Commitment from the leadership of partner organisations seems to have been a factor in forming and sustaining the partnership and has influenced how involved organisations have been. The case study suggests that “silos” still operate to some extent: the bulk of participants were ICT managers and there does not seem to be a clear formal link into other customer facing directorates, although the extent to which there are less formal links from the partnership into their own organisations will vary. There are a few key figures in the partnership. They play a dual role of driving the group forward and acting as a glue to bring everyone together. Beyond this, there is a core group of “boundary spanners” who act as champions of the group in their own organisations and vice versa. There is no involvement of citizens or councillors in this partnership. The initiatives have so far focussed on administrative efficiency and cost savings rather than projects which will directly impact on citizen quality of life, but planned developments include the piloting of smartcards for young people.

5 Case Narrative 2 - Shire County⁶

5.1. Introduction: Shire County

The Shire County partnership was launched in 2001 as a partnership of all ten of the local authorities in the sub-region: a county council, a unitary authority and eight district councils (referred to here as councils F, G, H, I, J, K, L, M, N and O). The partnership's vision, agreed in 2002 is "The seamless delivery of joined-up services to afford the customer a consistent, high-quality experience, irrespective of location"⁷.

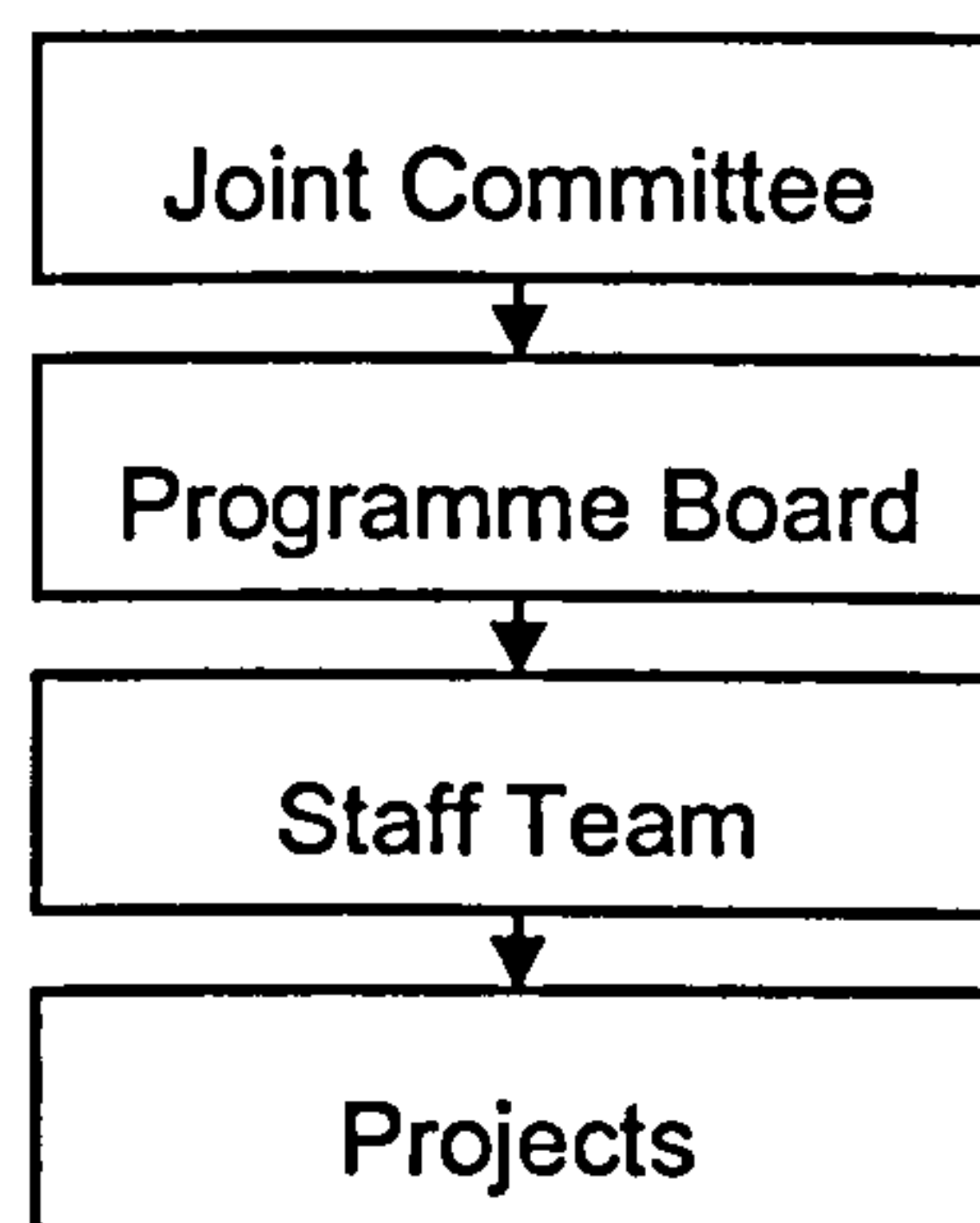


Figure 11 Shire County Partnership Structure

Overall management is provided by an executive *Joint Committee*, comprising a councillor and officer e-champion from each of the partners. Recommendations to the Joint Committee are made by a *Programme Board* of the ten officer e-champions. There is a small *Staff Team* of local government officers, whose function is to enact the decisions of the Joint Committee and manage the programme. Reporting to the Joint Committee and the Programme Board are a number of project boards including Joint Telephony and Secure Customer Self Service and implementation groups including Customer Services Managers' Group, Development Group, Security Forum, Technical Group, e-Payments User Group and Directory Users Group. Three additional public organisations (Fire &

⁶ This chapter is based on a report provided to the Shire County partnership.

⁷ Shire County e-Government Strategy, 2002 p7

Rescue Service, Parish Councils' Association and the Police) have observer status. These observers attend the Joint Committee but are not involved in project delivery and do not contribute financially.

The research included all those involved in the Joint Committee, Programme Board and staff team, plus members of one of the project implementation groups, the Customer Services Managers' Group. This included 48 people from 10 neighbouring authorities (referred to here as councils F, G, H, I, J, K, L, M, N and O) plus three public organisations operating in the area (police, fire, parish councils' association) and the staff team. The research explored two networks. The first was the strategic level: 31 people involved in the Joint Committee and Programme Board plus the staff team members who attend those boards. The second was at an operational level: 17 people involved in the Customer Services Managers' Group, plus the staff team members that attend that group. This case narrative concentrates on the strategic level network - to make it consistent with the other two case narratives which did not include an operational network – but incorporates some of the interviews with Customer Services Managers.

5.2. Motives for Working in Partnership

There are a number of motives for organisations in Shire County to work together. Firstly, all the councils involved in Shire County are motivated by a vision of seamless service delivery across the county. Outside of the unitary authority, citizens receive services from both the district councils (e.g. planning and leisure services) and the county council (e.g. education and social services). Participants hope that working together in Shire County will enable citizens to access services provided by several councils from one source, whether that be a council office, by telephone, via the web or in a one stop shop.

“you just can't achieve success alone in a local government two tier environment because customers have needs obviously that cut across the tiers and you have to be joined up” (Customer Services Manager 1)

Secondly, organisations are looking to Shire County to offer economies of scale by jointly procuring equipment, software and support services. This is particularly attractive to smaller districts. Thirdly, some participants are motivated by the

potential to “share learning through the partnership” (Council Senior Manager) and see it as an opportunity for “picking up good practice from others” (Customer Services Manager 2). Fourthly, working together meets various targets set by national government and has allowed access to additional central government funding. Fifthly, among some participants there is a desire to develop shared services.

5.3. Partnership Activities

Shire County has initiated a number of joint projects:

Public Consultation Consultants were engaged in 2002 to run a research project to identify public needs, with the intention that subsequent Shire County projects would be designed to address those needs. The research included a survey of 1800 adults and focus groups with businesses. 80% of respondents identified telephone as their preferred method of contact, so projects have tended to focus on that as the main means of contact.

Customer Relationship Management (CRM) The 10 local authority partners jointly procured an Oracle LG45 CRM system via a local company, Capula. This allows front office staff to log and track all contact from citizens (by telephone, web, or face-to-face). Alongside the procurement, business process re-engineering work has been done to establish common approaches between the local authorities to data capture of service requests. This enables partners to accept service requests on behalf of each other, log all contacts with citizens and provide information to callers on progress with their request. Initially the system went live with a limited range of services, but the intention is to expand the number of services covered, so that 80% of service requests from the public can be resolved by front office staff. Shire County’s approach to CRM is “wide and thin”: it aims to cover a large number of council services, but did not initially link deep into back office systems. The CRM system offers the capability to link directly to back office systems and this is starting to happen, although at different paces in different councils. At the time of the research Council J had yet to join the CRM, but it was expected that it would do so in the coming months.

Joined Up Directory An internal electronic contacts directory has been set up which includes a direct dial telephone number and clickable email link for all employees across the 10 councils. This can be accessed by all council employees in the sub-region.

Shire County Portal A website is used to exchange programme and project information between partners. It was originally anticipated that this would be customer facing, allowing one-stop access to different council services, but this has not been pursued because the councils prefer to offer services via their own websites.

e-Procurement 10 pilots were undertaken of e-procurement techniques, to achieve some quick wins, establish a business case for the joint procurement of goods and services and to improve procurement by the individual councils.

e-Payments 5 councils (Councils, H, I, L, M and O) have jointly procured a Civica e-payments system, which has recently gone live. It allows customers to pay for council services by credit or debit card using the internet or automated telephone payments. The joint procurement resulted in capital savings for partners, reduced maintenance costs and lower bank charges. Further amendment is needed to allow the CRM system to take payments for service requests. The other 4 partners already had some form of e-payments system. Council K already had the same Civica system, and is acting as host for the others.

Joint Telephony The project has three phases. Firstly, a feasibility study, which has already been completed. Secondly, joint housekeeping of existing telephony contracts to achieve economies of scale. Thirdly the procurement by three councils (Council F, H and K) of an Automatic Call Distribution (ACD) system to enable the re-routing of calls between the partners. Work on the joint housekeeping is still ongoing and implementation of the ACD system has recently started.

Secure Customer Self Service This will enable any service requests made by customers on the internet using e-forms to be delivered to the CRM system. It is expected to be completed by autumn 2006.

Improving Access to Street-Scene Services This is a relatively new project, which aims to improve public access to the various council services dealing with

roads, pavement, street furniture etc and identify savings. A feasibility study will be undertaken and if this proves there is a business case, the project will be introduced.

Government Connect Shire County has been approved as an early adopter of Government Connect and is awaiting national developments.

5.4. Benefits of Working in Partnership

In addition to the projects developed by Shire County, participants identified three key direct benefits of working together.

The first benefit relates to customer services. There has been a culture shift among Shire County councils towards a new emphasis on customer services, call centres, one-stop shops, which has led to substantial organisational change. Among the ten councils, there is a continuum on this customer services agenda. Some have long-established customer services teams and one-stop shops, others have only recently embarked on this agenda and others lie somewhere in between. This culture shift towards customer services has developed closely alongside the growth of the Shire County e-government partnership and the two have influenced one another. Councils J and O see an advantage in their relatively late adoption of CRM because they were able to learn from the mistakes of others. Councils H and M see the CRM as a cost-effective technical solution which, because it was procured and designed jointly, has freed them up to go a lot further forward in other areas of service delivery.

A second direct benefit of Shire County has been the opportunity to learn from each other; to share expertise and knowledge. Service specialists from the councils have worked together to define standard service requests for the CRM system, which has provided the opportunity to think together about how things are being done and whether they could be improved. A customer services manager with a long history in the private sector has been able, through Shire County to share their expertise around contact centres with a colleague from another authority who can swap their longstanding knowledge of local government. Participants mentioned the benefit of having a list of people to exchange problems and ideas with:

“I think from the partnership ... the sort of free flow of information from colleagues in the same situation has been probably the greatest thing we’ve been getting; we have been able to exchange ideas, exchange problems” (Customer Services Manager 3).

For some of those interviewed, this aspect of Shire County needs to be strengthened; there is a need to create more opportunities to share best practice amongst each other and learn from what each other has tried.

A third direct benefit has been efficiency savings. The joint procurement of the CRM system, the e-payments system and the joint telephony system has produced substantial financial savings over the cost of buying individual systems and has also required less staff input.

“we have benefited firstly through having joint procurement so it has been less resource intensive in terms of handling the procurement process and also much better deals have been struck in terms of sharing the cost. There’s a real efficiency benefit there” (Council Senior Manager).

“In terms of the procurement of the CRM system I think we’ve worked out it’ll save us £1/2 million over 10 years” (Council Assistant Director).

In addition to these direct benefits, some participants report further, indirect benefits of working together in Shire County:

- Shire County has proved that partnerships can be successful in the sub-region, leading to further collaborations, such as an improvement partnership which covers the same ten council councils, plus parts of a neighbouring county and also involves the police and fire services.

“it has actually proved that it can work and it has encouraged general partnership working and it is like the main trunk out of which lots and lots of smaller, and in the case of [the improvement partnership], bigger partnerships arrangements have been formed” (Councillor A)

- Working together in Shire County has led to opportunities for councils to work together bi-laterally. Two councils, H and O have formed a joint health scrutiny

committee. Councils H and O have jointly procured ICT services. Councils L and M have developed one stop shops. Councils I and M are discussing piloting shared out of hours cover. Councils K and L are discussing plans for a shared contact centre.

“I think one of the big hidden benefits from this is that because we are working together through this partnership you build up trust and it starts to open up opportunities to work together then in different ways”
(Council Senior Manager).

- For some councils, participation in Shire County has raised their profile and provided the opportunity for them to have a national voice, for example by showcasing their achievements to a wider audience or getting involved in national projects. Council O is the leading authority on a national e-innovations project and Council H is host to the e-democracy national project.

5.5. Key Issues

Participants were asked to identify the key issues currently facing Shire County. The biggest issue, mentioned by almost all those interviewed, concerns the future direction of the partnership. Funding provided by the ODPM's Partnership Programme has come to an end and most of the original projects have been or are almost completed. Shire County exists in a changing climate, with a move from e-government towards transformational government and an increased national emphasis on shared services. Two alternative routes forward were mentioned. One is for Shire County to adopt a clear vision of shared services across the sub-region and develop a strategy to achieve that. The vision could include provision of one-stop services across the county, via a variety of channels, and shared provision of some back office systems like finance or human resources. An alternative route forward is as a delivery vehicle which continues the implementation and development of CRM, together with a portfolio of discrete projects. Whichever route is taken will require senior level support from council chief executives to fund and empower the partnership to go forward. It is unclear whether that is forthcoming. At the time of the interviews, the local government review was pending and was expected to include a review of two tier systems in local

government. This was mentioned by some participants as a source of uncertainty and conflict: councils in the sub region have different perspectives on a future configuration of unitary authorities.

“The local government review means that people are not really buying into [Shire County’s] vision of the bigger picture stuff, the shared services agenda so what it could well end up being is just ... delivering a roll out of the CRM project and that is all very well and worthy but it wasn’t the sort of big thing that they envisaged when they started out”
(Council Head of ICT).

Another key issue has been the tension between some organisations involved in the partnership. There has been some conflict in recent times between the County Council and others, focused on different approaches to CRM. The County Council initially committed to the shared Oracle LG45 CRM system commissioned jointly by the partnership. Following a change of both chief executive and Head of ICT at the County Council, this decision was revisited and the County Council decided to introduce a SAP CRM system, which could more easily integrate with their existing SAP back office systems. After some months of tension, a way of integrating the County Council’s SAP CRM system with the Oracle CRM system has now been identified. There is a common feeling that the survival of the partnership through this rocky period is a sign of the partnership’s maturity and success. Yet the episode seems to have left some on-going tension.

There is a need for clarity about how Shire County fits with other local partnerships. The Collaboration Block is a Local Area Agreement between the County Council and the eight districts looking at the issue of shared resources and services. There appears to be some crossover between the Customer Services Managers’ Group and the customer services strand of the improvement partnership.

Now that the shared Oracle CRM system is being used by most partners, a key issue is the integration of the CRM with all the different back office systems used by the various councils and to start using the system capability more fully. This is a substantial piece of work which will require a commitment from each authority in terms of both staff resources and funding.

5.6. Network Structure

5.6.1. Communication in the partnership

Everyone in the partnership was asked about the frequency of their communication with others: “How often do you typically communicate with the following people about e-government?”

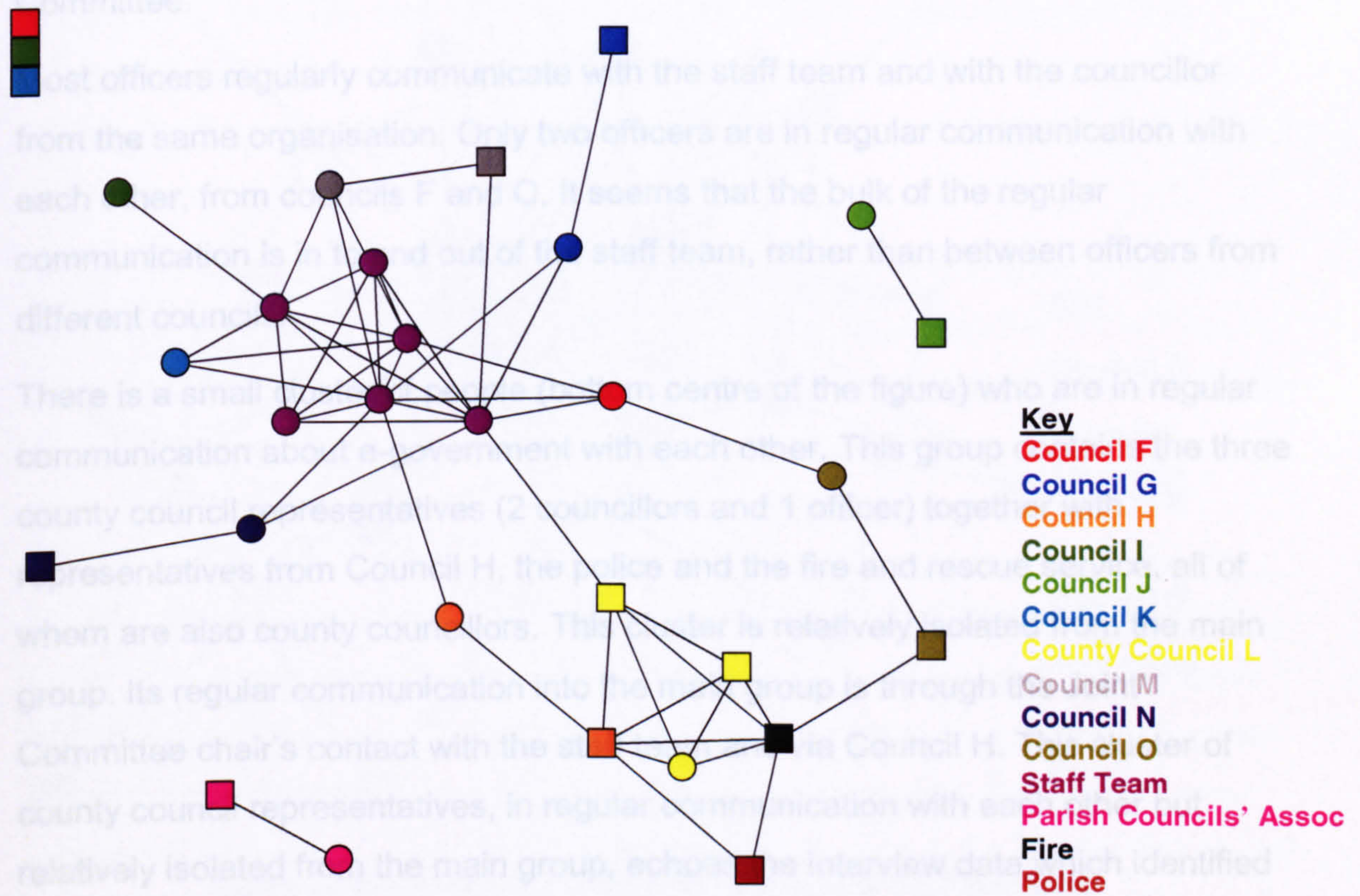


Figure 12 Shire County Partnership Board: Communication More Often Than Monthly

Figure 12 represents frequent communication between members of the Joint Committee, Programme Board and staff team. It does not include all communication, only communication more often than monthly. The data has been symmetrised, so a link is only recorded when both people report a connection. Each node represents an individual. The nodes are shaped according to role: officers are indicated by circles and councillors are indicated by squares. The nodes are coloured by organisation.

The bulk of participants are connected into the main body of the sociogram, indicating that they speak to at least one person regularly and are therefore linked into what the partnership is doing.

The staff team are in regular contact with each other and with officers from 7 of the 10 authorities (Councils F, G, H, I, K, M and N). The staff team are also in regular contact with two councillors, the current and previous chairs of the Joint Committee.

Most officers regularly communicate with the staff team and with the councillor from the same organisation. Only two officers are in regular communication with each other, from councils F and O. It seems that the bulk of the regular communication is in to and out of the staff team, rather than between officers from different councils.

There is a small cluster of people (bottom centre of the figure) who are in regular communication about e-government with each other. This group contains the three county council representatives (2 councillors and 1 officer) together with representatives from Council H, the police and the fire and rescue service, all of whom are also county councillors. This cluster is relatively isolated from the main group. Its regular communication into the main group is through the Joint Committee chair's contact with the staff team and via Council H. This cluster of county council representatives, in regular communication with each other but relatively isolated from the main group, echoes the interview data which identified tensions between the County Council and others over the CRM system.

A small number of people are isolated in the sense that they are not in regular communication with anyone else. This includes the councillors from councils F, I and K. Council J's officer and councillor communicate regularly with each other but with nobody else, as do the representatives of the Parish Councils' Association.

5.6.2. Getting hold of information

Getting hold of accurate information in a timely fashion may be expected to help organisations work together. Participants were asked, "Who do you typically go to for information relating to e-government?" and "Who typically comes to you for

information relating to e-government?" The results of these two questions were combined together (Figure 13).

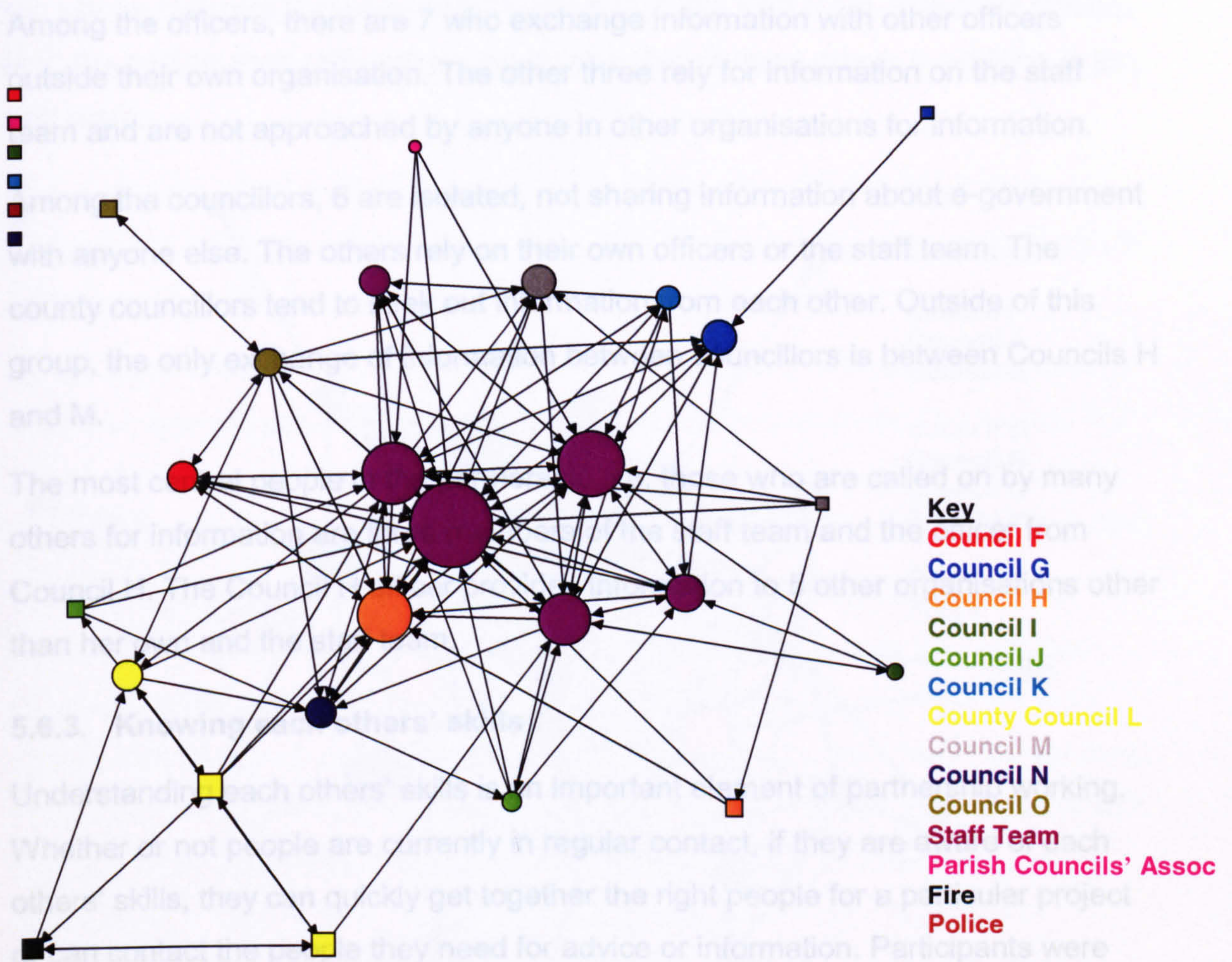


Figure 13 Shire County Partnership Board: Seeking Information (sized by in-degree)

In the figure, the lines represent information seeking. Each node represents an individual. The nodes are shaped according to role: officers are indicated by circles and councillors are indicated by squares. The nodes are coloured by organisation. The size of the node indicates how many people seek information from that person; a larger node indicates someone from whom many people seek information; the smallest nodes indicate someone who is not sought out for information by anyone.

All of the staff team are called on by many others for information: all of the officers go to staff team members for information about e-government.

Among the officers, there are 7 who exchange information with other officers outside their own organisation. The other three rely for information on the staff team and are not approached by anyone in other organisations for information.

Among the councillors, 6 are isolated, not sharing information about e-government with anyone else. The others rely on their own officers or the staff team. The county councillors tend to seek out information from each other. Outside of this group, the only exchange of information between councillors is between Councils H and M.

The most central people in the partnership, i.e. those who are called on by many others for information are three members of the staff team and the officer from Council H. The Council H officer provides information to 5 other organisations other than her own and the staff team.

5.6.3. Knowing each others' skills

Understanding each others' skills is an important element of partnership working. Whether or not people are currently in regular contact, if they are aware of each others' skills, they can quickly get together the right people for a particular project or can contact the people they need for advice or information. Participants were asked "About whom can you say "I understand what skills & knowledge this person has"?" Each node represents an individual. The nodes are shaped according to role: officers are indicated by circles and councillors are indicated by squares. The nodes are coloured by organisation. The size of the node indicates how many people know the skills of that person: those whose skills are known by lots of others will be indicated by large nodes; the smallest nodes indicate those whose skills are not known by anyone else in the network.

The skills of the more senior members of the staff team are known by all of the officers except one representative who is fairly new. Councillors have a much lower awareness of staff team skills: only three councillors know the skills of a staff team member.

Officers have a limited knowledge of the each others' skills. There are two officers whose skills are known by five others in addition to the staff team, and there are two whose skills are known by nobody other than the staff team. The other officers lie in the middle; their skills are known by one, two or three others in addition to the staff team.

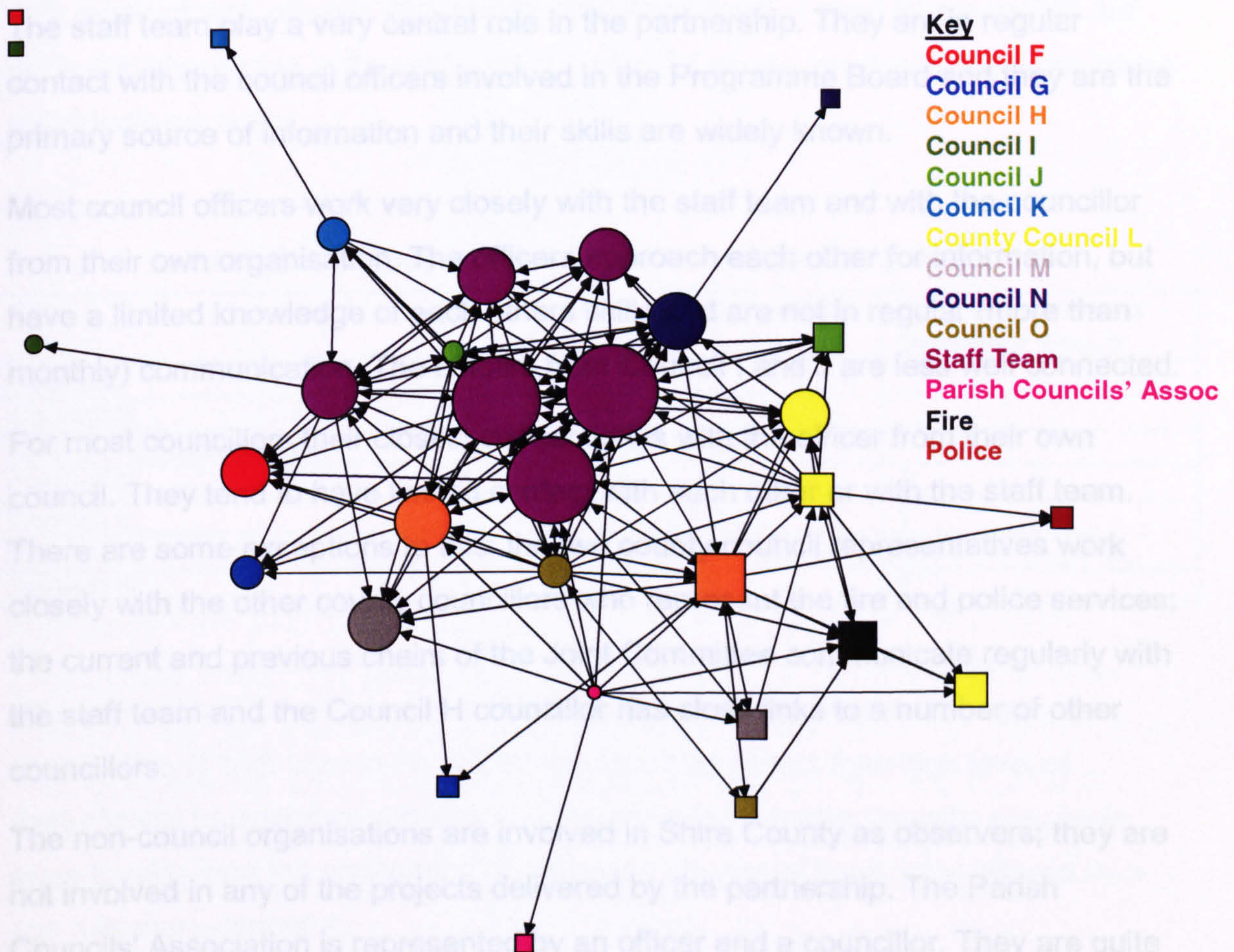


Figure 14 Shire County Partnership Board: Knowing the Skills of Others (sized by in-degree)

Among the councillors, one, the councillor from Council H has skills known by six others outside his own organisation. The cluster of county councillors tends to know each others' skills. There are four councillors (from councils F, I, K, N) whose skills are known by nobody outside their own organisation and five whose skills are known by only one or two people outside their own organisations.

5.6.4. Partnership connections – an overview

By combining these three partnership connections - communication, providing information, knowledge of the skills of others – it is possible to identify close working i.e. where people communicate more often than monthly, provide information to one another and know each others skills.

The staff team play a very central role in the partnership. They are in regular contact with the council officers involved in the Programme Board and they are the primary source of information and their skills are widely known.

Most council officers work very closely with the staff team and with the councillor from their own organisation. The officers approach each other for information, but have a limited knowledge of each others skills and are not in regular (more than monthly) communication. The officers from Council I and J are less well connected.

For most councillors their closest connection is with the officer from their own council. They tend to have limited contact with each other or with the staff team. There are some exceptions to this: the two county council representatives work closely with the other county councillors who represent the fire and police services; the current and previous chairs of the Joint Committee communicate regularly with the staff team and the Council H councillor has close links to a number of other councillors.

The non-council organisations are involved in Shire County as observers; they are not involved in any of the projects delivered by the partnership. The Parish Councils' Association is represented by an officer and a councillor. They are quite isolated within the partnership: they are not in regular communication with others in the partnership, their skills are not widely known and they are not sought out for information about e-government. The officer representative from the police to Shire County has gone on secondment abroad and had not been replaced at the time of the research. The police service is represented by a county councillor, who is in regular communication with two other councillors who represent Council H and the fire service. The fire service is represented by a county councillor, who is in regular communication with the officer and councillors from the county council, the councillors from Councils H and O and the police representative. It is only the

connections established through the County councillors that maintain contact between Shire County and these emergency services.

Looking across all of the partnership connections – communication, providing information, knowledge of the skills of others – some people emerge as key figures in the partnership. These are the individuals who are in frequent communication with many others, provide information widely and have a good awareness of the skills and knowledge in the partnership. Table 22 shows which organisations these individuals are from.

Table 22 Shire County - Most Active Individuals (excluding staff team)

	Programme Board	Councillors	Customer Services Managers' Group
Council F	1		
Council G	1		
Fire and Rescue Service		1	
Council H	1	1	1
Council L	1	2	1
Council M	1		3
Council N	1		2

Councils H and M, which are two of the smallest councils, make a substantial contribution of staff time to Shire County. This may reflect their high level of commitment to customer services and suggests that smaller councils may have more to gain from the economies of scale and sharing of knowledge offered by a sub-regional partnership.

5.7. Who is Involved in the Partnership?

At the time of the research, Shire County Joint Committee was made up of 14 councillors and 11 officers. 11 of the 14 councillors represent the 10 councils (one from each council, but the County Council also has an alternate delegate) and the other 3 councillors represent the Fire Service, the Police Service and the Parish Councils' Association. Many of the councillors are relatively senior members: two are council leaders and six are cabinet members.

The 11 officers include one from each of the 10 councils, plus the chief executive of the Parish Councils' Association. The seniority of the officers varies among the different councils. The most senior officer is a Director of Organisational Development, five are heads of service, one is an e-services manager and one is an ICT Projects manager. Two officers did not reply.

Table 23 Seniority of Those Involved in Shire County Partnership Board

Role	Number
Councillor (2 leaders, 6 cabinet members)	14
Chief Executive	1
Director	1
Head of Service	5
Manager	1
Officer	1
Staff team	6
Missing – no reply	2
Total	31

Partnership success and activity will be influenced by the seniority of the individual representatives and their capacity to commit to decisions on behalf of their organisation. Within this partnership, there seems to be a relationship between activity in the partnership and seniority: those officers who are more senior in their own organisations play a more central role in the partnership. This is perhaps a reflection of the differing levels of commitment towards Shire County among the councils, with those who want greater involvement sending more senior representatives.

Table 24 Shire County: Departmental Affiliations of the Partnership Board

Directorate	Number
Resources	6
Organisational Development	1
ICT	1
Planning and Engineering	1
Corporate Governance & Service Improvement	1
Chief Executives	1
Total	11

Table 24 indicates which directorates are represented on Programme Board. The board appears to be overwhelmingly made up of people from “back office” directorates, with little direct representation at Programme Board level of customer services or citizen-facing directorates. People from other departments may well be involved in some of the sub-committees of Shire County, but they are not participating at this strategic level in the partnership.

5.8. Governance

Since its inception in 2002, Shire County has developed a series of projects which are valued by partners for contributing to efficiency savings and customer service improvements. The initial portfolio of projects is now mostly completed or near completion, and partners are starting to see the benefits of them. Almost all of the initial projects have come to fruition, which suggests that the management arrangements have been successful.

However, there is a sense in which Shire County has been driven forward by projects, in the absence of a clear strategic direction for the partnership. At a Programme Board meeting, reference was made to a “scattergun of projects”. It was evident in all the interviews that those involved in Shire County share a long term vision of joining up services across the two tiers of local government, but there does not seem to be a shared commitment and strategy of how to work towards this vision. Such a strategy could provide a link between the long term vision of joined up provision and the here and now, offering a framework for the development of projects. A number of examples of this project-driven approach arose during the study:

Some members of the Customers Services Managers’ Group reported that their activity is generally self-generated: if the group come up with a good idea, they either take it forward themselves, or for more major projects, pass the idea up to the Programme Board for approval. The system is felt to be more effective now that a member of Programme Board chairs the Customer Services Managers’ Group, offering a clear route for ideas to be raised. However, some members felt that the group is “meandering”: it plays a useful function in coming up with good ideas from the bottom up, but could be more effective with greater senior direction.

"I would have expected the leaders, the members, the council leaders and chief executives to take a view and say look, in [the sub-region] we are going to have single points of access for all services in the community and it is going to look like this. We are going to have one call centre, a virtual site, one phone number for all council services, we are going to have a single web portal and all services are accessed through that in [the sub-region] ... They haven't made those decisions, those strategic decisions so this group is just left to meander its own course, which it does reasonably effectively" (Customer Services Manager 1).

There seems to be general agreement among participants that Shire County has developed into a useful partnership which, despite some difficulties and obstacles, has managed to stick together and achieve some effective outcomes. The description "mature" was applied to the partnership by many of those interviewed. But some feel that the Shire County partnership is more mature than the structures that surround it:

"it is like having a massive racing car engine in a small mini. The engine wants to do something and the mini is not quite sure whether it can actually achieve it. So this thing, you know, you've got something that could really really transform service delivery I would have thought in [the sub-region] but whether the brakes will ever be taken off by these people and the Chief Execs to let it happen because of the vested interests etc, I don't know" (Council Assistant Director)

Shared services have developed unevenly across the county. So there can be a string of one stop shops developed jointly with the County Council in one district, but none in another.

"I don't necessarily see a model being rolled out and it may well be that there isn't a one size fits all to these things but I don't see the thing being modelled and then taken and adapted and so on". (Customer Services Manager 2).

This research did not include any specific evaluation of the governance arrangements, but partners seemed to be in general support of them. Each council

has an equal vote and core costs are funded by equal share. The costs for the largest project, the CRM system, have been split between the councils according to population size. Chairs of the Joint Committee and the Programme Board rotate regularly between partners and meetings are held in different venues throughout the county. Partners only get involved in those projects they choose to take on and can step back from those of less relevance to them.

Shire County is unusual among sub-regional e-government partnerships in involving councillors from the participating councils on the board. The councillors are senior representatives – almost all are executive members, with a few leaders and deputy leaders – so they are able to speak on behalf of their organisations. This puts them in a position to be able to commit to some decisions and to have authority within their own organisation when reporting back.

“all the others are certainly executive members of their council, so ... well, it is difficult to make decisions if the person isn't of a senior enough position to know what's what” (Councillor B)

The social network figures indicate that most councillors have a close working relationship with their own council's officer champion but relatively little contact with other councillors and this view was confirmed in the interviews, “the main relationship will be with the member and officer within the same authority” (Councillor A). The councillors meet together formally at the Partnership Board meetings four times a year and it seems that most councillors are not in regular contact with one another and have little awareness of each others' skills. Councillors are responsible for taking the key strategic decisions of the partnership and they are guided in those decisions primarily by their own council's officer champion.

Decisions about Shire County' activity and direction are taken by the Joint Committee. Where the decision is likely to be costly or may impact substantially on individual councils, the decision will be taken back to the individual council's senior management team, (or to council meetings where necessary) by the officer and member champions.

Shire County reports occasionally on its activity and achievements to an established board of all the council chief executives in the sub-region. Among the research participants, there does not seem to be a sense that the chief executives group drives or owns Shire County activity and there “isn’t a coherent Shire County wide model for service delivery” (Council Assistant Director).

Perhaps the partnership could be strengthened and its legitimacy increased if there was greater understanding and joint working among the member champions and greater direction from the Chief Executives. This might be challenging and could reveal some tensions, but it would give the partnership more strategic direction from the top.

5.9. Other Networking

The research explored the extent to which people involved in Shire County are also involved in other e-government networks such as national projects, regional organisations and other local networks.

Of the 48 people involved in the Partnership Board, Programme Board, Staff team and Customer Services Managers’ Group, only 11 have been involved in a national project in the previous year, but some of those 11 have been involved in more than one national project. The national projects that people from Shire County were involved in were (numbers involved in brackets): an e-innovations project (5), Government Connect (4), ESD Toolkit (4), Working with Business, (2), CRM, e-democracy, Parsol and smartcards. Those involved in national projects were from councils H, J, N and O and the staff team. Council H is host to the International Centre of Excellence for Local e-Democracy (ICELE).

Table 25 Shire County: Involvement in National Projects and Regional e-Government Activity

	Involved in National Project in last 12 months	Involved in regional activity in last 12 months
Officers	3	3
Councillors	1	3
Customer Services Managers	3	0
Staff team	4	3
Total	11	9

The impact that this involvement has had on partnership activity is difficult to assess from the data, but there is evidence of dissemination of national project outcomes through the partnership. The local authorities have made a joint bid to be early adopters of Government Connect. The e-democracy national project was discussed at a board meeting attended by the researcher. The CRM system in Shire County was developed by a local firm: the CRM national project products came on board too late, after the local development had already taken place. Four of the Shire County local authorities are working together on an e-innovations national project. Shire County has been awarded a beacon award for its e-government activity and this has brought in national funding for seminars and other events to disseminate their best practice to others.

9 people had some involvement in regional e-government activity in the past year. Shire County is represented on a regional e-government group by the programme manager. Of those interviewed, a number of people, particularly those from the more northern parts of the sub-region, saw themselves as being "on the periphery of the [region]" (Officer). Generally people either had little awareness of regional e-government activity or regarded it as weak in comparison to Shire County' work. However, there was an awareness that central government funding would be going to regions rather than sub-regions in the future and therefore some concern about access to future e-government partnership funding.

5.10. Size of Organisation ⁸

Shire County is made up of eight small district councils together with a large city council and a very large county council. The eight districts all have resident populations under 130,000. The small districts would have been unable to afford a CRM system as individual councils and have benefited from the economies of scale offered by the partnerships. Within the Shire County partnership two of the smallest districts, H and M, have made a disproportionately substantial contribution of staff time.

⁸ Source of population information: ONS mid year population estimates 2004
www.areaprofiles.audit-commission.gov.uk accessed 09/11/2006

5.11. Embeddedness

There seems to be little history of the local authorities working together on shared projects in the sub-region: most people who took part in the research had not previously collaborated with their counterparts in other organisations. But arising, from the experience of Shire County, there are now two other networks in the sub-region, both of which are much newer organisations:

The Improvement Partnership is a partnership of the 10 Shire County councils plus the Fire and Rescue Service and two councils from a neighbouring county. It has been awarded a £850,000 government grant for capacity building and training of councillors, managers and staff. It is widely believed among those interviewed that the Improvement Partnership has come about because of the success of Shire County in showing what partnership working can achieve. Among some customer services managers there was a feeling that there was a potential crossover or duplication between the Customer Services Managers' Group and the customer services strand of the Improvement Partnership.

The Collaboration Block of the local area agreement between the County Council and the eight district councils has been formed to look into shared services.

Council M is involved in three partnerships with other local authorities (management development, a revenues and benefits product and a procurement partnership).

5.12. Conclusions

Councils have strong motives for being involved in Shire County: a vision of seamless service delivery across the county, economies of scale, learning from each other and a raised national profile for the individual councils involved. Shire County has developed a series of projects which are valued by partners for contributing to efficiency savings and customer service improvements. The initial portfolio of projects is now mostly completed or near completion, and partners are starting to see the benefits of them. Almost all of the initial projects have come to fruition, which suggests that the management arrangements have been successful. Now that the CRM system is being used by most partners, a key issue is the integration of the CRM system with all the different back office systems used by the

various councils and to start using the system capability more fully. This is a substantial piece of work which will require a commitment from each authority in terms of both staff resources and funding.

The staff team play a very central role in the partnership. They are in regular contact with the council officers involved in Shire County, they are the primary source of information and their skills are widely known. Most council officers work very closely with the staff team and with the councillor from their own organisation. The officers approach each other for information, but have a limited knowledge of each others skills and are not in regular (more than monthly) communication. Some spoke of the need for more opportunities to share best practice amongst each other and learn from what each other has tried. For most councillors their closest connection is with the officer from their own council. They tend to have limited contact with each other or with the staff team.

Amongst the key figures in the partnership are the senior members of the staff team and representatives from 6 of the councils. Councils H and M, which are two of the smallest councils, make a substantial contribution of staff time to Shire County. This may reflect their high level of commitment to customer services and suggests that smaller councils may have more to gain from the economies of scale and sharing of knowledge offered by a sub-regional partnership.

There is a sense in which Shire County has been driven forward by projects, in the absence of a clear strategic direction for the partnership. Those involved in Shire County share a long term vision of joining up services across the two tiers of local government, but there does not seem to be a shared commitment and strategy of how to work towards this vision. Such a strategy could provide a link between the long term vision of joined up provision and the here and now, offering a framework for the development of projects.

Shire County is unusual among sub-regional e-government partnerships in involving councillors from the participating councils on the board. The councillors are senior representatives which puts them in a position to be able to commit to some decisions and to have authority within their own organisation when reporting

back. Shire County reports occasionally on its activity and achievements to an established board of local authority chief executives.

The seniority of the officers varies among the different councils. The Programme Board appears to be overwhelmingly made up of people from “back office” directorates, with little direct representation at Programme Board level of customer services or citizen-facing directorates.

Shire County has developed into a mature partnership which, despite some difficulties and obstacles, has managed to stick together and achieve effective outcomes. It takes time to build the relationships and understanding required for effective partnership working; the structures and relationships are now well-established, which should make any future work together easier. Shire County has proved that partnerships can be successful in this sub-region, leading to further collaborations, such as an Improvement Partnership and a Local Area Agreement. It has also led to opportunities for councils to work together bi-laterally. There is a need for clarity about how Shire County fits with these other partnerships.

6 Case Narrative 3 - Urban⁹

6.1. Introduction: Urban

The Urban Partnership was launched in January 2002 as a partnership of local authorities and other public organisations in the sub-region to deliver a number of joint e-government projects. It received initial funding of £1 million from the ODPM's e-government Partnership Programme. The partners in Urban are: 11 local authorities (referred to here as council P, Q, R, S, T, U, V, W, X, Y and Z) and 5 other public sector organisations (Fire and Rescue Service, Passenger Transport Executive, Police Service, Learning and Skills Council and the Strategic Health Authority). The partners have formed a group of officers which has met regularly. Decisions are reached by consensus. The Urban partnership employs two members of staff, a Programme Manager and a Development Worker. There is also a sub-regional ICT Managers' Group, which usually meets on the same day in the same venue. These are separate groups, but with some overlap in membership. Both groups report to a board of sub-regional chief executives.

The research included all those involved in the Urban e-government partnership and the ICT Managers' Group, plus two members of staff who are employed by the partnership. This included 30 people from 11 neighbouring local authorities plus 5 other public organisations operating in the area. The research took place between April and July 2006.

6.2. Motives for Working in Partnership

Participants' motives for working together in the Urban partnership are to share information, learn from one another and to access government funding. Some participants have additional motives: The partnership can act as a lever to encourage management support for initiatives in councils which are lagging behind on e-government; it offers an opportunity for local authorities to influence what is happening across the sub-region; and it allows other public sector organisations to understand what the councils are doing.

⁹ This chapter is based on a report provided to the Urban partnership

6.3. Partnership Activities and Benefits of Working in Partnership

Urban has initiated a number of joint projects including:

A recruitment website, which allows partners to advertise job vacancies, offering a one-stop service to applicants and efficiency savings for councils. It is used by 8 of the 10 councils to post their vacancies.

A series of virtual workgroups, which allow groups of officers to share information and have discussions with others in their field. At the time of the research, work was being undertaken to extend this service to more groups and increase uptake.

A database of training opportunities.

A website, which has information about Urban initiatives, allows access to the recruitment site, the virtual workgroups and the database of training opportunities and provides the opportunity to search across all the local authority websites. It is unclear whether this is a site for officers or citizens and there are plans to divide it into two separate sites.

A roadworks on-line pilot project which developed tools to enable local authorities to electronically inform the emergency services of planned roadworks. This was a pilot project between the fire service and one of the councils. The tools developed by the project worked successfully, but there was insufficient funding or commitment to extend the pilot to other councils in the sub-region.

A digital television project was developed by Urban and, once it was up and running, passed to local authorities to manage the content.

The initial funding was spent on developing a set of products, and once they were launched there was little left for promoting or embedding those products.

Beyond the projects, the main benefit reported by participants in the Urban partnership has been the role of Urban staff in providing help and advice or putting members in touch with other sources of support:

“If I want some practical help in terms of finding a solution, again they are one of the first people I would turn to. If they don't know it's 'I know a man who can'”. (Council Senior Manager)

For one participant from a digital development agency, the main benefit has been to have the opportunity to raise the importance - among others involved in e-government - of addressing the digital divide:

“We have tried to stress that we see it as a balanced approach; that you have got to drive up awareness, capability, interest amongst residents as much as you have got to develop integrated front and back office systems”. (Council Head of Service)

6.4. Key Issues

Participants were asked to identify the key issues facing the Urban partnership. As with the other partnerships, the biggest issue concerns the future direction of the partnership. Funding provided by the ODPM's Partnership Programme has come to an end and most of the original projects have been completed. The Urban partnership exists in a changing climate, with a move from e-government towards transformational government and an increased national emphasis on shared services. Among those interviewed there emerged two narratives of Urban's current position. One sees it as a group with dwindling involvement by increasingly junior officers, which has largely completed the e-government activity it set out to do. The second narrative has hope of a renewed and strengthened future for Urban, working on shared services and linking into the City Regions agenda.

There is some overlap between the activity of the e-government partnership, the ICT managers' group and the regional e-government group and a need for clarity on their remits. If the Urban partnership is to continue, it needs to address the declining attendance by establishing a clear shared vision and purpose.

6.5. Network Structure

6.5.1. Communication in the partnership

Everyone in the partnership was asked about the frequency of their communication with others: “How often do you typically communicate with the following people about e-government?” Figure 15 represents frequent communication between members of the partnership. It does not include all communication, only communication more often than monthly. The data has been symmetrised, so a

link is only recorded when both people report a connection. Each node represents an individual. The nodes are coloured by organisation.

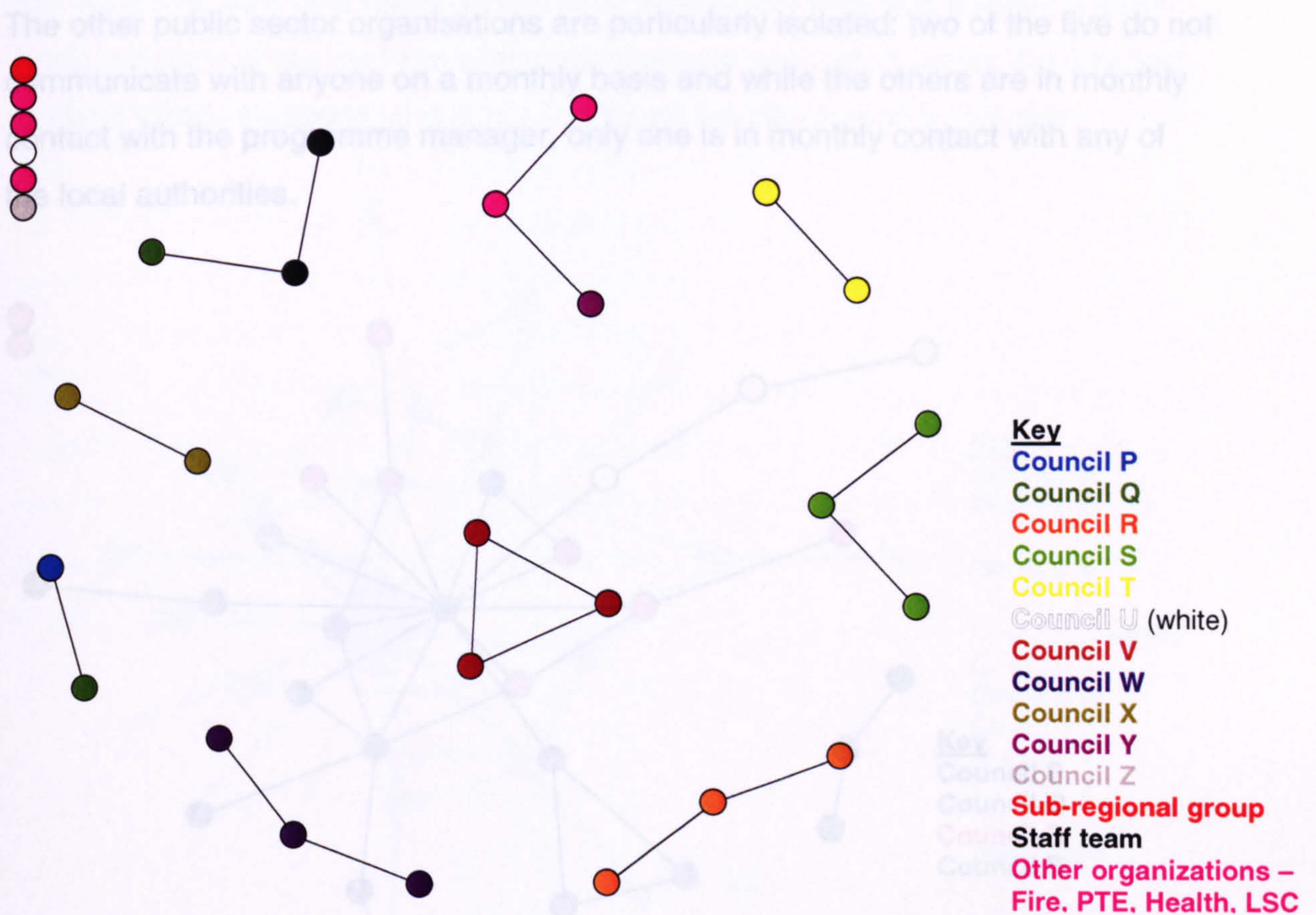


Figure 15 Urban Partnership: Communication More Often Than Monthly

The graph is not connected: it is divided into a number of separate clusters, largely based on organisation. Frequent communication is generally restricted to within organisations. Most participants are not in frequent communication with anyone outside their own organisation.

Figure 16 represents the level of less frequent communication in the Urban partnership: the ties record communication that is at least monthly. As the figure illustrates, most of the monthly communication is through the programme manager on the Urban staff team. 20 of the 30 participants don't speak on a monthly basis to anyone outside their own organisation, other than to the Urban staff team members. 6 people communicate monthly to one other organisation. Only 2 people

(other than the staff) communicate on a monthly basis to more than one other organisation involved in the partnership.

The other public sector organisations are particularly isolated: two of the five do not communicate with anyone on a monthly basis and while the others are in monthly contact with the programme manager, only one is in monthly contact with any of the local authorities.

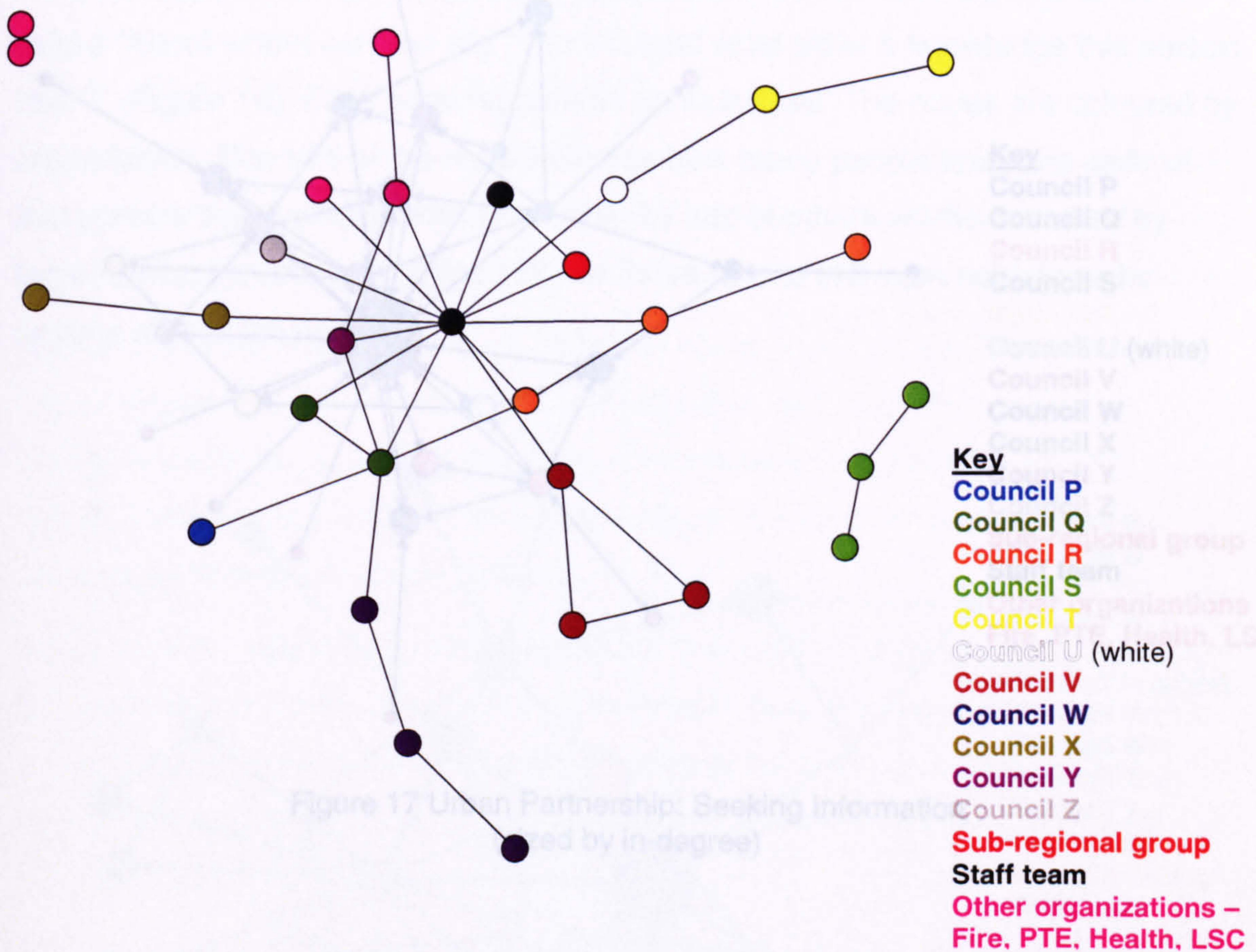


Figure 17 Urban Partnership: Seeking Information (Nodes are coloured by organisation. The size of the nodes indicates how many people seek information from that person in the partnership.)

Figure 16 Urban Partnership: Communication at Least Monthly

6.5.2. Getting hold of information

Getting hold of accurate information in a timely fashion may be expected to help organisations work together. Participants were asked, “Who do you typically go to for information relating to e-government?” and “Who typically comes to you for information relating to e-government?” The results of these two questions were

combined together. In Figure 17, the lines represent information seeking. Each node represents an individual. The nodes are coloured by organisation. The size of the node indicates how many people seek information from that person; a larger node indicates someone from whom many people seek information; the smallest nodes indicate someone who is not sought out for information by anyone.

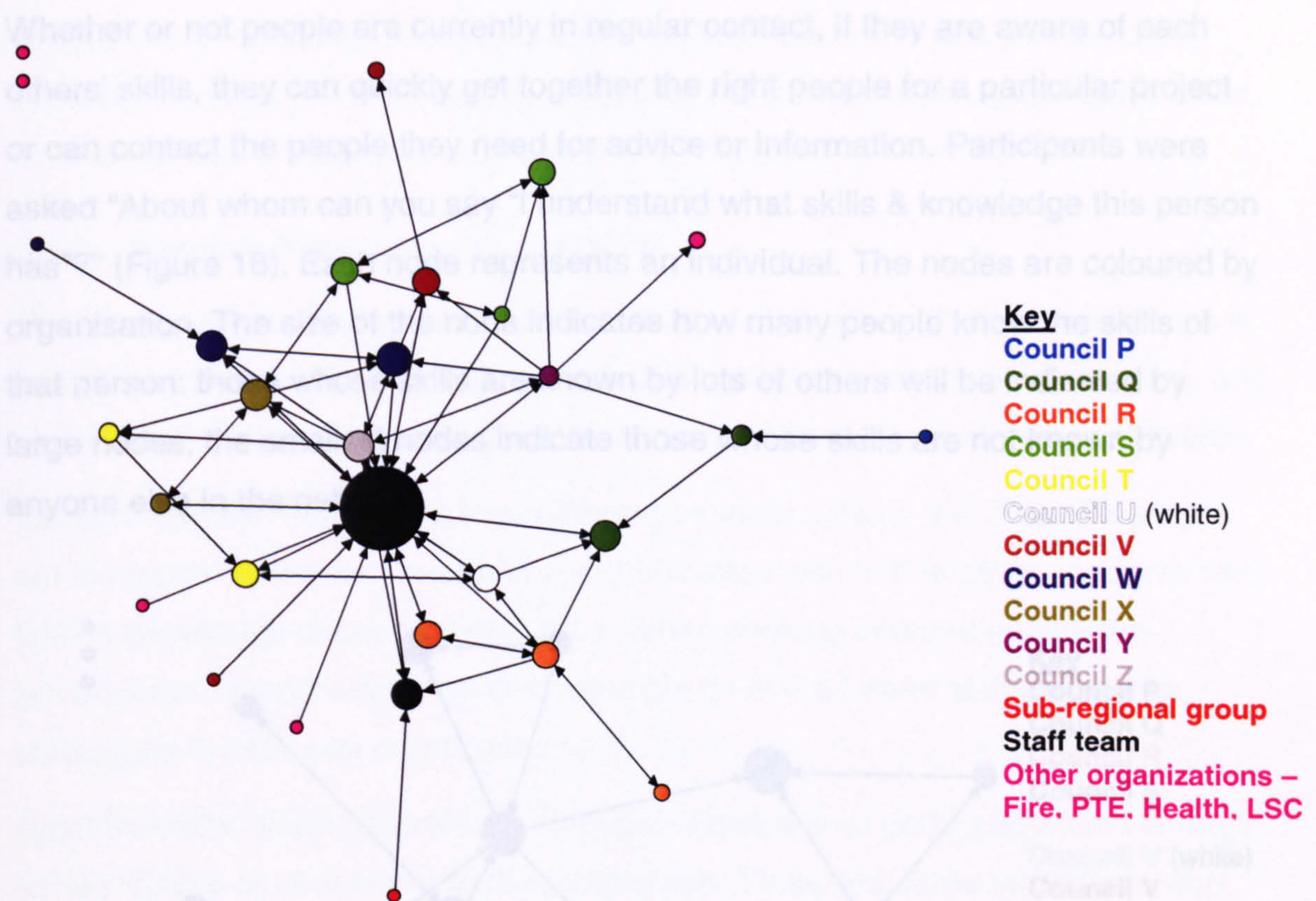


Figure 17 Urban Partnership: Seeking Information (sized by in-degree)

Overwhelmingly people go for information to the Urban programme manager or to others in their own organisation: 14 of the 30 participants only ever approach the staff team or colleagues in their own organisation. 11 go to one or two other organisations for information and only 3 go to 3 or more organisations for information.

In terms of providing information, other than the programme manager on the staff team, there are only three participants who are approached by 3 or more others outside their own organisation.

Among the other public sector organisation, 3 seek information from no one and 2 go only to the staff team.

6.5.3. Knowing each others' skills

Understanding each others' skills is an important element of partnership working. Whether or not people are currently in regular contact, if they are aware of each others' skills, they can quickly get together the right people for a particular project or can contact the people they need for advice or information. Participants were asked "About whom can you say "I understand what skills & knowledge this person has"?" (Figure 18). Each node represents an individual. The nodes are coloured by organisation. The size of the node indicates how many people know the skills of that person: those whose skills are known by lots of others will be indicated by large nodes; the smallest nodes indicate those whose skills are not known by anyone else in the network.

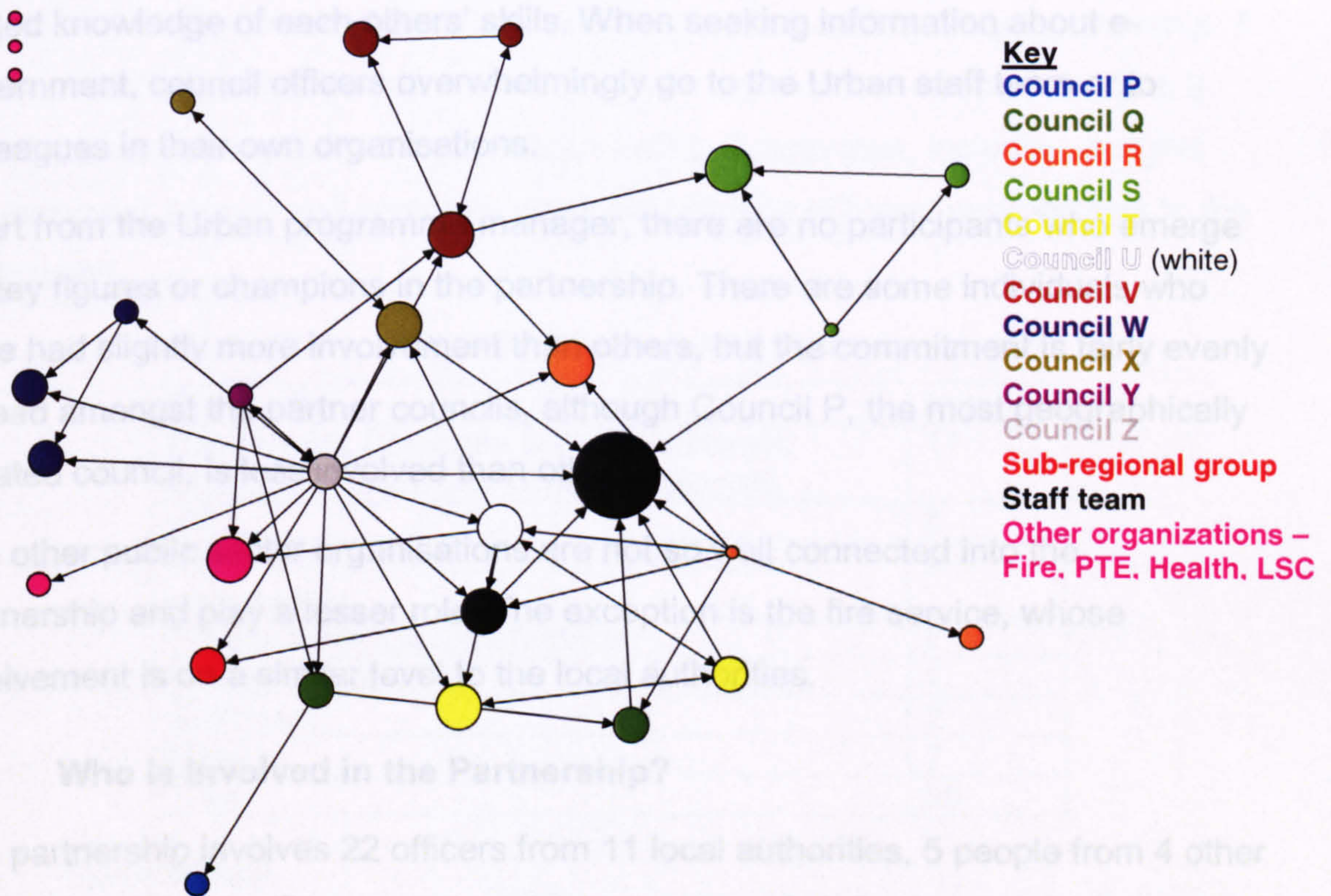


Figure 18 Urban Partnership: Knowing the Skills of Others (sized by in-degree)

The skills of the programme manager on the staff team are the most widely known. There are 16 of the 30 participants who don't know the skills of anyone outside their own organisation and this includes all the non-council organisations. Only 6 people know the skills of more than one other person outside their own organisation. There is potentially a lot of skills and knowledge here which could be shared but is not being. There is one person from Council Z who has reported knowing the skills of fifteen others, while only two people report knowing his skills. This is perhaps a case of over-estimation on his part.

6.5.4. Network Structure – an overview

The Urban programme manager plays a very central role in the partnership. He is in regular contact with most organisations, is a primary sources of information, and his skills are known fairly widely. He acts as a broker between Urban participants.

Contact between the officers from different councils is fairly low. The officers are not in regular (more than monthly) communication with one another and have very limited knowledge of each others' skills. When seeking information about e-government, council officers overwhelmingly go to the Urban staff team or to colleagues in their own organisations.

Apart from the Urban programme manager, there are no participants who emerge as key figures or champions in the partnership. There are some individuals who have had slightly more involvement than others, but the commitment is fairly evenly spread amongst the partner councils, although Council P, the most geographically isolated council, is less involved than others.

The other public sector organisations are not so well connected into the partnership and play a lesser role. The exception is the fire service, whose involvement is on a similar level to the local authorities.

6.6. Who is Involved in the Partnership?

The partnership involves 22 officers from 11 local authorities, 5 people from 4 other public organisations (fire, passenger transport executive, health and the learning and skills council), 1 person from a strategic sub-regional body and 2 members of staff. The seniority of the representatives varies among the different organisations.

One is a director, 10 are heads of service, 6 are managers and 4 are officers. 7 did not reply. Half of those who replied are below head of service level. Partnership activity and success will be influenced by the seniority of the individual representatives and their capacity to commit to decisions on behalf of their organisations. For this to be possible, all representatives should be at least heads of service.

Table 26 Seniority of Those Involved in the Urban Partnership

Role	Number
Councillor	0
Chief Executive	0
Director	1
Head of Service	10
Manager	6
Officer	4
Staff team	2
Missing – no reply	7
Total	30

Table 27 indicates which directorates are represented on the Urban partnership. 5 are from ICT departments and 1 are from other “back-office” directorates. But it does involved 4 people from more citizen-facing directorates, including a digital development agency and customer services, bringing different perspectives to the partnership.

Table 27 Departmental Affiliations of the Urban Partnership

Directorate	Number
Chief Execs, Corporate Services, Finance, Strategy & Resources, Business Services	11
ICT	5
Digital Development Agency, Sustainable communities	2
Customer and Support Services	2
E-government	1
Staff team	2
Missing	7
Total	30

6.7. Governance

There is a sense in which partners are working without any strategic direction. This is partly due to the ending of the national e-government strategy and the

associated government funding: the research took place when new national priorities were being launched. But it also reflects the absence of a shared vision of what the group is aiming for, with some clear outcomes and a strategy for achieving them. The group's activity does not appear to have been guided or driven by any shared priorities of the participating organisations.

Urban activity has focused on a number of discrete projects funded by the ODPM's Partnership Programme. The project ideas arose from within Urban: partners came up with a series of suggestions and those which achieved some support within the group were pursued. The portfolio of projects does not appear to relate to any shared vision or strategy.

The sub region is viewed by those interviewed as a powerful political body, with greater authority than comparable bodies in other sub-regions. The sub-regional chief executives and leaders are seen to have a growing commitment to shared services. They have established a collaborative services group to explore possible areas of joint work. Urban may potentially develop a role alongside the collaborative services group, implementing shared services. This could help to provide a clear vision and strategy for its activity. This perspective is influenced by two national developments: the transformation agenda with its emphasis on efficiency and shared services and the potential for the sub-region to become one of the first city regions.

If Urban is to continue, it is recommended that partners work together on a clear vision for Urban and a strategy towards achieving the vision. Both the vision and strategy are more likely to be implemented if they relate closely to the aims and activity of other partnerships in the sub-region and deliver on outcomes which are shared by directorates beyond ICT. One way to achieve this would be closer working with the Collaborative Services Group or any other group focussing on shared services.

6.8. Other Networking

The research explored the extent to which people involved in the Urban partnership are also involved in other e-government networks such as national projects and regional organisations. Of the 21 people who completed

questionnaires, 8 were involved in a national project in the previous year, but some of those 8 have been involved in more than one national project. There was involvement in 13 national projects including Customer Relationship Management (3), Parsol, e-Democracy, APLAWS, Working With Business and Digital TV. The impact that this involvement has had on partnership activity is hard to assess from the data.

Table 28 Urban Partnership: Involvement in National Projects and Regional e-Government Activity

	Involved in National Project in last 12 months	Involved in regional activity in last 12 months
Urban participants	8	11

11 people from the Urban partnership were involved in regional e-government activity. The regional e-government group was regarded highly by those who were interviewed: the regional group were seen as a very good arena for networking, advice and strategic activity such as influencing national policy. But the regional stage was seen as too big for developing collaborative projects and participants saw the sub-region as a more appropriate arena for collaboration.

6.9. Size of Organisation ¹⁰

All of the authorities involved are relatively large metropolitan boroughs, with populations ranging from 182,000 to 437,000. Perhaps the relatively low levels of commitment to Urban reflect that larger councils have less to gain from the economies of scale and sharing of knowledge offered by a sub-regional partnership: they can meet e-government targets on their own.

6.10. Embeddedness

There seems to be little history of these individuals working together prior to Urban: Half of the people (16) who took part in the research had not previously worked or collaborated with anyone else involved, a quarter (8) had worked with one other person. Of the remaining quarter, only four people had worked or collaborated with more than two other participants before getting involved in the partnership. There

¹⁰ Source of population information: ONS mid year population estimates 2004 www.areaprofiles.audit-commission.gov.uk accessed 09/11/2006

was a small amount of joint working between some of the organisations in the 1990s on ICT issues relating to economic development.

6.11. Conclusions

The Urban partnership is at a crossroads and is thinking about where to go next. Some within the partnership see it as a dwindling group which has run its course and others want it to have a renewed future, developing shared services.

The Urban partnership initiated a number of projects, but they arose from amongst a variety of suggestions made by partners and do not relate to any clear vision or strategy. Future working together would benefit from clearer aims and objectives, linked to wider sub-regional strategies. There are moves within the partnership to make this happen, through alignment with a sub-regional collaborative services group.

Relations between members of the partnership do not seem to be well established: the ties between participants are relatively sparse. The programme manager plays a central role: he is in regular contact with most organisations, is a primary source of information and his skills are known fairly widely. He acts as a broker between participants. Contact between organisations in the partnership is fairly low. All the councils in this study are metropolitan boroughs with relatively large populations: the low level of partnership ties may reflect that larger councils have less to gain from the economies of scale and learning offered by an e-government partnership.

There is little history of these individuals having worked together previously. The seniority of the representatives varies between organisations, with a substantial number of relatively junior staff (officers and managers). The partnership would be better able to act decisively if all the representatives were at least head of service.

The previous three chapters have outlined the findings from the three case studies of local e-government partnerships, Metropolitan, Shire County and Urban. The following chapter will discuss these findings, exploring three themes which contribute to partnership effectiveness: network structure, governance (including leadership commitment, accountability and strategy), maturity and local authority population size.

7 Discussion

7.1. Introduction

In the UK and elsewhere there is increasing emphasis on public sector organisations working together in local partnerships. Partnerships can potentially encourage the delivery of joined up services to citizens, promote democracy and improve public policy making, but partnership working is not always easy and can be challenging for the individuals and organisations involved. This research study has explored the research question “How can local authorities and their partners work together to successfully implement electronic government?”

A systematic literature review has been undertaken to identify relevant research relating to the research question. The objectives of the systematic review were to:

1. Examine the changing nature of local governance and the modernisation agenda.
2. Gain an increased understanding of electronic government.
3. Identify issues relating to public sector partnerships.
4. Examine the issues relating to the diffusion of innovations in public sector organisations.
5. Identify how social network analysis can be used as a tool to describe and evaluate electronic government partnerships.

The local governance and modernisation literature provides an overview of the academic and practitioner debate on the current position of UK local government, which is the setting for the introduction of local e-government. It also provides a rich source of knowledge on issues of partnership and participation, which are important themes both for local government in general and for e-government in particular. The academic electronic government literature provides some understanding of the factors contributing to the successful introduction of information systems and the potential effects they can have. The government-produced literature on e-government provides an overview of UK policy in this

arena. The partnerships literature has explored network governance theory, examined issues relevant to local partnerships and draws on social network studies of inter-organisational alliances, partnerships and joint ventures. The diffusion of innovation literature examines the factors which contribute to the spread of best practice and identifies the characteristics which impact on whether and when an organisation introduces new ideas. This aids understanding of the adoption of e-government by local authorities. The literature on the use of social network analysis informs the development of the research methodology.

The themes which emerged from the literature review (chapter two) were used to develop a research protocol for three case studies of sub-regional e-government partnerships. The methodology is described in chapter three and the case narratives are included as chapters four, five and six.

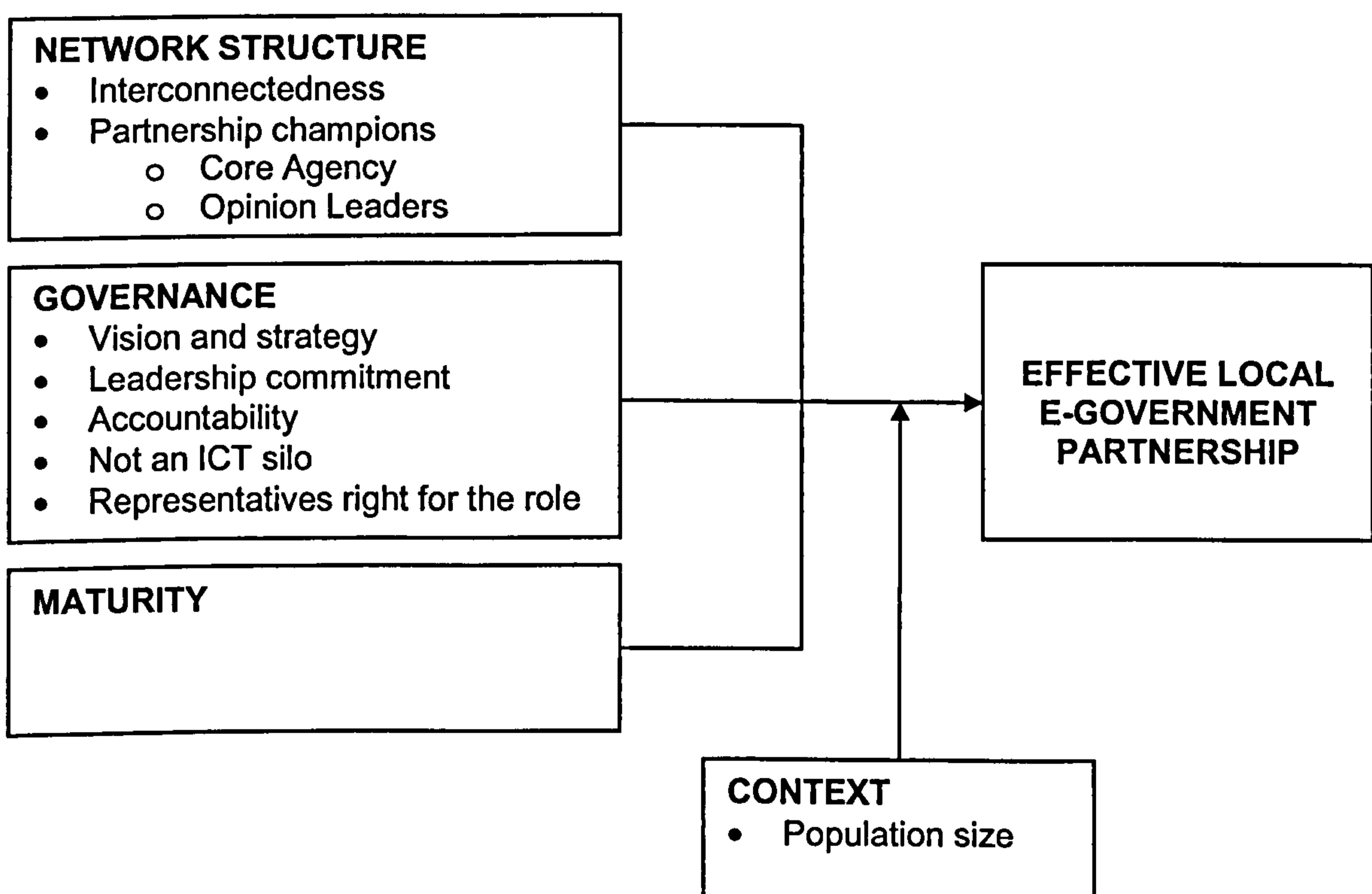


Figure 19 Model of Partnership Effectiveness

During the research study, a model of partnership effectiveness has been developed (Figure 19). It emerged iteratively from a consideration of the literature

in the systematic review and the themes which have emerged from the case study narratives. The model explores similar broad themes to those identified in Provan and Milward's (1995) study of mental health service delivery networks (Figure 2 page 64) – network structure, network context and network effectiveness – and adds two further themes of governance and maturity. Within these broad themes, the issues explored differ from the Provan and Milward model, reflecting differences in the networks studied: Provan and Milward looked at networks of mental health service providers, all working in the same geographical area, whereas the partnerships in this study are more formal, are working together on e-government and do not provide services to a shared client group.

This chapter explores the model of partnership effectiveness and applies it to the three case studies. Section two develops a definition of effectiveness in relation to local partnerships and uses the definition to discuss the effectiveness of the case study partnerships. Section three considers how the network structure of a partnership might affect its outcomes, section four looks at the importance of governance, section five explores the relevance of maturity and section six examines the issues of population size.

7.2. Effectiveness

The effectiveness of e-government partnerships can not easily be assessed. Unlike the comprehensive performance assessment of local authorities, there are no national measures of sub-regional bodies and the views of citizens on the effectiveness of e-government partnerships would have been difficult to establish and beyond the scope of this project. The concept of effectiveness is explored below, using:

- This study's definition of e-government;
- The contribution of e-government to the key themes of local government;
- The contribution of e-government partnerships to the expectations set by the UK government's strategy for local e-government and how well they meet the government's goals for e-government partnerships.

7.2.1. Definition of E-government

A definition of e-government was first suggested in the literature review chapter:

E-government is the use of computer technologies by government to transform the provision of services and information, improve internal organisation, encourage citizen participation and promote sharing between partners.

One way of assessing the effectiveness of an e-government partnership would be to examine the extent to which it is working towards the various elements of the definition. A successful partnership would then be one that uses e-government in a transformational way, making fundamental and profound changes, rather than simply tinkering with the current way of doing things, and whose activities focus on:

Services: e.g. improving customer's experience of using services; increasing take up; joining up service provision; or providing services more efficiently.

Organisational Change e.g. improving internal communication; breaking down silos; facilitating learning and adoption of best practice; improving procurement.

Working With Partners e.g. collating information about citizens' needs and making it available to other stakeholders; providing up-to-date information in varied formats about what is available in the area, planned changes and strategies for improvement.

Participation and Democracy: e.g. encouraging voting; facilitating participation in decision making; helping councillors to play a community leadership role; enhancing the involvement of service users.

7.2.2. The Contribution of E-government to Successful Local Government

A second approach to assessing e-government partnerships is to examine the contribution of the partnerships to the wider effectiveness of local government. In any geographical area there is a complicated arrangement of local governance involving an array of individuals and organisations. Within this context, local government can make a "unique contribution" (Sullivan, 2003 p366) to local

governance by focusing on what have variously been described as its “role and purposes” (Pratchett, 1999), “key issues” (Pearce and Mawson, 2003) or “core values” (Sullivan, 2003). For Pratchett (1999) the key purposes of local government are service delivery, public policy and local democracy, which are similar to the themes arising from the e-government definition above. These key purposes are outlined below, incorporating Sullivan’s “core values” and Pearce and Mawson’s “key issues”.

1. Service Delivery

- Improving service delivery (Pearce and Mawson, 2003; Pratchett, 1999).
- Enabling organisations to work together to deliver better services (Pearce and Mawson, 2003; Pratchett, 1999; Sullivan, 2003).

2. Public Policy Making

- Community leadership – developing a strategic vision for the area and ensuring it is achieved (Pratchett, 1999).
- Establishing the needs, priorities and aspirations of citizens and other stakeholders (Pearce and Mawson, 2003; Sullivan, 2003) and providing a forum for the resolution of conflict (Pratchett, 1999)
- Ensuring an infrastructure is in place so organisations can work together and communicate with citizens (Sullivan, 2003)
- Adhering to high standards of conduct and encouraging others to do the same (Sullivan, 2003)

3. Participation and Democracy

- Representing a range of communities in the geographical area (Pratchett, 1999; Sullivan, 2003)
- Enhancing and legitimising the role of councillors (Pearce and Mawson, 2003).
- Facilitating participation (Pearce and Mawson, 2003; Sullivan, 2003) and encouraging citizenship (Sullivan, 2003).

7.2.3. The UK Government Strategy for Local e-Government

A third way of assessing the effectiveness of e-government partnerships is to look at how far they have gone in meeting the expectations set by the UK government’s

strategy for local e-government. The national strategy required local authorities to focus on a set of specific priority outcomes that should be delivered by December 2005. The contribution of those priority areas to the three themes of local government outlined above is shown in Table 29. The emphasis of the priority outcomes is on service delivery, but they also contribute to the other two themes, public policy making and participation and democracy.

Table 29 Priority Areas for Local e-Government

Priority Area	A. Service Delivery	B. Public Policy Making	C. Participation and Democracy
Schools	✓		
Community Information	✓	✓	
Democratic Renewal			✓
Local Environment	✓	✓	
e-Procurement	✓		
Payments	✓		
Libraries, Sports and Leisure	✓		
Transport	✓		
Benefits	✓		
Support for vulnerable people	✓		
Supporting new ways of working	✓		✓
Accessibility of services	✓		
Take up of web-based transactional services	✓		✓
Customer Services Management	✓		

While each individual local authority was required to address all of the priority areas, authorities were expected by the government to work in partnerships on those priority outcomes that “demand an integrated or joined up approach” (ODPM, 2004b p6), and in particular, partnerships were intended to ensure: joined up service delivery at a local level; efficiencies and economies of scale in procurement activity; and rapid roll-out of outputs from National Projects (ODPM, 2004b p6; ODPM, 2005b p17).

In its overview report of the achievements of local e-government partnerships, the ODPM focused on (i) service improvement and (ii) reducing the associated risks of organisational change, as the two reasons why local authorities work in partnership and identified six ways in which partnerships can help:

Service Improvement:

1. Improving front-line customer service
2. Joining up front-line service delivery
3. Improving corporate services

Organisational Change:

4. Reducing the costs and risks of procurement
5. Enhancing organisational learning
6. Building people's skills (ODPM, 2005a)

7.2.4. E-government Effectiveness

Table 30 summarises these three different ways of assessing e-government effectiveness. It identifies three themes of local government, breaks them down into a number of objectives and gives some examples of what e-government might be able to contribute.

Table 30 What E-government Can Contribute Towards the Key Purposes of Local Government

Themes and Objectives of Local Government	Examples of what e-government can contribute
1. Service Delivery & Organisational Change Improving front-line customer service Joining up front-line service delivery Improving corporate services Reducing the costs/risks of procurement Enhancing Organisational Learning Building people's skills	Use of technology to: Improve customer experience; Increase accessibility and take up; Joining up the services of providers; Providing services at lower cost; Share information and skills
2. Public Policy Making Community leadership – developing a strategic vision for the area and ensuring it is achieved. Establishing the needs, priorities and aspirations of citizens and other stakeholders Ensuring an infrastructure is in place so organisations can work together Adhering to high standards of conduct and encouraging others to do the same	Collecting & disseminating: Information on the needs, priorities and aspirations of citizens Information on the activities of local, national and international agencies Economic and social data Economic modelling/forecasting ICT infrastructure for partnerships
3. Participation and Democracy Representing a range of communities in the geographical area Enhancing and legitimizing the role of councillors. Facilitating participation and encouraging citizenship.	Encouraging voting Facilitating participation Promoting equality of access Enhancing the role of councillors

While e-government can contribute to all three themes identified in the literature review, the expectation of the ODPM was that local e-government partnerships would focus on the first theme, Service Delivery and Organisational Change. It would be unfair to judge the partnerships by wider criteria than was originally set for them, so the discussion of effectiveness which follows will focus on the extent to which the three partnerships have contributed to:

- A. Improved or joined up service delivery;
- B. Efficiencies and Economies of Scale:
- C. Organisational and Individual Learning.

However, some reference will also be made to any contribution they are making to the two other themes identified, Public Policy Making and Participation and Democracy.

7.2.5. Effectiveness of the Case Study Partnerships

In this section, the effectiveness of each of the case study partnerships is examined by exploring their contribution to:

- A. Improved or joined up service delivery;
- B. Efficiencies and Economies of Scale:
- C. Organisational and Individual Learning.

Any activity relating to Public Policy Making and Participation and Democracy has been noted, but it is expected that their activity will focus on the three primary themes. The information is summarised in Table 31.

Table 31 Effectiveness of the Three Case Study Partnerships

Themes and Objectives of Local Government	Metropolitan	Shire County	Urban
A. Improved or Joined Up Service Delivery.			
Improving front-line customer service.	Regional take up campaign is helped by existing relations & may lead to improved take up.	Secure customer self service; CRM system; Culture shift on customer services;	Digital TV project;
Joining up front-line service delivery.	Planned smartcard for young people; Microwave link enables police to work in council buildings	Street scene improvements; Bi-lateral projects (one-stop shops, ICT procurement, out of hours cover)	Database of training opportunities
B. Efficiencies and Economies of Scale.			
Improving corporate services.	Disaster recovery and GIS; Shared approach to Government Connect;	Joined up directory; Joint telephony Shared approach to Government Connect	Joint job website
Reducing the costs and risks of procurement/ efficiency.	£250,000 of efficiencies identified	10 e-procurement pilots; Joint e-payments system; Purchase of the joint CRM system	
C. Organisational and Individual Learning.			
Enhancing organisational learning.	Improved referrals between organisations; Joint problem solving, e.g. priority outcomes; Home working pilot	Working together on service requests;	Virtual workgroups
Building people's skills	Sharing expertise & knowledge; Developed partnership skills	Developed partnership skills	Virtual workgroups

Themes and Objectives of Local Government	Metropolitan	Shire County	Urban
<i>Public Policy Making</i>			
Community leadership		Vision of shared services across county	
Establishing citizen need		Public consultation 2002	
Building an infrastructure so organisations can work together	Involvement of other public organisations; Early adopters of Government Connect; Microwave link; Shared business database	Early adopters of Government Connect; Shire County Web Portal	Roadworks pilot project
Adhering to high standards			
<i>Participation and Democracy</i>			
Representing a range of communities in the area		Bi-lateral joint health scrutiny committee	
Enhancing and legitimizing the role of councillors.		Councillor involvement in the partnership	
Facilitating participation & encouraging citizenship.			

7.2.5.1. Metropolitan

A. Improved or Joined Up Service Delivery. The microwave network and the joint approach to Government Connect bring the potential of joined up service delivery, but they have had limited impact so far on improving or joining up customer services. Other projects such as the planned smartcard for young people may bring future service improvements and joining up. The relationships built up through partnership have helped ensure that a planned regional e-government take-up campaign is relevant to sub-regional concerns.

B. Efficiencies and Economies of Scale. Metropolitan has made substantial achievements in this area: the local authorities have worked together to identify substantial efficiency savings and they are developing joint approaches to disaster recovery and GIS mapping.

C. Organisational and Individual Learning. The shared approach to the priority outcomes, improved referrals between organisations and the willingness to share expertise and knowledge all help the organisations to learn from one another and help develop the skills of those involved.

Metropolitan has been the most successful of the partnerships in involving other public sector organisations in its activity, which is a contribution to building an infrastructure for organisations to work together on public policy making. The microwave network, the shared business database and the shared approach to Government Connect will all help to provide an infrastructure for joint working in the future. Little has been done to develop a shared vision for the area or establish the needs of citizens and other stakeholders. None of Metropolitan's projects are likely to directly lead to improvements in participation or democracy.

Overall, the emphasis has been on problem solving; sharing skills and learning; and identifying cost efficiencies, rather than initiating joint projects relating to service delivery.

7.2.5.2. Shire County

A. Improved or Joined Up Service Delivery. Shire County's main focus has been to improve customer service and improve joined up delivery, as reflected in their

vision, "The seamless delivery of joined-up services to afford the customer a consistent, high-quality experience, irrespective of location". (Shire County e-Government Strategy, 2002). Of the three case studies, Shire County has the strongest vision of shared services across the county, encouraged by its two tier system, in which services are delivered to citizens by both county and district councils. Their flagship project, a shared CRM system aims to improve access to services and allow organisations to take enquiries on behalf of each other.

B. Efficiencies and Economies of Scale. A number of projects have been developed which improve corporate services or efficiency including a joined up staff directory, the joint purchase of e-payments and telephone systems and a range of e-procurement pilots. The joint purchase of a CRM system has led to substantial savings.

C. Organisational and Individual Learning. The partnership has been part of a culture shift in the sub-region on customer services. It is not possible from this research to assess the actual effect of the partnership on customer service, but certainly those involved believe they are making improvements. There has been some sharing of knowledge and expertise, for example by working together on the service requests relating to the CRM system, but there is also a sense that more could have been done to encourage joint problem solving and the sharing of skills in other areas.

Shire County conducted a public consultation in 2002 to establish the e-government priorities of local citizens. Its perceived success locally has brought it respect and has contributed to the development of other partnerships in the sub-region, building a local infrastructure for joint working among local authorities. Other public sector organisations are only involved to a very limited degree. None of Shire County's projects are likely to directly lead to improvements in participation or democracy, but the involvement of councillors in the partnership may enhance their role, and working together in Shire County has helped two local authorities to develop a joint health scrutiny committee.

Overall, the partnership is working productively and has delivered a substantial number of shared projects, focussing on customer service and efficiency. There

has been substantial sharing of knowledge and expertise on customer services, but there is a sense that more could be done to encourage further learning.

7.2.5.3. Urban

A. Improved or Joined Up Service Delivery. In its early days Urban worked on a digital television project which was passed to individual local authorities after the initial development, and it has also produced a web-based database of training opportunities. It is unclear from the case study how successful these have been in terms of improving customer service.

B. Efficiencies and Economies of Scale. A shared job website, a one-stop shop for job applicants seeking local authority employment, has helped reduce recruitment costs.

C. Organisational and Individual Learning. The formation of virtual workgroups for officers to share information with others in the same field (e.g. environmental health officers or solicitors) has the potential to enhance organisational learning and build skills. At the time of the research, work was being done to expand participation in these groups.

The pilot to share roadworks information between local authorities and the emergency services could potentially have made a small contribution to developing a shared infrastructure, but it did not develop beyond the initial pilot. The virtual workgroups offer the potential to allow organisations to work together more effectively in specific areas of expertise. None of Urban's projects are likely to directly lead to improvements in participation or democracy.

Overall, the Urban partnership has developed a number of standalone projects, but once they were launched there was little left for promoting or embedding the projects. While the partnership has provided a useful source of advice and support, it has made less substantial achievements than the other two partnerships.

7.2.6. Conclusions: Effectiveness

When its outputs are judged against the measures of effectiveness in Table 31, Shire County emerges as the most effective of the case study partnerships:

- In terms of the first theme, improved or joined up service delivery, the CRM system Shire County has introduced and other associated projects make a more substantial contribution to service delivery than the other two partnerships.
- All three partnerships have worked on projects relating to efficiency and procurement but Shire County have introduced more substantial shared changes in this area, jointly procuring a number of ICT systems.
- All three have undertaken activity to encourage organisational and individual learning – for example, virtual workgroups in Urban, shared service requests in Shire County and work on the priority outcomes in Metropolitan. But the issue of shared learning was more prominent among the members of the Metropolitan partnership.
- On the theme of public policy making, the Shire County partnership has helped to promote a vision of shared services across the County, and is the only one of the three to have undertaken prior public consultation. Metropolitan has been the most successful at involving other public sector organisations and has worked on the shared microwave link. The involvement of councillors in the Shire County partnership is the only example across any of the partnerships of activity relating to participation and democracy.

Table 32 provides a summary of partnership effectiveness. As stated at the start of this section, the effectiveness of e-government partnerships cannot easily be assessed and this comparison of the three case studies is subjective and tentative.

Table 32 Summary of Partnership Effectiveness

E-Government Partnership Themes	Most effective partnership
Theme A: Improved or Joined Up Service Delivery	Shire County
Theme B. Efficiencies and Economies of Scale.	Shire County
Theme C: Organisational and Individual Learning	Metropolitan

Pratchett found that local authority ICT expenditure and priorities are focussed on service delivery rather than local democracy or public policy making (Pratchett,

1999). Similarly, McNeal et al (2003) conclude that e-government is largely an administrative reform, driven by officials seeking efficiency, rather than a mechanism for democratic participation. Other e-government studies indicate that e-government projects aimed at citizens tend to offer access to services and information rather than an opportunity to participate or access information on council performance (Beynon-Davies and Martin, 2004), treating people as customers or users rather than citizens (Ho, 2002). The case studies reinforce these findings: the emphasis has been on service delivery and organisational change rather than advancing local democracy or improving policy making.

7.3. Network Structure

The first theme in the model of partnership effectiveness (Figure 19) is network structure and in particular, how the network of relations within an e-government partnership might affect the outcomes it achieves, or how effective it is. Two aspects of network structure emerged as areas of interest during the study: firstly interconnectedness among those involved in the partnership; secondly the role of champions in co-ordinating and driving forward partnership activity. These are explained in turn below, but first some issues relating to the data are explained.

7.3.1. Data Preparation

In their study of networks of mental health providers in four US cities, Provan and Milward (1995) examined the relationship between network structure and effectiveness. Unlike Provan and Milward's mental health agency data, which is based on relations between organisations, the e-government partnership data is based on relations between individuals. One option would be to adapt the approach, calculating the strength and existence of integration between individuals rather than organisations. But any comparison of the individual level network structure of the three studies would be affected by the differences in their composition: in the Metropolitan partnership each council is represented by between 4 and 7 people, whereas in the Shire County partnership it is 2-3 people and in the Urban partnership it is 1-3 people. A comparison of the individual level networks would include both *intra*-organisational ties and *inter*-organisational ties, making it hard to compare across the three different studies. Inevitably, if intra-

organisational ties are included, the Metropolitan case study, with more representatives per organisation, is likely to have a higher network density than the other two. To avoid this difficulty, the investigation of network structure will focus, as Provan and Milward did, on relations between organisations rather than on relations between individuals.

The network questionnaire asked about a number of different ties. The three which suggest a current link between participants are:

Communication at least monthly about e-government;

Seeking information about e-government;

Understanding what skills and knowledge a person has.

For each partnership the three matrices (communication at least monthly, seeking information and understanding skills and knowledge) were joined and the rows were collapsed using a sum function. This produces an aggregated matrix containing a summary of all three relationships. It is a directed, valued matrix, with values ranging from 0 if a pair has no ties to 3 if one individual communicates at least monthly AND seeks information AND understands the skills and knowledge of another:

Individuals' Matrix A: Number of ties between individuals.

This matrix of individuals was then aggregated to a matrix of organisations, by collapsing the data along both rows and columns, using the sum function. This aggregates the ties between individuals to produce a directed, valued matrix summarising all the ties between organisations:

Organisations Matrix A: Number of ties between organisations

For each partnership the three matrices (communication at least monthly, seeking information and understanding skills and knowledge) were again joined and the rows collapsed, but this time the maximum function was used rather than the sum function. This results in an aggregated matrix which is directed and binary: 1 indicates that an individual has at least one tie to another; 0 indicates the absence of any tie. It does not convey the strength of the tie:

Individuals' Matrix B: Existence of a tie between individuals.

This matrix of individuals was then aggregated to a matrix of organisations by collapsing the data along both rows and columns, again using the maximum function, to produce a directed binary matrix summarising the ties between organisations:

- Organisations Matrix B: Existence of a tie between organisations.

There are now four new matrices for each case study partnership, each of which includes ties across three relations, frequent communication, seeking information and understanding skills:

Individuals' Matrix A: Number of ties between individuals.

Organisations Matrix A: Number of ties between organisations

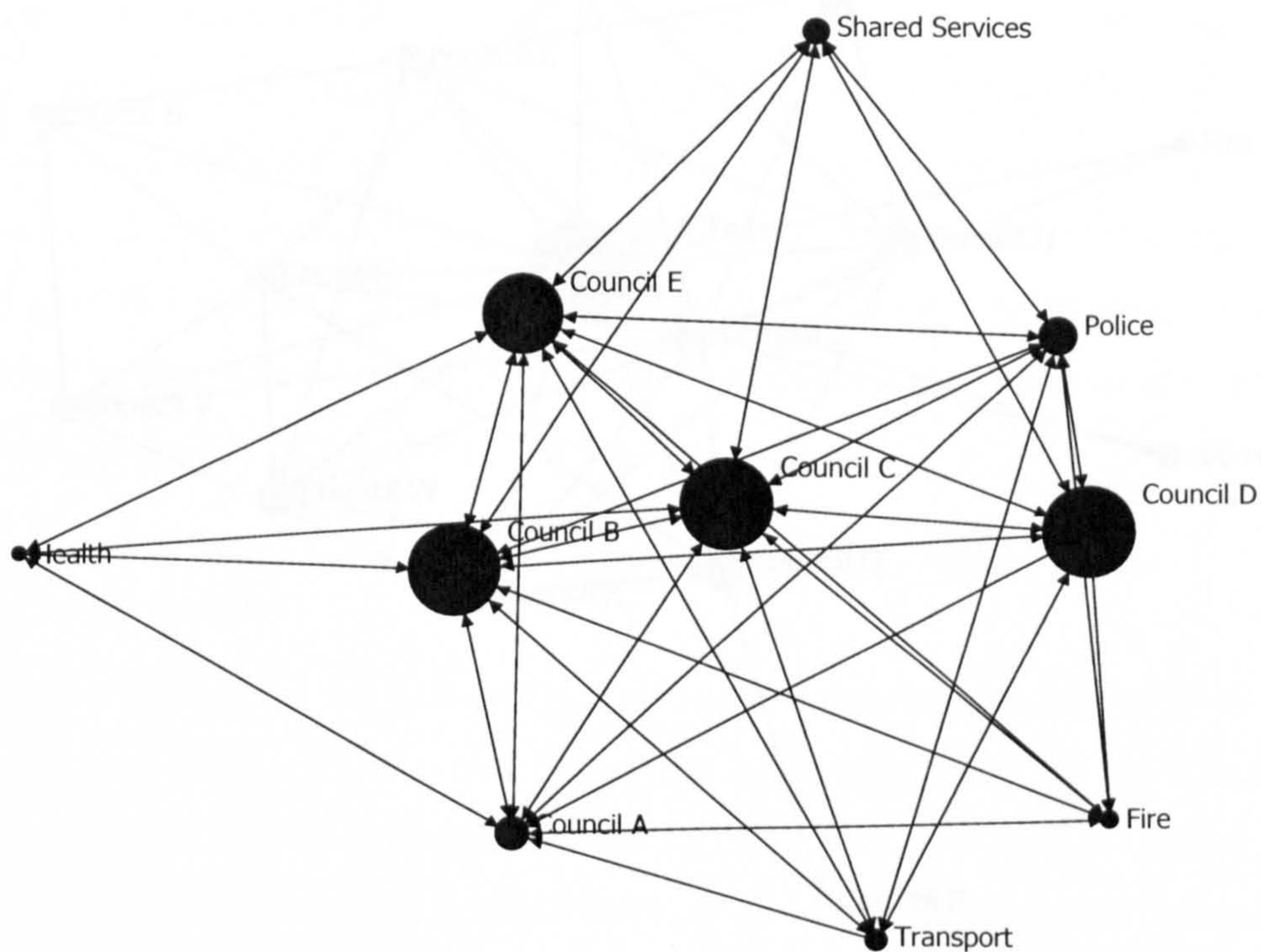
Individuals' Matrix B: Existence of a tie between individuals

Organisations Matrix B: Existence of a tie between organisations

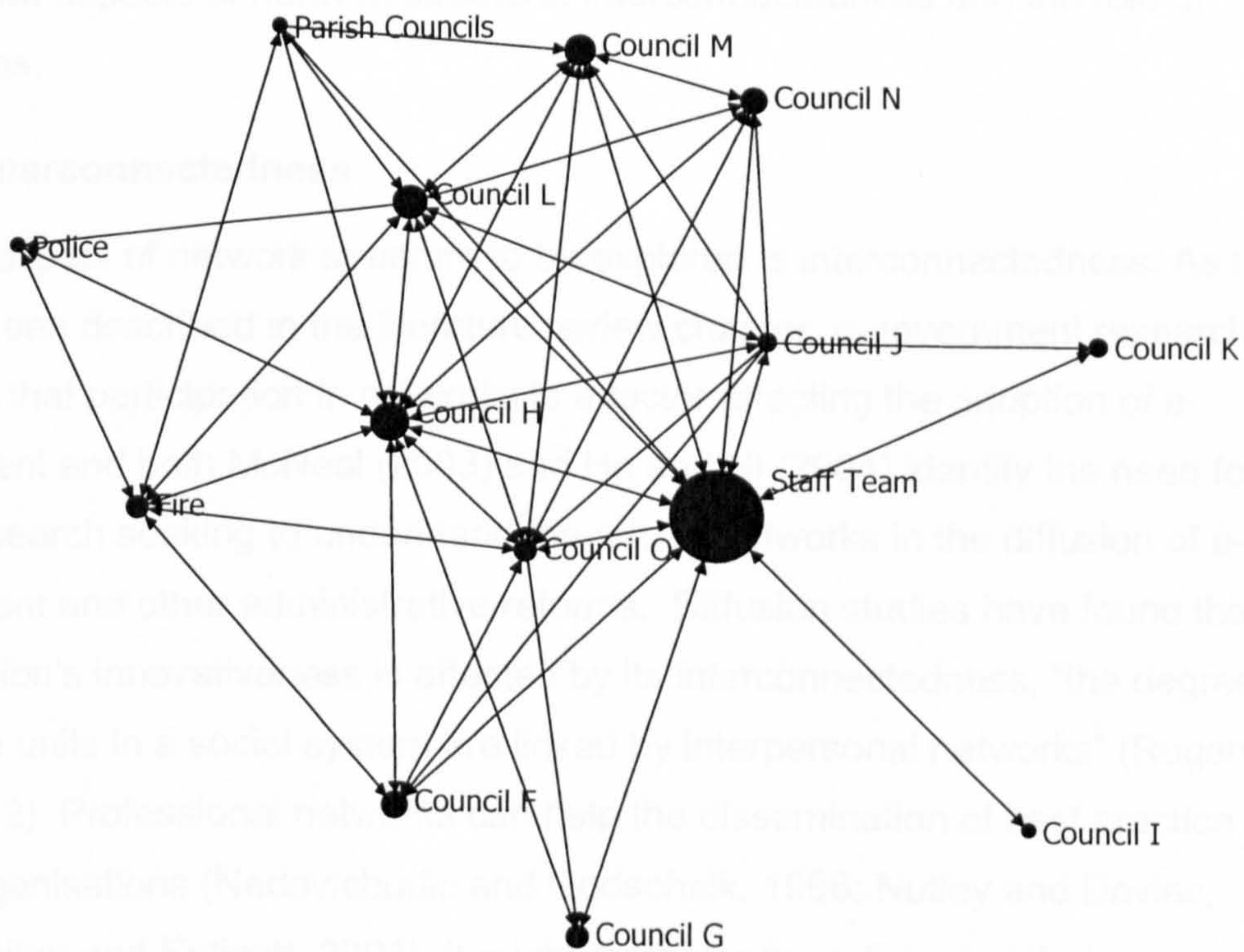
The ties between the organisations in each of the three case studies are represented in Figure 20. Each node represents an organisation. The lines represent the existence of one or more ties between two organisations (frequent communication, seeking information and/or understanding skills). The size of the node indicates the organisation's prestige in the network, i.e. the number of incoming ties from others in the network.

Figure 20 Ties Between Organisations

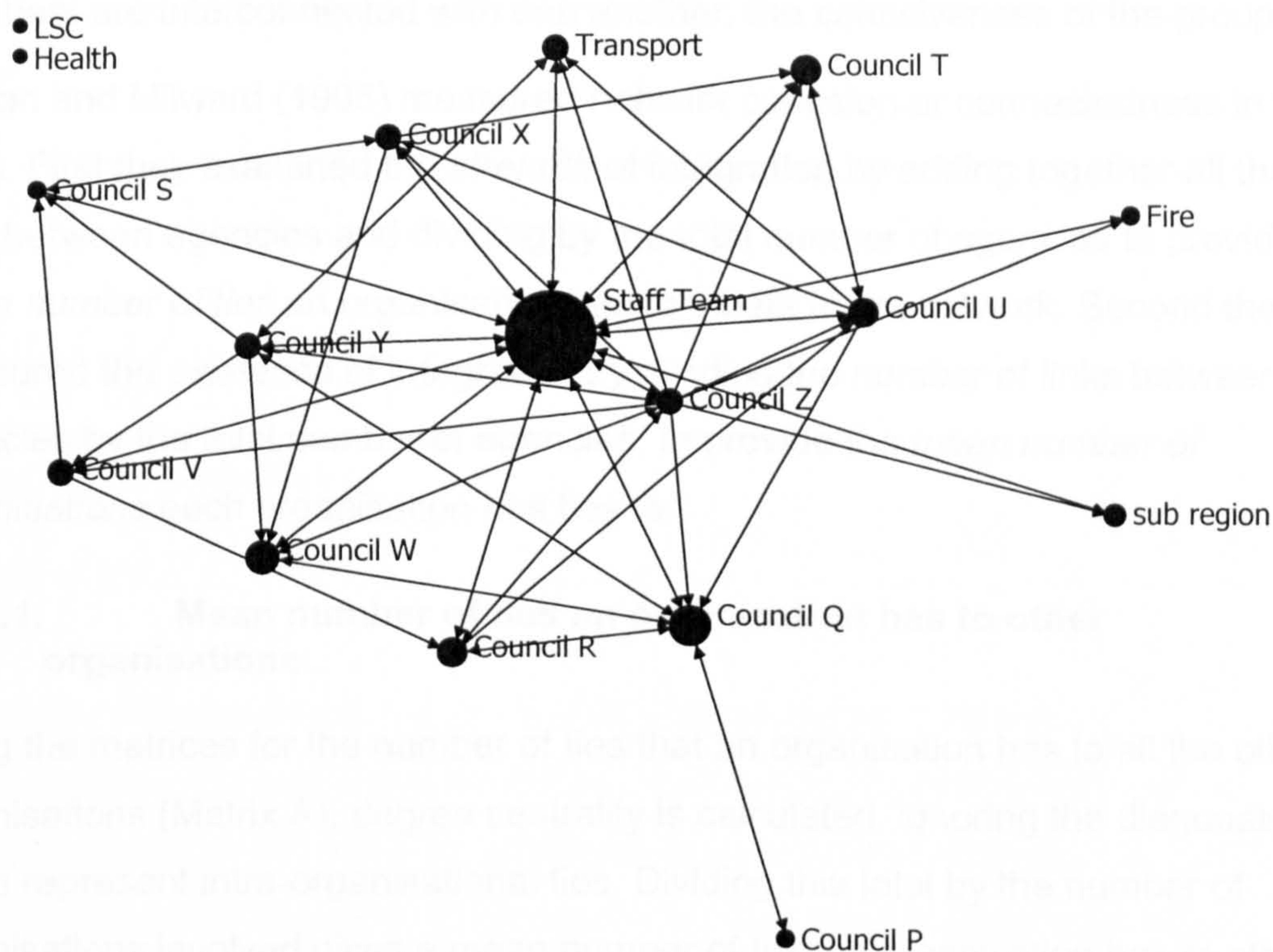
Metropolitan



Shire County



Urban



The two matrices of organisations, together with qualitative data, were used to explore two aspects of network structure: interconnectedness and the role of champions.

7.3.2. Interconnectedness

The first aspect of network structure to be explored is interconnectedness. As has already been described in the literature review chapter, e-government research suggests that participation in networks is a factor affecting the adoption of e-government and both McNeal (2003) and Ho and Ni (2004) identify the need for future research seeking to understand the role of networks in the diffusion of e-government and other administrative reforms. Diffusion studies have found that an organisation's innovativeness is affected by its interconnectedness, "the degree to which the units in a social system are linked by interpersonal networks" (Rogers, 2003 p412). Professional networks can help the dissemination of best practice in public organisations (Nedovicbudic and Godschalk, 1996; Nutley and Davies, 2000; Walker and Enticott, 2004). It might therefore be anticipated that a

partnership's activity and success might be affected by the extent to which its members are interconnected with one another, the cohesiveness of the group.

Provan and Milward (1995) measured network cohesion or connectedness in two ways. First they examined the *strength* of integration by adding together all the links between agencies and dividing by the total number of agencies to provide the *mean number of ties* an organisation has to others in the network. Second they measured the *existence* of integration by dividing the number of links between agencies by the total number of agencies, to provide the *mean number of organisations* each organisation has ties to.

7.3.2.1. Mean number of ties an organisation has to other organisations

Using the matrices for the number of ties that an organisation has to all the other organisations (Matrix A), degree centrality is calculated, ignoring the diagonals, which represent intra-organisational ties. Dividing this total by the number of organisations involved gives a mean number of ties an organisation has to other organisations. When this method of analysis is applied to the e-government partnership data, Metropolitan has the highest mean number of ties per organisation, 51.4, followed by Shire County, 24.7 and lastly Urban, 7.8 ties per organisation. This indicates that organisations in Metropolitan are linked by more numerous network ties than in the other two partnerships, suggesting that Metropolitan is the most cohesive of the partnerships, followed by Shire County and that Urban is the least cohesive.

7.3.2.2. Mean number of organisations an organisation has links to

The number of organisations each organisation is tied to is calculated using degree centrality (ignoring the diagonals, which represent intra-organisational ties). Adding these together and dividing by the total number of organisations gives a mean number of organisations an organisation has links to. When this method of analysis is applied to the e-government partnership data, Metropolitan organisations are on average linked to 6.9 other organisations within the partnership, Shire County organisations are linked to 5.4 and lastly Urban organisations are linked to 3.8. This indicates that organisations in Metropolitan are linked to more organisations

than in the other two partnerships, suggesting that Metropolitan is the most cohesive of the partnerships, followed by Shire County and that Urban is the least cohesive.

Table 33 The Relationship Between Interconnectedness and Effectiveness

	Shire County <i>Most effective</i>	Metropolitan	Urban <i>Least effective</i>
Mean number of ties an organisation has to other organisations	24.7	51.4	7.8
Mean number of organisations an organisation has links to	5.4	6.9	3.8
Mean % of organisations an organisation has links to	(41.6%)	(76.7%)	(23.8%)

Provan and Milward found that there was little relationship between interconnectedness and network effectiveness among mental health service providers. Contrary to their initial expectations, the most effective network in their study was the least cohesive. They concluded that decentralised sites have a difficult time organising services because of the complexity of organisations and linkages involved.

The results for this study are somewhat different. The least effective partnership, Urban, is also the least cohesive. But the most effective partnership, Shire County, is not the most cohesive. Initially there seems to be no relation here between network interconnectedness and effectiveness. But closer consideration of the social network analysis and the interview data can provide a plausible explanation of the findings.

Metropolitan, the most cohesive of the three partnerships, with organisations on average having ties to 76.7% of others, has tended to undertake activities that rely on problem solving and shared learning. One example is efficiencies: a sub-group has met regularly to work together on identifying how and where ICT can be used to help the partner organisations to deliver improved service at reduced cost and between them they have identified efficiencies of £250,000. Another example is the priority outcomes sub-group, which has worked together to identify how the local authorities can successfully achieve the e-government priority outcomes set by central government (ODPM, 2004b). When asked about the benefits of partnership

working, Metropolitan participants most often spoke of skills transfer, problem solving and access to expertise, with a sense that the more concrete service benefits might accrue in the future. The only infrastructure project in Metropolitan was a microwave link, which allows for communication between partners, but had not yet been exploited to its full potential.

Shire County is less cohesive than Metropolitan, with organisations on average having ties to 41.6% of others. Shire County has concentrated on the development of infrastructure projects such as a shared Customer Relationship Management system, a joined up staff directory and new systems for e-payments and telephony. These types of projects need a central team to drive them, but have also depended on the sharing of ideas between organisations. An example is working together to establish common approaches on how to capture service requests and deciding together which systems to purchase. Urban's projects have been delivered centrally, with less reliance on shared learning or discussion between organisations.

It appears that interconnectedness might be related to problem solving and shared learning: partnerships which intend to focus on sharing information, learning from each others' expertise or developing joint approaches need to be cohesive, with frequent and strong relations between the partners.

7.3.3. Role of Partnership Champions

The second aspect of network structure to be explored is the role of partnership champions. The literature review suggested the importance of champions – individuals or organisations – who co-ordinate the partnership and drive forward its activity. The findings from the three case studies point towards there being two areas of interest relating to the role of partnership champions: the role played by a central core agency and the role of key individuals or opinion leaders. These two areas are explored below.

7.3.3.1. Central Core Agency

In their study of networks of mental health service providers, Provan and Milward (1995) found core agency centrality to be linked to effectiveness: the networks that

provided the most effective mental health services to clients and their families were co-ordinated by a core agency in the city such as a local authority or health service. Provan and Milward used two types of measures of the role of core agencies. Firstly they examined the number of links the core agency had with other agencies. Secondly they calculated the density of the network without the core agency. When these measures were used to compare the three e-government partnerships in the current study they provided unreliable results. Whichever of Provan and Milward's measures were used, Metropolitan appeared to have the highest level of core agency centrality, despite the fact that Metropolitan has no core agency: as can be seen in Figure 20, four organisations play relatively equal roles in the Metropolitan partnership. The reason for these results is that Provan and Milward's measures are very influenced by network density and Metropolitan has higher density levels than the other two partnerships. The measures are not suitable for comparing these three networks with very different density levels.

An alternative approach to comparing the role of core agencies across the three partnerships is to consider prestige and group prestige. Prestige is a centrality measure suitable for use with directed data; it measures actor in-degree, the number of in-coming ties an organisation has to others. An organisation with high prestige is approached by many others in its network (Wasserman and Faust, 1994 p174-175). See the literature review chapter, page 80 for a fuller discussion of centrality in networks.

Organisations Matrix A – number of ties – was used to examine prestige.

Organisations Matrix A is a directed, valued matrix which includes all the ties between organisations across three relations, frequent communication, seeking information and understanding skills. Table 34 shows the prestige of organisations involved in each partnership.

An organisation with the highest levels of prestige is one which is approached by many others in their network for frequent communication and/or to seek information and/or their skills are widely known. It is inappropriate to compare prestige levels between organisations involved in different partnerships, because the partnerships vary in the number of individuals and organisations they involve. But an

examination of the comparative prestige within each network suggests some interesting differences.

Table 34 Prestige (Strength of Incoming Ties)

Metropolitan	Prestige - No. of incoming ties	Shire County	Prestige - No. of incoming ties	Urban	Prestige - No. of incoming ties
Council B	103	Staff Team	128	Staff Team	41
Council C	103	Council H	42	Council Q	14
Council D	101	County Council L	32	Council W	10
Council E	90	Council M	25	Council R	8
Police	35	Council N	21	Council T	8
Council A	29	Council F	19	Council U	8
Joint Services	22	Fire	16	Council X	7
PTE	14	Council G	15	Council Z	7
Fire	11	Council O	13	PTE	6
Health	6	Council J	12	Council V	6
		Council K	12	Council Y	6
		Council I	4	sub-region	4
		Police	4	Council S	3
		Parish Councils	3	Council P	2
				Fire	2
				LSC	0
				Health	0

Table 34 shows clearly the differences between the three partnerships in terms of core agency centrality. Metropolitan has no core agency: four councils (B, C, D and E) all have very similar levels of prestige. In both Shire County and Urban the staff team acts as a core agency: organisations have more numerous ties with the staff team than they do with other organisations in the network. From the interview data, it seems that staff play three linked roles in a partnership. Firstly they undertake work to ensure that partnership projects are developed and implemented, either by doing the work themselves or engaging others such as consultants. Secondly they help the partnership move forward; ensuring that proposals are taken forward from initial idea through to idea development, decision and implementation. Thirdly staff act as a conduit between people in the partnership, for example by putting people with similar interests in contact with one another. Where there is no staff team, as in Metropolitan, individuals take on those roles, but they are less well-placed to

carry them out effectively. A core team is independent in the sense that it is not from any one of the partner organisations and its sole focus is on partnership activity.

7.3.3.2. Opinion Leaders

Across the three e-government partnerships there are signs of the importance of individuals who drive the partnership forward. These are individuals who have inspirational ideas about where the partnership should be going, are passionate about the partnership and are able to convince others, mobilising them to ensure partnership success. These are the “opinion leaders” who can exert influence over others in the social system they are members of (Rogers, 2003 p26-27). In the Metropolitan partnership there is an opinion leader who took the early initiative to form the partnership and from the outset has played a key role in getting people to work together effectively.

“[name] is a driver. If he was no longer involved the partnership would flounder... He is the most valuable resource” (council officer, Metropolitan)

He is the person regarded by others as having the most influence on the partnership. But beyond him, there is a group of other people who also share influence on the direction of the partnership.

In Shire County the most central opinion leader has played a similar role. She was a key figure in getting the partnership established, is determined to make it a success and can bring others along with her ideas. She is involved in e-government at a national level and so it a key person for introducing innovative ideas to the partnership. But she is not the only opinion leader. There is a group of four or five people, who are seen to “push things forward and make things happen” (councillor, Shire County).

The Urban partnership currently lacks an opinion leader. Nobody other than the staff team manager has a central role in the partnership, and he is not in a position to mobilise others around a set of ideas. In the early stages of the partnership there were two people who acted as opinion leaders: they came up with the ideas and were able to persuade others to get involved. They have now moved on to new

roles and no one else has taken their place. In their absence there have been no key champions outside the core team. During the research a small sub-group of officers were starting to meet to discuss collaborative services and they could potentially develop into the opinion leaders of the partnership in the future, if they are able to attract others to their perspective.

7.3.4. Conclusions: Network Structure

The differences in network structure can be further illustrated by returning to the sociograms presented in the case narratives, taking Communication More Often Than Monthly as an example. These sociograms do not include all communication, only frequent communication, more often than monthly.

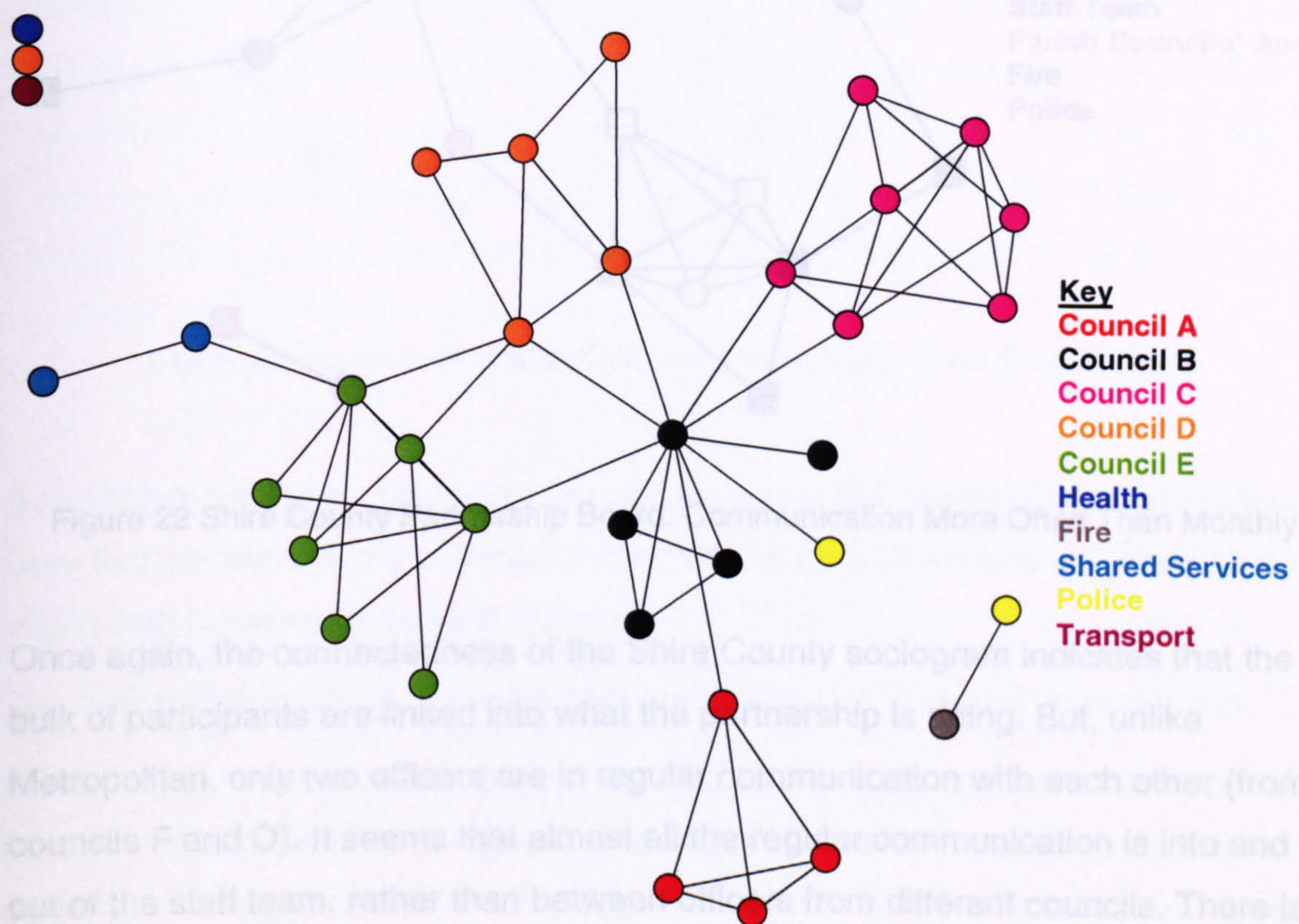


Figure 21 Metropolitan: Communication More Often Than Monthly

The connectedness of the Metropolitan sociogram suggests that news and information about e-government can reach most participants. All but two of the participating organisations have someone who is in regular contact with other

partners. There is not one core agency coordinating activity, although one individual does play a large facilitating role.

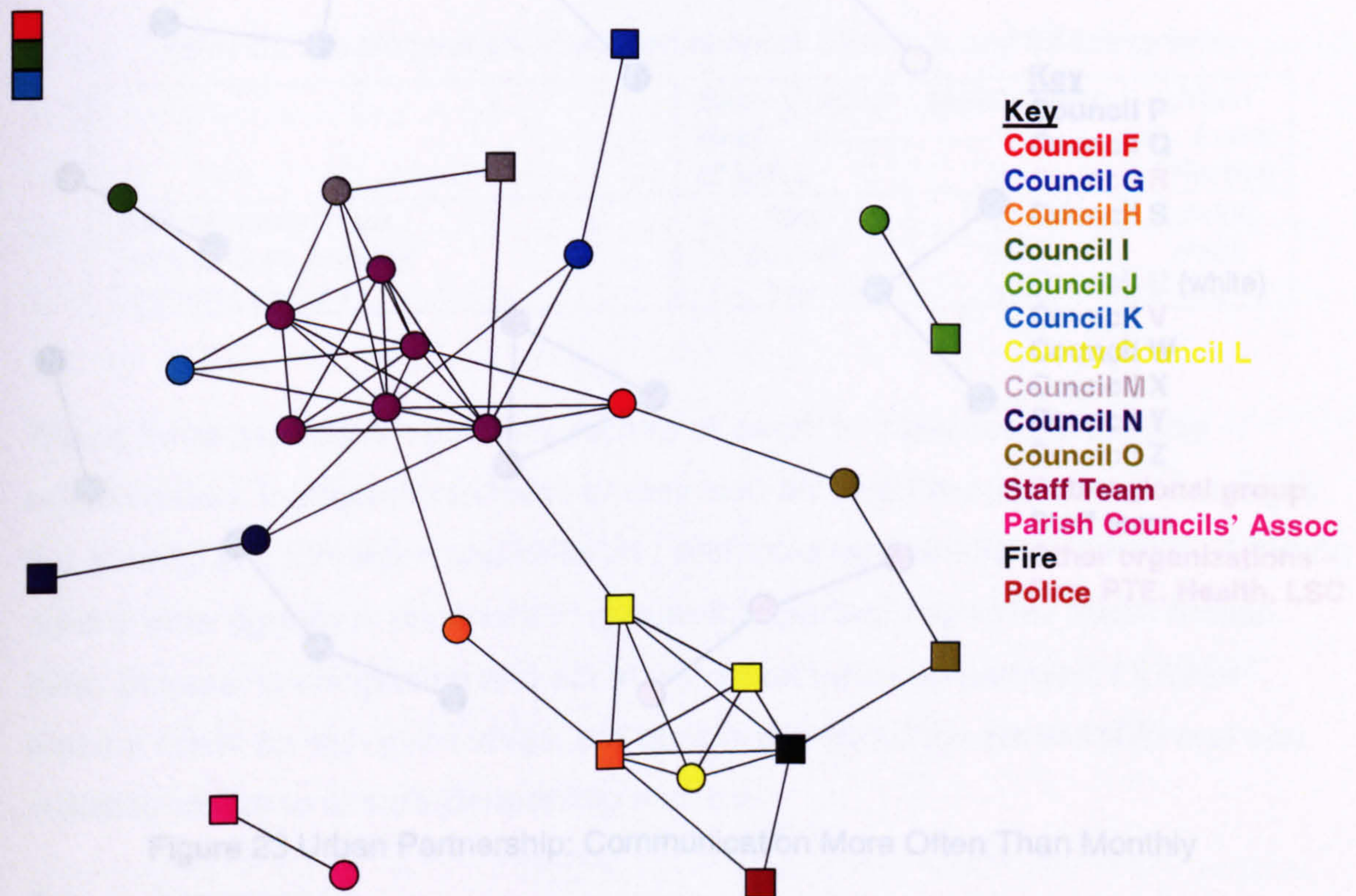


Figure 22 Shire County Partnership Board: Communication More Often Than Monthly

Once again, the connectedness of the Shire County sociogram indicates that the bulk of participants are linked into what the partnership is doing. But, unlike Metropolitan, only two officers are in regular communication with each other (from councils F and O). It seems that almost all the regular communication is into and out of the staff team, rather than between officers from different councils. There is a separate cluster (bottom right) of people associated with the County Council, reflecting tensions between the County Council and others.

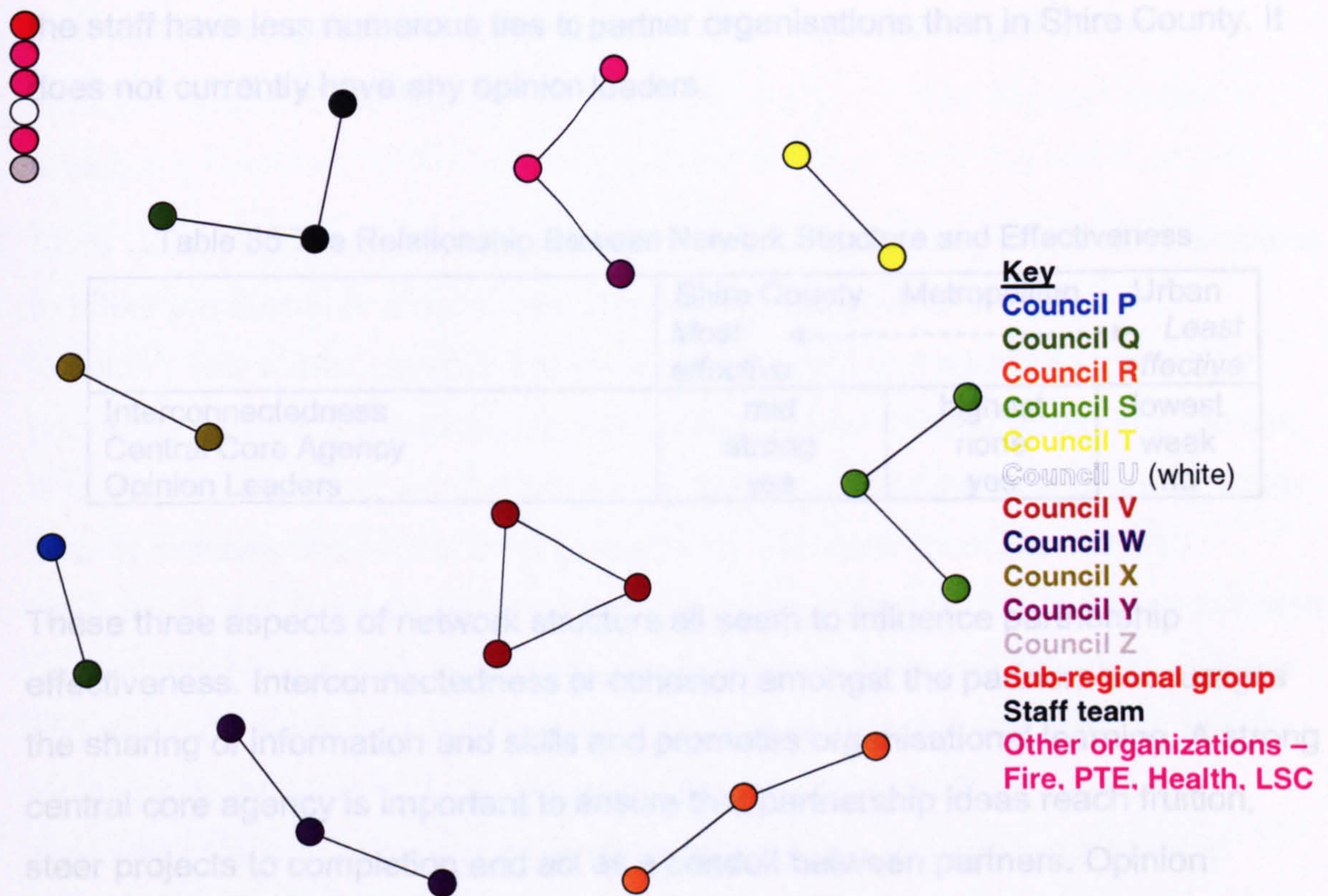


Figure 23 Urban Partnership: Communication More Often Than Monthly

7.4. Governance

By contrast, the Urban sociogram is not connected, but clustered by organisation. Very few participants are in frequent communication with anyone outside their own organisation, not even the staff team.

The network structure of the three partnerships can be summed up as follows. Shire County is the most effective partnership. It is the second most interconnected partnership, after Metropolitan, and is centred on a staff team who act as a core agency, ensuring initiatives are implemented. It has a group of opinion leaders who drive the partnership forward and motivate others.

Metropolitan is the second most effective partnership. It is a highly interconnected partnership without a core agency. It has a group of opinion leaders who drive the partnership forward and motivate others.

Urban is the least effective partnership. It has the lowest level of interconnectedness. It has a small staff team who operate as a core agency, but

the staff have less numerous ties to partner organisations than in Shire County. It does not currently have any opinion leaders.

Table 35 The Relationship Between Network Structure and Effectiveness

	Shire County <i>Most effective</i>	Metropolitan	Urban <i>Least effective</i>
Interconnectedness	mid	highest	lowest
Central Core Agency	strong	none	weak
Opinion Leaders	yes	yes	no

These three aspects of network structure all seem to influence partnership effectiveness. Interconnectedness or cohesion amongst the partners encourages the sharing of information and skills and promotes organisational learning. A strong central core agency is important to ensure that partnership ideas reach fruition, steer projects to completion and act as a conduit between partners. Opinion leaders come up with good ideas, are passionate about the partnership and can mobilise others to ensure partnership success.

7.4. Governance

The second theme in the model of network effectiveness is governance: how the governance of an e-government partnership might affect the outcomes it achieves. Five aspects of governance will be explored here: the importance of vision and strategy; the commitment of leaders to the partnership; issues of accountability; the extent to which the partnership is an ICT silo and the seniority of the representatives. These are all explored in turn in this section.

7.4.1. Vision and Strategy

Vision and strategy did not emerge from the literature review as particularly salient issues. E-government surveys have found that having an e-government strategy is a factor affecting an organisation's adoption of e-government features (Melitski, 2003; Norris and Moon, 2005), but did not explore the issue in any depth.

Reaching agreement on aims can be difficult because of the divergent interests of members (Huxham and Vangen, 2005). The case study findings suggest that

vision and strategy are important concepts which impact on e-government partnership effectiveness.

Vision

Shire County's e-government vision is "The seamless delivery of joined-up services to afford the customer a consistent, high-quality experience, irrespective of location". This formal statement is shared in an active and vocalised fashion by people throughout the partnership, with a clear shared understanding that the aim is to improve customer service and join up the services of the local councils, Shire County includes two tiers of local government, with both county and district councils providing overlapping services to the same citizens. It is therefore perhaps understandable that their vision is to join up services to ensure seamless delivery and eliminate duplication and the vision provides a very real and relevant direction for their activity. Most of the past projects are clearly linked to this vision of improved customer service and joined up delivery (e.g. customer relationship management, a joint staff directory, joint telephony system, street scene improvement, Government Connect).

Metropolitan's formal vision is similar; to "bring together the power of our people, processes, systems and technology to cross geographical and organisational boundaries to deliver joined up, easily understood and accessible public services". Yet the formal vision was not reflected in the interviews. Unlike Shire County, where the strongest motivation for involvement was a vision of seamless service, those in Metropolitan were more often motivated by economies of scale or shared learning. This is reflected in the partnership activity, which focuses on learning from each other, identifying efficiency savings and back office initiatives, with fewer projects relating to customer services. So the vision is a formal statement rather than a real guiding aim.

The Urban partnership does not have a clear vision statement: the primary motives for involvement in the Urban partnership are the sharing of information and learning between organisations. This is reflected in one of the main current activities of the partnerships, the virtual workgroups for council officers, with an assortment of other projects.

Strategy

None of the three case study partnerships had a clear *current* strategy to guide their activity towards their vision. In Shire County there was a frustration among many of those interviewed that there was a “scattergun” selection of projects, which would benefit from more strategic direction from leaders. A customer services manager felt that his group often worked “under the radar” – if they could find the money for projects and could get away with them they went ahead. Metropolitan started off with a strategy document in 2002, but few of those interviewed were aware of it and much of its detail was outdated. Just prior to the research the partnership had submitted a report to the sub-regional chief executives group asking for greater strategic guidance, which suggests their awareness of a need to be working to a broader plan. In Urban, the projects had been haphazardly selected in response to the availability of government funding: people floated ideas and those that gained resonance in the group were approved, without reference to any strategic plan.

This lack of clarity about vision and an absence of strategy is perhaps a reflection of the precarious position of local e-government partnerships. The initiative for their formation came from national government, with a remit to improve customer service, join up service delivery, improve corporate services and introduce organisational change (ODPM, 2005a).

7.4.2. Leadership Commitment

Leadership commitment is important to the success of e-government partnerships. Partnership activity and success are influenced by the extent of *collective commitment* by senior executives from organisations in the sub-region and the involvement of particular individuals and organisations is influenced by the *individual commitment* of particular chief executives and leadership teams.

Public sector partnerships are influenced by the attitudes of senior figures outside the partnership (Cowell and Martin, 2003; Painter and Clarence, 2001; Raco, 2002), whether or not they are directly involved and partnership effectiveness is influenced by strong external control by a powerful local agency (Provan and Milward, 1995). Successful alliances need to have active, visible backing of senior

executives (Hutt et al. 2000). The adoption of e-government is affected by the leadership attitudes towards e-government (Beynon-Davies and Martin, 2004; Hinnant and O'Looney, 2003; Ho, 2002; Ho and Ni, 2004; McNeal et al. 2003) which may perhaps also extend to a commitment to involvement in a local e-government partnership. Lasting change in public organisations requires political and managerial leadership (Rashman and Hartley, 2002).

E-government activity is often "cross-cutting" in the sense that it involves or cuts across a number of different directorates: e-government is rarely a wholly ICT initiative. One example is the introduction of a CRM system by Shire County. CRM implies a change in the way public enquiries are dealt with: CRM systems enable frontline staff to resolve more enquiries without referring them on to specialist officers and is usually associated with the development of customer service centres where generic advisors take calls on behalf of a number of council directorates. Another example is the development of a home working policy by Metropolitan. The policy will only lead to an increase in home working if managers and staff beyond the ICT directorate are aware of the policy and support the idea of home working. A third example is the database of training opportunities by Urban, which is reliant on information from other directorates and training providers and promotion of the service by a range of advisors to potential learners.

The research findings indicate that top level leadership support is important for this cross-cutting e-government activity in three ways. Firstly, overt leadership support for the partnership's existence and activity provides it with *credibility*, which both signals to e-government and ICT managers that this is something they should be involved in and signals to other directorates that the partnership is an entity they need to pay attention to. Secondly, the support of leaders provides a *link to the priorities and strategies* of the participating organisations, making it more likely that the partnership's e-government activity will be relevant to those priorities, addressing the wider needs of the organisations and offering a route by which e-government activity can be promoted and reflected in wider strategy documentation. Thirdly, and linked to the issue of credibility, *take up* of partnership e-government initiatives by other directorates is more likely if the partnership has leadership support.

Funding from the national e-government partnership programme has come to an end, so all three partnerships must now rely on getting the agreement of chief executives to provide funding if the partnerships are to continue in existence.

The importance of leadership support was recognised by all three partnerships. The Metropolitan partnership had, a few months before the research, submitted a report to the sub-regional chief executives' group asking for "strategic guidance and adjudication" to take forward cross-cutting projects and shared services initiatives. In Urban a growing commitment to shared services amongst sub-regional chief executives had led to the establishment of a collaborative services group and some members of the partnership were seeking to establish clarity from the leadership group on the relationship between the two partnership organisations. A similar position occurred in Shire County where, as part of a Local Area Agreement a collaborative services group had been formed between the local authorities and the partnership wanted clarification of the roles. Among Shire County research participants, there did not seem to be a sense that the chief executives group drives or owns Shire County activity. Perhaps the partnership could be strengthened and its legitimacy increased if there was greater understanding and joint working among the member champions and greater direction from the Chief Executives.

The need for leadership recognition was particularly important at the point in time of the research: with the ending of the government's local e-government strategy and associated funding, the partnerships had a greater need to seek authority from local leaders to continue with their activity.

As well as signalling the credibility of a partnership, linking to wider strategies and promoting take-up of partnership e-government activity, leadership commitment impacts on the extent to which individuals and organisations get involved in partnership activity. Those individuals who play the most active roles at a senior level in the partnerships are all doing so with the express encouragement and support of senior staff in their organisations. Conversely, individuals who play a peripheral role, when interviewed, were very conscious of a lack of support from their leaders for partnership activity. In all three case studies it emerged that the individuals who played very central roles had senior level support and those who

were most peripheral did not. For one ICT manager, frustrated by the lack of support for e-government among the organisation's senior management team, the main motivation for involvement in the partnership was to persuade his own management that they should adopt e-government initiatives because everyone else in the sub-region was doing it.

7.4.3. Accountability

The involvement of 'many hands' in local decision making and service delivery raises important issues of public accountability (Sullivan, 2003). It can be hard for citizens to see exactly where power and responsibility lie (Lowndes and Sullivan, 2004). 'In the twenty first century the solution has been to create an overarching local strategic partnership to co-ordinate the activities of the multiplicity of actors, leaving the question of democratic control and legitimacy unanswered' (Skelcher, 2003). Within LSPs, Sullivan identifies three lines of accountability: vertical accountability upwards to central government; vertical accountability downwards to citizens; and horizontal accountability sideways to partners. There are tensions between these different forms of accountability (Sullivan, 2003). Governance exists in a 'multi-level' environment (Skelcher, 2003; Smith and Sullivan, 2003; Sullivan et al. 2004). The modernisation agenda has encouraged the primacy of the accountability to the centre by its emphasis on audit and inspection (Cowell and Martin, 2003; Sullivan, 2003). Sullivan suggests that a more balanced form of accountability could be established if local government focussed on the core values which are the key contribution it can bring to local governance: service co-ordination, representation, conduct and standards and public participation. A clearer role for elected councillors in local partnerships would aid accountability (Pearce and Mawson, 2003).

The reviewed literature on public partnerships focuses on local partnerships: local strategic partnerships, action zones and regeneration areas. Sub-regional partnerships potentially raise even more complex issues of accountability because, since the abolition of the metropolitan councils in the 1980s there is no decision making structure (outside London) in most urban areas at sub-regional level. Unlike the local partnerships which are usually led by one local authority, the sub-regional partnerships in this study involve between five and eleven local

authorities, each of which has separate lines of accountability. Sullivan's three lines of accountability (Sullivan, 2003) can be applied to sub-regional e-government partnerships as follows:

1. There are clear lines of *vertical accountability to government*: the partnerships were all allocated funding from the ODPM's partnership programme and have been required to report on their plans and progress. Additionally, the partnership activities have contributed to the achievement of e-government priority outcomes, on which each local authority has had to submit regular IEG statements reporting on progress. At the time of the case study research emerging national government priorities including a review of two tier government (ODPM, 2006), the potential development of city regions and the transformation agenda all encouraged local authorities to work in partnership with others. Involvement in partnership has helped raise the national profile of some of the councils, particularly the two small district councils in Shire County which have hosted national e-government projects.
2. There are signs of *horizontal accountability to partners*. Partnership projects arise out of a consensus by the partners; there is an emphasis on partners being able to opt in or out of particular projects as suits them; and leadership roles tend to be spread amongst councils, either by rotation (Shire County and Urban) or by sharing out different leadership roles (Metropolitan).
3. *Vertical accountability to citizens* is challenging to achieve because if it is hard for citizens to see where power and responsibility lie in local decision making (Lowndes and Sullivan, 2004), it is even harder when those decisions are taken sub-regionally, out of view, by a group of managers who tend to be from back office directorates without regular contact with the public.

Accountability to central government and to other partners may exert more immediate pressures on partnerships than accountability to citizens, but there were some examples in the case studies of accountability to citizens. Shire County included senior councillors from all the local authorities on its board, which potentially improves the accountability to citizens because councillors are publicly accountable. Councillor involvement can provide a reality check on partnership

proposals and ensure they are tied in with the priorities of the various local councils. But councillors are primarily accountable to the constituents of their ward and the wider electorate of their council, from whom sub-regional activity may be rather remote. Shire County is the only one of the three to have carried out prior public consultation on its priorities and also the one that has focussed most on projects with a direct impact on customer experience of services. Accountability to citizens can also be introduced by working with other partnerships with a wider remit, such as a regeneration partnership (Metropolitan) or a collaborative services partnership (Urban and Shire County), but insufficient information was collected during the case studies on these other partnerships to know the extent to which these are in touch with citizen needs and wants.

7.4.4. Not an ICT Silo

Historically, local authority departments have sometimes acted as “silos” concentrating on the delivery of individual services rather than having a broader citizen-focussed approach (Cowell and Martin, 2003; Geddes and Root, 2000; McAdam and Walker, 2004; Snape, 2003). Diffusion studies have found that an organisation’s innovativeness is affected by its interconnectedness (Rogers, 2003). One factor which influences successful e-government implementation is the extent of support from other departments outside the ICT section (Ho, 2002). Pratchett’s case study of an English local authority found that ICT policy making tends to be closed and exclusive, with an emphasis on developing technology to support existing service functions and a neglect of the local democracy and policy making roles of councils (Pratchett, 1999). If e-government partnerships act as ICT silos, this could lead them to develop initiatives without sufficient reference to other local developments. There is a link here to accountability: other directorates which are more citizen-facing will, by their nature, have more links to citizens and are less able to do their business behind closed doors.

In all three partnerships the group of officers who lead the sub-regional e-government activity are predominantly from ICT and back office departments. However, there are a number of examples of ways in which the partnerships can avoid being an ICT silo. Project groups in Shire County have involved people from non-ICT backgrounds. The Customer Services Managers Group is entirely made

up of the managers of customer service teams. Some individual council ICT departments allocate ICT staff to liaise with particular directorates in their council, which can potentially lead them to a greater understanding of wider issues. The links with other partnerships which were explored in section 7.4.3 Accountability offer the potential to avoid an overly-ICT focus. The councillors involved in Shire County are non ICT people and can bring a different perspective.

Table 36 Directorates Represented in the Case Study Partnerships

Directorate	Metropolitan	Shire County	Urban
ICT Directorate	26	1	8
E-government	5	0	6
Other back office directorates (e.g. policy, resources, planning)	5	9	3
Front office directorates (e.g. Customer services, regeneration)	0	1	4
Councillors	0	14	0
Staff team	0	6	2
Missing information			7
Total	36	31	30

There are some individuals involved who are not from an ICT background. One example is a member of the Urban partnership who has a background in economic development and regeneration. He works for an agency that uses new technology to encourage economic development and regeneration. His perspective was unique amongst those interviewed: he has innovative ideas about using ICT to transform cities and communities and has built close links with a local university. His main motive for involvement in the partnership is to influence others with these ideas. It is not possible from the research to judge his success in influencing individual local authorities, but it is clear that the partnership has not pursued projects relating to economic development. He is perhaps an example of an innovator as described by Rogers; someone who has forward thinking ideas and adopts new innovations, but cannot be an opinion leader, influencing wider behaviour because he is not really a member the social system, in this instance the ICT community (Rogers, 2003 p27).

7.4.5. Representatives Right for the Role

Interpersonal ties develop more smoothly in an alliance where role counterparts interact; when those involved have equivalent rank and job experience (Hutt et al. 2000). Successful partnerships need to have representatives who are right for the role (ODPM, 2005a), sufficiently senior to commit on behalf of their organisation and take decisions without constantly having to refer back (Painter and Clarence, 2001).

Table 37 Seniority of Those Involved in the 3 Partnerships

Job Function	Metropolitan*	Shire County	Urban
Councillor	0	14	0
Chief Executive	0	1	0
Director	2	1	1
Head of Service	7	5	10
Manager	19	1	6
Officer	4	1	4
Core team	0	6	2
Missing	4	2	7
Total	36	31	30

* The Metropolitan questionnaire did not have a question on job function, so the data here is based on an interpretation of the job titles.

Shire County has both senior councillors on its board and among the officers all but two are heads of service or higher. Metropolitan includes a range of job functions, and has someone from each local authority who is a head of service or higher, usually the Head of ICT. Similarly, the Urban partnership has a range of functions, including a Head of ICT from each organisation, but the interviews suggest that, as some people see the partnership as dwindling, they are sending more junior managers to the meetings and the heads of service are reducing their involvement. Partnership success and activity will be influenced by the seniority of the individual representatives and their capacity to commit to decisions on behalf of their organisation. All three partnerships might want to consider whether all representatives should be at least Heads of Service.

7.4.6. Conclusions: Governance

While the previous section on network structure included a table summarising the relationship between network structure and effectiveness for each of the three partnerships, a similar table has not been presented for governance. The case study research strongly indicates that governance is important for partnership effectiveness and that the factors discussed above have a particular impact, but it has not been possible to accurately measure differences in governance between the three partnerships. This is due in part to the reliance on qualitative interviews, which are more suited to narrative description than tabular comparison. It is also due to the way that the model was not formed in advance and then tested, but developed during the research, so adequate measures were not all identified at the outset.

Five aspects of governance have been identified as important for partnership effectiveness:

An effective partnership needs a clear vision, publicly stated and shared by partners, and activity that works towards that vision. This was evident in Shire County, but not in the other partnerships: Shire County's formal written vision of joined-up services was clearly reflected in the motives of those interviewed. There also needs to be a strategy to work towards that vision, agreed by the partnership and with commitment from leaders. Without it there tends to be a scattergun approach to project development.

The collective commitment of the leaders of organisations in the sub-region offers the partnership credibility, provides a link to wider strategies and priorities and encourages the wider take-up of e-government initiatives. In all three partnerships there was a perception that leadership commitment could be stronger. Leadership commitment also has an impact on the extent to which individuals get involved.

Accountability is an issue for sub-regional e-government partnership. There are clear lines of vertical accountability to government and horizontal accountability between partners, but introducing accountability to citizens is more difficult. Two examples of how accountability to citizens can be encouraged were to involve

councillors in the partnership and to build links with other partnerships whose role is more citizen-facing.

There is a danger that an e-government partnership made up of people from ICT and other back office departments could become a silo, divorced from wider strategic concerns. This can be avoided by including people from other directorates on the partnership board and in project groups, but it may be difficult for people from outside the ICT social system to act as opinion leaders and influence others. Councillor involvement can add a non-ICT focus, but the councillors in this study have a primary connection with the officer from their own council, rather than with each other, which could encourage the primacy of the officers.

An effective partnership needs the right people involved. In particular it helps if each organisation sends at least one person who is Head of Service or above.

7.5. Maturity

Studies of local partnerships suggest that it takes time to establish the relationships and understanding required for effective partnership working. Partnerships are likely to be more effective in bringing organisations together if they are based on pre-existing collaborative arrangements or have boundaries which are co-terminus with existing organisations with a history of working together. Partner organisations will have different traditions, attitudes and ways of arriving at decisions. They may distrust one another (Lowndes and Sullivan, 2004; Painter and Clarence, 2001).

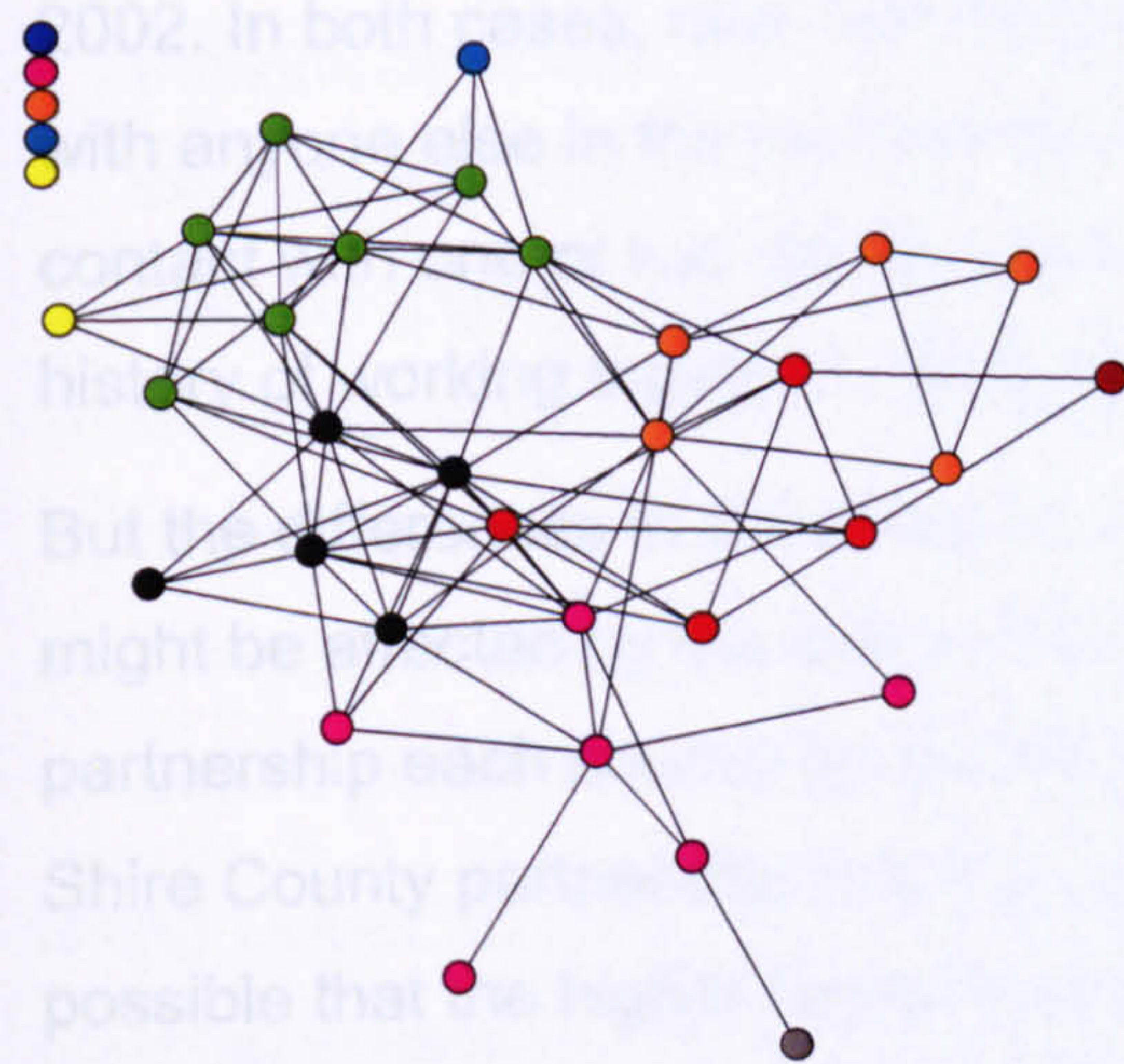
Within the social network literature, the term embeddedness is used to describe the idea that economic action is embedded in social networks (BarNir and Smith, 2002; Gulati and Gargiulo, 1999). The concept of embeddedness was developed by Granovetter and is now a key concept of social network analysis. Most people working within organisations are embedded in a varied social network. Within local government, for example, one individual can build up a rich social network by having worked for a number of different local authorities, perhaps having worked for another public body or a private firm, being involved in local, sub-regional or regional partnerships, joining a trade union and/or a profession association, plus relationships outside work including friendships and membership of community organisations or clubs. When deciding who to trust, people rely on their own past

experience of interacting with a person, or they take recommendations from others who they know well. Research suggests that managers rely on their social network to find *trustworthy* and *timely* information about the reliability and suitability of potential alliance partners (Gulati and Gargiulo, 1999). There are parallels here with a section of the social capital literature: people and organisations can gain advantage if they are well-supported and well-informed, by having strong and numerous connections with others (Putnam, 2000).

Figure 24 is an illustration of the extent to which those involved in the partnerships had previously worked together. Participants were asked “Who have you worked or collaborated with before joining the partnership?” In the sociograms, the lines represent a previous working relationship prior to involvement in the partnership. Each node represents an individual. The nodes are coloured by organisation and in the Shire County sociogram, officers are shown as circles and councillors as squares.

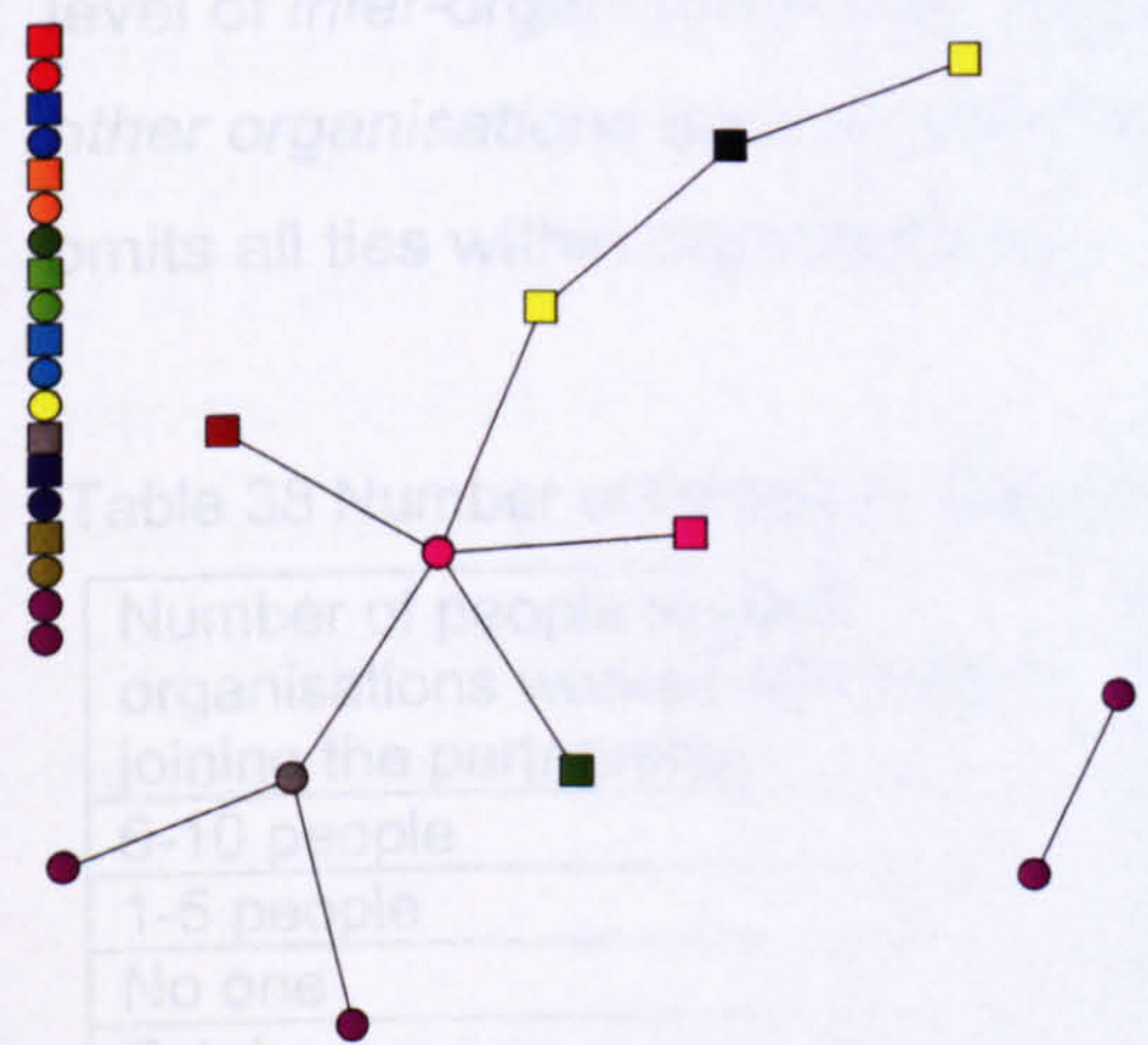
Figure 24 Previously Worked Together - A Comparison of the Three Case Studies

Metropolitan



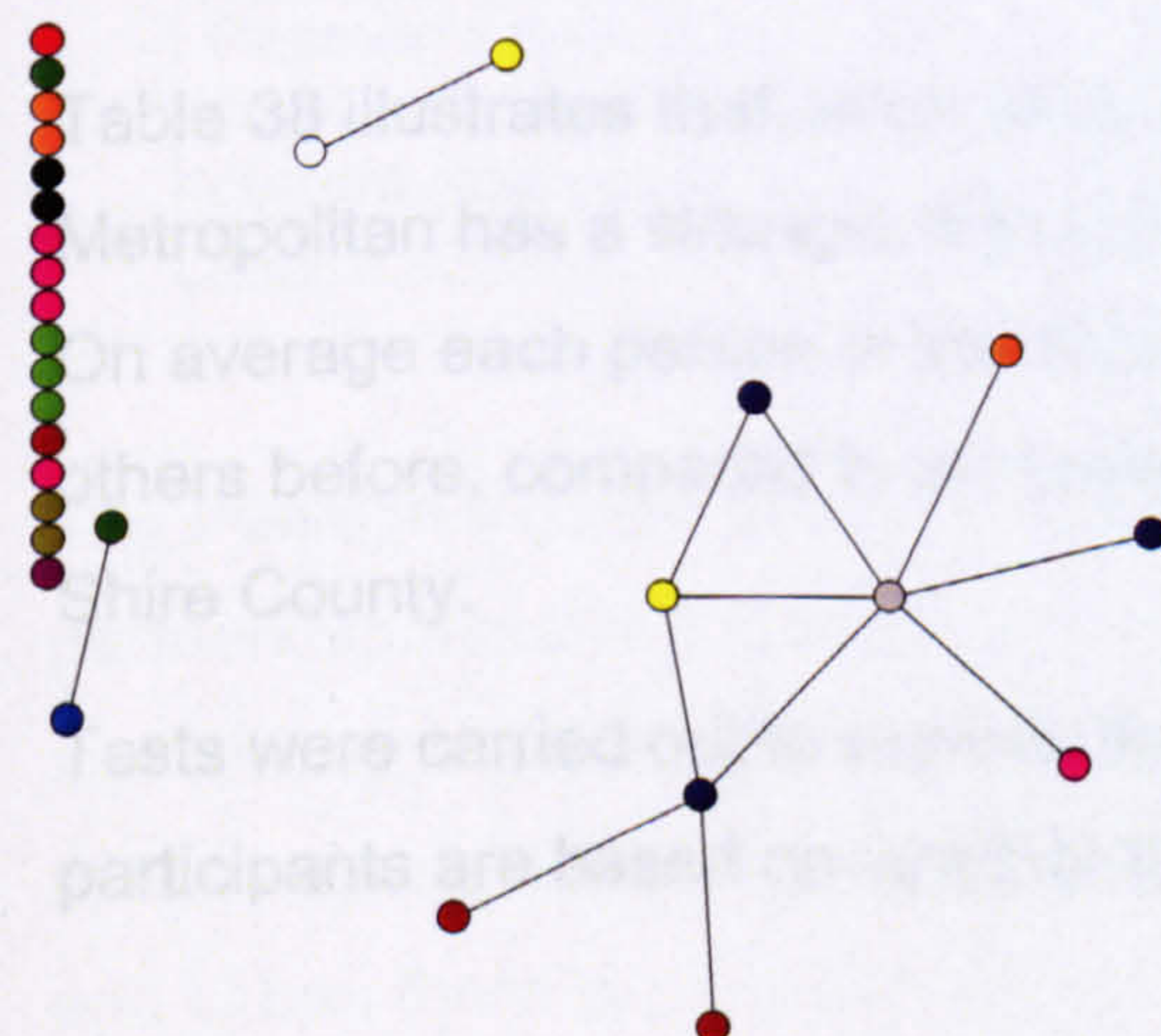
- Key**
- Council A
 - Council B
 - Council C
 - Council D
 - Council E
 - Health
 - Fire
 - Shared Services
 - Police
 - Transport

Shire County



- Key**
- Council F
 - Council G
 - Council H
 - Council I
 - Council J
 - Council K
 - County Council L
 - Council M
 - Council N
 - Council O
 - Staff Team
 - Parish Councils' Assoc
 - Fire
 - Police

Urban



- Key**
- Council P
 - Council Q
 - Council R
 - Council S
 - Council T
 - Council U (white)
 - Council V
 - Council W
 - Council X
 - Council Y
 - Council Z
 - Sub-regional group
 - Staff team
 - Other organizations - Fire, PTE, Health, LSC

The sociograms show that in both Shire County and Urban there is little history of the individuals working or collaborating together before the partnerships started in 2002. In both cases, over half the participants had not worked together previously with anyone else in the partnership, and most of the others had only had previous contact with one or two others. By contrast, Metropolitan has a much stronger history of working together: most participants have worked with others before.

But the differences in the levels of previous working between the partnerships might be affected by the differences in their composition: in the Metropolitan partnership each council is represented by between 4 and 7 people, whereas in the Shire County partnership it is 2-3 people and in the Urban partnership it is 1-3. It is possible that the higher levels of previous working in the Metropolitan partnership represent a high level of previous *intra*-organisational working rather than a high level of *inter*-organisation ties. Table 38 summarises the number of people *from other organisations* each person has worked with before joining the partnership: it omits all ties within organisations.

Table 38 Number of People in Other Organisations Each Person has Worked With Before

Number of people in other organisations worked with before joining the partnership	Metropolitan	Shire County	Urban
6-10 people	7	0	1
1-5 people	19	9	12
No one	10	22	17
Total	36	31	30
Mean number of ties per person	2.7	0.5	0.8

Table 38 illustrates that, even when intra-organisational ties are discounted, Metropolitan has a stronger history of working together than the other partnerships. On average each person in the Metropolitan partnership has worked with 2.7 others before, compared to an average of 0.8 in the Urban partnership and 0.5 in Shire County.

Tests were carried out to explore the extent to which current ties between participants are based on whether they have previously worked together: QAP

correlations were calculated using Ucinet for each of the three case study partnerships, to test the association between two matrices:

- Individuals' Matrix A, which summarises three relationships, communication, seeking information and knowing skills. It is a valued, directional matrix, with values ranging from 0 if a pair has no ties to 3 if an individual communicates at least monthly and seeks information and understands the skills and knowledge of another.
- The matrix of whether individuals have worked or collaborated with each other before joining the partnership.

Using Ucinet, the two databases were compared to examine the extent of any correlation between them. It would be inappropriate to use some of the more common statistical models to test the significance of this result, because social network data does not meet the requirements of being a random sample, the distribution is not normal and the observations are not independent of one another. As an alternative, Ucinet uses a permutation test; exploring the correlations between 10,000 different possible permutations and counting what proportion of those correlations are as large as those observed. Using a permutation test, the correlation statistics have a p-value of less than 0.01. The relationships are therefore statistically significant.

Table 39 QAP Correlation Between Previously Working Together and Current Relationships (Pearson's correlation statistics)

	Metropolitan	Shire County	Urban
Pearson's correlations between previously working together and current relationships	0.48	0.15	0.19
p-value = <0.01			

The Pearson's correlation statistics are shown in Table 39. In the Metropolitan partnership there is a high level of correlation (0.48) between current relationships and having previously worked together, suggesting that the actors are more likely to have stronger links with those they have worked with before. In Shire County and Urban there is a much lower level of correlation (0.15 for Shire County and

0.19 for Urban), but the correlation is still significantly greater than is likely to have occurred by chance. The results indicate that, across all three case studies, people are more likely to communicate regularly, seek information from and know the skills of people they have worked or collaborated with before, but the link is most marked in Metropolitan, where there is also a stronger history of people having worked together before joining the partnership.

There initially appears to be no clear relationship between people having worked together over time and partnership effectiveness. All three partnerships have existed for a similar length of time, so there is little variation in terms of how long people have worked together in these particular partnerships. Metropolitan is the one with the strongest history of the individuals working together and therefore might have been expected, from the literature, to have been the most effective of the three. And yet it is not. One plausible explanation of the results could be (as already suggested in the section on Interconnectedness, page 203) that a history of close working in the partnership encourages the softer elements of partnerships working - collective problem solving, shared learning and skills transfer - rather than harder elements such as the development of new projects or new initiatives.

Another potential explanation may lie in the fact that Metropolitan is the most homogenous of the three partnerships in the sense that it has a higher concentration of ICT professionals (see Table 36). Having a history of working together and a shared professional outlook may help the partnership establish itself and work closely together, but may not lead to effectiveness as it is being measured here.

In the social network literature there is a concept of strong and weak ties. Strong ties are those built between members of an established social group of like minded people, homophilous ties. Weak ties are ties to people outside the established group, people with different perspectives, heterophilous ties. A number of studies have found that people tend to find new and innovative opportunities via weak ties to people who are different rather than via strong ties to people like them (Rogers, 2003). For example Granovetter found that people more often get information about jobs from acquaintances than from their close friends, because the close friends usually only have access to the same information as the individual, while

acquaintances bring new sources of information (Granovetter, 1973). Perhaps an effective local partnership needs to be based on these weak ties between a range of people with different perspectives, rather than a group of like minded people with strong ties between them.

During the Shire County case study a number of participants mentioned the “maturity” of the partnership.

“It is a mature partnership – everyone knows each other’s Council agendas and there is an honest debate”. (Shire County officer)

“Every partnership is going to have tensions, because that is about authorities working together. What really matters is can we plot a way through those tensions and deliver “it” at the end of the day, whatever the “it” is, whether it is shared services or street scene and up to now we have”. (Shire County officer)

“When we have difficult things we don’t run away from it, you know, we sometimes do some very hard talking and I think that is about the fact that it really is a partnership, because if it is just where people get together and they deal with superficial issues then it is not really a relationship”. (Shire County Officer)

This concept of maturity is difficult to define, but it seems to encompass:

- A stable group of people;
- With different perspectives
- Working together to achieve something tangible
- Over a prolonged time period
- Facing conflict between participants
- But carrying on.

It would be difficult to explore maturity in any depth using the data from these three case studies because additional information is required, which was not collected at the outset, such as:

- the length of time individuals have been involved in the partnership;

- a measure of individual perspective more precise than their directorate or job title;
- a study of the conflicts and differences in the partnerships; if and how they were resolved.

However, the impressions gathered during the case studies are summarised in Table 40. This suggests that Shire County is the more mature of the partnerships, but further research would be needed to clarify this in more depth.

Table 40 The Relationship Between Maturity and Effectiveness

	Shire County <i>Most effective</i>	Metropolitan	Urban <i>Least effective</i>
Stable group of people	Yes	Yes	No
Different perspectives	Varied	ICT dominated	Varied
Prolonged time period	Since 2002	Strong pre-history	Since 2002
Facing conflicts	Yes	?	?
Carrying on	Yes	Yes	unsure

7.6. Context

A number of contextual factors are likely to impact on partnership effectiveness including system stability and resources (Provan and Milward, 1995) and the values and norms of partner organisations (Huxham and Vangen, 2005). These have not all been explored in this study, but one contextual aspect which has emerged as relevant is council population size.

7.6.1. Council Population Size ¹¹

Shire County is a partnership of eight small district councils with a large city council and a very large county council. The eight districts all have resident populations under 130,000, substantially smaller than any of the councils in Metropolitan or Urban. The small districts have much to gain from the economies of scale offered by a partnership and would, for example, have had difficulty affording a CRM

¹¹ Source of population information: ONS mid year population estimates 2004
www.areaprofiles.audit-commission.gov.uk accessed 09/11/2006

system as individual councils. Shire County has focussed more on capital projects than the other two partnerships, possibly because in the other areas the larger councils have been able to go it alone on these large developments.

The Metropolitan councils are all larger than the small districts in Shire County, with resident populations ranging from 194,300 to 719,600. The three people at the forefront of e-government activity are from the three councils with the smallest resident population and this again perhaps is a reflection of the relatively small councils seeing more gains from the economies of scale and sharing of knowledge offered by e-government partnerships. For example, in relation to discussions about a shared approach to disaster recovery,

“Council D is a large City Council so they have resources that we can use and they are quite happy to share” (council officer, Metropolitan).

In Urban, there is less variation among the councils in their involvement in the partnership and the variation does not seem to be related to council size, but the largest of the councils has relatively low involvement.

It would not be appropriate to draw any firm conclusions on the relationship between population size and partnership involvement from these three case studies. But there is some indication from these findings that smaller councils have more to gain from e-government partnerships and seem to make a larger contribution to partnership activity. E-government research suggests that population size is a factor in adopting e-government, with large councils being more likely to adopt more sophisticated approaches (Ho and Ni, 2004). Larger organisations have a greater availability of slack resources and more technical expertise (Rogers, 2003). It may be that smaller councils lack the capacity to go it alone on e-government and therefore are more likely to seek out partnerships (Cotterill and King, 2007). Smaller councils appear to have more to gain from working in partnership and amongst these three case studies, the most effective is the one with predominantly small councils.

Having discussed the findings from the case studies, the next, final chapter offers some conclusions. It summarises the research project, sets out the contribution to

academia and policy and practice, describes the strengths and limitations and offers some suggestions for future research.

8 Summary and Contribution

8.1. Introduction

This final chapter starts with a summary of the research study and the research findings. It will then set out the academic contribution of the research and outline the implications for policy and practice. This is followed by a description of the research project's strengths and limitations and some implications for future research.

8.2. Research Summary

The study set out to learn about the role of public sector partnerships in the development of local electronic government in England. It explored the research question, "How can local authorities and their partners work together to successfully implement electronic government?"

A systematic literature review was undertaken, which explored five themes: the changing nature of local governance; local electronic government; public sector partnerships; the dissemination of best practice in public organisations; and the use of social network analysis to describe and evaluate partnerships. From the literature review a number of subsidiary research questions and key concepts were identified. These were used to develop a research protocol, including a research framework and case study questions (see Methodology Chapter).

Comparative case studies were conducted with three sub-regional e-government partnerships, using a mixed methods approach, combining social network analysis and qualitative research methods. The case studies were guided by a research protocol based on the themes identified during the systematic review. The findings from each of the case studies were analysed separately and written up as case narratives, which were provided to participating partnerships.

Cross-case analysis and "enfolding" the findings in the literature review (Eisenhardt, 1989 p544) led to the development of a model of partnership

effectiveness (Figure 25) which includes five elements: effectiveness, network structure, governance, maturity and context.

Effectiveness. Establishing the effectiveness of e-government partnerships has proved to be problematic. In this study, effectiveness has been judged by the extent to which each partnership has contributed to the government's expectations: improved or joined up service delivery; efficiencies and economies of scale; and organisational or individual learning. All three partnerships have undertaken activity which contributes to these themes, to differing degrees of success.

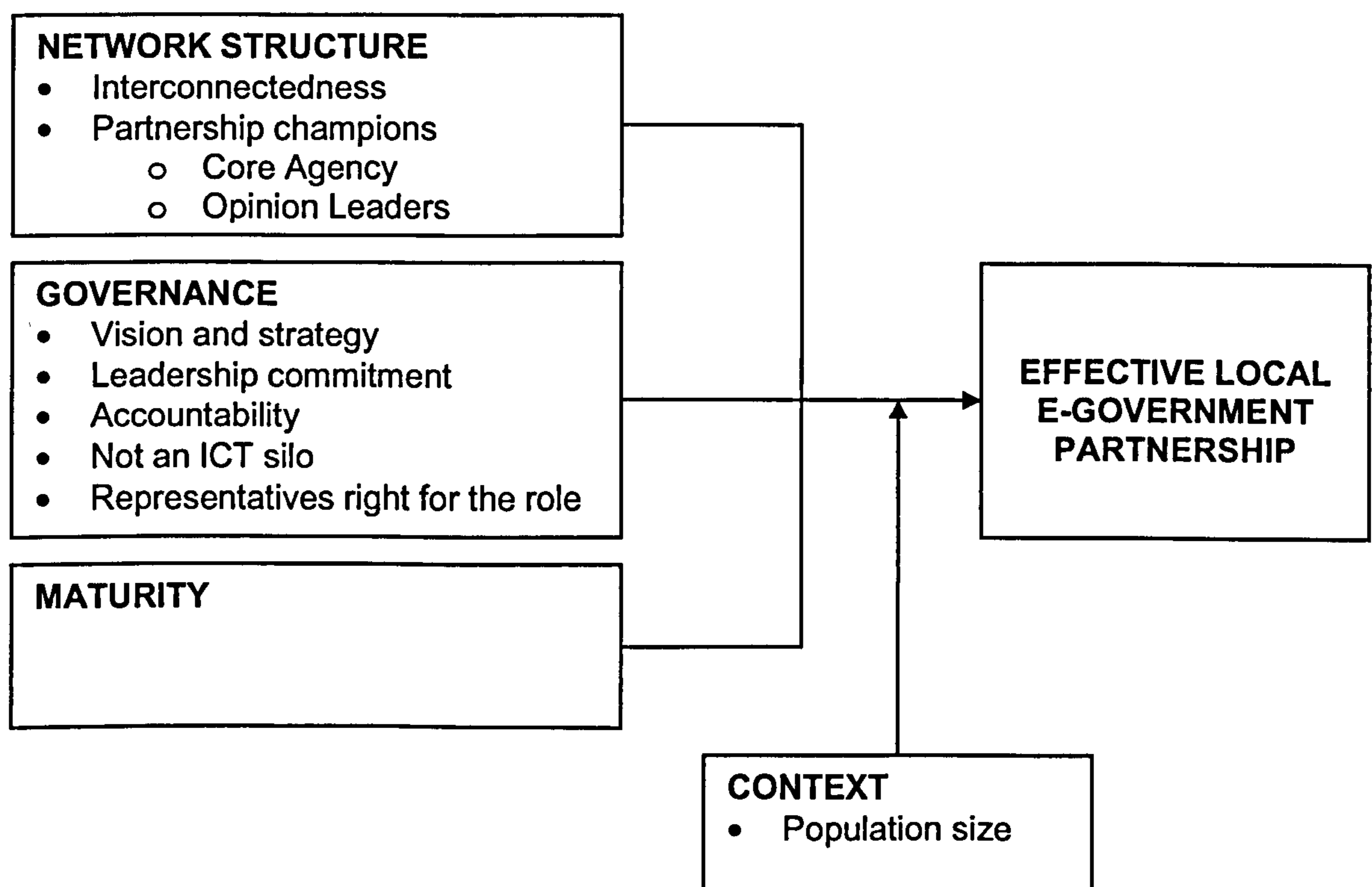


Figure 25 Model of Partnership Effectiveness

Network Structure. Two aspects of network structure have been found to have an impact on partnership effectiveness. Interconnectedness or cohesion amongst the partners encourages the sharing of information and skills and promotes organisational learning. Central champions are important in two respects: firstly, a strong central core agency is important to ensure that partnership ideas reach fruition, steer projects to completion and act as a conduit between partners; and

secondly, opinion leaders come up with good ideas, are passionate about the partnership and can mobilise others to ensure partnership success.

Governance The governance of a partnership is important for its effectiveness. An effective partnership needs a clear vision, publicly stated and shared by partners. There also needs to be a strategy to work towards that vision, agreed by the partnership and with commitment from leaders. Without it there tends to be a scattergun approach to project development. The collective commitment of the leaders of organisations in the sub-region offers the partnership credibility, provides a link to wider strategies and priorities and encourages the wider take-up of e-government initiatives. Leadership commitment also has an impact on the extent to which individuals get involved. Accountability is an issue for sub-regional e-government partnership. There are clear lines of vertical accountability to government and horizontal accountability between partners, but introducing accountability to citizens is more difficult. Two examples of how accountability to citizens can be encouraged were to involve councillors in the partnership and to build links with other partnerships whose role is more citizen-facing. There is a danger that an e-government partnership made up of people from ICT and other back office departments could become a silo, divorced from wider strategic concerns. This can be avoided by including people from other directorates on the partnership board and in project groups, but it may be difficult for people from outside the ICT social system to act as opinion leaders and influence others. Councillor involvement can add a non-ICT focus, but the councillors in this study have a primary connection with the officer from their own council, rather than with each other, which could encourage the primacy of the officers. An effective partnership needs the right people involved, sufficiently senior to commit to decisions.

Maturity A partnership's effectiveness is influenced by its maturity. This concept of maturity is difficult to define, but it seems to encompass:

- A stable group of people;
- With different perspectives
- Working together to achieve something tangible
- Over a prolonged time period

- Facing conflict between participants
- But carrying on.

Context Smaller councils appear to have more to gain from working in partnership and amongst these three case studies, the most effective is the one with predominantly small councils.

8.3. Academic Contribution

The study contributes to academic research in four areas: e-government, local governance, inter-organisational partnerships and methodology.

E-Government

Partnerships are an important element of the UK local e-government programme: local authorities have been encouraged to work with others in local partnerships and national projects. The importance of partnership working is continuing with the transformation agenda, which promotes the development of shared services, to offer a more joined up experience for citizens. Working in partnership with others can contribute to improved and joined up services, efficiency savings and organisational learning. Previous research has suggested that networking amongst professionals can influence the adoption of e-government (Ho and Ni, 2004; McNeal et al. 2003), but this is the first study to examine how local public organisations network together on e-government, putting forward a theory of what factors contribute to an effective e-government partnership. In doing so the study builds on the work of others who have identified factors like leadership, support of departments beyond ICT, e-government strategies and population size as important to e-government development (Hinnant and O'Looney, 2003; Ho, 2002; Ho and Ni, 2004; McNeal et al. 2003; Melitski, 2003; Moon and Norris, 2005; Norris and Moon, 2005) and explored the contribution of these factors to the success of e-government partnerships. It has confirmed that leadership support, having a clear vision and strategy and support from beyond ICT are important for partnership success and has discovered that councils with smaller populations are more likely to get involved in partnerships, perhaps because they lack the resources to develop e-government solutions alone.

A broad view of the potential impact of e-government has been adopted, as illustrated by the wide definition that has been developed to guide the study:

E-government is the use of computer technologies by government to transform the provision of services and information, improve internal organisation, encourage citizen participation and promote sharing between partners.

The research has found that English local e-government partnerships have been encouraged to follow a narrower focus, concentrating on three areas of activity: improved or joined up service delivery; efficiency and economies of scale; organisational and individual learning. All of the partnerships in the study have worked on projects in these three areas. This suggests that e-government is now having a greater impact than in its early days when government reported few impacts (Norris and Moon, 2005) or financial savings (Moon and Norris, 2005). It still seems to be the case that internal development is an important part of e-government (Beynon-Davies and Martin, 2004) but there is increasing attention to efficiency and improving services for citizens.

As previous studies indicated (Beynon-Davies and Martin, 2004; Ho, 2002; Pratchett, 1999), e-government partnerships have focussed on service delivery, efficiency and organisational change rather than addressing a broader agenda of encouraging democracy and participation.

Local Governance

There is a growing body of research on local public sector partnerships, with a focus on either neighbourhood partnerships (Clegg and McNulty, 2002; Painter and Clarence, 2001; Raco, 2002; Thacher, 2004) or council-wide Local Strategic Partnerships (Cowell and Martin, 2003; Lowndes and Sullivan, 2004). This is the first study of partnerships between public organisations in a sub-region. It builds on concepts like accountability (Cowell and Martin, 2003; Geddes, 2006; Lowndes and Sullivan, 2004; Skelcher, 2003; Sullivan, 2003), participation (Lowndes and Sullivan, 2004; Pearce and Mawson, 2003), councillor involvement (Orr and Mcateer, 2004; Pearce and Mawson, 2003), and the role of individuals (Cowell and Martin, 2003; Lowndes and Sullivan, 2004; Painter and Clarence, 2001; Raco, 2002) which arise in the literature on local governance, but explores them in the

context of sub-regional rather than local partnerships. For example, sub-regional partnerships are more removed from citizens and have been funded and monitored by central government, which discourages citizen participation and promotes accountability to the centre and between public organisations rather than public accountability. Councillors are accountable to local wards, for which sub-regional activity may be rather remote.

Partnership Working

This research has developed a model of partnership effectiveness, identifying factors which contribute to the success of e-government partnerships. The initial inspiration for that model started with Provan and Milward's (1995) model of network effectiveness, which they used to explore local networks for the delivery of mental health services. E-government partnerships differ from service delivery networks in that they are sub-regional rather than local, they are formal partnerships rather than loose networks, and they are not focussed on service delivery. The model proposed in this study is substantially different from the original, reflecting the different subjects of study.

Provan and Milward claim some contributions for their study which equally apply to this research. The emphasis on studying network effectiveness and its correlates is unusual. Traditionally, studies explore how the characteristics of organisations explain their involvement in networks (Ahuja, 2000; BarNir and Smith, 2002; Gulati and Gargiulo, 1999) or they look at the outcomes for organisations of being involved in networks (Hagedoorn and Duysters, 2002; Lee and Pennings, 2002). Few studies focus, as this has done, on what factors lead to effective outcomes for the network as a whole.

Methodology

The use of social network analysis and qualitative research in comparative case studies is unusual in the study of inter-organisational networks (Provan and Milward, 1995). No examples have been identified of this methodology being used in research into UK local governance or e-government. The methodology has proved a useful way of investigating public partnerships and could easily be adapted to future studies in this area. Aspects of the methodology which are particularly novel are:

- The use of multiple informants from each organisation, to get a range of perspectives;
- The use of sociograms in interviews, providing a focus for discussion;
- Comparing network structure across different partnerships;
- Linking network structure with partnership effectiveness;
- Combining positional and snowball sampling techniques.

8.4. Implications for Policy and Practice

The research findings have been fed back to participants in each case study via a workshop and a written report. This was done in part to improve the validity of the research, but it also provided an opportunity to discuss with participants the lessons from the research for their partnership. The research has been used by participants from Metropolitan to illustrate a presentation they made at a practitioner national event on shared services. It has also been used by the staff team at Shire County as part of a submission to a local authority scrutiny committee looking at partnership working. A final written report will be provided to the public sector organisations who participated in the research and to the research funders, ESRC, DCLG and PWC. It is hoped that this final report will inform guidance and practice on e-government partnerships.

Partnerships have contributed to e-government by encouraging organisational learning, improving access to services and achieving efficiency. There is a potential for e-government partnerships to contribute to joined up service delivery and signs that they may be moving more in that direction. Partnerships could also address wider issues of participation, democracy and encouraging a more joined up approach to public policy development, but so far this has not been a focus of their activity.

The structure of partnerships can influence their activity and success. Inter-organisational learning can be promoted by establishing interconnected, dense networks, where participants get to know the skills of others and have the opportunity for regular communication. This research suggests that when seeking to build partnerships which aim to encourage learning together and sharing of ideas between organisations it is important to build strong and frequent ties

between participants. This could be encouraged by allowing partnerships to develop over time, encouraging informal contact between participants and ensuring that there is access to information on the skills and knowledge held in the partnership.

As well as providing a forum for learning and sharing, another function of e-government partnerships is to fund and implement shared projects such as the introduction or development of new ICT systems. The successful implementation of these projects benefits from a central core agency – often a staff team – that maintains regular communication with others, ensures that targets are met, monitors progress and ensures completion. A suitably skilled staff team with good connections to partners is a key element in achieving large capital projects.

Partnerships need opinion leaders. These are innovative people who have strong and passionate ideas about what the partnership should be aiming for and can motivate others to get involved. Opinion leaders stop partnerships becoming “talking shops”, give a clear direction and purpose and galvanise others into action. They can also persuade others in the sub-region of the importance of what the partnership is doing.

Local e-government partnerships need a clear vision and strategy. The vision needs to be not just publicly stated, but shared by all partners and linked to their wider priorities. The strategy needs to be regularly updated and can act as a guide for all the activity and projects.

The support of chief executives and council leaders for a partnership offers credibility, provides a link to wider strategies and priorities and encourages the take up of e-government by other directorates. This can be aided by ensuring the partnership reports regularly to an appropriate leadership body in the sub-region and that its strategy is linked to wider sub-regional strategies as appropriate.

Central government funding and encouragement has positively promoted the development of local e-government partnerships, but this central support promotes accountability to the centre and ways need to be found to also build in accountability to citizens. Local accountability could be improved by: the direct participation of councillors and voluntary sector ICT organisations in the

partnerships; consultation with citizens on their needs; and wider publication of information on partnership activities. eDemocracy is a growing phenomenon in local government (for example the work of the International Centre for Excellence for Local eDemocracy www.icele.org) which could be explored further in this context.

The involvement of a wide range of people – beyond ICT – in e-government partnerships is likely to lead to greater innovativeness and avoid a narrow focus on improving the current way of doing business. Participants need to be sufficiently senior to take decisions: e-government partnerships need someone from each organisation who is at least a Head of Service

A mature partnership is one where a group of people with different perspectives work together to achieve specific goals and carry on despite facing hurdles. For this maturity to develop a partnership needs time to develop and to go through a process of working out how it will function. It also needs permission to make mistakes and work through them.

Partnerships have a lot to offer smaller councils, who may lack the financial and staffing capacity to develop e-government solutions on their own. Larger authorities may not value this shared development opportunity so highly, but partnership offers them the opportunity to provide joined up services to citizens, and they can benefit from sharing learning and gaining status as sub-regional leaders, encouraging the adoption of their ideas and approaches. This is particularly relevant in the current climate of proposed City Regions.

8.5. Research Quality

Some quality criteria for the research study were set out in the Research Design and Methodology Chapter (section 3.2.3 Research Quality).

Table 41 reflects on the extent to which the study has met those criteria.

Table 41 Research Quality Assessment

1. Readers should be able to <i>follow the research process and draw their own conclusions</i>
The thesis contains a comprehensive account of the research process: the problem, purpose and research question are set out in the introduction and expanded on in chapter 2; the methods of data collection, motives for selecting cases, coding and analysis are described in chapter 3; the case narratives offer a rich description of the cases; the results and interpretation are in chapter 7. The limits of the research project and conclusions are in chapter 8.
2. Researchers should present their <i>perspective and preunderstanding</i>
Some limited information on the prior experience and personal and professional values of the researcher were given in chapter 3. The values of the national strategy for local e-government are in the e-government section of the literature review. The theories and concepts used are introduced in the literature review and summarised in the research protocol.
3. The research should possess <i>credibility</i>
Every attempt has been made to give a correct rendering of informants' views: recording and transcribing interviews; providing quotes and social network analysis to support the interpretation. The inclusion of the full case narratives and a description of the cross case analysis can help build confidence in the proposed model of network effectiveness. Most actors have had the opportunity to see the relevant case narrative and provide feedback on accuracy. The methods used seem appropriate for research on e-government partnerships.
4. The researcher should have had adequate <i>access</i>
The methods used allowed access to everyone directly involved in the partnerships. Access difficulties, response rates and how missing data has been dealt with are discussed in chapter 3.
5. There should be an assessment on the <i>generalisability and validity</i> of the research
Generalisability is discussed in chapter 3. The issue of how closely the research represents e-government partnerships is discussed in chapter 3 and also in the strengths and limitations section of this chapter. The extent to which the research conforms with other studies is discussed in chapter 7 and summarised in the academic contribution section of this chapter.
6. The research should make a <i>contribution</i>
The contribution to knowledge and to policy and practice is outlined in the academic contribution section of this chapter. The findings have been presented at academic conferences, in a working paper for the funders, and the case narratives have been provided to the participating partnerships.
7. The research process should be <i>dynamic</i>
The conduct of the PhD has been a learning process, involving personal reflection and academic dialogue. The research design and methods have changed during the process, in response to new situations and growing awareness of the problem.
8. The researcher should possess certain <i>personal qualities</i>
Commitment, integrity, honesty, conviction, flexibility and openness have been developed during the research process.

8.6. Strengths and Limitations

Systematic Literature Review

Undertaking a systematic literature review has been a valuable experience. It developed many skills which will be of future use including learning how to search academic databases, appraise articles and synthesise research from different authors. The systematic review encouraged the inclusion of articles from a wide range of fields and perspectives, which was particularly useful for a new researcher coming to some of these areas of literature for the first time. The maintenance of comprehensive records of both the review process and the individual articles means that the study is potentially replicable in future research. The introduction to Procite bibliographic software at the start of the research project has been invaluable for storing and retrieving references.

The main limitation of undertaking a systematic review was time: devising the review protocol, designing and conducting searches and learning to use the bibliographic software were time-consuming in the first year of PhD study. A second limitation was that the systematic review methodology is designed to be used by a team of researchers, introducing checks and balances between team members. Consistency and transparency were introduced by the involvement of supervisors and advisors, but a team approach would be preferable.

Case Studies

The use of a comparative case study approach allowed for an in-depth exploration of e-government partnerships and included the perspectives of a range of stakeholders. Problems with access mean that, although the three case studies cover a variety of different partnerships, they were not chosen as robustly as they might otherwise have been.

All three partnerships were relatively successful, both in terms of the outcomes they achieved and their ability to work together harmoniously. It would have been interesting to have included a failing or less successful partnership in the research. This would have provided a valuable opportunity to test the model against a failing example. Unfortunately this was not possible: it was very difficult to recruit partnerships to the study and only successful partnerships were willing to take part.

The case studies focus on one point in time: a longitudinal study could have explored the transition of the partnerships over time.

Social Network Analysis Methodology

Social network analysis proved to be a very useful, but as yet under-used, methodology for studying partnerships. Social network analysis provides the researcher with a good understanding of the pattern of relations within a partnership and it conveys a portrait of the partnership which can encourage discussion amongst participants. Sociograms are a convenient way of portraying complex patterns of relations which could not so easily be conveyed in words. Qualitative interviews can add a rich explanation of the social network data and provide more detailed contextualisation.

A limitation of using this approach is the difficulty of using social network techniques like density and centrality to compare across different networks. The boundaries of the partnerships were difficult to define and the categorisation of participants into comparable work roles was problematic. The methodology requires all members of the partnerships to complete questionnaires and for a proportion of them to be interviewed: this is a time-consuming research method, for both researcher and participants.

Model of partnership effectiveness

The model of partnership effectiveness is a useful pictorial summary of the findings, which could offer a useful starting point in future research on public sector partnerships. The research started out in an exploratory fashion, allowing room for important issues to emerge: this model offers a reasonable explanation of the research findings, but there may be other factors contributing to partnership effectiveness which have not been considered. Successful partnerships are the result of a multitude of influences, which cannot all be neatly packaged in a prescriptive model.

Public sector partnerships vary widely in their purpose, activity and degree of formality. For example regeneration partnerships are formally constituted organisations which allocate additional funds to a variety of projects with the aim of tackling poverty and inequality in a local neighbourhood. Crime and disorder

partnerships co-ordinate the services provided by the police, local authority and others to improve community safety in a neighbourhood. Both usually encourage participation by local citizens to improve accountability and build public trust. The e-government partnerships studied here are particular types of partnership:

- A stable membership but relatively informal;
- A partnership between local authorities rather than the more usual model of an alliance between a single local authority and other agencies in its locality;
- Not focussed on a shared geographical area: each authority is accountable to its own population (although in Shire County the two-tier arrangement made co-ordination an issue)
- Focus on sharing information and developing new shared projects rather than service co-ordination;
- Central government funding provided an impetus for the partnership to be formed, although in all three cases there had been a history of IT managers working together.

This particular nature of e-government partnerships means that caution is needed in applying the success factors identified in the model to other public sector partnerships which may have different characteristics. However, the model reflects themes that arose from the literature review as well as the empirical study: the literature review included articles on a wide range of partnerships and alliances, going beyond the realms of ICT. Many of the themes that have emerged during the research are anticipated to have wider relevance. A fruitful avenue of future research would be to use the methodology developed in this study to test the model in other types of public sector partnerships. Research with other partnerships may reveal other factors not featured here. In particular, other elements of the context might be expected to have an impact. For example, all three partnerships studied here received a similar amount of funding, but in other contexts, funding differences might be very relevant factors. Another example is differences in geographical proximity of partners, which might be expected to have an impact.

All elements of the model reflect findings from the research, but not all the themes were measurable between partnerships. For example, leadership commitment was

an issue for all three case studies, but the data did not permit a comparison of the extent of leadership commitment across the three partnerships. This was because the model emerged during the study rather than being tested from the outset.

Maturity arose as a concept during the case studies and was only able to be explored in a very initial way because the study did not set out initially to find data to measure the concept. Any future research in this area could explore this concept of maturity in more depth.

The model might have been improved by a more participatory approach. The model was adopted after the completion of the case studies, so it was not possible to incorporate participant views into it. For example, it would have been beneficial to get a feel for what participants viewed as an effective partnership and consider the extent to which they had achieved what they set out to do.

8.7. Implications for Future Research

Having developed a model of partnership effectiveness, it would be interesting for it to be used in studies of other e-government partnerships or other public sector partnerships, such as local strategic partnerships, area based regeneration initiatives or crime and disorder partnerships. There are a number of ways in which the constructs and measures could be sharpened for use in any future studies. Firstly, future studies using social network analysis to compare partnership would be aided by further research on how to compare across different networks using measures like centralization and density. Secondly, some of the governance concepts, including vision, strategy, leadership commitment and accountability could be explored in more depth by additional interviews and desk research looking at the wider context the partnership is in; for example interviewing leading figures outside the partnership and attending the meetings of other partnerships operating locally. Thirdly, the development of clearer definitions of job roles would be helpful in examining the concepts of ICT silos, maturity and whether the representatives are right for the role. Job titles and directorate names vary greatly between organisations, making it difficult to assess precisely what job someone does and how senior they are. This became apparent in the first case study, so in following studies a question on job function was added to the questionnaire (see

Appendix 3). A further improvement would be to ask about core skills and perspectives. Fourthly, the concept of maturity could be explored in more detail in future by including in the in-depth interviews the additional topics of conflict between partners and the variety of attitudes towards both partnership working and e-government. This would help establish the breadth of perspectives involved and levels of conflict. When thinking about maturity, it would also be useful to establish how long individuals had been involved and the extent of any turnover of participants.

The research indicates that maturity is important for partnership effectiveness, but the study only focuses on one point in time. It would be interesting to adopt a more longitudinal approach to explore the development of networks over time.

An approach which could usefully be incorporated into future research of public sector partnerships is stakeholder analysis (Scholl et al. 2007). Stakeholder Theory has been applied to research in ICT project management, public administration and e-Government information systems. It seeks to give consideration to a wide range of individuals and organisations that might affect or be affected by an initiative or project. It examines the "stance" and "salience" of different stakeholders and can be useful in identifying who all the salient influencers are and what their likely stance may be (Scholl et al. 2007 p133). This could be useful in thinking about what roles the different individuals and organisations play in e-government partnerships. The researcher became aware of this approach after the completion of the empirical research, but with hindsight it could enrich any future similar study.

Partnerships continue to be an important part of the local government agenda. Transformational Government (t-government) has emerged recently as a new priority for local authorities. While shared services were always a feature of e-government, the primary focus of e-government was to ensure that a range of core functions were e-enabled by 2005-6. Now that these initial targets have been achieved, t-government appears to be placing greater emphasis on the use of ICT to transform the way services are delivered and it encourages greater attention to joined up or shared service delivery between public organisations and shared back office functions. In this context, local authorities can be expected to continue to

work in partnership to develop ICT solutions, and further research in this area could help provide answers on how they can successfully work together.

Appendix 1: Systematic Literature Review Protocol

(Prepared January 2005)

1. Introduction

1.1. The need for the review

An increased role for electronic government is a central plank of the government's modernisation agenda, with the aim of improving local government efficiency and increasing its accessibility and responsiveness to local citizens. The diffusion of innovation and best practice both within and between organisations is regarded as an important element in improving the effectiveness of local government. Social Network Analysis has been used throughout the social sciences and is a growing field within management research. There is no existing research which combines these three strands to examine the social networks involved in the diffusion of best practices relating to electronic government. A systematic review of the literature in these areas of study will provide a base of knowledge to inform the design and execution of the field research element of the PhD.

1.2. The purpose of the review

This review is being undertaken during the first year of a PhD studentship. The research addresses the research question: "How can local authorities and their partners work together to successfully implement electronic government?"

1.3. Overall objectives

The objectives of this review are to:

1. Examine the changing nature of local government and the modernisation agenda.
2. Gain an increased understanding of electronic government.
3. Identify the e-government initiatives that have the greatest impact on citizens' quality of life.
4. Examine the issues relating to the diffusion of innovations in public sector organisations.
5. Identify how social network analysis can be used as a tool to describe and evaluate electronic government partnerships.

1.4. Rationale for the review

To provide knowledge that will inform and shape the research undertaken for the PhD. To produce a high calibre doctoral researcher knowledgeable in local governance and innovation matters, and skilled in modelling and interpreting organisations as social networks.

2. The Systematic Review

The review will follow the phases and stages outlined in table 1.

Table 1. The Systematic Review Stages and Phases

Stage I – Planning the Review	
Phase 0	Identification of the need for a review
Phase 1	Preparation of a proposal for a review
Phase 2	Development of a review protocol
Stage II – Conducting the Review	
Phase 3	Identification of research
Phase 4	Selection of studies
Phase 5	Study quality assessment
Phase 6	Data extraction and monitoring progress
Phase 7	Data synthesis
Stage III – Reporting and dissemination	
Phase 8	The report and recommendations
Phase 9	Getting evidence into practice

Source: Tranfield and Denyer (2003) p 214

2.1. The Review Panel

Sarah Cotterill Lead scholar – Main Reviewer
Dr Stephen King Advisory Scholar

2.2. The Review Timetable

Table 2. Timetable of the Review

Phase	Content and inputs	Expected outputs	Who	Target Date
1		Decision to undertake a review and specification of research question	SC/SK	Nov 2004
2	Training session and reading on systematic literature reviews	Increased understanding	SC	Dec 2005 & on-going
2 & 3	Scoping study	Define additional research questions and decide on search terms	SC/SK & ODPM advice	19th Jan 2005
2 & 3	Filters: inclusion and exclusion criteria	List of inclusion/exclusion criteria. Finalise Protocol document	SC	19th Jan 2005
4	Database searches	Selection of articles	SC	28th Jan 2005
4	Additional filtering by title	Relevant articles	SC	28th Jan 2005
4	Document selection	Classification: A-relevant, B- not sure, C-irrelevant.	SC/SK	4 th March 2005

4	Retrieval of policy documents etc	Relevant documents	SC with ODPM advice	4 th March 2005
5	Conduct quality assessment and descriptive analysis	List of quality of each article	SC	25 th Mar 2005
6	Panel discussion of quality assessment and descriptive analysis	Refine the quality assessment and descriptive analysis	SC/SK & ODPM	8 th Apr 2005
7 & 8	Conduct thematic analysis	Final report	SC	6 th May 2005
9	Validate report. Identification of potential utilization	Action plan	SC/SK & ODPM	13 th May 2005

3. The Review Protocol

3.1. The Review Strategy

3.1.1. Identification of Keywords

The keywords were defined by the review panel. The search will be conducted in five stages, each including one aspect of the study.

Table 3. Keywords to be Used in the Review

Objective 1: Examine the changing nature of local government and the modernisation agenda.		
1a) Modernis*	1b) AND local government OR local authorit* OR local council*	
Objective 2: Gain an increased understanding of electronic government.		
2a) Electronic government OR e.government OR e-government OR electronic democracy OR e.democracy OR e-democracy	2b) OR Customer relationship management OR CRM OR Knowledge Management OR KM	2c) AND local government OR local authorit* OR local council
Objective 3: Identify the e-government initiatives that have the greatest impact on citizens' quality of life.		
3a) Quality of life OR social inclusion OR social exclusion OR digital divide	3b) AND local government OR local authorit* OR local council	
Objective 4: Examine the issues relating to the diffusion of innovations in public sector organisations.		
4a) (Innovation OR best practice* OR good practice* OR promising practice*) AND (diffus* OR disseminat*)	4b) AND local government OR local authorit* OR local council	4c) OR public sector
Objective 5: Identify how social network analysis can be used as a tool to describe and		

evaluate electronic government partnerships.		
5a) social network* and (organi?ation* OR interorgani?ation* OR inter-organi?ation* OR interfirm OR inter-firm)	AND (partner* OR alliance* OR joint venture*)	

(based on Leseure et al (2004) Adoption of Promising Practice, a Systematic Review of the Literature)

3.1.2. Types of information

The following types of documents, when relevant for addressing the review question will be considered:

Published journal articles	Reports from relevant institutions: government, local government, training organisations, software suppliers, management consultancies, industry bodies.	Personal requests to knowledgeable researchers and/or practitioners
Conference papers		

3.1.3. Sources of information

3.1.3.1. Electronic Databases

The following databases have been considered for use in the review (table 4). Between them they cover a wide range of literature within the management field and more generally across the social sciences. Preliminary searches were done on all the databases, using the core terms 'electronic government or social network* or diffusion of innovation*'. The total numbers of results from each database are shown below. They arise from exploratory searches done 06/01/05 using the core terms. Given the limited timescale of the project, the review will focus on the three databases that provide the largest number of results.

3.1.3.2. Other sources

Searches will be conducted of the Office of the Deputy Prime Minister and Price Waterhouse Cooper websites, using the same search terms as those entered into the academic databases, to identify strategy documents and evaluation reports.

3.1.4. Search steps

- Each of the search strings, together with the automatic exclusion criteria (table 5) will be typed in the database search fields, searching within the title, keywords and abstract. The results will be exported to Procite bibliographic software.
- Articles will be analysed by title to:

- Exclude duplicates, anonymous articles and book reviews
- Apply manual inclusion and exclusion criteria (table 6).
- Additional filtering by title, including:
 - Filtering by unanticipated exclusion criteria which emerge from an examination of the article output;
 - If two or more papers by the same author on similar topics are found, only one paper (usually the most recent) will be reviewed.

Table 4. Databases to be Explored for Use in the Review

DATABASE	AREAS	SPECIFICS	COMMENTS
Proquest ABI/ INFORM global 1419 hits	Covers some 1700 journals world wide and includes trade journals as well as academic titles. Full text for many titles is available, with indexes giving references to articles extending back to 1971.	Use " " to search for exact phrases. 2 word queries are searched as an exact phrase by default. (*) is used as a right hand truncator. (?) is used to replace any single character (not at start of word)	Some full text available. Guided search mode is preferable.
Business Source Premier 2766 hits	Published by EBSCO. Has similar coverage to ABI, but likely to be some difference, so worth searching it too.	(*) is used as a right hand truncator. (?) is used to replace any single character	Considerable full text available. Searches refined to include only articles in peer reviewed academic journals with cited references available.
Web of Science (Social Science Citation Index) 4359 hits	More than 5700 major journals across 164 scientific disciplines.	Words entered as a series without punctuation are assumed to be a phrase (not use " "). (*) in place of any group of characters, including no character. (?) represents any single character. Both can use these wildcards within and at the ends of terms.	Search for articles only. () for combining operators. No full text availability. Cited references functionality. Includes conference proceedings
Public Affairs Information Service 713 hits	Bibliographic database for Public Affairs and Social Policy. 1972 to date	Same as Web of Science	
ASSIA 1229 hits	Web version of Applied Social Sciences Index And Abstracts. 1987 to present	Same as Web of Science	
PsycINFO 4698 hits	Major bibliographic database for psychology. Coverage:	(\$) is used as a right hand truncator. (?) used to replace any	

	1887 to date.	single character	
INGENTA 542 hits	Gives full text access to over 5,000 electronic journals across all academic subject areas, including business, economics and management.	("") to find an exact phrase, and (!) asterisks to match partial words	

Table 5. Automatic Exclusion Criteria

No.	Criteria	Reasons for exclusion
1	English language articles only	Sole language of researcher.
2	Only articles published from 1997 to the present are included. Articles on diffusion of innovation date from 1990. Articles on electronic government date from 2001.	Research before 1997 will be outdated for most of the topics studies. The diffusion of innovations literature is less affected by the period of study. Research before 2001 on e.government is likely to be outdated.
3	NOT election* OR parish OR devolution OR international development	In the modernisation searches only, to exclude literature which is not focussed on local government.
4	NOT e-voting OR voting OR medicine OR terror*	In the e.government searches only, to remove articles not relating to customer services.
5	NOT social support OR sex* or education or drug* or alcohol or treatment or child* or individual* or gender or older or care or ego* or virtual or internet	In the social network searches only, to exclude literature on social network analysis of individual networks.
6	Academic Journals only when using Business Source Premier	To exclude newspaper, press and trade journal articles

Table 6. Manual inclusion and exclusion criteria

No.	Inclusion criteria	Reasons for inclusion
1	Inter-organisational studies only	In the social network searches only, to exclude literature on social network analysis of individual networks.
2.	Articles focussing on UK, USA, Australasia and Western Europe	The literature review is being done in preparation for UK based research.
No.	Exclusion Criteria	Reasons for exclusion
1	Articles containing the search terms, but whose focus lies elsewhere.	To eliminate articles outside the field of study.
2	Articles about the dissemination of information.	To focus the study on the diffusion or dissemination of technologies or knowledge
3	Articles focussing on the technical aspects of e.government and web site accessibility issues.	To avoid very technical articles.

3.1.5. Relevance assessment

The lead scholar will examine the abstracts and grade each paper as A (should be in shortlist), B (uncertain) or C (should not be in shortlist) and discuss this with the advisory scholars. Additional references may be included at this stage on the recommendation of the advisory scholars.

3.1.6. DATA EXTRACTION TOOL

1. Author
2. Title
3. Journal reference
4. Appropriate research objective / theme
 - a. Modernisation and local governance
 - b. E-government
 - c. Public Sector Partnerships
 - d. Diffusion of Innovations
 - e. Social Networks and organisations.
5. Key sub-themes
6. Quality Assessment Criteria (see overleaf)
7. Country of study
8. Study period
9. Research objective
10. Research questions
11. Research methodology
12. Summary of Study
13. Conclusion of Study
14. Study limitations
15. Issues/Concerns

Quality Assessment Criteria

Element	Level				
	0-Absent	1-Low	2-Medium	3-High	Not applicable
1. Theory robustness	The article does not provide enough information to assess this criterion	Poor awareness of existing literature and debates. Under or over referenced. Low validity of theory	Basic understanding of the issues around the topic being discussed. The theory is weakly related to data	Deep and broad knowledge of relevant literature for addressing the research. Good relation theory-data	This element is not applicable to the document or study.
2. Implication for practise	The article does not provide enough information to assess this criterion	Very difficult to implement the concepts and ideas presented. Not relevant for practitioners or professionals	There is a potential for implementing the proposed ideas, with minor revisions or adjustments	Significant benefit may be obtained if the ideas being discussed are put into practice.	This element is not applicable to the document or study.
3. Methodology. Data supporting arguments	The article does not provide enough information to assess this criterion	Data inaccuracy and not related to theory. Flawed research design	Data is related to the arguments, though there are some gaps. Research design may be improved	Data strongly supports arguments. Besides, the research design is robust: sampling, data gathering, data analysis is rigorous.	This element is not applicable to the document or study.
4. Generalisability	The article does not provide enough information to assess this criterion	Only to the population studied	Generalisable to organisations of similar characteristics	High level of generalisability.	This element is not applicable to the document or study.
5. Contribution Plus a short statement summarising the article's contribution	The article does not provide enough information to assess this criterion	Does not make an important contribution. It is not clear the advances it makes	Although using other's ideas, builds upon existing theory	Further develops existing knowledge, expanding the way the issue was explained so far.	This element is not applicable to the document or study.

Articles that pass the quality assessment criteria and are included in the review will be analysed in depth to identify the best evidence for the object of study. Data will be input into reference software (Procite 5.0) to enable easier groupings and further analyses.

3.2. Reporting the Systematic Review Results

3.2.1. Descriptive Analysis Report

This section will include a presentation of brief descriptive findings about the reviewed papers. An overview of the academic discipline, research focus and country of origin of the reviewed papers.

3.2.2. Thematic Analysis Report

The reviewed articles will be examined in detail to draw out the main themes from the research in the field of study.

Appendix 2: Systematic Literature Review – searches and results

Search Term	Database	Date	Number articles	Number selected
1a) AND 1b) (Modernis* AND (local government OR local authorit* OR local council*)) NOT (election* OR parish OR devolution OR international development)	Web of Science Social Science Citation Index 1997-2005	19/01/05	40	31
local governance AND (UK OR United Kingdom OR England OR Scotland OR Wales OR Ireland)	Social Science Citation Index 1997-2005	14/02/04	43	28 (8 duplicates)
2a (electronic government OR e.government OR e-government OR electronic democracy OR e.democracy OR e-democracy) NOT (e-voting OR voting OR medicine OR terror*)	Social Science Citation Index 2001-2005	24/01/05	95	51
2b and 2c (Customer relationship management OR CRM OR knowledge management OR KM) AND (local government OR local authorit* OR local council*)	Social Science Citation Index 1997-2005	24/01/05	2	1
2a and 3a (electronic government OR e.government OR e-government OR electronic democracy OR e.democracy OR e-democracy) AND (quality of life OR social inclusion OR social exclusion OR digital divide)	Social Science Citation Index 1997-2005	25/01/05	6	5
3a and 3b ((quality of life OR social inclusion OR social exclusion OR digital divide) AND (local government OR local authorit*))	Social Science Citation Index 1997-2005	25/01/05	38	22
4a and 4b and 4c (Innovation OR best practice* OR good practice* OR promising practice*) AND (diffus* OR disseminat*) AND (local government OR local authorit* OR public sector)	Social Science Citation Index 1990-2005	25/01/05	27	14
5a social network* and (organi?ation* OR interorgani?ation* OR inter-	Social Science Citation	2/2/05	38	27

organi?ation* OR interfirm OR inter-firm) AND (partner* OR alliance* OR joint venture*))	Index 1997-2005			
1a) AND 1b) (Modernis* AND (local government OR local authorit* OR local council*)) NOT (election* OR parish OR devolution OR sustainable development OR international development)	EBSCO Business Source Premier 1997-2005	27/01/05	14	6 (3 duplicates)
local governance AND (UK OR United Kingdom OR England OR Scotland OR Wales OR Ireland)	EBSCO Business Source Premier 1997-2005	15/02/04	31	16 (7 duplicates)
2a (electronic government OR e.government OR e-government OR electronic democracy OR e.democracy OR e-democracy) NOT (e-voting OR voting OR medicine OR terror*)	EBSCO Business Source Premier 2001-2005	27/01/05	63	39 (10 duplicates)
2b and 2c (Customer relationship management OR CRM OR knowledge management OR KM) AND (local government OR local authorit* OR local council*)	EBSCO Business Source Premier 1997-2005	27/01/05	4	2 (2 duplicates)
2a and 3a (electronic government OR e.government OR e-government OR electronic democracy OR e.democracy OR e-democracy) AND (quality of life OR social inclusion OR social exclusion OR digital divide)	EBSCO Business Source Premier 1997-2005	27/01/05	5	3 (3 duplicates)
3a and 3b ((quality of life OR social inclusion OR social exclusion OR digital divide) AND (local government OR local authorit*))	EBSCO Business Source Premier 1997-2005	27/01/05	23	15 (6 duplicates)
4a and 4b and 4c (Innovation OR best practice* OR good practice* OR promising practice*) AND (diffus* OR disseminat*) AND (local government OR local authorit* OR public sector)	EBSCO Business Source Premier 1990-2005	27/01/05	16	11 (6 duplicates)
5a social network* and (organi?ation* OR interorgani?ation* OR inter-organi?ation* OR interfirm OR inter-firm) AND (partner* OR alliance* OR joint venture*)	EBSCO Business Source Premier 1997-2005	15/02/05	32	15 (4 duplicates)
1a) AND 1b) (Modernis* AND (local government	Proquest ABI/INFORM	15/02/05	14	10 (3

OR local authorit* OR local council*)) AND NOT (election* OR parish OR devolution OR international development)	global (1997-2005)			duplicates)
local governance AND (UK OR United Kingdom OR England OR Scotland OR Wales OR Ireland)	Proquest ABI/INFORM global (1997-2005)	15/02/05	20	12 (1 duplicates)
2a (electronic government OR e.government OR e-government OR electronic democracy OR e.democracy OR e-democracy) AND NOT (e-voting OR voting OR medicine OR terror*)	Proquest ABI/INFORM global 2001-2005	15/02/05	152	47 (7 duplicates)
2b and 2c ("Customer relationship management" OR "CRM" OR "knowledge management" OR "KM") AND ("local government" OR "local authorit*" OR "local council**")	Proquest ABI/INFORM global 1997-2005	15/02/05	5	4 (1 duplicate)
2a and 3a (electronic government OR e.government OR e-government OR electronic democracy OR e.democracy OR e-democracy) AND (quality of life OR social inclusion OR social exclusion OR digital divide)	Proquest ABI/INFORM global 1997-2005	15/02/05	8	6 (4 duplicates)
3a and 3b (("quality of life" OR social inclusion OR social exclusion OR digital divide) AND (local government OR local authorit* OR local council*))	Proquest ABI/INFORM global 1997-2005	15/02/05	28	10 (4 duplicates)
4a and 4b and 4c (Innovation OR best practice* OR good practice* OR promising practice*) AND (diffus* OR disseminat*) AND (local government OR local authorit* OR public sector)	Proquest ABI/INFORM global 1990-2005	15/02/05	13	5
5a (social network* and (organisation* OR organization* OR interorganisation* OR interorganization* OR inter- organisation* OR inter-organization* OR interfirm OR inter-firm) AND (partner* OR alliance* OR joint venture*))	Proquest ABI/INFORM global 1997-2005	15/02/05	16	8 (3 duplicates)
Total			733	388 (72 duplicates)

Appendix 3: Social Network Questionnaire

[This is the unformatted text of the questionnaire]

The Local e-Government Partnership has agreed to take part in a research study looking at how organisations are working together to develop local e-government. The research examines the social networks between individuals and organisations as they innovate and share local electronic government best practice.

Benefits of taking part

With an increasing emphasis on organisations working together to develop local services, the research can help participants learn more about partnership arrangements. The local report may be of use to you and your organisation in helping to demonstrate your approach to partnerships.

The answers you provide will be used for:

- A local report providing information for the partnership;
- An overview of the findings from this and other local e-government partnerships, which will be passed to all of the partnerships involved in the research and the research funders.
- Academic articles and reports.

Your responses will be treated confidentially. Individuals will not be named in any reports. Organisations may be identified. Every attempt will be made to provide anonymity, but, given the small number of people, it may be possible for those involved in the project to identify one another.

The research will be done by Sarah Cotterill, a postgraduate researcher at Leeds University Business School. Her research is jointly funded by the Economic and Social Research Council, Communities and Local Government and Price Waterhouse Coopers. For more information, contact Sarah Cotterill [insert email]. It is important that everyone replies, so we get a complete picture of the partnership network.

[Questions 1-6 each were followed by a list of those involved in the network, inviting respondents to indicate their relations with each other person in the network]

Q1 How often do you typically communicate with the following people about e-government?

(Daily, Weekly, 2 or 3 times a month, Monthly, Less than monthly, Never)

Q2 Who do you typically go to for information relating to e-government?
(enter 'X' against all that apply)

Q3 Who typically comes to you for information relating to e-government?
(enter 'X' against all that apply)

Q4 Who has most influence on e-government decisions in the sub-region?
(enter 'X' against all that apply) [not asked in Urban]

Q5 Who have you worked or collaborated with before joining the partnership?
(enter 'X' against all that apply)

Q6 About whom can you say "I understand what skills & knowledge this person has"?
(enter 'X' against all that apply)

Q7 About whom can you say "I trust this person" [asked in Shire County only]

Q8 Please indicate the sub-regional e-government groups you have participated in during the last year

Q9 Please indicate any other e-government networks you have participated in during the last year:

National Projects (please name):

Regional Networks (please name):

Other (please name):

Q10 What is your job function?

Chief Executive/Councillor/Director/Head of Service/ Manager/ Officer or Employee
[not asked in Urban]

Your details:

Q9 Your name

Q10 Your phone number

Q11 Your email address

Q12 Your employer

Q13 Your job title

Thank you for completing this questionnaire

Please save a copy of this form, complete it, and return to [insert email address] by
[insert date]

If you have any questions please contact Sarah Cotterill [phone number]

Appendix 4: Abstracts of Articles and Conference Papers by the Author

Journal Article

King S. F. and Cotterill S. (2007) Transformational Government? The Role of Information Technology in Delivering Citizen-Centric Local Public Services, *Local Government Studies*, 33.3, 333-354

Following on from five years of 'electronic government', the Labour Government has recently announced a new five year plan for 'transformational government'. Like its predecessor, t-government emphasizes the important role of information technology (IT) in enabling the delivery of modernised public services. Modernisation is defined as an increasing emphasis on citizen choice, personalization of services and understanding and responding to service user needs. This paper explores the appropriateness of the t-government agenda by drawing upon lessons learned from the preceding e-government era. Arguably the most significant citizen-focused technology of the e-government era was customer relationship management (CRM). The potential of CRM to support service transformation is explored and co-production, an alternative approach to citizen-centric service design, is examined both as a way of addressing weaknesses in IT-enabled service transformation and as a candidate later stage in the evolution of citizen-centric local public services.

Conference papers

Sixth International EGOV conference, 3rd – 7th September 2007, Germany

Title: Public Sector Partnerships to Deliver Local e-Government: a Social Network Study

Sarah Cotterill and Dr Stephen King

This research explores how UK local authorities and their partners work together in sub-regional e-government partnerships. The paper first introduces the literature in four key areas: local e-government, partnership working, local governance and

social networks. It goes on to explain the methodology adopted during the study: comparative case studies of three sub-regional e-government partnerships using social network analysis and qualitative interviews. The findings from the first case study show that the partnership is working productively and is delivering a number of projects, but that the partnership is largely IT-led and has little representation from citizen-facing directorates. The initiatives being pursued have so far been essentially administrative reforms driven by efficiency and have yet to impact directly on the citizens of the sub-region. The emphasis has been on improving existing local authority ways of working rather than advancing local democracy or improving policy making.

Leeds University Business School Annual Doctoral Conference, 13 – 14th June 2007 (awarded 1st prize for poster presentation)

Title: Public sector partnerships – a model for success?

Sarah Cotterill

In the UK and elsewhere there is increasing emphasis on public sector organisations working together in local partnerships. Partnerships can potentially encourage the delivery of joined-up services to citizens, promote democracy and improve public policy making, but partnership working is not always easy and can be challenging for the individuals and organisations involved.

This research explores how English local authorities and their partners work together on electronic government. E-government is the use of computer technologies by government to transform the provision of services and information, improve internal organisation, encourage citizen participation and promote sharing between partners.

The research is based on a systematic literature review and comparative case studies of three sub-regional e-government partnerships, using a mixed methods approach. In each case study social network data was collected from participants using a short questionnaire to ascertain who they dealt with in relation to e-government. This data was analysed using Ucinet and then used during qualitative interviews and workshops to generate discussions on why the network looks the

way it does and learn more about the meaning behind the surface of the relationships.

A preliminary model of partnership effectiveness has been developed which identifies *network structure*, *governance* and *system stability* as three themes contributing to the success of local e-government partnerships. Research with a county partnership made up of staff from 10 local councils, councillors and other public organisations such as police and fire services will be used to illustrate and explore these three themes. Its *network structure* is centralised around a staff team, which has helped drive forward the shared projects to successful implementation, but the lack of a dense web of relationships among participants provides limited opportunities to learn from each other or share best practice. In terms of *governance*, there is a strong shared vision among participants of joining up services, but no shared strategy of how to work towards it and a lack of leadership direction from the top. Few people from citizen-facing directorates are involved and not all the representatives are sufficiently senior to commit to decisions. On *system stability*, despite little history of county-wide joint working, the partnership is now embedded and the respect it has earned has led to the development of a number of other partnership arrangements in the locality. Overall, the partnership is working productively and has delivered a substantial number of shared projects, but the initiatives being pursued focus on customer service and administrative reform rather than advancing local democracy or improving policy making.

International Sunbelt Social Network Conference XXVII, 1st – 6th May 2007, Greece

Title: Using Social Network Analysis and qualitative research in case studies of public sector partnerships.

Sarah Cotterill

An increased role for electronic government is a central plank of the UK government's modernisation agenda, with the aim of improving local government efficiency and increasing its accessibility and responsiveness to local citizens. This research examines the network of relationships between individuals and organisations involved in sub-regional e-government partnerships in the UK. These

partnerships variously involve officers from different departments within a number of local authorities, councillors and other public organisations such as police, fire and health services. The research explores how local authorities and their partners work together to implement electronic government, identifying the issues, challenges and successes. The policy contribution will evolve from an increased understanding of the social networks underpinning complex service innovation.

This paper focuses on the methodology adopted during the study: a systematic literature review and comparative case studies of three sub-regional e-government partnerships using a combination of social network analysis and qualitative interviews. Network data was collected from participants using a short questionnaire to ascertain who they dealt with in relation to e-government. This data was analysed using Ucinet. The social network data was then used during qualitative interviews and workshops to generate discussions on why the network looks the way it does and learn more about the meaning behind the surface of the relationships. This approach has helped create a richer picture of e-government partnerships than could be found from social network analysis alone.

Social Network Analysis Forum, Leeds, 30th June – 1st July 2006

Title: The role of social networks in the development of English local e-government

Sarah Cotterill

An increased role for electronic government is a central plank of the government's modernisation agenda, with the aim of improving local government efficiency and increasing its accessibility and responsiveness to local citizens. Local authorities have been encouraged by the government to develop e-government solutions in partnership with others. Literature from the fields of e-government and the diffusion of innovations suggests that participation in wider networks is a factor affecting successful e-government implementation.

This research examines the network of relationships between individuals and organisations as they innovate and share local electronic government best practice. The development of local e-government projects can involve people from different departments within the local authority, councillors, other local authorities, national projects, other public organisations and potentially the voluntary and

private sectors. The research explores how these individuals work together, mapping out the key relationships and identifying barriers to knowledge sharing and service improvement. The policy contribution will evolve from an increased understanding of the social networks underpinning complex service innovation.

This paper first introduces the literature in four key areas: local governance and networks, e-government, diffusion of innovation and social networks. It goes on to explain the methodology adopted during the study: comparative case studies of three sub-regional e-government partnerships using social network analysis and qualitative interviews. It finishes with a description of the first of these case studies and presents some preliminary findings.

Political Studies Association conference, Reading 4th – 6th April 2006

Title: The role of networks in the development of UK local e-government

Sarah Cotterill and Dr Stephen King

An increased role for electronic government is a central plank of the government's modernisation agenda, with the aim of improving local government efficiency and increasing its accessibility and responsiveness to local citizens. The implementation of electronic government best practice in local authorities is influenced by a number of different initiatives, including IEG Statements, the National Projects, regional partnerships, and the e-Innovations Programme. The research explores how organisations work together to deliver local government service innovation and examines the influence of the different initiatives on the diffusion of innovation in local authorities. The research examines the network of relationships between individuals and organisations as they innovate and share local electronic government best practice. The development of local e-government projects can involve individuals from different departments within the local authority, other local authorities, regional partnerships, national projects, other public organisations and the private sector. The research will map out the key relationships and identify barriers to knowledge sharing and service improvement. The policy contribution will evolve from an increased understanding of the social networks underpinning complex service innovation spanning central and local government and private sector suppliers.

This paper will present the preliminary findings from a case study of an e-government partnership in an English local authority, focusing those aspects of local e-government implementation which are most likely to have a significant effect on citizen quality of life.

UK Public Administration Committee Annual Conference, Nottingham 5th – 7th
September 2005

Title: Electronic Government, Local Government and Quality of Life

Sarah Cotterill and Dr Stephen King

The research addresses the research question: "How can the network of organisations involved in the development and dissemination of electronic government 'best practices' best be co-ordinated to deliver improved citizen quality of life?"

An increased role for electronic government is a central plank of the government's modernisation agenda, with the aim of improving local government efficiency and increasing its accessibility and responsiveness to local citizens. The diffusion of innovation and best practice both within and between organisations is regarded as an important element in improving the effectiveness of local government. Social Network Analysis has been used throughout the social sciences and is a growing field within management research. The research will combine these three strands to examine the social networks involved in the diffusion of best practices relating to electronic government. It is jointly funded by the Economic and Social Research Council, the Office of the Deputy Prime Minister and Price Waterhouse Coopers, as part of the Governance and Quality of Life Postgraduate Research Programme.

There has emerged in recent years a large network of organisations devoted to electronic government and the identification and dissemination of "best practice" - including local authorities, the ODPM, the Improvement & Development Agency, management consultancies and software suppliers. The implementation of electronic government best practice in local authorities is influenced by a number of different initiatives, including IEG Statements, the National Projects, regional partnerships, and the e-Innovations Programme. The research will explore how organisations work together to deliver local government service innovation and

examine the influence of the different initiatives on the diffusion of innovation in local authorities.

The drive towards electronic government originates from the national government and local authorities, rather than from citizens and there is a need to ensure that the innovations arising will serve both the needs of providers and deliver the expected improvements in services and citizen quality of life.

The research will examine the network of relationships between organisations as they innovate and share best practice. The project will explore the assumptions that best practice can be readily identified and shared and that providers know best. It will map out the key relationships and identify barriers to knowledge sharing and service improvement. The research will inform future governance policy on innovation in local government and the delivery of improved services to citizens. The policy contribution will evolve from an increased understanding of the social networks underpinning complex service innovation spanning central and local government and private sector suppliers.

UK Academy for Information Systems Conference, PhD consortium, Newcastle
21st-22nd Mar 2005

Title: Electronic Government, Local Government and Quality of Life

Sarah Cotterill

References

- Ahuja, G. (2000) The Duality of Collaboration: Inducements and Opportunities in the Formation of Interfirm Linkages. *Strategic Management Journal* 21 (3):317-343.
- BarNir, A. and Smith, K.A. (2002) Interfirm Alliances in the Small Business: The Role of Social Networks. *Journal of Small Business Management* 40 (3):219-232.
- Benton, J.E. and Daly, J.L. (1996) County Impact Fee Adoptions as Policy Innovations: A Search for Theory. *International Journal of Public Administration* 19 (7):1037
- Beynon-Davies, P. (2005) Constructing Electronic Government: The Case of the UK Inland Revenue. *International Journal of Information Management* 25 3-20.
- Beynon-Davies, P. and Martin, S. (2004) Electronic Local Government and the Modernisation Agenda: Progress and Prospects for Public Service Improvement. *Local Government Studies* 30 (2):214-229.
- Boaz, A., Ashby, D. and Young, K. (2002) Systematic Reviews: What Have They Got to Offer Evidence Based Policy and Practice? ESRC UK Centre for Evidence Policy and Practice: Working Paper 2.
<http://www.evidencenetwork.org/Documents/wp2.pdf> (date accessed 10/11/04).
- Borgatti, S.P., Everett, M.G. and Freeman, L.C. (2002) Ucinet for Windows: Software for Social Network Analysis. Harvard, MA: Analytic Technologies.
- Borgatti, S.P. and Foster, P.C. (2003) The Network Paradigm in Organizational Research: A Review and Typology. *Journal of Management* 29 (6):991-1013.
- Borgatti, S.P. and Molina, J.L. (2003) Ethical and Strategic Issues in Organizational Social Network Analysis. *The Journal of Applied Behavioral Science* 39 (3):337-349.
- Bryman, A. (2001) *Social Research Methods*. Chapter 15 'Interviewing in Qualitative Research' Oxford: Oxford University Press.
- Burgess, T.F., Burkinshaw, S.M. and Vijayan, A.P. (2005) Adoption of a Focal Production Innovation Within a Supply Network (Unpublished paper developed by invitation from a paper presented to the 2004 EUROMA

- conference).
- Burrell, G. and Morgan, G. (2000) *Sociological Paradigms and Organisational Analysis*. Aldershot: Ashgate Publishing Company.
- Burt, R. (1982) *The Social Structure of Competition*. London, England: Harvard University Press.
- Centre for Urban and Regional Development Studies (2003) *Implementing Local e-Government: a Literature Review*. London: ODPM.
- Chen, W. and Hirschheim, R. (2004) A Paradigmatic and Methodological Examination of Information Systems From 1991 to 2001. *Information Systems Journal* 14 197-235.
- Clegg, S. and McNulty, K. (2002) Partnership Working in Delivering Social Inclusion: Organizational and Gender Dynamics. *Journal of Education Policy* 17 (5):587-601.
- Cochrane, A. (2004) Modernisation, Managerialism and the Culture Wars: Reshaping the Local Welfare State in England. *Local Government Studies* 30 (4):481-496.
- Copus, C. (2003) Re-Engaging Citizens and Councils: the Importance of the Councillor to Enhanced Citizen Involvement. *Local Government Studies* 29 (2):32-51.
- Cotterill, S. (2005a) *Electronic Government, Local Government and Quality of Life* (unpublished). *UK Public Administration Committee Annual Conference, Nottingham*
- Cotterill, S. (2005b) *Local Electronic Government and Quality of Life: The Implications of Social Networks for the Dissemination of Electronic Government Best Practice*. A report of progress for consideration to upgrade to a PhD, unpublished:
- Cotterill, S. (2007) The Role of Social Networks in the Development of English Local e-Government. *ESRC/DCLG Local Governance and Quality of Life Postgraduate Research Programme working paper series*
<http://www.communities.gov.uk/index.asp?id=1142165>
- Cotterill, S. and King, S. (2007) Public Sector Partnerships to Deliver Local e-Government: a Social Network Study. *Sixth International EGOV Conference, Regensburg (Germany), September 3 - 7, 2007*
- Cowell, R. (2004) Community Planning: Fostering Participation in the Congested State? *Local Government Studies* 30 (4):497-518.
- Cowell, R. and Martin, S. (2003) The Joy of Joining up: Modes of Integrating the Local Government Modernisation Agenda. *Environment and Planning C-*

- Government and Policy* 21 (2):159-179.
- Cross, R., Borgatti, S.P. and Parker, A. (2002) Making Invisible Work Visible: Using Social Network Analysis to Support Strategic Collaboration. *California Management Review* 44 (2):25-46.
- Cross, R., Parker, A., Prusak, L. and Borgatti, S.P. (2001) Supporting Knowledge Creation and Sharing in Social Networks. *Organizational Dynamics* 30 (2):100-120.
- Danziger, J.N. (2004) Innovation in Innovation? The Technology Enactment Framework. *Social Science Computer Review* 22 (1):100-110.
- Denyer, D. and Neely, A. (2004) Introduction to special issue: Innovation and Productivity Performance in the UK. *International Journal of Management Reviews* 5/6 (3):131-136.
- Dubé, L. and Paré, G. (2003) Rigor in Information Systems Positivist Case Research: Current Practices, Trends and Recommendations. *MIS Quarterly* 27 (4):597-635.
- Edwards, T., Battisti, G. and Neely, A. (2004) Value Creation and the UK Economy: A Review of Strategic Options. *International Journal of Management Reviews* 5/6 (3):191-213.
- Eisenhardt, K. (1989) Building Theories from Case Study Research. *The Academy of Management Review* 14 (4):532-550.
- Ferlie, E., Hartley, J. and Martin, S. (2003) Changing Public Service Organizations: Current Perspectives and Future Prospects. *British Journal of Management* 14 S1-S14
- Fountain, J.E. (2001) *Building the Virtual State - Information Technology and Institutional Change*. Washington: The Brookings Institute.
- Frederickson, H.G., Johnson, G.A. and Wood, C. (2004) The Changing Structure of American Cities: A Study of the Diffusion of Innovation. *Public Administration Review* 64 (3):320-330.
- Freeman, L.C. (1979) Centrality in Social Networks: Conceptual Clarification. *Social Networks* 1 215-239.
- Gable, G.G. (1994) Integrating Case Study and Survey Research Methods: An Example in Information Systems. *European Journal of Information Systems* 3 (2):112-126.
- Geddes, M. and Martin, S. (2000) The Policy and Politics of Best Value: Currents, Crosscurrents and Undercurrents in the New Regime. *Policy and Politics* 28 (3):379-395.
- Geddes, M. (2006) Partnerships and the Limits to Local Governance in England:

- Institutionalist Analysis and Neoliberalism. *Journal of Urban and Regional Research* 30 (1):76-97.
- Geddes, M. and Root, A. (2000) Social Exclusion - New Language, New Challenges for Local Authorities. *Public Money & Management* 20 (2):55-60.
- Glaser, B.G. and Strauss, A.I. (1967) *The Discovery of Grounded Theory*. London: Weidenfeld and Nicolson.
- Granovetter, M. (1973) The Strength of Weak Ties. *The American Journal of Sociology* 78 (6):1360-1380.
- Granovetter, M. (1985) Economic Action and Social Structure: The Problem of Embeddedness. *The American Journal of Sociology* 91 (3):481-510.
- Gulati, R. and Gargiulo, M. (1999) Where do Interorganizational Networks Come From? *American Journal of Sociology* 104 (5):1439-1493.
- Gummesson, E. (2000) *Qualitative Methods in Management Research*. Second edn, London: Sage Publications.
- Hagedoorn, J. and Duysters, G. (2002) Learning in Dynamic Inter-Firm Networks: the Efficacy of Multiple Contacts. *Organization Studies* 23 (4):525-548.
- Hambleton, R. and Sweeting, D. (2004) U.S.-Style Leadership for English Local Government? *Public Administration Review* 64 (4):474-488.
- Hinnant, C.C. and O'Looney, J.A. (2003) Examining Pre-Adoption Interest in Online Innovations: an Exploratory Study of E-Service Personalization in the Public Sector. *IEEE Transactions on Engineering Management* 50, 436-447.
- Ho, A.T.-K. (2002) Reinventing local governments and the E-government initiative. *Public Administration Review* 62 (4):434-445.
- Ho, A.T.-K. and Ni, A.Y. (2004) Explaining the Adoption of E-Government Features - a Case Study of Iowa County Treasurers' Offices. *American Review of Public Administration* 34 (2):164-180.
- Holden, S.H., Norris, D.F. and Fletcher, P.D. (2003) Electronic government at the local level: Progress to date and future issues. *Public Performance & Management Review* 26 (4):325-344.
- Hutt, M.D., Stafford, E.R., Walker, B.A. and Reingen, P.H. (2000) Defining the Social Network of a Strategic Alliance. *Sloan Management Review* 41 (2):51-62.
- Huxham, C. and Vangen, S. (2005) *Managing to Collaborate: the theory and practice of collaborative advantage*. London: Routledge.

- Jaeger, P.T. and Thompson, K.M. (2004) Social Information Behavior and the Democratic Process: Information Poverty, Non-Native Behavior, and Electronic Government in the United States. *Library & Information Science Research* 26 (1):94-107.
- Kaylor, C., Deshazo, R. and Van Eck, D. (2001) Gauging E-Government: a Report on Implementing Services Among American Cities. *Government Information Quarterly* 18 (4):293-307.
- King, S. (2007) Citizens as Customers: Exploring the Future of CRM in UK Local Government. *Government Information Quarterly* 24 47-63.
- King, S. and Cotterill, S. (2007) Transformational Government? The Role of Information Technology in Delivering Citizen-Centric Local Public Services. *Local Government Studies* 33 (3):333-354.
- Klein, H.K. and Myers, M.D. (1999) A Set of Principles for Conducting and Evaluating Interpretive Field Studies in Information Systems. *MIS Quarterly* 23 (1):67-94.
- Leach, S. and Wingfield, M. (1999) Public Participation and the Democratic Renewal Agenda: Prioritisation or Marginalisation? *Local Government Studies* 25, 46-59.
- Lee, A.S. and Baskerville, R.L. (2003) Generalizing Generalizability in Information Systems Research. *Information Systems Research* 14 (3):221-243.
- Lee, K. and Pennings, J.M. (2002) Mimicry and the Market: Adoption of a New Organizational Form. *Academy of Management Journal* 45 (1):144-162.
- Lee-Kelley, L. and James, T. (2003) E-Government and Social Exclusion: An Empirical Study. *Journal of Electronic Commerce in Organizations* 1 (4):1
- Leseure, M., Birdi, K., Bauer, J., Denyer, D. and Neely, A. (2004a) Adoption of Promising Practice: A Systematic Review of the Literature. Advanced Institute of Management Research.
<http://www.aimresearch.org/publications/adoption.pdf> (date accessed 10/11/04).
- Leseure, M.J., Bauer, J., Birdi, K., Neely, A. and Denyer, D. (2004b) Adoption of promising practices: a systematic review of the evidence. *International Journal of Management Reviews* 5/6 (3):169-190.
- Lowndes, V. (1999) Rebuilding Trust in Central/Local Relations: Policy or Passion. *Local Government Studies* 25 (4):116-136.
- Lowndes, V. and Sullivan, H. (2004) Like a Horse and Carriage or a Fish on a Bicycle: How Well Do Local Partnerships and Public Participation Go Together? *Local Government Studies* 30, 51-73.

- Margetts, H. (2003) *Electronic Government: Method or Madness?* Inaugural lecture given at University College London, School of Public Policy. <http://www.ucl.ac.uk/spp/download/publications/sppwp3.pdf>.
- McAdam, R. and Walker, T. (2004) Evaluating the Best Value Framework in UK Local Government Services. *Public Administration & Development* 24 (3):183-196.
- McCullough, K. (2003) E-Democracy: Potential for Political Revolution? *International Journal of Law and Information Technology* 1 (2):149-161.
- McNeal, R.S., Tolbert, C.J., Mossberger, K. and Dotterweich, L.J. (2003) Innovating in Digital Government in the American States. *Social Science Quarterly* 84 (1):52-70.
- Melitski, J. (2003) Capacity and E-government Performance: An Analysis Based on Early Adopters of Internet Technologies in New Jersey. *Public Performance & Management Review* 26 (4):376-390.
- Midwinter, A. (2001) New Labour and the Modernisation of British Local Government: A Critique. *Financial Accountability & Management* 17 (4):311-320.
- Miles, M.B. and Huberman, A.M. (1994) *Qualitative Data Analysis - An Expanded Sourcebook*. Second edn, London: Sage.
- Milward, H.B. and Provan, K.G. (1998) Measuring Network Structure. *Public Administration* 76 (2):387-407.
- Moon, M.J. and Norris, D.F. (2005) Does Managerial Orientation Matter? The Adoption of Reinventing Government and E-government at the Municipal Level. *Information Systems Journal* 15 (1):43-60.
- Nedovicbudic, Z. and Godschalk, D.R. (1996) Human Factors in Adoption of Geographic Information Systems: a Local Government Case Study. *Public Administration Review* 56 (6):554-567.
- Norris, D.F. (2003) Building the Virtual State... Or Not? A Critical Appraisal. *Social Science Computer Review* 21 (4):417-424.
- Norris, D.F. and Moon, M.J. (2005) Advancing E-Government at the Grassroots: Tortoise or Hare? *Public Administration Review* 65 (1):64-75.
- Nutley, S. and Davies, H.T.O. (2000) Making a Reality of Evidence-Based Practice: Some Lessons From the Diffusion of Innovations. *Public Money & Management* 20 (4):35-42.
- ODPM (2002) *The National Strategy for Local E-government*. London: HMSO.
- ODPM (2003) *One Year On: The National Strategy for Local E-government*. London: HMSO.

- ODPM (2004a) *The future of local government: Developing a 10 year vision*. London: HMSO.
- ODPM (2004b) *Priority Outcomes 2005*. London: HMSO.
- ODPM (2005a) *Local e-Government Partnerships*. London: ODPM.
- ODPM (2005b) *Two Years On: Realising the Benefits From Our Investment in E-government*. London: HMSO.
- ODPM (2006) *Invitations to councils in England to make proposals for future unitary structures and to pioneer, as pathfinders, new two-tier models*. http://www.communities.gov.uk/pub/93/InvitationtocouncilsinEngland_id1504093.pdf. London: ODPM.
- Olk, P. and Elvira, M. (2001) Friends and Strategic Agents: The Role of Friendship and Discretion in Negotiating Strategic Alliances. *Group & Organization Management* 26 (2):124-164.
- Orr, K. and Mcateer, M. (2004) The Modernisation of Local Decision Making: Public Participation and Scottish Local Government. *Local Government Studies* 30 (2):131-155.
- Painter, C. and Clarence, E. (2001) UK Local Action Zones and Changing Urban Governance. *Urban Studies* 38 (8):1215-1232.
- Pearce, G. and Mawson, J. (2003) Delivering Devolved Approaches to Local Governance. *Policy and Politics* 31 (1):51-67.
- Pittaway, L., Robertson, M., Munir, K., Denyer, D. and Neely, A. (2004) Networking and Innovation: A Systematic Review of the Evidence. *International Journal of Management Reviews* 5/6 (3):137-168.
- Pratchett, L. (1999) New Technologies and the Modernization of Local Government: an Analysis of Biases and Constraints. *Public Administration* 77 (4):731-750.
- Pratchett, L. and Leach, S. (2004) Local Government: Choice Within Constraint. *Parliamentary Affairs* 57 (2):366-379.
- Provan, K.G. and Milward, H.B. (1995) A Preliminary Theory of Interorganizational Effectiveness: A Comparative Study of Four Community Mental Health Systems. *Administrative Science Quarterly* 40 (1):1-34.
- Putnam, R.D. (2000) *Bowling Alone: The Collapse and Revival of American Community*. New York: Simon and Schuster.
- Raco, M. (2002) The Social Relations of Organisational Activity and the New Local Governance in the UK. *Urban Studies* 39 (3):437-456.
- Rashman, L. and Hartley, J. (2002) Leading and Learning? Knowledge Transfer in

- the Beacon Council Scheme. *Public Administration* 80 (3):523-542.
- Reddick, C.G. (2004) A Two-Stage Model of E-Government Growth: Theories and Empirical Evidence for US Cities. *Government Information Quarterly* 21 (1):51-64.
- Rhodes, R.A.W. (2007) Understanding Governance: Ten Years On. *Organization Studies* 28 (8):1243-1264.
- Rindfleisch, A. and Moorman, C. (2001) The Acquisition and Utilization of Information in New Product Alliances: A Strength-of-Ties Perspective. *Journal of Marketing* 65 (2):1-18.
- Rogers, E.M. (2003) *Diffusion of Innovations*. 5th edn, New York: Free Press.
- Scholl, H.J., Fidel, R., Liua, S., Paulsmeyer, M. and Unsworth, K. (2007) E-Government Field Force Automation: Promises, Challenges and Stakeholders. *6th International Conference, EGOV 2007, Regensburg, Germany September 2007*
- Scott, J. (2000) *Social Network Analysis - A Handbook*. 2nd edn, London: Sage.
- Shaw, N. (2004) Questionnaire used to assess social networks for innovation sharing in water industry (unpublished). University of Leeds.
- Skelcher, C. (2003) Governing Communities: Parish-Pump Politics or Strategic Partnerships? *Local Government Studies* 29, 1-16.
- Smith, M. and Sullivan, H. (2003) Developing Frameworks for Examining Community Participation in a Multi-Level Environment. *Local Economy* 18 (3):237-252.
- Snape, S. (2003) Health and Local Government Partnerships: the Local Government Policy Context. *Local Government Studies* 29, 73-98.
- Stake, R.E. (1995) *The Art of Case Study Research*. London: Sage Publications.
- Stoker, G. (1998) Governance as Theory: Five Propositions. *International Social Science Journal* 50, 17-28.
- Stoker, G. (2004) *Transforming Local Governance: From Thatcherism to New Labour*. Hampshire: Palgrave MacMillan.
- Stoker, G. (2006) Public Value Management: A New Narrative for Networked Governance? *American Review of Public Administration* 36 (1):41-57.
- Sullivan, H. (2003) New Forms of Local Accountability: Coming to Terms With 'Many Hands'? *Policy and Politics* 31, 353-369.
- Sullivan, H., Knops, A., Barnes, M. and Newman, J. (2004) Central-Local Relations in an Era of Multi-Level Governance: the Case of Public

- Participation Policy in England, 1997-2001. *Local Government Studies* 30 (2):245-265.
- Szulanski, G. (2003) *Sticky Knowledge: Barriers to Knowing in the Firm*. London: Sage.
- Thacher, D. (2004) Interorganizational Partnerships as Inchoate Hierarchies: A Case Study of the Community Security Initiative. *Administration & Society* 36 (1):91-127.
- Tranfield, D., Denyer, D. and Smart, P. (2003) Towards a Methodology for Developing Evidence-Informed Management by Means of Systematic Review. *British Journal of Management* 14 207-222.
- University of Surrey. The Question Bank, <http://qb.soc.surrey.ac.uk>, accessed 16/06/05.
- Walker, R.M. and Enticott, G. (2004) Using Multiple Informants in Public Administration: Revisiting the Managerial Values and Actions Debate. *Journal of Public Administration Research and Theory* 14 (3):417-434.
- Wasserman, S. and Faust, K. (1994) *Social Network Analysis: Methods and Applications*. Cambridge University Press.
- Williams, P. (2002) The Competent Boundary Spanner. *Public Administration* 80 (1):103-124.
- Wilson, D. (2001) Local Government: Balancing Diversity and Uniformity. *Parliamentary Affairs* 54 (2):289-307.
- Wolman, H. and Page, E. (2002) Policy Transfer Among Local Governments: an Information-Theory Approach. *Governance-an International Journal of Policy and Administration* 15 (4):477-501.
- Yin, R.K. (2003) *Case Study Research Design and Methods*. Third edn, London: Sage Publications.