

Opportunities for innovation through local government procurement

A case study of Greater Manchester

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Executive summary

In today's economy, local authorities are being expected to do more with less. Tight financial constraints leave local authorities with a difficult balancing act between ensuring good quality public services and delivering efficiency gains. Public procurement can be a good way of achieving such efficiencies while minimising the impact on frontline public services. This study explores the opportunities for innovation from local government procurement, with a special focus on Greater Manchester. More specifically, this research has four main aims:

- To develop a conceptual understanding of the relationship between procurement, innovation and the local economy.
- To identify case studies reflecting the various ways in which local procurement can stimulate innovation.
- To identify the preconditions for the innovative procurement at the local level and assess the extent to which these are present in the Greater Manchester area.
- To derive policy recommendations relevant to the city region, as well as at the wider North West regional and national level.

The study draws from some 25 in-depth interviews mainly of procurement professionals in the Greater Manchester area (see Appendix B).

Procurement is the process of acquiring goods, works and services by government or public sector organisations, both from third parties and from in-house providers. Besides trying to deliver value for money, public procurement also aims to further social inclusion, sustainability, regeneration, employment generation and support for small businesses. The aspiration

to harness public procurement in support of innovation has recently gained momentum, attracting interest from policymakers and academics.

In a bid to understand the influence of public procurement on innovation, this study adopts a framework that takes into consideration organisational and strategic aspects of the procurement function, the interplay between technologies and markets, and the geographical impacts of procurement.

We identify different examples of procurement-driven innovations in Greater Manchester ranging from improving processes and services to product innovations and market shaping. Process innovations often involve more efficient or 'smarter' procurement. In some cases, councils have actively searched for innovative procurement solutions to pressing problems, which have led to product innovations. A further source of innovations lies in strategic commissioning of adapted services, particularly where procurement has not been involved traditionally and where markets are underdeveloped. Strategic partnerships with private and not-for-profit organisations can also lead to innovations. Finally, procurement for large, complex services is a key source of technological innovations requiring greater capabilities in terms of contract design, contract management and risk management.

Certain organisational aspects prevent the adoption and diffusion of innovations. In many councils individual service departments do their own procurement. This means that central procurement units have little involvement or oversight in many important strategic procurement and commissioning decisions. Effective procurement is also limited by

insufficient capacity, status and commercial skills. The focus of procurement units on common purpose goods and services – such as energy or stationery – prevents procurers from delivering on issues that are of strategic importance to the council.

Some councils have started to centralise their purchasing, achieving immediate savings in the process. However, there are tensions across departments when this happens. Excessive centralisation can also reduce flexibility and innovation. Councils need to strike the right balance between central economies of scale and individual flexibility.

Intentionally or not, procurement will have an influence on innovation. Suppliers and the supply chain will adapt to the signals of public demand and respond with innovative solutions if they see the public sector as a demanding and intelligent customer. Engaging suppliers early, managing their expectations and increasing the transparency and accessibility of the process are more likely to lead to innovations.

Improved market engagement does not imply that all councils need to do everything independently. Councils need better to exploit opportunities for collaborative procurement. Collaboration allows economies of scale, the sharing of good practice and expertise, and the potential to use collaboration to help local area needs.

However, structural barriers hinder effective collaboration. These can be related to differences in the size of authorities, their objectives and procurement profile, cultural barriers such as lack of trust and commitment or poor data management and quality. There is also a mismatch between short-term aspirations and imperatives of local councils and the longer period that collaboration for innovation and market shaping would require.

A better understanding and management of the supply chain would aid our understanding the local impact of procurement. Such resources and expertise may require a critical mass only available at sub-regional or regional level. Initiatives to understand the supply chain may best be carried out as part of the economic strategy of the city region, integrating procurement, local development and competitiveness goals. However, procurement should always primarily be about ensuring the quality of government services and the use of the products and services for the public sector, rather than other policy objectives.

Three issues stand out as conclusions:

- **Procurement is much broader than the activities of the procurement departments.** A broader organisational picture is needed involving senior elected members and managers of service departments. It is difficult to see how procurers can respond to the many increasingly complex policy agendas (such as skills, SMEs, innovation, sustainability) that procurement is expected to deliver when they have limited influence over some policies. In this sense, the need to adopt a broader organisational view of procurement constitutes both a finding and a shortcoming of our study, as we only approached procurement professionals relying on their perceptions rather than those of other functional specialists or senior managers.
- **Procurers must both increase their institutional profile and engage only in core activities with true leverage.** Expectations on the capacity of procurement to deliver on a number of policy areas are paradoxically heightened at a time when increased outsourcing, multiple forms of public-private service delivery and joint purchasing agencies mean that procuring authorities have individually less direct influence over procurement decisions. Procurers need to regain that influence.
- **Discussions on procurement of innovation cannot take place in isolation.** They should recognise both complex organisational issues and diverse, often conflicting, policy goals. Rather than elevating innovation goals above the proximate goals of public procurement, the challenge is to understand how innovation can help other policy objectives or help overcome perceived conflicts in policy goals. Decisions should be made on a case-by-case basis depending on what is being procured and its uses, as well as other political and financial constraints and objectives.

Acknowledgements

This work was funded under the NESTA Research and Innovation Policy Fellowship scheme. The objectives of the Fellowship were: to build strong linkages between the research and policy communities; develop innovation research that is of practical use to an organisation responsible for developing innovation policy; and increase NESTA's insights into and connections to the development of innovation policy in the UK's nations, cities and regions. The author wishes to thank Kieron Flanagan and Jeremy Howells for their supervision during the Fellowship, and Luke Georghiou and Jakob Edler for their help and advice. In the North West the policy partners were Manchester:Knowledge Capital (special thanks to Cathy Garner) and the North West Regional Development Agency (special thanks to David Sanderson). At NESTA the author would like to thank Richard Halkett in helping shape the ideas early on and to Kirsten Bound for her advice in finishing the report. I am very grateful to all those involved in public procurement who agreed to be interviewed and especially to Colin Cram for his help and supportive advice. The usual disclaimer applies: any errors or omissions are solely the responsibility of the author.

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Part I: Setting the Scene

Section 1: Introduction

Public procurement refers to the acquisition of goods and services by government or public sector organisations. The National Procurement Strategy (ODPM, 2003) states that:

Procurement is the process of acquiring goods, works and services, covering both acquisition from third parties and from in-house providers. The process spans the whole cycle from identification of needs, through to the end of a services contract or the end of the useful life of an asset. It involves options appraisal and the critical 'make or buy' decision, which may result in the provision of services in-house in appropriate circumstances.

Procurement by local authorities represents around £50 billion of public expenditure (£6.9 billion in the North West of England). This is almost a third of the total £170 billion of annual expenditure in procurement in the UK. Thus its potential impact on the economy and on the delivery of public services is considerable. Furthermore, procurement has experienced a profound transformation in recent years: it has moved from being a peripheral to a core function of public sector organisations. As this has happened, there have been many efforts to improve procurement practice. Procurement is also now expected to address a wide range of social and policy goals, such as sustainability, skills and innovation (in addition to increased pressures to deliver efficiency savings).¹ As Poulter (2007; p.5) points out, procurement standards seem to be improving, but “the goalposts are moving too”.

Today's economic environment presents a number of challenges for local government. Tight financial constraints leave local authorities with a difficult balancing act

between ensuring good quality public services and delivering efficiency gains. But this environment also provides opportunities to encourage creativity and innovation in suppliers while at the same time enabling a level playing field and a contestable supplier market. Meanwhile, public sector reforms confer local authorities a greater responsibility to shape the communities they serve (place-shaping), with a greater role for procurers and commissioners in addressing the needs of local residents. The public, in turn, are demanding better quality and more personalised public services (BERR, 2008). This is why it is so important to understand how local government procurement can deliver innovative outcomes – and the potential scenarios, barriers and enablers involved.

Various policy reviews have highlighted constraints on this local innovation: corporate capacity constraints, skills shortages, poor market intelligence, poor specifications, entry barriers for small firms and the voluntary sector or poor management of risks. To address these constraints, the National Procurement strategy for local government gave an impulse to strategic procurement, including greater use of e-procurement, collaborative consortia, and better engagement with the supplier market and the voluntary sector. Regional Efficiency and Improvement Partnerships (REIPs) were established to assist this process.

This is the backdrop for our study. We set out to understand the different opportunities for innovation at local authority level – and the barriers – by taking a detailed look at Greater Manchester. The study aims to inform policy by better understanding the various ways in which procurement can influence innovation at the regional and city-regional level. The project

1. This is reflected in the recent UK 'Policy through procurement' agenda (OGC, 2010).

is funded by NESTA in collaboration with the Northwest Regional Development Agency (NWDA) and Manchester: Knowledge Capital (M:KC). More specifically, this research aims to:

- Develop a conceptual understanding of the relationship between procurement, innovation and the local economy.
- Identify case studies reflecting the various ways in which local procurement can stimulate innovation.
- Identify the preconditions for the innovative procurement at the local level and assess the extent to which these are present in the Greater Manchester area.
- Derive policy recommendations that are relevant for the city region, as well as at North Western regional and national level.

Empirical work has included 25 in-depth interviews, mainly of procurement officers in the Greater Manchester area (local authorities and single-purpose authorities, such as the fire and rescue service) (see Appendix B). Interviews have been based on semi-structured questions intended to address: a) the internal organisation of the procurement activities; b) innovation activities and engagement with SME and the third sector; and c) types of collaboration they are engaged in, as well as benefits and barriers associated with such activities.

Restricting the research to the sub-regional level allows for a more in-depth understanding of the procurement organisation in each local authority. It allows us to identify efficiencies to be gained from collaboration between neighbouring local authorities and other organisations. It also gives us a clearer picture of the opportunities for local governance and place-shaping initiatives in supporting innovative procurement.

Part I sets the scene by reviewing the policy context for local government procurement (Section 2) and the relevant literature configuring the conceptual framework (Section 3).

Part II focuses specifically on Greater Manchester. It deals with the internal organisation of the procurement function in local authorities (Section 4), the collaborative procurement activities in Greater Manchester (Section 5), different scenarios and opportunities for innovation, illustrated by

selected case studies (Section 6), and forms of engagement with the local supply base (Section 7). Section 8 draws some tentative conclusions followed by recommendations in Section 9.

Section 2: Local government procurement: from purchasing to procurement to commissioning

The policy context will help us to understand the backdrop for the current challenges of local public procurement. But before we consider that, we should clarify what is meant by procurement as well as by related notions of purchasing and commissioning.

2.1 What is procurement?

Public procurement refers to the acquisition of goods and services by government or public sector organisations. However the terms 'procurement', 'commissioning' and 'purchasing' are often used interchangeably in the literature. Caldwell and Bakker (2009) argue that procurement and purchasing refer to similar activities, with procurement often being identified with public sector buying, and purchasing with private sector activities. However most authors (and indeed this report) consider that procurement is broader than purchasing. According to Murray (2009) and ODPM (2003), procurement comprises the purchasing cycle and the make-or-buy options appraisal. However, just because procurement includes such strategic decisions does not mean that procurement professionals take those decisions. Indeed the scope of the procurement function is much broader than that of the procurement department. Often purchases are made outside of the procurement department, and non-procurement specialists influence sourcing and supplier management decisions (Zheng *et al.*, 2007).

There is also a degree of confusion in the use of the terms 'procurement' and 'commissioning.' Commissioning and procurement are often used to refer to the sourcing of services and goods respectively.

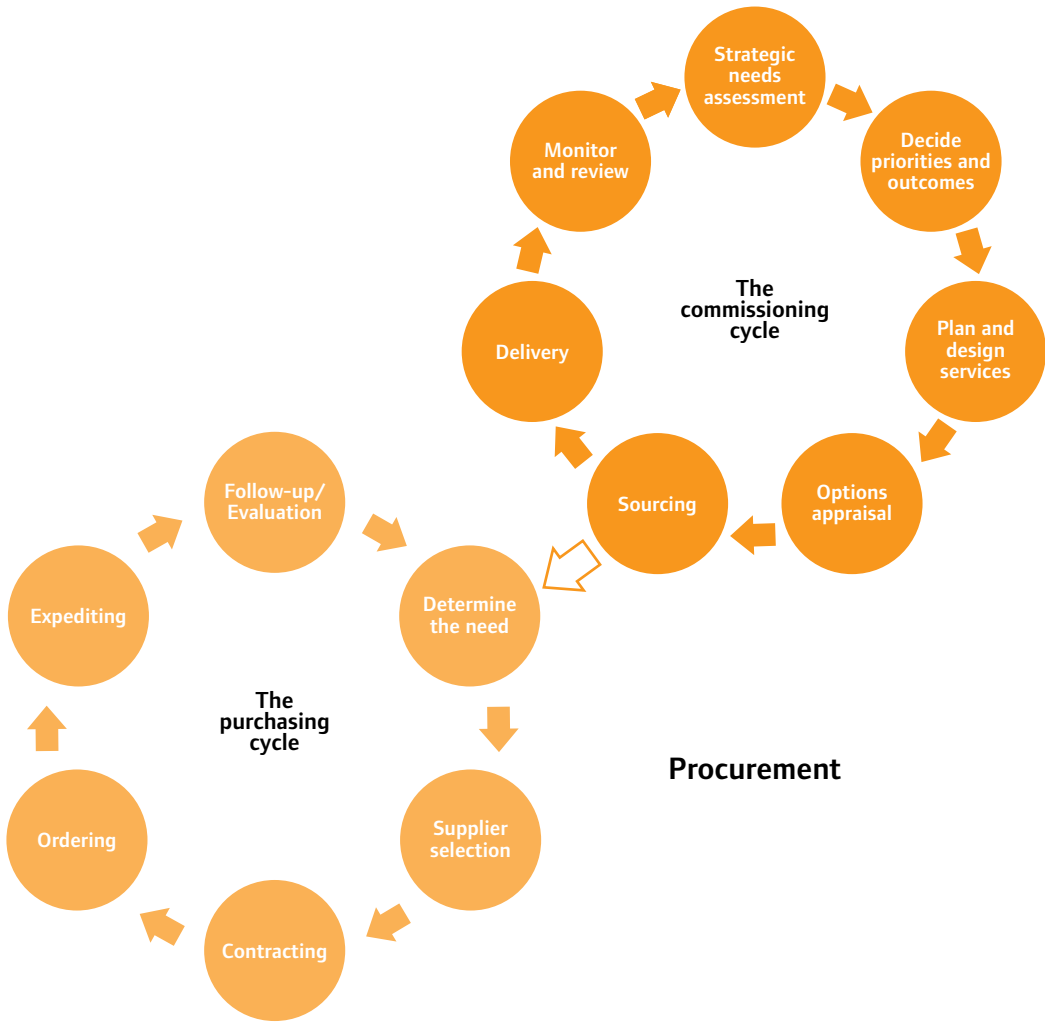
However, commissioning could also be seen as broader than procurement. It has been defined in relation to local government services as 'the cycle of assessing the needs of people in an area, designing and then securing appropriate service' (Cabinet Office, 2006: p.4). Following this definition, Murray (2009) notes that procurement professionals have neither the ability nor the knowledge to assess the needs of people in an area. Nor are they able to take strategic decisions in relation to budget allocation, priorities and outcomes for public services. Thus those decisions would be part of a commissioning cycle that precedes the procurement cycle (see Figure 1). Whereas commissioning is concerned with what public services are required and their delivery, procurement would be concerned with the most adequate sourcing of those services (Murray, 2009).

Recent government initiatives have aimed not only to raise the standards and capacity of national and local public procurement, but also to harness the purchasing power of the public sector to drive innovation and to support wider government priorities and other policy goals (see Figure 2).

2.2 Strategic procurement: increasing procurement capacity in local government

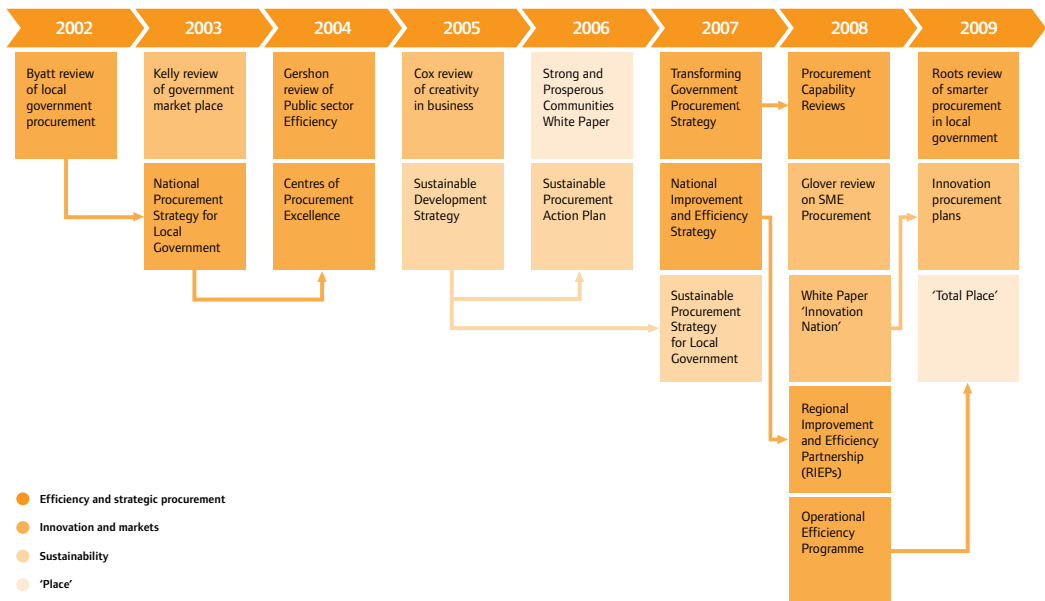
Following a series of national procurement reviews aimed at modernising government departments (HM Treasury, 1995; HM Treasury/Cabinet Office 1998; HM Treasury, 1999), an independent taskforce led by Sir Ian Byatt was set up in 2000 to review the state of procurement skills and practice

Figure 1: The Procurement and Commissioning cycles



Source: Murray (2009)

Figure 2: Timeline of UK government procurement agendas



- Efficiency and strategic procurement
- Innovation and markets
- Sustainability
- 'Place'

in local government in England. Research conducted for the taskforce (DLTR, 2001) highlighted important corporate capacity constraints in local government. These included deficient procurement skills and qualifications, an insufficiently strategic approach towards procurement, a lack of involvement of procurers in core areas of the organisations, poor market intelligence and market engagement, and a tendency towards over-rigid contracts as opposed to outcome-based specifications. Among the taskforce's recommendations (DTLR, 2001) were a better alignment of procurement and best practice; the development of a corporate procurement function; building more procurement capability; better management of risks; greater use of e-procurement; and improved regulations and legislation.

These recommendations led to a national procurement strategy.² The strategy aimed to change existing practices so that all local authorities would implement procurement practices which would contribute to 'community wellbeing' and sustainable development. As one of the proposals in support of the National Procurement Strategy, the Centres of Procurement Excellence were launched in 2004, one for each of the nine English regions. The aim was to promote excellence in procurement activities and to carry out procurement tasks, such as the development of framework agreements and new procurement vehicles for local government.

The Centres have been recently replaced by the Regional Improvement and Efficiency Partnerships (RIEPs) as a result of the *National Improvement and Efficiency Strategy* launched in 2007 by the Local Government Association (LGA) and the Department for Communities and Local Government. Its focus was on joining up local and national improvement and development priorities and the streamlining and devolving of resources to meet those priorities. The nine RIEPs were created in April 2008 through the merger of the Regional Improvement Partnerships and the Regional Centres of Procurement Excellence. The RIEPs were endowed with a three-year funding package of £185 million.

At the national level, the *Transforming Government Procurement Strategy* launched as part of the 2007 Comprehensive Spending Review also set out to improve government's procurement capability, through better performance and value for money. Following

this strategy, the OGC kick-started a series of Procurement Capability Reviews, intended to look in detail at key elements of procurement capability in central government departments. Each department is expected to develop and implement an Improvement Plan in response.

In 2008, the economist Dr DeAnne Julius conducted a review of the 'public services industry'³ which identified areas inhibiting its development (BERR, 2008), including skills shortages, lack of a level playing field and the high cost of the procurement process. To improve procurement skills, she recommended the appointment of a Director of Service Delivery in all departments and local authorities with a substantial service delivery function.

2.3 Procurement and the efficiency agenda

These initiatives are taking place against a backdrop of an increasingly tight fiscal environment. In the 2004 Spending Review the Government set local government the challenge of achieving 2.5 per cent annual efficiency gains, rising to 7.5 per cent by the end of 2007-08, equivalent at that stage to £3 billion a year. The 2004 Gershon review focused on greater efficiency to facilitate better services. It identified efficiencies that could be realised within the public sector's back office, procurement, transaction service and policy-making functions, as well as in other frontline public services.⁴ The 2007 Spending Review (CSR07) took place in an even tighter fiscal context. All public services were set a target of achieving at least 3 per cent net cash-releasing value for money gains per annum over 2008-09 to 2010-11. Councils are expected to achieve 3 per cent annual efficiency gains; and 9.3 per cent by the end of 2010-11, equivalent to £4.9 billion (DCLG, 2007).⁵

The Treasury's *'Operational Efficiency Programme'*, launched in late 2008, identified annual savings to be made from back office operations and IT, collaborative procurement, asset management and sales, property and local incentives and empowerment. Within collaborative procurement, the Treasury suggested additional categories such as facilities management, food and construction, which could be added to the big spend categories already included in the government programme of collaborative procurement (energy, office solutions, fleet, travel, ICT, professional services). Part of the Treasury

2. National Procurement Strategy for Local Government (ODPM, 2003).

3. The Public Services Industry is defined as "All private and third sector enterprises that provide services to the public on behalf of Government or to the Government itself". (BERR, 2008, p.i).

4. HM Treasury (2004) 'Releasing Resources to the Frontline: Independent Review of Public Sector Efficiency.' Gershon Review. London: TSO.

5. The 'Delivering Value for Money in Local Government: Meeting the challenge of CSR07' report develops themes from the Local Government White Paper and National Improvement and Efficiency Strategy (NIES) to help councils meet this efficiency challenge.

Operational Efficiency Programme, the 'Total Place' initiative is focusing on how public money is spent in particular local areas and how it could be used more effectively to improve local services. £5 million is allocated in 13 areas to pilot the initiative.⁶

In 2009, Bill Roots, a former local authority chief executive, was asked by the Government to review the arrangements for efficiencies from smarter procurement in local government. One of his main recommendations was to set up a local procurement champion to work alongside the RIEPs, OGC, Government Departments, wider public sector bodies and suppliers to coordinate procurement. Additional recommendations included a more streamlined, effective procurement support and stronger role for the RIEPs, a greater balance of attention and resources given to efficiency considerations, improved availability of contracts information and improved supplier engagement.⁷ As part of these efforts towards rationalisation, there is an emphasis on the utilisation of 'procurement hubs' and regional collaborative procurement to achieve economies of scale (DCLG, 2009).

2.4 Public sector reform and place-centred commissioning

In parallel, local government has undergone a number of reforms aimed at greater local decision-making autonomy. In October 2006, the government released a White Paper on public sector reform⁸ which established a new local performance framework including the development of Comprehensive Area Assessments (CAA). Chapter Five of the White Paper provides a focus for local authorities acting as place-shaper and leaders of their communities and creates a framework for greater co-operation between local agencies through Local Area Agreements (LAAs).⁹

In advocating stronger local strategic partnerships for improved and more responsive service delivery, the White Paper recommends a move away from a narrowly defined approach to service delivery and towards a 'commissioning' role (including needs identification, planning, sourcing, delivery, and performance management). It recognises that local authorities may increasingly act as strategic commissioners of services rather than providers of services themselves. It therefore highlights the need for local authorities and their partners to focus

on the whole commissioning cycle, including joint commissioning where this is the best way of achieving the desired outcomes. Chapter Seven of the White Paper sets out a number of proposals to drive forward efficiency and innovation through service transformation: business process improvement to redesign service delivery around customer needs; collaboration between local authorities; 'smart procurement' and use of competition in local government service markets; better use of technology; and asset management.

The commissioning agenda shifts the focus from traditional service delivery towards a broader assessment of needs. It is a move from processes and outputs to customer-led outcomes with new forms of partnerships between the public, private and third sectors. The strategy 'Improving the strategic commissioning of public services' (CBI/LGA, 2008) notes that good commissioning "is much more than just procuring services. It is about delivering customer-centric outcomes for an area, not narrow outputs" (CBI/LGA, 2008;p.5). This strategy highlights challenges also, such as the need for better commissioning skills across the public, private and third sectors; the creation of conditions that can support a contestable, commissioning-based market place; and a better understanding of value for money and use of resources. The 'Total place' initiative is one response to this 'place' agenda, which implies "a move away from services designed and implemented along institutional or sectoral lines, to a more whole-government approach based on the needs of an area" (NLGN, 2009).

In care services, the commissioning agenda has focused on the development of individualised and personalised services. Key mechanisms include direct payments and individual budgets, and their likely take-up has to be considered in forecasting demand and developing commissioning strategies. Personalisation does make the commissioning process more complex and shifts the focus to more flexible arrangements. Following *Putting people first* (HM Government, 2007), local authorities are expected to develop a commissioning strategy that ensures choice and control as well as balancing investment in prevention.

Changes in public service delivery also imply increasing reliance on strategic partnerships and greater engagement with community and voluntary organisations to design and deliver public services. One way this happens is

6. In Greater Manchester a pilot is dedicated to young children.

7. However, the ability for someone to act as procurement champion and the suitability of attributing to the regional level of areas that may best be tackled at local level have been questioned (NLGN, 2009).

8. DCLG (2006) 'Strong and Prosperous Communities.' London: DCLG.

9. A Local Area Agreement (LAA) is "a three year agreement, based on local Sustainable Community Strategies, that sets out the priorities for a local area agreed between Central Government, represented by the Government Office (GO), and a local area, represented by the lead local authority and other key partners through Local Strategic Partnerships (LSPs)". Local Area Agreements: Guidance. Available at: <http://www.communities.gov.uk/publications/localgovernment/localareaagreements>

through Strategic Service Delivery Partnerships, which are long-term contracts made by local authorities with private companies, the public or the community and voluntary sectors, to provide a broad range of services. The Government has been keen to highlight the benefits of a 'mixed economy' model of provision where public, private and third sectors compete to provide the best service in a given area (BERR, 2008).

2.5 Policy through procurement

A number of policy statements have also highlighted the importance of public procurement to regeneration, support to SMEs, sustainability, skills and innovation. Innovation and market shaping was the focus of the Kelly review, which focused on the mechanisms that could be adopted to increase competition and encourage better long-term capacity planning in markets where the Government has significant purchasing power.¹⁰ Similarly, the Cox Review of creativity examined ways in which UK business productivity could be enhanced by drawing on its creative capabilities.¹¹

The former Department for Trade and Industry's own innovation reports have highlighted the innovation potential of public procurement. One recommendation of the DTI's 2003 report was to develop new procurement guidelines designed to make government a more 'intelligent customer'.¹² The report highlighted the potential of the public sector's purchasing power to drive innovation. These arguments have been echoed more recently in the *Innovation Nation* White Paper. The White Paper notes that "*procuring innovative solutions has tended to be a low priority*" (DIUS, 2008: p.23), mainly due to a risk-averse culture, difficulties in defining what constitutes innovation in procurement terms and insufficient capability in procurement. It proposes that each Government Department should develop an Innovation Procurement Plan as part of its commercial strategy, detailing how they will embed innovation in its procurement practices and seek to use 'innovation procurement' mechanisms. To this end a guide to driving innovation through public procurement was produced in 2009.

The Government has also worked to *improve access by small and medium-sized enterprises (SMEs) to procurement contracts*. Recommendations were initially made in the

Better Regulation Task Force/Small Business Council Report '*Government: Supporter or Customer?*' in 2003, which were taken up by the DTI and the Office of Government Commerce (OGC). In 2008, the Government appointed Anne Glover to review the barriers for SMEs to access public sector procurement. The Glover review (HM Treasury, 2008: p.5) concludes that "*improving SME participation in public procurement is best achieved by making the market work effectively to allow SMEs to compete effectively for contracts*". It therefore recommends that opportunities should be transparent,¹³ procurement processes as simple as possible, and that a strategic approach to procurement should be adopted that encourages innovation and gives SMEs a fair deal as sub-contractors. The review recommends a more strategic approach to procurement from small firms through outcome-based specifications, more accessible subcontracting opportunities, and better reporting of the value of SME contracts.

There is also a growing interest in relation to the delivery of services by the voluntary or third sector. Gershon (HMT, 2004; 44) reported that "*contracts for service delivery by voluntary and community organisations (VCOs) tend to [...] place an excessive burden of risk on service providers*." The specific characteristics of the third sector have given rise to a number of government reviews, dedicated funding streams¹⁴ and targets (Public Service Agreements) to increase third sector contribution to public service delivery. Since 1997 the Government has negotiated 'compacts', non-binding frameworks for Government and VCO sector relationships and partnerships. They aim to build and sustain equal partnership arrangements between the statutory and the voluntary sector.

The UK *Sustainable Development Strategy*, published in 2005, made the case for harnessing public sector purchasing power to transform the market for goods and services with lower environmental and social impacts and achieve the Government's goal to be among the EU leaders in 'sustainable procurement' by 2009. The UK Government's Sustainable Procurement Action Plan described actions to be taken collectively by Government and individually by Departments to achieve that goal. The Sustainable Procurement Strategy for Local Government was published in 2007. A key commitment included in the UK Government's Action Plan is a commitment to reduce carbon use, further articulated in the

10. OGC (2003) 'Increasing Competition and Improving Long-Term Capacity Planning in the Government Market Place.' London: OGC.

11. HM Treasury (2005) 'Creativity in Business: Building on the UK's Strengths.' Cox Review. London: TSO.

12. DTI (2003) 'Competing in the Global Economy: the innovation challenge.' London: DTI.

13. In relation to transparency, it proposes that by 2010 all contract opportunities above £20,000 are advertised electronically through a single, free, easy to search online portal.

14. The Government earmarked £125 million in Spending Review 2002 for the creation of Futurebuilders – a new one-off three-year fund to assist VCOs in their public service work. Its aims are to overcome obstacles to effective service delivery, to modernise the sector for the long term, and to increase the scope and scale of VCS service delivery.

Government's 2009 'Low Carbon Industrial Strategy'.

The 2009 *Equality Bill* also contains a specific measure on procurement. The Bill's title includes the provision *"to enable duties to be imposed in relation to the exercise of public procurement functions"*. The accompanying guide, *'Framework for a Fairer Future – The Equality Bill'*, states that *"with an annual expenditure of around £175 billion every year on goods and services – about 13 per cent of GDP – the public sector has an important opportunity to use its purchasing power to promote equality where possible"*.

The Government also sees the scale of public expenditure on products and services as an opportunity to support the *skills* base of the workforce. BIS announced a cross-governmental initiative in 2009 to create 20,000 apprenticeships by employers working with government over three years. A recent OGC guide on promoting skills through public procurement¹⁵ advises those responsible for letting publicly funded contracts across a range of sectors on how to embed skills training and apprenticeships in all aspects and stages of the procurement process.

The use of procurement to address multiple agendas has been made explicit in the *'Policy through Procurement Action Plan'* (OGC, 2010), announced in the 2009 Pre-Budget Report. Its procurement policy priorities are SME development, skills training and apprenticeship and carbon reduction. In addition, it stresses that *"public authorities will need to be innovative in their procurement practices and engage suppliers in developing innovative, high quality and cost-effective solutions to the delivery of works, services and goods."* (OGC, 2010: p1). The Innovation Procurement Plans produced by government departments are to be linked to the policy through procurement (PtP) agendas. The development of the PtP agenda is to be monitored through a set of key performance metrics such as the value of contracts placed with SMEs or the number of apprenticeships supported.

15. See http://www.ogc.gov.uk/documents/promoting_skills_through_public_procurement.pdf

Section 3: Conceptual framework: Procurement, innovation, organisation and place

3.1 Introduction

A literature has emerged in recent years analysing the influence of procurement on the stimulation of innovation and the development of new technologies, and advocating the active use of public procurement as an innovation policy instrument. While an interest in the use of procurement as an industrial and technology policy tool is not new (see e.g. Rothwell, 1984; Geroski, 1990) there has been a renewed focus on this underexploited policy tool (Edler and Georghiou, 2007). Interest has been encouraged by the recommendations of a number of inquiries, reports and policy documents (e.g. Edler *et al.*, 2005; European Commission, 2005; Aho *et al.*, 2006). This aspiration to harness public procurement in support of innovation has featured strongly in recent statements of UK innovation policy (DIUS, 2008), as noted in the previous chapter.

The current debate has several limitations. First, it tends to downplay the varied nature of goods and services procured by the public sector. The literature has tended to rely on a limited number of examples to demonstrate the innovation effect of procurement, notably on the high end of technology, supported by procurement at the early stages of development (such as the internet or semiconductor technology). These are not very representative of the goods and services purchased by public sector bodies, which vary according to their goals, size, level of specialisation, and the extent of in-house or external provision. Second, the debate misses the varied nature of innovation, as a widely-used definition of 'innovative procurement' as 'the purchase of goods or services that do not yet exist' excludes many categories of innovation.

Third, it sidesteps the many potential innovation effects of public procurement. Public procurement impacts upon innovation both directly and indirectly by shaping the demand environment in which firms innovate and compete. Explicit or dedicated innovation procurement strategies are not a necessary condition for innovation to occur, as procurement will influence innovation whether or not this is an explicit goal. Nor is it a *sufficient* condition. As Rolfstam *et al.* (2009) note, in order to understand and indeed favour the influence of procurement on innovation, organisational and institutional aspects influencing the adoption and diffusion of innovations need to be taken into account.

Finally, much of the academic and policy debate is based on an *aspatial* analysis of impacts and tends to be biased towards national procurement, ignoring local factors. Such considerations are further developed in this section.

3.2 Procurement and innovation

What type of innovation?

This interest in procurement and innovation has given rise to several definitions of the *public procurement of innovation*, and a number of typologies of innovation procurement. Public procurement of innovation has been understood as "*the purchase of goods or services that do not yet exist*" (European Commission 2005). This is contrasted with so called 'normal' procurement, which is said to occur when public sector organisations buy ready-made products for which no research and development (R&D) is required. A third scenario occurs when the public

sector directly procures R&D to support the activities and decisions of government and public authorities.¹⁶ Finally, we can also identify *innovation in procurement* – change in the procurement process itself. Indeed, innovation in procurement processes may be an essential precursor to the active use of public procurement to stimulate innovation in suppliers and the wider economy.

Rolfstam (2008) notes that the literature often ignores which *kind* of innovation is associated with the procurement activities. Indeed, if procurement is to be used as a policy tool, a clear definition of innovation is needed to allow an evaluation of such policies, together with a clear rationale for intervention. Uyarra and Flanagan (2010) argue that the definition of public procurement of innovation tends to be too R&D and technology-oriented, potentially excluding more ‘ordinary’ forms of innovation that may occur through the recombination of existing goods or services, innovation in delivery of existing services, or certain process innovations. They note an emphasis on the direct purchase of innovations, at the expense of the indirect impacts of procurement on the wider economy (including the supply chain).

Uyarra and Flanagan (2010) also question the usefulness of distinguishing between ‘normal’ and ‘innovation’ procurement: regardless of whether public procurement is explicitly oriented towards innovation, there will be innovation impacts. As Dalpe (1994, p.66) argues, “*decisions concerning prices, quantities, and standards affect innovation, positively or negatively, in a group of industries involved in government procurement*”. It is important to understand these effects, whether or not they are actively sought. After all, many frequently cited examples of procurement-induced innovations have not been the result of an intentional or conscious drive to encourage innovations but rather the by-product of ‘normal’ procurement.

Direct and indirect effects of procurement on innovation

Since procurement will influence innovation whether or not this is an explicit goal, Cave and Frinkin (2003) differentiate *indirect* demand-pull impacts, where innovation is a by-product of government procurement, from *direct* demand-pull impacts, where the intention is to procure innovative goods and services directly.

Such impacts relate to the different effects of demand on innovation highlighted in the innovation studies literature, going back to

Schmookler’s (1966) discussion on the impact of market size in triggering technological developments. Significant demand ‘pulls’ innovation as it guarantees a significant level of production and a reduction in uncertainty, allowing firms to benefit from economies of scale and technological investment, and ensuring larger profits. Network externalities¹⁷ on the demand side also create advantages for certain industries by allowing dynamic increasing returns. Demand also influences innovation through its impact on market structure (Kamien and Schwartz, 1975) and during the life cycle of an industry (Utterback 1994). Part of the literature focuses more specifically on the needs of users (Mowery and Rosenberg, 1979) and user-producer interaction (Lundvall, 1993) as a source of innovation. Von Hippel (1986) has explored user driven innovations in sectors such as scientific instruments and coined the term ‘lead users’ to refer to “*users whose present strong needs will become general in a marketplace months or years in the future*” (Von Hippel 1986; p.791). Malerba *et al.* (2007) highlight the importance of ‘experimental’ users in the development of technologies.

Public procurement could affect innovation *indirectly* by influencing the size and structure of the market, by setting standards and by increasing or reducing competition. A sizeable public demand reduces market risks by guaranteeing minimum sales, enabling innovative firms to generate early economies of scale and learning, increase productivity and lower costs (Edler and Georghiou, 2007). However the scale of public demand is only relevant if it can be made *effective* through the exercise of buyer power, for instance through consolidation of demand and co-ordinated action (OFT 2004, Edquist *et al.*, 2000). Through procurement, the public sector can also help to create standards or promote convergence to a single standard, thus encouraging diffusion. Procurement can also influence innovation indirectly by altering the structure of competition in the market (OFT, 2004).

Of course, public procurement can influence innovation *directly*. The public sector may be willing to pay a premium cost or bear some efficiency losses to encourage certain policy goals and social needs, such as sustainability or social inclusion. (Edler and Georghiou, 2007). The government can be highly influential when it is itself the end user of the innovation (Dalpe, 1992; 1994), and as such it can act as a ‘lead user’. The public sector can act as an

16. Policy initiatives such as the US SBIR programme or the UK SBRI would fit into this third modality. A related concept is that of ‘pre-commercial procurement’ which concerns the Research and Development (R&D) phase before commercialisation.

17. Network externalities refer to the effects on a user of a product or service of others using the same or compatible products or services.

‘experimental user’, where a cheaper, proven option does not meet its requirements, and it is willing to assume the risk inherent in the purchase of a new product, even if it is only a prototype. A public procurer with the necessary technical competences could force innovation on the supplier or even engage in co-invention, pushing suppliers to innovate in order to keep up with user requirements.

Typologies of public procurement of innovation

A number of typologies have been developed to categorise public procurement of innovation. These include: the end users of the goods and services procured (Edquist *et al.*, 2000; Edler and Georghiou 2007; Hommen and Rolfstam, 2009); the type of innovation and the stage of the technology life cycle in which innovation is seen to occur (Edquist *et al.*, 2000; Edler *et al.*, 2005; Hommen and Rolfstam, 2009); and the combination of markets and technology of the goods and services procured (Uyarra and Flanagan, 2010).

Innovation procurement can address *different types of end-user*. As such, procurement can be ‘*direct*’ or ‘*catalytic*’ (Edquist *et al.*, 2000). In direct public procurement, the procuring agency or government department is the primary end-user of the product in question. In the case of ‘*catalytic*’ procurement, the procurement is conducted on behalf of end-users other than the procuring public agency or authority.

Edquist *et al.* (2000) also differentiate between ‘*developmental*’ and ‘*adaptive*’ public

technology procurement. Developmental procurement occurs where completely new products, processes or systems are created whilst adaptive procurement is the procurement of goods and services not “*new to the world*” but new to the country of procurement (Edquist *et al.*, 2000). In this case the emphasis is on adaptation of the existing product or process to local circumstances.

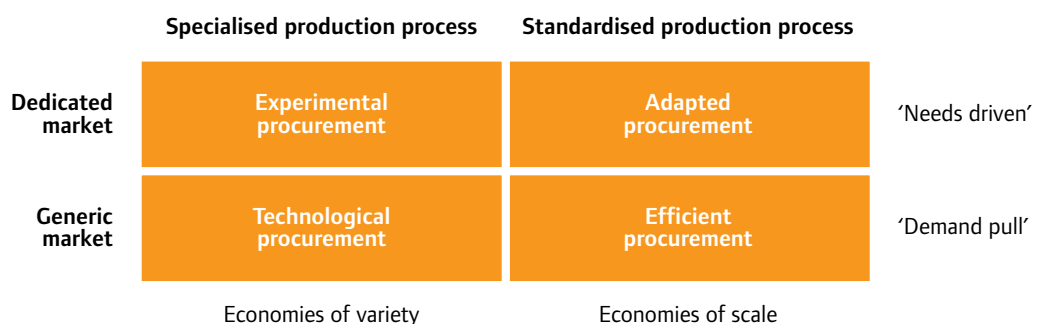
Edler *et al.* (2005) distinguish three different roles that *public technology procurement* can play: market *initiation*, market *escalation* and market *consolidation*. The first role assumes that there is no existing market giving public procurement the chance to start one. The market escalation role requires further development for the technology to succeed commercially. In the market consolidation phase, procurement helps develop standards and the acceptance of new or alternative technologies.

Uyarra and Flanagan (2010), based on Storper (1997), propose a typology based on a combination of two dimensions associated with the goods and services being procured¹⁸ (see Figure 2). The first dimension refers to the supply of inputs – the technology, information and skills – and distinguishes between specialised and standardised production processes. The second dimension refers to the degree of uniformity of the client’s needs and distinguishes between generic and dedicated products.

Thus a fourfold typology of public procurement can be formulated: procurement

18. The nature of the procured product considered in the literature is of key importance to understand the nature of supply chains and networks. Lamming *et al.* (2000) suggest that “supply networks differ substantially according to the type of product being supplied... [it] may be more useful than sectoral distinctions as supply networks frequently transcend the bounds of one industry” (p.687). However products and services are seldom characterised in relation to both the demand patterns and the technologies and knowledge that produce them.

Figure 3: A fourfold typology of procurement



Source: Based on Uyarra and Flanagan (2010)

of standardised products or services serving a generic market (*efficient procurement*); procurement of goods and services addressing specific demand niches but employing known production methods and practices (*adapted procurement*); procurement that encourages new technical solutions to meet a generic need (*technological procurement*); and procurement of adapted technical solutions (*experimental procurement*).

Table 1 below summarises the implications of this typology. Different types of public procurement correspond to different demand-side effects on the part of the government and different types of innovation opportunities. For instance, in the case of experimental procurement, a public procurer with the necessary technical expertise could force innovation on the part of the supplier or even engage in co-invention, pushing suppliers to innovate to keep up with public sector requirements. Adapted procurement involves close communication or co-production with end users to adapt general technology to specific problems and needs. Further, combination of market/production system dimensions of each quadrant can be associated with different opportunities for innovation. Following Abernathy and Clark's (1985) typology of innovation, innovation can arise from adapting and applying latent technologies to previously unarticulated user needs (*architectural*); applying established

technical competence in emerging market segments (*market niche*); building cumulative effects on product cost and performance (*regular* or incremental innovation); and from radical improvements that render established technical and production competence obsolete (*revolutionary* or radical innovation).

Besides presenting different implications for innovation in the short term, each type entails different risks for procurers and suppliers and different dynamics of competition in the medium and long term. For instance technological procurement is likely to be served by a range of powerful suppliers, and therefore may reduce competition over time by generating incumbent advantages. Experimental procurement may lead to innovation but its spread or diffusion may be limited if the characteristics of the procured product or service are too idiosyncratic to allow future commercial opportunities, or further adoption within the public sector is limited.

3.3 The procurement function within organisations

Having considered the procurement of innovation, we now look at the question of how the procurement function is organised in order to understand the capacities and

Table 1: Procurement types and innovation effect

	Adapted procurement	Technological procurement	Experimental procurement	Efficient procurement
Role of the public sector	Niche user	Large/sophisticated customer	Experimental/lead user	Efficiency-driven customer
Dominant motivation of procurement award criteria	Adaptation/customisation to specific needs The best/better adapted solution	Fitness for use, value for money The best available/most efficient solution	Functional product performance The most innovative solution	Price, volume Value for money
Product/service type	Diverse designs, customised	At least one product design	Emerging design, prototype, pilot	Mostly undifferentiated, standard
Potential innovation type	Market niche	Architectural	Radical	Incremental

Source: Based on Uyarra and Flanagan (2010)

incentives within organisations that may influence innovation in procurement.

Management literature sees the procurement function as a way to increase the competitive advantage of organisations (Porter, 1990). While purchasing was once considered a low level clerical buying function, its status has changed to that of a strategic business function capable of contributing to the competitive position of organisations (Lamming *et al.*, 2000; Zheng *et al.*, 2007; Tassabehji and Moorhouse, 2008).

In the context of this more strategic view of procurement, there are organisational concerns about whether the procurement function should be centralised or decentralised within organisations, and the advantages and disadvantages associated with different options (Cavinato, 1991; Baily *et al.*, 1994; van Weele, 1994; Lamming, 2002).

In centralised procurement models, the organisation has a single, collective sourcing and buying power (Cavinato, 1991). Centralisation may mean that procurement is done nationally or regionally, but most often it refers to centralised procurement at the level of the individual organisation or local council (Murray *et al.*, 2008). Centralised procurement has become more relevant as a result of advances in ICT, which allow tenders to be posted and orders to be made in real time, thus reducing communication costs dramatically (Dimitri *et al.*, 2006). Centralisation allows cost reduction, due to reduced transaction costs and minimal duplication of costs, specialisation and knowledge and resource sharing. A better use of qualified human resources would positively influence the transparency, quality and measurability of the procurement procedures. Indeed, according to Murray *et al.* (2008), the rationale behind centralisation in the case of local government has been the concentration of professional procurement expertise in one place, maximising its internal organisational 'leverage' and therefore extracting the best deals from the market.

The downside of this model is a potentially lower user engagement and responsiveness to local needs. Centralisation is also associated with sacrificing "budget holder autonomy" (Murray *et al.*, 2008), potentially leading to resentment in the operational divisions, which may end up ignoring the standard systems and 'bucking the system'. Centralised purchasing can also lead to excessive overhead costs (Lamming, 2002).

At the other end of the spectrum (see Table 2), decentralised procurement models imply that responsibility for procurement lies with the divisions often supported by a corporate purchasing co-ordinating group. Greater autonomy can allow exploitation of diversity and variety of local suppliers, better adaptation and the ability to exploit local innovations. However, while decentralised models can be more flexible and closer to the end user, they can also be fragmented and inefficient, potentially leading to duplication of resources, shortage of expertise and poor financial control. Lack of communication or collaboration between divisions can give opportunities for suppliers to charge different prices and influence specifications (Lamming, 2002). Decentralised or 'silo' budgets may also hinder the adoption of innovations. Rolsftam *et al.* (2009), in their description of the introduction of Bardex catheters into the NHS, noted how the benefits of the new catheter were not visible to the budget-holder affected by the purchasing of a more expensive product, but to another department within the organisation, and this slowed down the adoption of the new product within the organisation.

In practice, hybrid arrangements tend to be adopted that combine the efficiency of centralisation and the flexibility of decentralisation. Organisational structures also tend to vary according to issues such as size of the organisation, industry context, purchasing maturity and corporate procurement strategies (Zheng *et al.*, 2007).

Buying consortia

Besides the internal organisation of procurement, organisations have the option of collaborative agreements such as buying consortia (Essig, 2000; Rozemeijer, 2000; Bakker *et al.*, 2006; Schotanus and Telgen, 2007). Such arrangements have been encouraged in the UK as a means of improving efficiency in procurement. Cooperative purchasing can be defined as "the cooperation between two or more organisations in a purchasing group in one or more steps of the purchasing process by sharing and/or bundling their purchasing volumes, information, and/or resources" (Schotanus and Telgen, 2007; p.53).

Collaboration allows economies of scale and lower transaction costs from unnecessary tender processes. It also promotes good practice and expertise sharing, freeing resources to focus on more strategic issues, and the potential to use collaboration to help

Table 2: Centralised vs. decentralised procurement

	Adapted procurement	Experimental procurement
Centralisation	<ul style="list-style-type: none"> Economies of scale Standardisation Policy deployment Financial control Auditing Policing Common ICT and systems Use of specialist skills Strong demand 'pull' effect on innovation 	<ul style="list-style-type: none"> Resentment in the regions Bucking the system Missed opportunities 'Overweight' overheads Slow response Less diversity of innovation opportunities
Decentralisation	<ul style="list-style-type: none"> Autonomy Variety/diversity Local prudence Local satisfaction Inter-divisional competition Local innovations 	<ul style="list-style-type: none"> Suppliers 'divide and confuse' Skills shortages/cost anomalies Duplications Lack of financial control

Source: Based on Lamming (2002)

local area needs (Bakker and Walker, 2008). Collaboration is also relevant for innovation, particularly where procurement by local authorities is too fragmented to incentivise suppliers to invest in innovation. It is also unlikely that sufficient market knowledge and procurement expertise would be available for each market or purchasing category within individual organisations. There are many types of possible collaboration. Bakker *et al.* (2008) identify informal, virtual and third party organisations. Schotanus and Telgen (2007) propose a typology of informal to more formal collaborative forms, which they call piggy backing, third party, lead buying, project and programme procurement groups (see Table 3).

Piggy backing is the simplest form. It entails informal purchasing cooperation, perhaps just the sharing of purchasing information and knowledge with other organisations in a large network. Typically, an organisation establishes a contract on its own specifications and a smaller organisation uses that contract under same or similar contract conditions. A potential disadvantage is that the smaller body generally cannot influence the specifications and supplier choice.

Third party groups consist of public or private external parties or central authorities with devoted resources. They focus on achieving a

large volume for common products and services and carry most of the purchasing activities by themselves using their specific purchasing expertise. Members have a formal relationship with the third party (perhaps a membership fee) but do not have to be engaged with other members. The members have little control over the purchasing process so cannot influence specifications and purchasing choice. Examples of third party groups are for instance the NHS Purchasing and Supply Agency (PASA) or at the local authority level, the Yorkshire Purchasing Organisation (YPO).

Lead buying groups involve outsourcing purchasing activities to one of the other members of the group. The particular item is purchased by the most suitable member of the group according to their expertise, resources or purchasing volume. This requires some collaboration to decide which member carries which activities, and members can influence tenders. Lead buying groups tend to be smaller than other forms of collaboration and the members share some similarities, such as geographical location. A potential disadvantage of such collaboration is that members become dependent on the knowledge and skills of other members. Examples include the central buying consortium (CBC) which brings together some 17 local authorities in south-eastern and central England.

Table 3: Typology of collaborative procurement

	Level of commitment	Dedicated resources	Number of participants	Potential advantages	Disadvantages
Piggy backing	Low	No	Medium/large (generally one larger organisation and few small)	Reduced transaction costs and prices for the piggy backers	Lack of information, no influence on specifications
Third party group	Low	Yes	Medium/large	Reduced transaction costs and prices	Low control over purchasing process, (e.g. specifications, supplier choice)
Lead buying	Medium	No	Small, relatively homogeneous group	Lower prices and transaction costs All benefit from lower costs	Dependence on the knowledge and skills of lead buyers
Project groups	High	No	Small	Can influence specifications Lower price and potential better service	Lack of commitment, insufficient trust
Programme groups	High	Yes	Small/medium	Greater efficiency Greater market shaping potential	Lack of compliance Lack of resources Communication problems Allocation of savings Lag of good quality data

19. Such is the case of a project by Gateshead, South Tyneside, Sunderland and Newcastle Councils. See <http://www.northeastiep.gov.uk/collabprocurement/collprocurement.htm>

Source: Based on Schotanus and Telgen (2007)

Project groups constitute a more intensive form of cooperative purchasing. They are typically one-off purchasing groups for a shared purchasing project, which generally winds up after the project ends. It involves quite intensive consultation among the members to bring the specifications up to the same level, agree on supplier choice, etc. For instance a group of local authorities could collaborate to procure food in schools in a more sustainable manner.¹⁹

Finally, *programme groups* are another form of intensive cooperative purchasing, often involving representatives of the management teams of the cooperating organisations, who meet regularly to discuss cooperative projects. They have close involvement with each other and jointly influence specifications. Such arrangements require greater degrees of trust, commitment and knowledge of how to work together. Common problems include communication problems and the allocation

of savings (Schotanus and Telgen, 2007). Programme groups may be an effective option for the procurement of complex services such as waste management.

Large and small organisations have different needs and tend to collaborate in different ways. Small organisations might be more likely to piggy back on larger organisations contracts or use third party purchasing, whereas large organisations would tend to engage in more intensive forms of cooperation (Schotanus and Telgen, 2007). While large organisations may have the necessary expertise to evaluate and engage with different procurement consortia, smaller councils may see collaboration as an effective way to tap into such expertise and achieve greater purchasing leverage (Murray *et al.*, 2008). For smaller councils, Bakker *et al.* (2008) and Murray *et al.* (2008) suggest the possibility of an additional organisational option, namely a procurement shared service. A procurement shared service is one in which

a number of councils jointly employ their own dedicated procurement specialist, sharing the costs and agreeing the priorities. Such arrangements are advantageous as they allow access to strategic procurement advice in those cases where the employment of a procurement specialist may not be considered justifiable or cost effective.

Supplier management strategy

A key consideration when deciding on organisational arrangements for procurement relates to the strategic importance of the goods or services procured and the nature of the suppliers of these goods and services (Gelderman and van Weele, 2005).

Purchasing portfolio models provide differentiated strategic actions for heterogeneous categories of procured goods and services, in order to minimise supply risk whilst taking advantage of buying power. They help understand and identify areas that are strategic to the organisation and that require a more careful supplier relations management – areas of greater leverage as well as power relations and imbalances between buyers and suppliers.

The standard purchasing portfolio model developed by Kraljic (1983) classifies products on the basis of two key dimensions, *profit impact* and *supply risk*. Accordingly, four categories of purchased items emerge: ‘bottleneck’, ‘non critical’, ‘leverage’ and ‘strategic’. Each category would necessitate a different strategy (see Figure 3). Those items in the bottleneck and strategic categories are generally goods and services of strategic importance to the company or the public administration due to their impact on business or policy. They are mission-critical and therefore entail a greater degree of risk. Examples of strategic items are engines and gearboxes for automobile manufacturers, turbines for the chemical industry and bottling equipment for breweries (Caniëls and Gelderman, 2005). In the case of these items, further analysis is recommended of the buying strengths against the strengths of the supply market, and three different supplier strategies are identified in relation to the different power positions: ‘diversify’, ‘balance’ or ‘exploit’²⁰ (Kraljic, 1983). Bottleneck items require volume insurance, vendor control, security of inventories and backup plans to reduce supply risk. In turn, noncritical items require

20. ‘Exploit’ implies making use of buyer advantage vis a vis the supplier; ‘diversify’ implies looking for material substitutes or new suppliers if the supplier’s strength outweighs the buyer’s; and ‘balance’ refers to an intermediary strategy for items with neither major visible risks nor benefits (Kraljic, 1983).

Figure 4: Purchasing portfolio model



Source: Kraljic (1983)

efficient processing, product standardisation, order volume and inventory optimisation, whilst leverage items allow the buyer to exploit its full purchasing power, for instance through tendering, target pricing and product substitution.

Different buying situations in turn give rise to different types of buyer/supplier relationship. The literature seems to suggest greater supplier dominance in the 'bottleneck' quadrant of the Kraljic matrix, greater buyer dominance in the 'leverage' quadrant, and balance power relationships in the 'non-critical' and 'strategic'²¹ quadrants (Caniëls and van Weele, 2005). High supplier power may be due to e.g. high concentration of suppliers or high 'switching costs', whereas buyer power would be high if for instance purchasing volume is high or there are alternative sources of supply (Baily *et al.*, 2005).

The nature of the procured goods and services has implications for the most advantageous organisational model for procurement: certain goods and services may or may not be suitable for collaboration. Bakker *et al.* (2008) try to map the different types of collaborative procurement described in Section 3.2. onto Kraljic's typology. Thus high volume, low value goods and services (leverage) would be more suitable for purchase through consortia to exploit collaborative purchasing power. Non-critical items could be outsourced or bought collaboratively through a third party. Bottleneck items may be suitable for lead buying, and products and services that are strategically important to an organisation may benefit from being purchased locally without collaboration. However some complex services, shared services or capital investment type goods may also benefit from collaboration to better exploit procurement skills and expertise and combined purchasing power. Collaboration may be less suitable in cases where supply that is geographically or time restricted, where purchasing is small-scale, or where supply market is locally oriented, may not lend itself to collaboration.

3.4 Procurement and place

The link between procurement and geography is complex given that procurement policy is decided at national, regional and local levels. Public procurement involves the interaction of many overlapping networks of actors and agencies. This complex procurement landscape

makes coordination harder and creates tensions between local and wider policy goals. The pursuit of different government agendas could influence the extent to which local actors may be willing to engage in pursuing national or regional policy goals.

The geographical impact of procurement will depend on the degree of spending at local and regional level, on the mix of goods and services procured, on the local supplier base, and on the extent to which benefits can be retained within a particular locality or region through sub-contracting and knowledge spillovers. There is a tendency to privilege local suppliers in the hope that this will create jobs and economic benefit for the local economy. However such favouritism can exclude innovative solutions available elsewhere, and neglect other possible indirect regional benefits (DLTR, 2001; Uyarra and Flanagan, 2010).

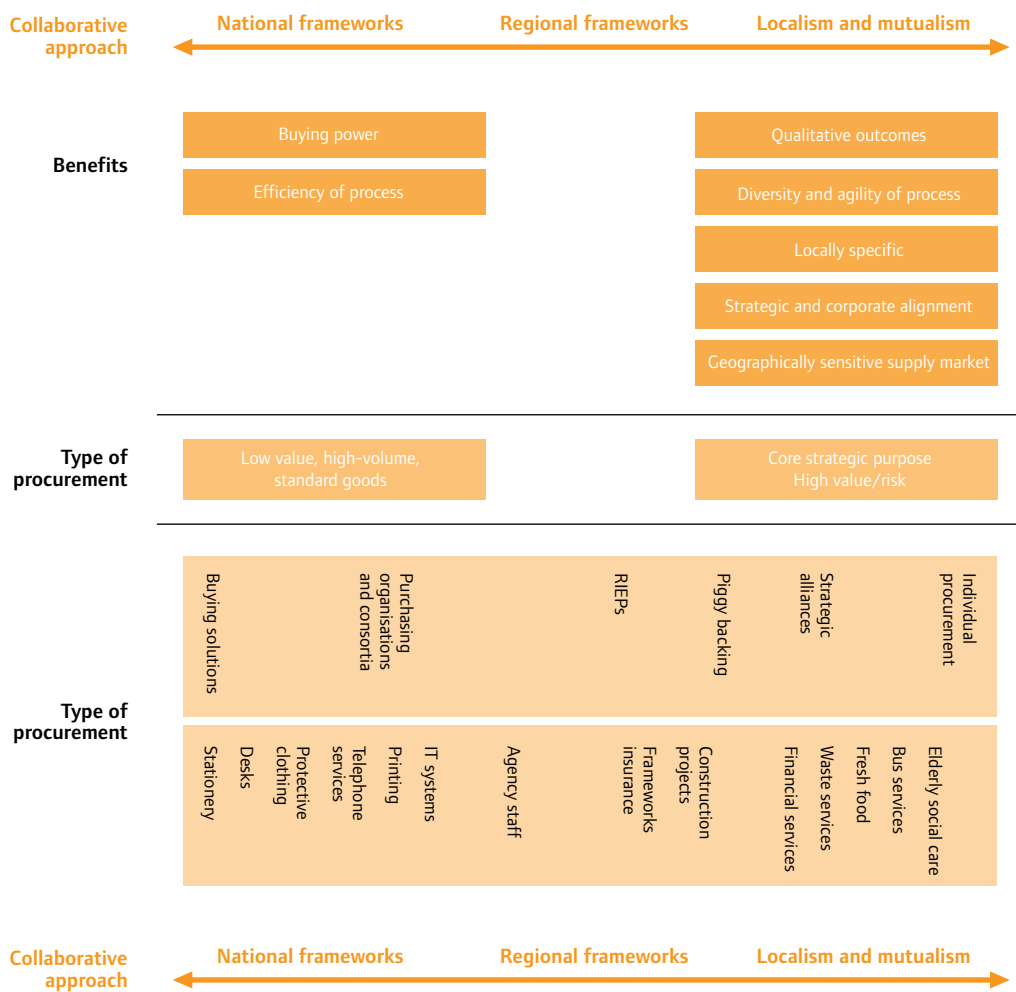
The advantages and disadvantages of local over national procurement are not dissimilar to those related to decentralised procurement. While national procurement may increase incentives to innovation through greater demand, it may also reduce the diversity of research paths and increase the distance between technology leaders and followers (Cabral *et al.*, 2006). At the same time, regional or local procurement may allow better adaptation and the ability to exploit local innovations. Procurement at the national or international level is particularly important when dealing with a specialist supplier market (protective clothing is a good example) to ensure the best suppliers bid for the contracts, although volume insurance may be needed to ensure incentives for innovation. When a large number of suppliers are available, they are not easily aggregated or where they require close interaction with final users, regional or local procurement usually works best.

The New Local Government Network proposes a division of labour on the basis of the type or procurement and the nature of the goods and services purchased (Figure 4). One could argue however that despite provision being strategic and primarily local, the procurement of services such as adult care should be at least partially centralised to improve industry engagement and demand planning, and to set standards.²²

21. However Caniëls and van Weele (2005), using data from a survey of Dutch purchasing professionals, found a supplier dominance in the strategic quadrant and thus an asymmetric rather than a balanced power relationship.

22. I am grateful to Colin Cram for this observation.

Figure 5: Spectrum of collaborative procurement



Source: NLGN (2009)

Part II: The case of Greater Manchester

Section 4: Introduction

We have seen how the procurement function has evolved from a mainly back office support function to a strategic business function. In local government, there has been a substantial improvement in standards and corporate procurement capacity in England since the Byatt Taskforce (DTLR, 2001) reported at the turn of the century that few councils had the necessary corporate capacity in procurement. In 2001, only a third of local authorities had a central unit for procurement and commissioning, and those that existed varied in the extent and nature of functions that they provide. Few took responsibility for strategically important or specialist areas of procurement. Construction procurement and social care contracting were normally outside their scope. Limitations in procurement training and development were also reported. Only half the councils employed any staff at the centre with a CIPS professional qualification. Byatt also found that only a quarter of English councils had a written procurement strategy. This had changed for the better within six years: the 2007 national procurement strategy reported significant improvements in efficiency and capacity of local procurement. However some issues remain, as we found in Greater Manchester.

4.1 Organisation and profile of procurement

Greater Manchester comprises the districts of Wigan, Bolton, Salford, Trafford, Bury, Rochdale, Stockport, Manchester, Tameside and Oldham. All these local authorities have a central or corporate procurement unit though most delegate responsibility for procurement and commissioning to individual service

departments. However, some authorities have recently adopted a fully centralised model of procurement. Each department in a devolved setting would directly procure goods and services and use the procurement team for support and advice. The rationale is that the departments are directly involved in the delivery of the service, and thus have a greater knowledge and understanding of the client or service-user needs, as well as the market for that service. As one head of procurement explained, the reason *“the council decided to put people out in the services is because sitting with the services you get a better understanding of the end users’ needs”*. The procurement unit (generally with 4-10 people) would provide an overarching coordination role, including setting standards, providing guidance on best practice and monitoring performance as well as drafting corporate procurement strategies. Thus, as an interviewee put it, the procurement unit performs a *“supportive role and a centralised function that people can dip into as and when required”*.

Another interviewee described the activities of their procurement unit:

“We have a very devolved structure so we have a team of six as a corporate procurement team but within each of the four departments there are services and service managers that are directly procuring goods and services. Sometimes it is contracts that we have set up on their behalf or recommended that they use but often there are areas of spend that we don’t have contracts for and they will buy that themselves on a devolved basis and will come to us for support, guidance and advice where necessary. However, in a lot of cases they will just go off within the

contract procedure rules as they stand and within the framework of the procurement strategy and procurement code of practice they will go ahead and make those procurement decisions and award contracts themselves. I think that is a fairly common picture across Greater Manchester.”

Such arrangements have the advantages of greater autonomy, user responsiveness and better use of expertise of the service areas. But they also lead to duplication, inconsistency and poor financial control of operations, and they make insufficient use of procurement skills. The procurement unit may have little oversight of what and how much is procured and how.

The number of full-time equivalent staff involved in procuring and commissioning goods and services may be up to ten times the number of procurement professionals in the central unit. So, a lot of the costs incurred in procurement across the organisation (specifications, contract management, advertising contracts) may be ‘hidden’ and cannot be clearly attributed to the procurement function.

Many councils have set up mechanisms to coordinate the activities of all staff involved in procurement throughout the organisation, to ensure information sharing and common standards. Rochdale has a network of 40 to 50 people who get together on a quarterly basis. In Tameside a ‘champions’ group representing each of the heads of the service areas (20 in total) meets on a bi-monthly basis for the dissemination and communication of information related to each project group. In Wigan, a cross-departmental procurement group meets quarterly to discuss procurement developments and disseminate good practice.

However, despite such efforts to ensure coordination and coherence, many decisions are effectively taken without the involvement of professional procurers. Much procurement activity is not even reported to the senior procurement managers. One procurement officer said: *“you can appreciate that if you are within the service it is not your first thought to feed that back into the centre because you are probably moving onto your next project”*. This also implies that procurement decisions are being made by people that are not procurement professionals and thus may not have the right training and skills needed for this activity. A recent study in the Northwest of England estimated that only around 50 per cent of people operating in professional

procurement units were professionally qualified (Poulter, 2007). If we include procurement done in the service directorates, the proportion of qualified staff making procurement decisions would be far lower. While this way of organising procurement may help procurers in devolved organisations better understand end user needs and benefit from a better specialist knowledge to identify appropriate solutions, local procurers may lack the commercial skills to engage with the market. Whilst the specialist departments are well placed to innovate due to their proximity to the end user, they are not necessarily using the corporate procurement team to enable these innovations. This in turn limits the diffusion and adoption of such innovations.

Another problem with having ‘pockets of procurement’ throughout the council is a lack of common standards and consistency. The procurement unit will draw up a procurement strategy²³ containing policy (including sustainability, equality and diversity and the voluntary sector) and best practice. But ensuring consistency and common standards is difficult. As one interviewee noted, *“unless you are actually able to go out and monitor it then there will be areas where the message has not filtered down to the people who are actually doing the work”*. Similar concerns were expressed by another interviewee, who noted that *“you can see that standards vary depending on which services you are working with. This raises whole levels of concerns to make sure we are meeting our statutory requirements and then in terms of innovation. How do you make sure good practice is shared?”*

Heads of procurement may find themselves unable to ensure their corporate contracts are followed. One head of procurement even suggested that *“we could save a lot of money right now by just sticking with the contracts we have without going out and setting up any new ones.”* Besides the obvious efficiency losses from maverick buying, the procurement team risks losing credibility if users ignore existing contracts. Such fragmentation may also lead to a wide supply base, which may favour smaller, local suppliers, but which can be difficult to manage and coordinate, leading to duplication, higher prices and inconsistent specifications.

Another shortcoming relates to the mix of spending areas that the procurement unit seems to be in a position of influence. Many corporate procurement teams tend to focus on general purpose goods and services, and

23. All the local authorities within Greater Manchester have a procurement strategy, detailing the corporate procurement framework in the context of fulfilling the wider corporate objectives. However these documents are very uneven in the information they provide and their operational purpose is unclear. They tend to focus on how procurement is or should be done rather than what is procured. As such they are more aspirational in terms of procurement goals and their contribution to corporate objectives than operative or informative about current activities. Innovation promotion is an objective in a reduced number of procurement strategies. They do not seem to be regularly reviewed and updated and many interviewees noted that their corporate procurement strategy was already out of date.

less on non-commodity areas that are core to the council's performance. Whilst areas like construction or adult care may represent the biggest spend in some councils, their corporate procurement units often do not have much input into their tenders beyond, as one interviewee put it, making sure they tender legally. In many cases, a lot of the procurement in strategic areas such as social care, education, housing and construction effectively fall outside of the remit of the procurement unit.

Some councils have also outsourced certain services though the creation of separate companies or through partnerships with the private sector. The companies to which these services are outsourced would have their own procurement departments, so the procurement department may have only indirect influence in these areas.

Procurement and commissioning

The commissioning of adult care services constitutes one of the biggest expenditure areas in many local authorities, yet commissioning and procurement have remained largely separate. As mentioned in Section 3, councils are shifting from direct provision to commissioning many areas of services, so while certain services such as adult care were internally provided in the past they are now being outsourced. Questions such as how to best buy these services, how to understand providers and markets, and how to extract best value need to be addressed, require greater procurement expertise than before.

Generally, a degree of mistrust was observed between 'procurers' and 'commissioners' (in charge of delivery of adult care and children services). Procurers are concerned that commissioners see them as only interested in reducing costs, and believe that commissioners fear the quality of the services will be compromised if procurers get involved. On the other hand, some procurers seem to be too risk-averse and lack the right skills and profile within the organisation to deal with sensitive issues such as adult care. There is even a stark difference in the use of the terms 'procurement' and 'commissioning': whilst some procurement officers tend to see commissioning as a stage in the procurement cycle, commissioners see procurement as the routine purchasing of goods and services within a much broader commissioning process. This was highlighted by one interviewee: *"Within adults' and children's services they get a bit precious about it and say it is not procurement, but some people see procurement*

as just buying stationery. [...] there is a lack of understanding of how procurement skills fit into commissioning and how good procurement benefits the whole process." This echoes Murray's (2009) observation that practitioners tend to have a confused understanding of the differences between commissioning, procurement and purchasing. Such lack of understanding seems to be a barrier to effective collaboration. Even within individual authorities' procurement strategies there is no shared understanding of the terms.²⁴

Whilst procurement of adult or children services remains mostly devolved, some councils are trying to develop a more joined up working approach. Some interviewees noted how this was their first time engaging with the social care services, adult care and childcare, and how the perceptions of procurers and commissioners were starting to change. One noted: *"We have gone from: 'oh they are just corporate procurement, they are here to make us jump through hurdles', to: 'they are here to be very helpful and look at the issues and find solutions'."*

4.2 Towards a centralised approach?

Whilst the decentralised approach has been the organisational form that prevails in most local authorities, a number of councils have recently significantly restructured their procurement activity. Some have become fully centralised, while others are testing a hybrid model between centralisation and decentralisation. The need to restructure was explained by one interviewee: *"instead of just thinking in silos mentality and being happy to deliver what we have always delivered with maybe a few small improvements, there is a need to make bigger improvements."*

Financial pressures, organisational reviews and the adoption of new financial systems requiring less back office functions have provided the push towards such restructuring efforts. For instance, Manchester and Trafford have adopted a fully centralised system, bringing to the centre all the people involved in procurement (in the procurement team and the specialist areas). In Manchester, a procurement Service Improvement Project (SIP) was kick-started in 2006 as a result of a wider Manchester Improvement Programme. Research revealed that over 120 staff (around 40 FTE) were involved in procurement activity across the council. And whilst areas

24. For instance Salford City Council's strategy states: "procurement has a far wider scope than 'purchasing', 'buying', or 'commissioning'. It is about securing services and products that best meet the needs of users and the local community in the widest sense". Stockport Council's strategy however sees procurement as "the process of acquiring goods, works and services" and commissioning as a "broader and deeper process of meeting the needs of whole groups of service users and/or whole populations".

of good practice were identified, there was an inconsistent application of procurement practices, an under-utilisation of corporate contracts, and lack of contract and supplier performance management. The decision was therefore taken to develop a centralised corporate procurement function to reduce costs, achieve economies of scale, apply professional procurement expertise and use technology to automate key procurement activities.

Centralisation has meant overcoming significant tensions around budgeting and attribution of costs and savings. Whereas savings revert back to the department in devolved systems, it is here brought back to the centre to be reinvested (maybe in other priority areas). Service areas understandably do not want to relinquish control over their budgets, which generates significant tensions. This can lead to resentment by those service departments that feel they have generated the savings. On the other hand, silo budgeting can also hamper innovation, as the benefits and savings resulting from a particular innovation may accrue to a department other than the one paying for it, thus reducing the incentives for adopting the innovation.

While centralisation allows almost immediate efficiency savings through standardising procedures, running the procurement department also becomes a lot more costly, which poses questions about the long-term sustainability of such arrangements after the initial efficiency savings have been realised. Furthermore, it can generate distrust in other councils which see their model as too rigid, an inflexibility that may prevent cross-council collaborations. Centralisation may be a less suitable option for smaller councils, which may find it more difficult to attract the procurement expertise that full centralisation requires.

Without adopting full centralisation, some councils are testing hybrid part devolved, part centralised models. These changes have generally followed procurement reviews made by the Improvement and Development Agency (IDEA) or external consultants. Such models would retain the strategic corporate procurement team but place more procurement expertise within the individual service areas. These councils are generally keen for the departments to maintain ownership of their activities and to make full use of their experience and specialism in the particular service or equipment they want to purchase. However it is unclear how much the service

units will be committed to achieving the savings set by the centre and how the costs and savings can be attributed.

These organisational changes imply an increased profile for procurers and a higher status of procurement within the organisation. As one interviewee put it: *"in some ways it is raising the profile of procurement to make sure we are accepted more and contacted more by the services to add value to what they are doing"*. Changes generally involve the introduction of a 'category management' system. The category managers for a particular commodity thus become the experts within the council in relation to that particular area and are also able to feed in information from the corporate procurement team, acting as a liaison and improving communication between procurement and the specialist team. So whoever is procuring electricity supplies would speak to the category manager for energy for advice to ensure there is a standardised approach across the council.

These changes imply that procurement departments are acquiring greater profile within organisations and increased capacity and resources, and that cross-sectoral working is being more actively encouraged. Across councils, procurers have more prominent positions, with a new focus on strategic commissioning and better connection with council services. The benefits of these developments notwithstanding, these new arrangements also raise the question of the suitability of all local authorities developing larger procurement capacity and of trying to do almost everything for themselves, irrespective of size, needs and expertise. While category managers would make procurement more outward-facing and improve the capacity for market intelligence, they may also bring unnecessary duplication by engaging with the market separately rather than joining forces or building on the specialism of individual councils. This sentiment was echoed by one interviewee: *"Why do you need to have ten procurement units across Greater Manchester when you could just have one?"*

Section 5: Collaboration in procurement

5.1 Background to collaboration in procurement in Greater Manchester

Greater Manchester has a long history of collaboration going back to the creation of the Greater Manchester Purchasing Consortium in the 1970s. Renamed the Local Authority Purchasing Partnership in 1999, and recently the AGMA Procurement Group following the publication of the Gershon review, it now includes the Boroughs of Tameside, Bolton, Bury, Stockport, Wigan, Oldham, Tameside, Trafford, Warrington, City of Manchester, Salford, GM Fire Service and GM Police.

The Procurement Group was intended as a cooperative whereby some authorities administer particular contracts on behalf of the group members. It was not a separate organisation but an extension of the councils' own procurement activities and staff. Often these contracts are led by those councils with the strongest specialism in that area, thus allowing other councils with skills or capabilities shortages to benefit from the expertise of others. Such voluntary contracting arrangements help reduce the transaction costs associated with inviting a tender for the individual authorities and allow them to benefit from more advantageous prices. One interviewee explained: *"What we have is a number of contracts that we collaborate on so we review those on a regular basis. The lead authority on the contract must report back on savings that have been made and flag up if there has been any problem with the particular supplier or goods/services and that is fed back to the supplier. The lead authority will also report back on any area of good practice."*

In addition to the sharing of contracts, members of the AGMA procurement group meet regularly to share information on new

products, new suppliers market changes, legislation, policy changes and training needs. For best practice and advice, other professional networks are available to councils such as the Improvement and Development Agency for local government (IDeA) and the various work streams of the Northwest Improvement and Efficiency Partnership (NWIEP). As one interviewee put it: *"there are all those different bodies that are trying to ensure that we are not re-inventing the wheel, that we are not duplicating things that have already been created."*

Besides collaboration within Greater Manchester, councils use existing framework contracts (e.g. OGC, NHS) and piggy-back expertise and contracts of bigger organisations. They also make use of national third party groups such as the Pro 5 buying organisations.²⁵ In particular a number of councils are members of the Yorkshire Purchasing Organisation (YPO) – one of the Pro 5 – which they use mainly for energy procurement. They also collaborate with other 'like-minded' authorities on specific areas of interest.

From such voluntary contract sharing and networking, collaborative working has increased and deepened (thus becoming more formalised) through project-based purchasing and joint purchasing. The AGMA Collaborative Services Group (CSG) was created in November 2004 with the aim of *"exploiting opportunities to develop and deliver efficiencies and service improvement through collaborative procurement or provision of goods, services and projects"*. CSG's membership included senior management representation from each member council, many of which act as project champions and play a role in delivering and

25. The Pro 5 brings together five of the largest public sector professional buying organisations in the UK with a combined purchasing power in excess of £2 billion per annum. See www.espo.org/index.asp?CMD=PRO.

Box 1: AGMA Agency staff project

Local authorities have become increasingly dependent on temporary agency staff. Local authorities were spending more than £28 million a year on agency staff and processing some 33,000 invoices a year. This led to inconsistencies in price, quality and lead times not only across AGMA but within single authorities. The challenge was to ensure consistency and standard approaches, more standardised pay rates and job descriptions. A feasibility study identified benefits from bringing in a management agent to recruit

agencies to supply staff. Bolton MBC led the procurement exercise with the new management agent for three years. The risks of the project included establishing current spend, particularly making sense of cost codes, and ensuring a strong mandate so managers would not work outside of the contract. The project has saved participating authorities £2.5 million per annum, plus a one-off saving of £4 million. The project won an award for Collaborative Procurement in 2008.

Source: IDeA (www.IDeA.gov.uk)

driving projects forward. A first phase of collaborative projects delivered some positive outcomes, particularly in areas such as vehicle procurement, construction and agency staffing (see Box 1).

Despite these positive outcomes, such intense collaboration involved relatively few councils (those willing to participate) and took place on an *ad hoc*, project basis. A report assessing the progress of the AGMA collaborative shared services noted some key barriers to sustained collaboration, such as insufficient commitment and compromise at all levels, lack of leadership, too many areas effectively excluded from collaboration ('no go' areas), and the fact that work was undertaken 'on top of' day-jobs, with insufficient resources.²⁶

5.2 Deepening of collaborative procurement activities

Following the 2007 Spending Review and the pressure to achieve greater efficiency savings, it was felt necessary to increase the pace of collaborative working. A regional analysis of spending by the North West Improvement and Efficiency Partnership (NWCE) in 2005 revealed that a large proportion of procurement by councils in Greater Manchester was in common goods and services. Around half the spending was accounted for by just two per cent of suppliers (most shared across councils), which provided a clear rationale for collaborative purchasing.

The Greater Manchester Collaborative Efficiency Plan, launched in 2008 to last up to nine years, focuses on areas with significant spending and impact. It aims to secure performance improvement in areas including: adult social care, children services, transport, construction, buildings and facilities management, back office service, professional services, customer contact and IT platform and infrastructure.²⁷ Acknowledging that authorities differ in their ability to engage in collaborative shared services, a four-stage maturity model was introduced, from sharing data and best practice (stage 1) to extensive collaborative delivery (stage 4). As one officer at AGMA acknowledged, this is necessary because *"you are not going to get all 10 local authorities working together or delivering services together immediately"*. All the authorities are being mapped to determine what level they are at and their ability to move forwards.

One efficiency plan initiative involved setting up of the AGMA collaborative procurement hub. Other sub-regional hubs have also been established in the Northwest (as part of the RIEP regional procurement strategy), all with different organisational forms and at different stages of development.²⁸ Greater Manchester is the most advanced, with a formal procurement hub led by Trafford MBC. It has its own governance and structure in place, with a dedicated team and resources to drive the efficiency programme.

26. AGMA (2009) 'Report to AGMA Executive: The future of collaborative services in AGMA.' Roger Ellis. Manchester: AGMA.
27. Due to the characteristics and the weight of construction procurement within the region, this area of procurement is dealt with at the regional level by the RIEP through the Regional Construction Hub, based in Manchester.
28. Merseyside operates a virtual hub, managed by Knowsley MBC. Procurement activities are carried out by member authorities with each leading on particular areas or projects. Lancashire created a sub-regional hub that will be a new organisation with a small central team. It is expected that the majority of procurement will be carried out by agreed lead authorities. Cheshire and Warrington are undergoing a review to develop an appropriate organisation for the hub. Cumbria has a well established collaborative procurement in Efficient Procurement in Cumbria (EPIC), managed and staffed by Cumbria County Council with inputs from district authorities.

5.3 Barriers to collaboration in procurement

Despite the impetus given to collaboration, there are many obstacles in bringing this agenda forward, such as differences in priorities and characteristics of councils, poor data sharing and data integration, and resistance on the part of procurers.

Poor sharing of procurement information

Sharing information is a precondition for informed decisions about collaborative purchasing. However, heads of procurement are often not able to share the necessary information, as they lack a comprehensive view of procurement activity within their own organisation. One interviewee said that procurers *“cannot collaborate because they don’t know what their spend is”*.

An associated problem is poor and inconsistent data management within authorities. Even when available, data cannot be easily shared with other councils due to poor integration of financial management systems. Councils use separate financial systems with different specifications, which hinder integration and data sharing.²⁹ Poor data sharing places the consortia in a disadvantageous position to negotiate with the supply market. However, suppliers generally have good knowledge and good data of their business with the local authorities. A procurer with limited experience in that business area may inadvertently give away information that the supplier may use to negotiate separately better conditions. Such asymmetry and fragmentation therefore works in favour of large suppliers, who can afford not to offer the best or more advantageous conditions in negotiations, rendering the collaborative hub unable to act as an intelligent and strategic buyer.

There is also some resistance to sharing data and good practice, particularly by the service departments, which see these efforts as interfering with their work, but also by procurers who perceive collaboration as a threat that could lead to job losses. One interviewee noted: *“I think one of the problems is that collaboration, if it is done effectively, threatens too many people”*.

Lack of commitment to collaboration

Collaboration can be further constrained by lack of commitment to collaborative contracts and lack of compliance. As one interviewee noted: *“they are all very loose arrangements and we don’t get the best prices because the*

commitment is not there”. There is clearly a mismatch of expectations and understanding about the terms of the collaboration.

Procurement officers will only commit to contracts if the conditions are advantageous. However, failure to commit in advance means that negotiations cannot be made with a sufficiently large volume of orders to get the best deal. Once the contract is secured, some local authorities may negotiate separately a better deal with suppliers. Procurers often try to prove they can get the best contract rather than delegate the negotiation on the hub. There is no shared understanding of the cost of such lack of commitment, in terms of the hidden costs of negotiating separately (which may be higher than the marginal savings achieved) and of undermining collaboration efforts. One expert argued that *“part of the problem is a focus on commodity-type items where everyone thinks they can be an expert and an inability to get to grips with the difficult procurement that challenges the status quo”*. The relatively low profile that procurers have in certain authorities suggests that they may be limited in their ability to engage in strategic collaboration on behalf of their organisations or to enforce decisions within their own councils.

The collaborative procurement hub is a voluntary arrangement. Its lack of a clear governance means that it is not able to mandate standards and ensure contract compliance, relying on the goodwill and commitment of the members. An interviewee noted that *“we don’t have that command and control mechanism in place [...] as soon as someone says I can get a better deal you start to get this fragmentation”*.

One difficulty in ensuring compliance is the attribution of benefits and savings as a result of collaboration. Capturing and recording savings and making the participants aware of them can be difficult. A procurement officer lamented that procurers *“don’t know they are making savings through procurement”*. It is particularly difficult to measure and implement savings when organisations are working with silo budgets.

There is also a mismatch in timing when it comes to collaboration. There is a conflict between the strategic/long term aspirations of the collaborative hub and the short term vision of authorities (financial year). Whereas local authorities tend to privilege ‘quick wins’ and follow shorter-term imperatives, collaborative initiatives and joint procurement operate more in the medium and long term.

29. The CSG identified as many as 12 different financial systems used in the ten authorities.

Organisational differences

Procurement teams also deal with different areas across local authorities. As noted in Section 4.2, councils' procurement teams have influence over different areas of service. The areas that procurers may deal with in one council, such as IT, may be outsourced in other councils. Thus the mix or portfolio of procurement expenditure is different across organisations, which limits the scope for collaboration. One head of procurement thus stated that *"one of the reasons we don't have a lot in common with AGMA is because a lot of the contracts that AGMA run are in areas that we have outsourced"*.

Councils also differ in their preparedness to engage in collaboration. The AGMA maturity model establishes four stages and different authorities join in when they feel prepared. Whereas this allows a common journey and precise milestones, it also slows down the process and places no incentives for authorities to engage deeply. Sometimes different attitudes and incentives to collaborate are a product of differences in size and resources. Some councils lack the critical mass and expertise necessary to engage in certain areas of procurement and address certain markets and are therefore more eager to collaborate. Others, in turn, feel they have the right critical mass, expertise and organisation themselves without the need to share good practice and procure jointly with others. Sometimes it is about personal relationships – whether relationships are established and function well. As one interviewee noted: *"the drawback is that it depends on personalities... There are a lot of egos that come into play"*.

Different authorities are organised very differently, have different responsibilities for service provision, serve areas that are very different in size and socioeconomic challenges, and have different corporate goals. However, they also have much in common. Yet, perceptions about their distinctiveness or a desire to be different may make them reluctant to agree on common and standard specifications. As one interviewee suggested, collaboration can be made difficult by the participants' unwillingness to agree on a standard approach and the need to *"amalgamate a number of specifications that are different for no valid reason other than that is the way they have always been"*.

Conflicting politics

Conflicting politics also pose a barrier to collaboration. Each council has its own

priorities and they are accountable to their own constituency. They often perceive a conflict between the objectives of the consortium and those of their own council. They may be reluctant to collaborate if they perceive that collaboration may mean that their local suppliers would lose out on contract opportunities. Indeed, the efficiency objectives of the consortia may conflict then with the objectives of supporting SMEs and promoting sustainable development in the local economy. An interviewee expressed this dilemma: *"What AGMA and OGC contracts are in place so we don't have to go through all the time consuming process of a tender? [...] if we go through AGMA and OGC would that be helping the local economy?"*

Trying to respond to multiple procurement policies and objectives may lead to conflicting goals. There is no obvious shared procurement roadmap setting out what should be bought through national deals, what should be bought regionally and where councils may be better placed to act alone. While in markets like energy the purchasing power of ten councils may not be large, it may provide a sufficiently competitive market to secure good deals in other sectors. There is insufficient awareness of what would be appropriate in different markets.

Broader procurement landscape

A perceived lack of clarity in the procurement landscape also influences local authorities' willingness to collaborate. Indeed, HM Treasury (2009) notes how fragmentation and lack of co-ordination in the procurement landscape presents a key barrier to driving greater value for money from collaborative procurement. There is no overall governance of the activities of buying organisations and consortia, which seem even to compete with each other over similar geographies or service offerings, resulting in duplication of efforts and contracts offering varying degrees of value for money. As a result of this fragmentation, there is no clear information available on the best deals available to the public sector.

There have been many recent government initiatives to support procurement related to the fulfilment of various policy objectives. However they tend to be relatively short-lived. This is a reflection of the constantly changing procurement landscape and an 'overcrowding' of the policy through procurement agenda. This results in a proliferation of guidance and reports which can be confusing to procurers and can also lead to an excessive use of consultants. There is a risk that some initiatives

may slip down the policy agenda before they can even achieve their intended objectives, as new and more urgent policy goals emerge. Public procurers may struggle to meet multiple policy objectives and make sense of the many overlapping efficiency programmes, value for money groups, shared services groups, improvement initiatives, collaborative buying and other regional and national initiatives. As a result of this lack of rationalisation, initiatives risk not receiving sufficient attention and commitment. And rather than providing efficiencies, such initiatives may fail to reduce duplication and could even lead to additional costs.

Section 6: Understanding different types of innovation through procurement

The fragmented procurement function in many councils suggests that service departments are better placed to encourage innovation through procurement, and that the corporate procurement team may be unaware of such innovations. Whilst the interviews of heads of procurement revealed pockets of innovation, it was difficult to obtain a clear picture of the type of innovations and the extent to which innovative goods and services are being purchased. This reflects IPEG's (2007) 'Innovation in the North West local government' finding that *"what matters for innovation is what happens in the service directorates"*. Indeed, just because a council is innovative in one area does not mean that the authority innovates in another. A key challenge is to diffuse these pockets of innovation beyond the directorates and *"connect the corporate team and the directorates"* (IPEG, 2007; p.6).

We argue in Section 2 that procurement can influence innovation in a number of ways. Innovation can occur directly or indirectly influencing the innovation capacity of suppliers or the supply chain, in products as well as services, leading to radical as well as to incremental improvements. Often innovation *per se* is not sufficient. A one-off product innovation may deliver service improvements and efficiency savings in a particular area, but its impact may be limited if it is not adopted more widely. A 'silo' mentality may not allow the generation of a wider market for that particular innovation and limit its diffusion.

In the interviews, a few isolated examples were identified of product innovations, new and improved services, and improved procurement practices. Particularly in councils where procurement is devolved to the service

directorates, corporate procurement units seemed to have little awareness of product and service innovations taking place within the service directorates, although they acknowledged that significant innovations take place in certain commissioning areas. As one interviewee noted: *"I am sure there are lots of things that are happening within the services that are quite innovative especially within adult and children's services. At the moment there is a gap and I don't have a direct link to those services"*.

6.1 Procurement of innovation examples

The identified examples of innovations are characterised following the fourfold typology of public procurement elaborated in Section 3: procurement of standardised products serving a generic market (efficient procurement); addressing specific demand niches but employing known production methods and practices (adapted procurement); through adapted technical solutions (experimental procurement); and through encouraging new technical solutions to meet a generic need (technological procurement).

Efficient or 'smarter' procurement: doing things better

As one interviewee put it: *"some of the significant opportunities for savings are from processes and another considerable opportunity is how we strategically commission those services so you may source them in a completely different way"*. Opportunities for innovation therefore arise from better and more efficient procurement.

Figure 6: Procurement of innovation examples

	Specialised production process	Standardised production process
Dedicated market	<p>Experimental procurement (e.g. street lighting, glass recycling)</p>	<p>Adapted procurement (e.g. electronic monitoring system, contact centre)</p>
Generic market	<p>Technological procurement (e.g. waste management)</p>	<p>Efficient procurement (e.g. p-cards)</p>

Pressured by financial constraints, councils are now moving away from loose financial management towards streamlining procurement processes. Better contract management, more strict financial control and improvement in e-ordering and payment systems, can allow financial ‘quick wins’ (also reduce maverick buying through better contract enforcement) and produce process innovations that impact positively on supply chains. Furthermore, ‘smarter procurement’ aimed at improving processes (or ‘doing things better’) can enable resources and money to be redirected into more critical work (or doing ‘better things’) (HMT, 2004; Morgan, 2008). As such, innovation *in* procurement can be thought of as a precondition for engaging in other forms of procurement of innovation.

Straightforward savings can be achieved through reducing the processing costs of each invoice (through automating processes, perhaps), or reducing the number of invoices through consolidating them into bigger contracts or reducing the number of suppliers. Purchase cards (p-cards)³⁰ can also reduce invoice processing costs and simplify payment processes. They have the additional (and critical) advantage to suppliers of guaranteeing prompt payment. Councils such as Manchester and Bolton have successfully employed p-cards for transactions. Manchester City Council is the single biggest user of p-cards in the country: in 2009, £55 million was spent using its p-cards.³¹ While p-cards are generally used for high volume low value spend items, the council also uses them for high value spend, and it now includes p-cards as their preferred method of payment in all tender documents. Bolton has also successfully used purchase cards in areas such as school kitchens and maintenance

services (see Box 2) with net savings for the council (lower cost in processing invoices) and the supply chain (lower costs and quicker payments). It has also been able to reduce staff numbers in the accounts department and redeploy resources elsewhere within the Council.

Other innovative approaches to procurement include the use of e-auctions by Manchester Council. In e-auctions, suppliers compete in a reverse auction, bidding prices downwards in a live online event. The aim was to deliver ‘quick wins’ identified in the analysis of procurement data. E-auctions are not suitable for all purchase categories and require good communication with participants to overcome resistance. Besides achieving greater savings than traditional tendering processes, the main positive outcome for Manchester was the gaining of valuable market intelligence that could be used as a benchmark for future projects, even without the use of e-auctions.

New technical solutions (experimental procurement)

Few ‘product’ innovations have been identified as a result of procurers actively seeking an innovative solution to a particular problem. As procurement is generally devolved, such innovations are more likely to emerge in the service directorates, and innovations may take place that go unnoticed to procurers. Service managers may however not be sufficiently market-facing and fully aware of how to use procurement tools such as outcome-based specifications or ‘whole life costing’ to their advantage. In many cases, innovation requires strategic decisions by senior elected members within the organisations. In Tameside Council, innovations such as the slipper street lighting

30. Purchase or Procurement Cards are charge cards that work in a similar way to personal credit cards and can be used by officers to purchase goods or services on behalf of the authority. The Government Procurement Card (GPC) is the most commonly used card in Local Government and is endorsed by Buying Solutions through a framework contract which offers a standard card solution to local authorities. However, all of the major UK Banks provide a Purchase Card Solution.

31. See <http://www.idea.gov.uk/idk/aio/14700084>

Box 2: Bolton's use of Purchase Cards for house repair services

Employees working on council housing repairs for Bolton at Home used to run big central stores where they had to restock the van between repair jobs. The council decided in 2007 to give the operatives a purchase card (p-card) so that they could carry sufficient stock on the vehicle or visit the nearest DIY store to buy the required items using p-cards. No longer would they turn up at a house and have to drive back to the main Council depot for parts. Closing down the stores and avoiding unnecessary trips to a central depot meant significant advantages in time savings, cost reduction and environmental benefits.

By reducing the amount of time driving back and forth from the job, they also increased the time actually doing jobs, while getting rid of the stores and all the equipment not being used led to significant savings. As the procurement officer at Bolton noted: *"by working smarter they are picking up more jobs and it is costing less money"*. They are now considering rolling out the use of p-cards to other services, for instance to the fleet maintenance team who buy spare parts for school minibuses and other vehicles.

column and the glass recycling scheme (see Boxes 3 and 4) have been the product of joint working between the corporate procurement team and the service areas, but mainly due to the entrepreneurial drive of the Executive Leader Cllr Roy Oldham in deciding to experiment with a local solution. Particularly in the case of the 'slipper' column, we can speak about a process of co-invention between the procuring organisation (the lighting engineers in Tameside) and the private sector.

A key challenge arising as a result of innovations such as those illustrated in boxes 3 and 4 is finding a market that can provide a broader outlet for these products. Such innovations may have no wider benefits if they are not spread across the public or private sector, thus the *catalytic* effect of procurement may be limited. In the case of the 'slipper' column, the diffusion of this solution has been limited across the public sector, despite the marketing efforts of the North West Centre of Procurement Excellence. Rivalries between authorities, resistance to adoption (lack of agreement over risks and benefits, 'not-invented-here' syndrome, risk aversion to new ideas) have prevented a greater take up of the solution by other authorities.

Better and more adapted commissioning of services (adapted procurement)

Another source of innovation lies in strategic commissioning of services. As local authorities adopt a strategic role as providers and commissioners, the challenge for procurement

is to move away from peripheral issues and to engage in strategic commissioning of core services such as housing, education, construction and social care. In addition, the public expects more from public services. This requires a new set of skills and expertise to drive innovation forward as well as close collaboration with service users. There is a need therefore to design the service to meet demand, requiring a lot more end user involvement even before the service is launched. Innovation becomes one of co-production with service users. One way in which such involvement has been ensured is through the presence of service user representatives in the award process of the tenders, who contributed to assessing applications and making funding decisions. Trafford's Innovation Fund (Box 5) and Salford's Connexions Service (an advisory service for children and young people) are but two examples. The latter included a young person's panel being used as part of the tender assessment, which listened to, discussed and scored the different options for service provision.

Another example of innovation is the introduction of an electronic monitoring system in home care services in adult care. Electronic call monitoring records electronically the time spent with each client and better ensures that the provision matches client needs. In Manchester, electronic monitoring was introduced within a wider strategy based on the zoning of home care services and the use

Box 3: Glass recycling solution in Tameside

Tameside council wanted to recycle more glass to meet its targets. In the process, they looked for an innovative solution that would provide a convenient glass collection service for residents. So, the Engineering and Environmental services at Tameside were asked to find ways of introducing wheeled bins for the collection of glass and an outlet for the mixed cullet that would be collected as a result. Research was conducted into the pulverisation of glass into sand and ways in which this sand could be used. One outlet identified was the use of sand as a cover for winter sports pitches. In order to develop new markets, work was commissioned to assess the possibilities to use glass-derived sand on winter sports pitches. British engineering companies were also approached to investigate the use of

their hammer mills for the pulverisation of glass.

After studying the investment involved and the potential return, the council commissioned the building of a processing plant with automated feed to the hammer mill and a system of filters beyond the milling process to sort the sand into grades and also remove any plastic, metal and paper derived from the bottles collected. To house the plant, the Ash Road Environment Centre was created in Droylsden as an environmental and educational facility. Collected glass can be delivered to the traditional recycling market or processed through the pulveriser. The end product can be used for other applications including golf courses, shot blasting, engineering, filtration and aggregate.

Source: IDeA (www.IDeA.gov.uk)

Box 4: The 'slipper' street lighting column replacement system

Tameside Council had urgently to replace a large number of concrete lighting columns that were over 30 years old and heavily deteriorated. Lighting renewal works can be expensive because of the very high cost of electricity cable jointing, which accounts for around 30 per cent of the cost of the installations. The lighting engineers joined with the lighting installation and repair contractors to devise a new design – the 'slipper' column—that would eliminate the involvement and costs of the electricity supplier. The 'slipper' is a steel column with a sleeve at the bottom, which slips over the base of the old concrete column. They are installed by 'cropping' the old concrete column just above the access door. A new column door allows the original column wiring to be accessed and rewired to the new lamp and control gear. Over 7,000 units

of the column were installed, saving the authority more than £2 million, between 31 and 46 per cent savings per unit replaced. Additional environmental benefits have flowed from a reduction of waste going to landfill and of CO₂ emissions since fewer visits to the site are required: from up to five (column installation, electricity company excavation for jointers, jointing team, contractor to remove old column, reinstatement of footpath) to just one. Furthermore, while conventional lighting replacement can take up to twelve weeks because of the multiple call-outs, this form of replacement can be done in an hour. Quicker installation causes minimal disruption for pedestrians and local residents, and has additional benefits for traffic safety and crime reduction.

of a reduced supplier base. Zoning means that external homecare providers service discrete zones within an area. This reduces travel time for providers, makes the monitoring of the

service easier and provides a better guarantee of service provision in the area.

Addressing opportunities for innovation requires long-term dialogue with markets

Box 5: Trafford 'Putting People First' Innovation Fund

Trafford service users were positive about the prospect of increased choice and control in the provision of care. But the council was concerned that the market offering these services was not developed enough to respond to their needs. The councils launched a competition for ideas, providing grants to innovative projects.

The innovation fund aimed to *"support the development of a diverse and robust market which expanded the choice and control available to Trafford citizens"*. To this aim an initial innovation fund of £100,000 was created by top slicing the Social Care Reform Grant in 2009/10 (this was later increased to £150,000).

Applications were invited for grants of between £500 and £50,000. In total, 36 applications were received from individuals, public, private and third sector organisations and community groups, and 14 projects were awarded funding. Applications were scored based on various criteria, such as innovative content, whether it addressed unmet needs, value for money, sustainability, impact on well-being, etc. Unsuccessful applications have been supported by the Market Development Officer. The Innovation Fund has been seen as a successful initiative to stimulate creative market responses including proposals for: home-based counselling services, home visiting services for the visually impaired, IT use for older people, and activities to improve life skills and social opportunities for people with autistic spectrum conditions.

and suppliers in the procurement processes, particularly in areas where procurement specialists have not been traditionally involved and where markets may not be very developed. Through long-term, strategic engagement with suppliers and the introduction of incentive contracts, better price/quality assessment in provider selection, and better monitoring, Manchester City Council has achieved significant quality improvements lower costs in areas such as foster care and residential care services. The commissioning agenda is still so new that a contestable, commissioning-based market place may not yet exist, thus requiring market stimulation to develop alternatives. Faced with this challenge, initiatives such as Trafford Innovation Fund (Box 5) have been directed at shaping the market, in this case to respond to the challenge of the personalisation agenda in adult social services. Such initiatives could be seen as a form of "pre-commercial procurement" as it is directed as developing ideas prior to the procurement phase.

Finally, one of the challenges of procurement is to be able to innovate through new forms of delivery arrangements and partnerships with public, private and third sector partners. Councils have engaged in partnerships with private and non-for-profit organisations for the delivery of services, often together with other councils or organisations.

Opportunities for innovation may therefore come from such partnership arrangements rather than through conventional contractual mechanisms. These arrangements are diverse, ranging from the setting up of arm's length management associations to joint ventures and social enterprises. Examples include the Unity and Impact Partnerships³² in Rochdale and Oldham respectively. Some arrangements include more than one council. Stockport has established a joint highways services committee with Trafford to share best practice and services. Social enterprises have been created to manage services, such as Stockport Sports Trust for sporting activities, Wigan leisure and culture trust, and Link4Life in Rochdale for leisure and cultural services.

Innovative solutions have emerged from these partnerships, in relation to the delivery of new or better services, or through better engagement with the local supply chain. Rochdale has used the Impact partnership to transform its customer contact centre to provide a single point of contact for telephone and email enquiries from local residents. The project has reportedly significantly improved access, as well as creating local jobs.

A better understanding of these varied types of partnership and how they support or inhibit

32. Unity provides services to Oldham Council, such as highways, engineering, traffic, property, architecture, maintenance, ICT, customer services, contact centre and exchequer services, as well as consultancy services. The Impact Partnership is a 15-year joint venture partnership between Mouchel, Agilisys and Rochdale Metropolitan Borough Council. It delivers Highways, Property and ICT services to support the regeneration of Rochdale MBC.

innovation would require a more in-depth study, and is beyond the scope of this research.

Technical solutions for large, complex services (technological procurement)

There are also instances of procurement for large and complex services requiring greater resources and contract design capabilities as well as good contract and risk management skills. Such projects can be complex construction projects such as waste management plants requiring heavy investment in state of the art technology. One example is

the recently completed procurement process for an integrated waste management plant in Greater Manchester (see Box 7). Such a large, complex project required a detailed knowledge of the relevant technologies, early dialogue with potential suppliers to understand their commercial requirements to ensure good quality bids were put forward, and innovative ways of designing contracts taking into account whole life cost and risk considerations.

33. Article 29 of the EC 2004 Public Sector Procurement Directive introduced the concept of competitive dialogue, which allows better information flow in designing complex public contracts, and an opportunity for bidders to develop alternative proposals in response to a client's outline requirements. Interestingly, competitive dialogue was used in this project before it was introduced in the legislation.

Box 6: Greater Manchester Waste Management Authority PFI

Greater Manchester Waste Disposal Authority (GMWDA) is responsible for 5 per cent of the UK's municipal waste, providing waste disposal services for over 973,000 households in Greater Manchester. It needed a solution in order to divert waste from landfill and meet recycling targets. So, in 2009, the Authority awarded a £3.8 billion, 25 year contract to a consortium of Viridor Waste Management and John Laing Infrastructure to provide an integrated waste management solution to deal with the 1.5 million tonnes of waste produced in the city-region every year.

This is the single biggest waste management PFI contract in Europe. The project involves the construction and upgrading of two mechanical biological treatment plants, one materials recycling facility, one composting plant and one CHP (Combined Heat and Power) energy from waste plant (total construction costs around £640 million). The refuse-derived fuel (RDF) from waste will be transported by rail to the energy from waste CHP plant to be built in Runcorn, which will provide energy for the INEOS chemical manufacturing operations plant. The key challenge for the procurement process was to ensure the right technological solution at a known cost at the RDF outlet. As a result two special purpose vehicles (SPV) were set up for the PFI, one responsible for the waste services and another one responsible for the delivery of the thermal power station.

Apart from the risks associated with the design, construction and operation of the

waste facilities, there are three areas in waste management PFIs where risk needs to be considered carefully: fluctuations in the demand for waste within the life of the contract, as a range of factors can influence the flow of biodegradable waste or alter its composition; the complexity of planning policy and the uncertainties over timescales and outcome of planning applications (and cost implications of planning delays); and changes in law affecting the waste management sector.

Efforts to gain public and stakeholder acceptance of the technological solution through continuous engagement eased the planning process. Extensive dialogue with industry (including competitive dialogue³³) helped mitigate market risks and develop the existing marketplace for RDF. In relation to regulatory risk, a Procurement Director was seconded from DEFRA, with expertise on procurement and national environment policy.

The project reached financial close later than foreseen due to the collapse of the PFI market in the wake of the credit crunch. Eventually the Treasury stepped in to support this and other PFI projects in 2009 with an additional capital injection. Despite the delays, the project is held to be a success for its management and execution of the procurement process, and follow-up projects are now underway in other regions in England, albeit on a smaller scale.

6.2 Barriers to innovation

The innovation examples above demonstrate that each type of procurement presents different opportunities for innovation and different challenges. Understanding the different markets is therefore essential to understand the risks, and tailor procurement strategies accordingly. Whereas well-established competitive markets may be addressed through arm's-length mechanisms such as e-procurement, other less developed markets for local services may need to be encouraged through working in partnership with suppliers and end users. Likewise, markets for complex products would require a dialogue with suppliers, innovative ways of designing contracts, and good contract management.

A key barrier to innovation seems to be the lack of skills and expertise needed effectively to understand, communicate and help shape the market. A shortage of commercial skills among procurers prevents a more successful engagement with the marketplace to develop closer supply relations. According to one interviewee: *"Within the authorities you have a lot of people working at a low level [...] they are very few that can work at a very senior level with the very senior teams."* Engagement with supply markets is generally more passive, in the form of 'meet the buyer' events and the publication of 'selling to the council' guides.

Close and early engagement with suppliers allows access to industry knowledge not available in-house that can be used to draw better contract specifications. As one procurement official noted: *"We have found all the ideas come from the suppliers not us. The trick is having those discussions before you have even committed pen to paper with your specification, have an idea of what you want but have an open discussion with them"*. Dialogue also helps identify opportunities for cost savings and creates an environment of trust to realise those opportunities. As one interviewee noted: *"The real savings were made in talking to the companies before we even put the tender out."* A procurement official who reported a successful commercial dialogue with suppliers noted how some of their suppliers had never been consulted before about the type and cost of the service and reacted positively to such dialogue.

Intentionally or not, procurement will have an influence on innovation. Suppliers and the supply chain will adapt to the signals of public demand and respond with innovative solutions

if they see the public sector as a demanding and intelligent customer (as opposed to one privileging the cheapest solution). Engaging the suppliers early, managing their expectations and increasing the transparency and accessibility of the process are more likely to lead to innovations. The need to 'educate' the suppliers is reflected by one procurement official: *"We are finding that unless we tell our suppliers this is important to us they won't do anything, so we need to drive it through."*

Innovation is harder when specifications are made too rigid and narrow, rather than being based on outputs or outcomes. Such rigidity does not allow suppliers to propose innovative ways of delivering those outcomes. Different and over-specified requirements may often be made for identical services and purposes. While there is an increasing awareness of the importance of outcome specifications (and procurers are increasingly incorporating them in their tenders) inertia prevents their wider use. As one officer mentioned: *"the same specification is used again and again. They redo the same one, get it onto the portal, get the tenders in and place the orders"*. Procurers often fail to review or market test these specifications, not questioning whether that is the right way forward and whether it may be stifling innovation and raising costs. This inertia constrains both innovation and opportunities to achieve savings. It also makes collaboration difficult across organisations as procurers cannot agree a common specification.

The low profile and reduced influence of some corporate procurement teams, and the lack of interaction with commissioners, constitute additional barriers. Innovations related to new services and service transformation are more likely to emerge when there is good communication with the service areas, and particularly when procurers and commissioners work together or when collaboration takes places across different sectors or policy areas. Fragmentation between commissioners and procurers or a silo mentality in different areas of public service can constrain opportunities for innovation.

A risk aversion culture can also impede innovation and the drive to do things better or more creatively. Risk aversion prevents the taking up of a new idea or the adoption of a solution that has worked well in a neighbouring council. As one interviewee said: *"there is often strong resistance to adopting opportunities already adopted in nearby councils and which in several instances should lead to annual*

savings". Another barrier is the lack of good information. Procurement information cannot easily be extracted from local authorities' financial management systems, and when it can it is not usually comparable across the organisation and with other councils. This, coupled with the fragmentation of procurement in many organisations, inhibits the understanding of what councils procure, who they do it with. It also makes it hard to identify opportunities for savings and innovation.

Section 7: Engagement with the local supply base

7.1 Engagement with SMEs and the voluntary sector

In order to adequately engage with suppliers, local authorities need to have a coherent strategy to deal with the market place, including small firms and the voluntary sector. SMEs and the voluntary sector find it difficult to work with the public sector if opportunities are not well advertised or the process and procedures to access those contracts are too onerous. All the councils in Greater Manchester make working with SMEs and the voluntary sector as a key priority in their procurement strategy, and most have already agreed a procurement compact with the voluntary sector, as well as small business-friendly concordats. However, there is scope for better harmonising processes and requirements, and coordinating the way in which councils engage with those sectors.

In order to engage the supplier market and make them aware of opportunities, substantial effort has been made to advertise opportunities better, using electronic portals and 'meet the buyer events'. Councils have also tried to simplify procedures for tendering and to raise the capacity of suppliers through working with intermediary agents such as chambers of commerce. However the practices used to engage with SMEs still need to be harmonised across the councils. There are still many different practices and documentations, as one procurement officer noted: *"we have a standard PQQ [pre-qualification questionnaire], but ten different versions"*. This leaves SMEs, as one interviewee put it: *"scratching their heads and having to apply to tender with ten different authorities"*.

Councils have sought greater synergy with procurement requirements and the introduction of standard terms and conditions. While significant steps have been taken towards simplifying PQQs, small firms would benefit from a procurement process for tenders under the EU limits that is not only simplified but is also standard for all councils (perhaps allowing for some small variations). SMEs shouldn't need to fill different and multiple PQQs if they want to work for different councils. One procurement officer asked: *"if you have already prequalified for Wigan why do you need to prequalify again for Salford or Manchester etc?"*

An online portal known as 'the Chest' advertises procurement opportunities to businesses in the Northwest. Registration is free for suppliers who are then alerted to regular updates about opportunities allowing them to respond electronically. As one interviewee put it: *"In the past small companies used to wade through local papers looking for adverts so we can help to take that away by getting them to register on the Chest"*. However its use is uneven across councils. It is generally used by the corporate procurement teams for the contracts they have control over, but much less so within the service departments. As a result, SMEs may still be missing out on many tender opportunities. E-portals are also useful sources of information about how many SMEs apply and their success rates, allowing a better understanding of the supplier base, and they can be used by local authorities to plan training activities and business support (as currently used by Manchester Council).

Councils sometimes organise 'meet the buyer' events and other activities to make suppliers aware of opportunities. These are

generally organised by individual councils to address their local suppliers. However, there are few joint supplier events between councils across Greater Manchester. Cross-Manchester events (or even events involving two or three neighbouring councils) could help make suppliers in the city region aware of opportunities outside of their own area and also for suppliers to learn from each other, even to form consortia. As one procurement officer noted, such joint events would offer suppliers an opportunity for *“up-skilling and learning from other suppliers with greater expertise”*.

Better advertising may not be sufficient if the local supply base lacks capacity and training to benefit from those opportunities. Some councils successfully work with chambers of commerce, business links and other business support organisations to train suppliers, particularly SMEs and the voluntary sector. Local agencies such as Business Bolton provide training and advice for local businesses on how to tender for contracts with the Council. Organisations such as the Voluntary Sector North West (VSNW) and the North West Infrastructure Partnership (NWIP) provide hands-on support to the voluntary sector, while local development agencies such as Tameside Third sector coalition (T3SC) provide training, advice and support services and facilities locally. There are therefore significant opportunities from sharing good practice developed in some authorities when dealing with the SME and voluntary sector supply base more broadly across Greater Manchester.

7.2 Innovation and engagement with the local economy

Procurement is expected to contribute to multiple policy agendas, such as regeneration, sustainability, innovation, as well as delivering value for money and meeting the Government's efficiency targets. But local government is also expected to promote local economic development. There is an expectation that procurers should aim to retain a proportion of the procurement spend in the local economy and that local SMEs should be supported. As one procurement officer noted: *“with SMEs councils love us to go to local SMEs but also love us to make savings on purchasing”*. Oldham Council even acknowledges in its procurement strategy the difficulty of balancing the ‘conflicting priorities’ of obtaining value for money, sourcing locally, and reducing the number of low-value creditors.

As noted in the Byatt (DTLR, 2001) report, whilst local business should be encouraged to bid alongside contractors from outside, favouring local and regional contractors may not work in the best interest of service users and can even be counterproductive for suppliers. It may exclude potential innovative solutions that bring benefits in terms of value for money, improved public services and indirect value to the region in terms of the technological upgrade of a location. Moreover, leakages and spillovers from such innovations may be more significant in terms of innovation impacts than local direct contracting, and can be secured through indirect means, such as sub-contracting practices in the region, licensing, and purchasing of complementary products and services such as maintenance services.

By the same token, the number and value of invoices addressed to a particular location is not necessarily an indication of local impact. A University of Central Lancashire study suggested that many suppliers within Cumbria do a relatively low level of subcontracting within the sub-region. This implies that a count of local invoices would probably overestimate the proportion of economic benefit remaining locally (Poulter, 2007). The size and structure of the supply chain, and factors such as whether the contractor is headquartered in the area, are key in determining local economic benefits. Given their diversity in size, economic diversification and industrial specialisation, it can be expected that some local authority areas will benefit more from certain types of procurement contracts than other. Big, agglomerated and economically more diversified areas would naturally obtain a larger proportion of contracts than smaller and less diversified ones. Expecting a minimum proportion of local contracting may be unrealistic given the diversity of the supply base in each council area and the mix of goods and services procured. In any case, such figures are meaningless without a proper understanding of the local supply base. As a procurement chief put it: *“Only 17 per cent of our spend goes to companies based in the area but [...] we don't know whether 17 per cent is good because how many companies are there in the council that can supply the sorts of goods and services we demand?”* The local supply base may lack the right specialisation to respond to all demands from one local authority, but at the same time may be able to gain specialised contracts elsewhere.

A better understanding and management of the supply chain can help our understanding of the local impact of procurement. However such expertise is limited within individual councils. Such resources and expertise may require a critical mass only available at sub regional or regional level. Some big councils have tried to assess the local impact of the supply chain using local multiplier tools and external consultants, with the aim of quantifying how the authority's procurement strategy impacts on the local economy. However, rather than duplicating such efforts in each local authority (which may also lead to protectionist attitudes) such initiatives may better be carried out as part of the City region economic strategy, integrating procurement, local development and competitiveness goals. As one procurement officer reflected: *"one thing that is lacking is an understanding of the Greater Manchester supply base. [...] You know who you are dealing with but do you know whether there are half a dozen of those companies operating within Greater Manchester for whatever reason have not thought of doing business with the local authority so are there opportunities that are being missed there? That mapping of the supply base within Greater Manchester I think is something someone must have but it is not visible to us as procurers."*

Firms do not perceive fixed administrative boundaries as relevant, particularly if they are located in a cross-county or cross-regional area. As a procurement officer noted: *"If a supplier is based in Oldham and they are tendering for work in Rochdale they don't see the boundaries of the local authorities."* 'Local' should refer to local needs rather than the local supply base, and the key focus should be the quality and responsiveness to the end user rather than to where suppliers are located. Furthermore, treating the supply base as fragmented and isolated (as a result of the fragmentation of the demand) may prevent suppliers from learning from each other and even collaborating. Such fragmentation may also be detrimental to innovation.

Engagement with suppliers also involves managing their expectations. Suppliers are often unaware of EU procurement procedures and the legal processes councils need to follow. This was illustrated by an interviewee, who said: *"I did a presentation last year and talked about the barriers we have to jump through to meet EU and UK legislation. There was a room of 30 and 40 people saying do you really have to do all that? [...] The feedback from this group was that they had not been told*

that." Furthermore, firms may expect councils to bail them out when they run into financial difficulty. The challenge is instead to create a level playing field and contribute to the training and up-skilling of firms so they can access contracts locally and in other areas.

As mentioned in Section 3, different goods and services and different markets require a different procurement strategy. However a clear roadmap of what should be procured at which level seems to be missing. In areas where there may be more local added value, where proximity effects are important,³⁴ or where constant interaction with the end user is vital to the service, a sub-regional approach is likely to be more appropriate. For standard and generic products, local procurement would imply unnecessary invoicing, bigger transaction costs for both buyer and supplier and diminishing opportunities on the part of the procurer to benefit from larger purchasing power. However, a local solution may be suitable if centralised procurement does not offer added value.

34. The cost of providing the service across a distance may offset the benefits of aggregation such as certain types of transport, maintenance and repair services.

Section 8: Conclusions

This study set out to understand the opportunities and barriers to innovation in local authorities, with a focus on procurement of goods and services in the Greater Manchester area.

Understanding the influence of public procurement on innovation required the development of a framework covering organisational and geographic issues, and the interplay between technologies and markets. Such understanding needs to go beyond the policy intention to 'procure something that doesn't exist' to consider the types of innovation that can result from procurement activities, and the organisational and institutional aspects that can prevent the adoption and diffusion of innovations.

Our review of UK policy reveals that the government is trying to pursue multiple agendas through procurement.

- It aims to encourage the use of innovative procurement practices such as outcome-based specifications as part of 'smarter' or more strategic procurement within individual authorities (as a way to deliver better value for many and more effective services, as well as addressing specific economic development objectives of local authorities).
- It sees procurement of innovation as having the potential of shaping markets and increasing the competitiveness and productivity of UK businesses.
- It regards local procurement as a means to drive the UK government's agenda on issues such as climate change and skills.

Tensions arise in trying to address these often conflicting agendas: Whitehall and local priorities may be different. Conflicts may be perceived over the impact of policies on the local economy. This issue of who benefits, as well as the political complexion of authorities, may influence whether such national agendas are fully adopted. Local authorities may also find it difficult to engage in a broad agenda of encouraging innovation and shaping markets unless it is perceived to benefit the delivery of strategic services to the community.

The procurement of innovation agenda also runs the risk of being too diffuse and vague to have much impact. It should instead focus on a reduced number of areas or markets. Such a strategy would require prioritisation of a narrow set of procurement areas or categories where public purchasing can exercise effective leverage. There should also be more collaboration in purchasing across the public sector to ensure the right signals are sent to the market.

Our examination of the organisation of procurement in Greater Manchester suggests that authorities are adopting many of the recommendations of the Byatt report and other reviews into procurement practice. All the local authorities in Greater Manchester have a central or corporate procurement unit in charge of coordination, standard setting, guidance and monitoring as well as drafting corporate procurement strategies. But ultimate responsibility for procurement generally lies within the service directorates. However pressures to improve efficiency and coordination in procurement, as well as the emerging commissioning agenda, are triggering additional organisational changes, with some

authorities moving towards more centralised procurement.

While it is difficult to make a case that all organisations should adopt the same functional model for procurement, there is still much scope for improvement in internal communication, market intelligence, compliance and common standards. Procurers also need to move away from peripheral purchasing (that can be purchased jointly or outsourced) and engage with strategic activities such as social services care and education, working jointly with commissioners and other organisations as appropriate.

The commissioning agenda requires procurement skills if it is successfully to advance. But it also offers valuable opportunities for innovation and the shaping of new and competitive markets in those areas, as well as for local development. However, it is important to recognise that local authorities are not the same: they are diverse in their size, capacity, corporate objectives and purchasing portfolios (and their influence in the market). While procurement needs greater capacity and strategic orientation, a much larger capacity may not be cost effective in small authorities, which instead might consider sharing procurement resources with other councils.

Greater Manchester has a long history of collaboration in procurement. From a mainly *ad hoc*, voluntary and informal arrangement, the tendency is now towards greater formalisation of procurement collaboration, through joint purchasing and shared services. However such efforts to deepen collaboration are constrained by a lack of shared understanding of collaboration, poor information, insufficient empowerment of procurers, distrust and defensive attitudes. A shared perception of the benefits of collaboration seems also to be lacking, as are sufficient incentives to engage in such activities.

Our interviews with procurement officers in Greater Manchester local authorities revealed pockets of innovation within councils. However, the internal organisation of procurement makes it difficult to obtain a clear picture of the type of innovations and the extent to which innovative goods and services are being purchased. One key conclusion in relation to the innovation procurement agenda is that much of this innovation is 'hidden' in the service directorates, which can hinder further adoption and diffusion of innovations.

Procurement of innovation takes many forms, from improving processes and services to product innovations and market shaping. Process innovations can arise from more efficient or 'smarter' procurement. 'Smarter procurement' can enable resources and money to be redirected into more critical work. Some councils actively search for innovative procurement solutions to pressing problems, which have led to product innovations. Strategic commissioning of adapted services is another source of innovation, particularly in areas where procurement has not been involved traditionally and where markets are underdeveloped. Strategic partnerships with private and non-for-profit organisations can help drive such innovations. Finally, procurement for large, complex services can lead to technological innovations requiring greater capabilities in contract design, contract management and risk management.

These examples demonstrate that each type of procured good and service and its associated market presents different opportunities for innovation – and different challenges and risks. Such understanding is essential in tailoring procurement strategies. Whereas well established competitive markets may be addressed through arm's-length mechanisms such as e-procurement, other less developed markets may need to be encouraged through working in partnership with suppliers and end users. Certain innovative solutions can be best developed through experimental, small-scale pilot projects. However, once tested they need a follow up strategy to enable their scaling up and further development (perhaps with the incentive of a commitment to purchase such goods in the future).

However a lack of commercial skills and expertise to understand and engage early with suppliers can prevent such innovation, alongside institutional inertia, poor data and intelligence on procurement expenditure, low collaboration and a risk-averse culture.

The local impact of procurement is not well understood. More research is therefore needed into the impact of the procurement supply chain on the city-region economy. Such understanding may contribute to agendas such as Total Place, based on cross-sectoral collaboration and the pooling of funding streams to tackle local economic challenges.

However, three issues stand out as conclusions.

- **Procurement is much broader than the activities of the procurement departments.** A broader organisational picture is needed involving senior elected members and managers of service departments. It is difficult to see how procurers can respond to the many increasingly complex policy agendas (such as skills, SMEs, innovation, sustainability) that procurement is expected to deliver when they have limited influence over some policies. In this sense, the need to adopt a broader organisational view of procurement constitutes both a finding and a shortcoming of our study, as we only approached procurement professionals relying on their perceptions rather than those of other functional specialists or senior managers.
- **Procurers must both increase their institutional profile and engage only in core activities with true leverage.** Expectations on the capacity of procurement to deliver on a number of policy areas are paradoxically heightened at a time when increased outsourcing, multiple forms of public-private service delivery and joint purchasing agencies mean that procuring authorities have individually less direct influence over procurement decisions. Procurers need to regain that influence.
- **Discussions on procurement of innovation cannot take place in isolation.** They should recognise both complex organisational issues and diverse, often conflicting, policy goals. Rather than elevating innovation goals above the proximate goals of public procurement, the challenge is to understand how innovation can help other policy objectives or help overcome perceived conflicts in policy goals. Decisions should be made on a case-by-case basis depending on what is being procured and its uses, as well as other political and financial constraints and objectives.

Section 9: Recommendations

At local authority level

1. Adopt 'smarter' procurement practices for 'quick wins', including e-procurement, to minimise fragmentation and avoid duplication. 'Smarter' procurement should enable better deployment of procurement expertise and resources in core business areas. It should also help identify more potentially successful opportunities for collaboration.
2. Improve the leadership, capacity and resources of the procurement function, and increase the incentives and guidance for the use of outcome-based specifications.
3. Improve the commitment to strategic commissioning, overcoming communication and cultural barriers between procurers and commissioners.

At sub-regional level (AGMA, Manchester City Region)

4. Improve the alignment between the Greater Manchester economic strategies and procurement strategies of local authorities.
5. Use the Manchester multi-area agreements (MAA) effectively as a platform for better procurement practices and for local supply chain engagement.
6. Pilot projects to understand the impact of procurement in the city region economy, testing different methodologies and approaches, with the collaboration of local authorities.

7. Use the multi-area agreements to identify collaborative innovation opportunities across councils and other public organisations, such as the Greater Manchester Police, the Transport Authority, the Fire and Emergency service and the Primary Care Trusts.
8. Link such opportunities to ongoing innovation initiatives at the national level, for instance with the Technology Strategy Board.
9. Link collaboration in procurement with local value, as well as efficiencies. Extract lessons from 'Total Place' to better align local needs, innovation opportunities and procurement activities within identified strategic areas.
10. Develop joint engagement activities with the marketplace such as supplier events where suppliers from different boroughs can meet.
11. Introduce rewards and incentives for collaborative working, and a better attribution of costs and benefits.

At Regional level (NWIEP/NWDA)

12. Advance the standardisation of procedures and documentation across councils in the region.
13. Develop a central qualification system for suppliers at the regional level, so that firms don't have to qualify each time for measures such as equality, diversity and sustainability standards. Some good

practices could be drawn from initiatives in the construction sector that simplify procedures for both suppliers and buyers.

14. Roll out the use of the Chest online procurement portal for all opportunities within councils, and increase SME registration on it.
15. Set up a regional database of framework contracts.
16. Assess opportunities for collaboration and shared learning across sectors, for instance with the NHS NW procurement hub.
17. Tackle regional skills and capabilities shortages identified in suppliers and supply chains through targeted business support assistance, working with the chambers of commerce and the NWDA.

National (OGC /DCLG/BIS/IDeA)

18. Encourage the adoption of pilot, experimental procurement projects (through TSB and other funding).
19. Communicate good practice and innovations better across the public sector. Promote existing information exchange platforms (e.g. IDEA) to advertise case studies of innovation that could enable shared learning and learning from other local authorities or government departments.
20. Rationalise the procurement landscape, identifying when existing organisations are providing value for money or leading to unnecessary overlap and competition.
21. Improve alignment of the multiple procurement agendas. Introduce a better roadmap of the different policy objectives to be delivered by procurement identifying who is expected to deliver on these agendas and at what level.

Appendix A: References

- Abernathy, W.J. and Clark, K.B. (1985) Innovation: Mapping the winds of creative destruction. 'Research Policy.' 14(1), pp.3-22.
- Aho, E., Cornu, J., Georghiou, L. and Subira, A. (2006) 'Creating an Innovative Europe.' Report of the Independent Expert Group on R&D and Innovation. Luxembourg: Office for Official Publications of the European Communities.
- Baily, P., Farmer, D., Jessop, D. and Jones, D. (1994) 'Purchasing Principles and Management.' 7th ed. London: Pitman.
- Bakker, E. and Walker, H. (2008) 'Collaborative Procurement in Local Government. Report for South East Centre of Excellence.' Available at: <http://www.southeastiep.gov.uk/uploads/files/SECECollaborativeprocurementreport16June2008.pdf>
- BERR (2008) 'Public services Industry Review: understanding the public services industry: how big, how good, where next?' A Review by Dr DeAnne Julius. London: BERR.
- Better Regulation Commission (2003) 'Government response: Better Regulation Task Force (BRTF) and Small Business Council (SBC) Report. Government: Supporter and Customer?' London: BRC.
- Cabinet Office (2006) 'Partnership in Public Services: An Action Plan for Third Sector Involvement.' London: Cabinet Office.
- Cabral, L., Cozzi, G., Denicolo, V., Spagnolo, G. and Zanza, M. (2006) Procuring innovations. In: Dimitri, N., Piga, G. and Spagnolo, G. (Eds) 'Handbook of Procurement.' pp.483-530 Cambridge, MA: Cambridge University Press.
- Caldwell, N. and Bakker, E. (2009) Procurement process in the public sector: An international perspective. In Thai, K. (Ed.) 'International Handbook of Public Procurement.' Boca Raton: Taylor & Francis Group.
- Caniëls, M.C.J. and Gelderman, C.J. (2007) 'Power and interdependence in buyer supplier relationships: A purchasing portfolio approach. 'Industrial Marketing Management.' 36(2), pp.219-229.
- Cave, J. and Frinking, E. (2003) 'Public procurement for R&D.' Available at: http://www2.warwick.ac.uk/fac/soc/economics/staff/faculty/cave/publications/pp_for_rd.pdf (Accessed 19 October 2009).
- Cavinato, J.L (1991) Identifying inter-firm total cost advantages for supply chain competitiveness. 'Journal of Purchasing and Materials Management.' 27(4), pp.10-15.
- CBI/LGA (2008) 'Improving the strategic commissioning of public services: a joint LGA/CBI vision.' London: CBI/LGA.
- Dalpe, R. (1994) Effects of government procurement on industrial innovation. 'Technology in Society.' 16(1), pp.65-83.
- Dalpe, R., Debresson, C. and Xiaoping, H. (1992) The public sector as first user of innovations. 'Research Policy.' 21(3), pp.251-263.
- DCLG (2006) 'Strong and Prosperous Communities: The Local Government White Paper.' London: DCLG.
- DCLG (2007) 'Delivering Value for Money in Local Government: Meeting the challenge of CSR07.' London: DCLG.
- DCLG (2008) 'National improvement and efficiency strategy.' London: DCLG.

- DCLG (2009) 'Roots Review: Review of arrangements for efficiencies from smarter procurement in local government.' London: DCLG.
- Dimitri, N., Dini, F. and Piga, G. (2006) When should procurement be centralized? In: Dimitri, N., Piga, G. and Spagnolo, G. (Eds) 'Handbook of Procurement.' pp.193–220. Cambridge, MA: Cambridge University Press.
- DIUS (2008) 'Innovation Nation.' White Paper. London: DIUS.
- DTI (2003) 'Competing in the global economy: the innovation challenge.' London: DTI.
- DTLR (2001) 'Delivering Better services for citizens. A review of local government procurement in England.' Ian Byatt. London: DTLR/LGA.
- Edler, J. and Georghiou, L. (2007) Public procurement and innovation—resurrecting the demand side. 'Research Policy.' 36(7), pp.949-963.
- Edler, J., Ruhland, S., Hafner, S., Rigby, J., Georghiou, L., Hommen, L., Rolfstam, M., Edquist, C., Tsiouri, L. and Papadakou, M. (2005) 'Innovation and Public Procurement. Review of Issues at Stake.' Final Report. Available at: ftp://ftp.cordis.lu/pub/innovation-policy/studies/full_study.pdf (Accessed 19 October 2009).
- Edquist, C., Hommen, L. and Tsiouri, L. (2000) 'Public Technology Procurement and Innovation.' Norwell, MA: Kluwer Academic Publishers.
- Erridge, A. and McLroy, J. (2002) Public procurement and supply management strategies. 'Public Policy and Administration.' 17(1), pp.52-71.
- Essig, M. (2000) Purchasing consortia as symbiotic relationships: developing the concept of 'consortium sourcing'. 'European Journal of Purchasing and Supply Management.' 6(1), pp.13-22.
- European Commission (2005) 'Public Procurement Driving Research and Innovation.' Luxembourg: Office for Official Publications of the European Communities.
- Gelderman, C.J. and van Weele, A.J. (2005) Purchasing portfolio models: a critique and update. 'The Journal of Supply Chain Management.' 41(3), pp.19-28.
- Geroski, P.A. (1990) Procurement policy as a tool of industrial policy. 'International Review of Applied Economics.' 4(2), pp.182-198.
- HM Government (2007) 'Putting people first: a shared vision and commitment to the transformation of adult social care.' London: TSO.
- HM Treasury (1995) 'Setting New Standards: A Strategy for Government Procurement.' London: TSO.
- HM Treasury (1999) 'Gershon Review of civil procurement in central government.' London: TSO.
- HM Treasury (2004) 'Releasing Resources to the Frontline: Independent Review of Public Sector Efficiency.' Gershon Review. London: TSO.
- HM Treasury (2007) 'Transforming government procurement.' London: TSO.
- HM Treasury (2008) 'Accelerating the SME economic engine: through transparent, simple and strategic procurement.' Glover Report. London: TSO.
- HM Treasury/Cabinet Office (1998) 'Efficiency in Civil Government Procurement.' The PX Report. London: TSO.
- Hommen, L. and Rolfstam, M. (2009) Public procurement and innovation: towards a taxonomy. 'Journal of Public Procurement.' 9(1), pp.17-56.
- IPEG (2007) 'Innovation and good practice in North West local government: where is the current position of the region? What should local government do next?' Summary of findings. Manchester: University of Manchester.
- Kamien, M.I.M. and Schwartz, N.L.N. (1975) Market structure and innovation: a survey. 'Journal of Economic Literature.' 13(1), pp.1-37.
- Keohane, N. (2009) 'Procuring for place: New reforms to promote local innovation and sustainability.' London: New Local Government Network.
- Kraljic, P. (1983) Purchasing must become supply management. 'Harvard Business Review.' 61(5), pp. 109-117.
- Lamming, R. (2002) Purchasing and organizational design. In: 'Gower Handbook of Purchasing Management.' Third edition. Burlington: Gower Publishing Company.
- Lamming, R. et al. (2000) An initial classification of supply networks. 'International Journal of Operations and Production Management.' 20(6), pp.675-691.

- Malerba, F., Nelson, R., Orsenigo, L. and Winter, S. (2007) Demand, innovation, and the dynamics of market structure: the role of experimental users and diverse preferences. *Journal of Evolutionary Economics.* 17(4), pp.371-399.
- McCrudden, C. (2004) Using public procurement to achieve social outcomes. *Natural Resources Forum.* 28(4), pp.257-267.
- Morgan, K. (2008) Greening the Realm: sustainable food chains and the public plate. *Regional Studies.* 42(9), pp.1237-1250.
- Mowery, D. and Rosenberg, N. (1979) The influence of market demand upon innovation: a critical review of some recent empirical studies. *Research Policy.* 8(2), pp.102-153.
- Murray, J.G. (2009) Towards a common understanding of the differences between purchasing, procurement and commissioning in the UK public sector. *Journal of Purchasing and Supply Management.* Vol. 15, Iss. 3, pp.198-202.
- Murray, J.G. *et al.* (2008) Procurement as a shared service in English local government. *Management.* 21(5), pp.540-555.
- ODPM (2003) *National procurement strategy for local government in England (2003-2006).* London: ODPM.
- OFT (2004) *Assessing Impact of Public Sector Procurement on Competition.* London: OFT.
- OGC (2003) *Report to the Chancellor of the Exchequer: Increasing Competition and Improving Long-term Capacity Planning in the Government Market Place.* London: OGC.
- OGC (2010) *Policy through Procurement (PtP) Action Plan.* London: OGC.
- OGC/DIUS (2009) *Promoting skills through public procurement.* London: OGC/DIUS.
- Porter, M.E. (1990) *The Competitive Advantage of Nations.* New York: Free Press.
- Poulter, C. (2007) *'Is buying a burden?'* Wigan: North West Centre of Excellence.
- Public Administration Select Committee (2008) *Public Services and the Third Sector: Rhetoric and Reality.* House of Commons, 11th Report of Session 2007-2008, Vol. 1. London: TSO.
- Rolfstam, M. (2008) *Public Procurement of innovation.* Lund: Lund University.
- Rolfstam, M., Phillips, W. and Bakker, E. (2009) *Public procurement of innovation diffusion: Exploring the role of institutions and institutional coordination.* Circle Working paper No. 2009/07. Lund: Lund University.
- Rozemeijer, F. (2000) *Creating Corporate Advantage in Purchasing.* Eindhoven: Eindhoven University of Technology.
- Schmookler, J. (1966) *Invention and Economic Growth.* Cambridge, MA: Harvard University Press.
- Schotanus, F. and Telgen, J. (2007) Developing a typology of organisational forms of cooperative purchasing. *Journal of Purchasing and Supply Management.* 13(1), pp.53-68.
- Storper, M. (1997) *The Regional World: territorial development in a global economy.* New York: Guilford.
- Tassabehji, R. and Moorhouse, A. (2008) The changing role of procurement: Developing professional effectiveness. *Journal of Purchasing and Supply Management.* 14(1), pp.55-68.
- Utterback, J.M. (1994) *Mastering the Dynamics of Innovation.* Cambridge, MA: Harvard Business School Press.
- Uyara, E. and Flanagan, K. (2010) Understanding the Innovation Impacts of Public Procurement. *European Planning Studies.* 18(1), pp.123-143.
- Van Weele, A.J. (1994) *Purchasing Management.* London: Chapman and Hall.
- Von Hippel, E. (1986) Lead users: A source of novel product concepts. *Management Science.* 32(7), pp.791-805.
- Zheng, J., Knight, L., Harland, C., Humbya, S. and James, K. (2007) An analysis of research into the future of purchasing and supply management. *Journal of Purchasing and Supply Management.* 13(1), pp.69-83.

Appendix B: Research participants

List of people interviewed

Allan Openshaw	Director at Accrue Consulting Ltd
Carl Brennen	Head of Procurement – Trafford Council
Clare Poulter	Cumbria County Council
Colin Cram	Managing Director. Marc1 Ltd
Cynthia Thompson	Efficiency Programme Director, AGMA
Gary Amos	Head of Procurement – Salford City Council
Georgina Jones	Head of Procurement – Rochdale Metropolitan Borough Council
Ian Brown	Head of Procurement – Manchester City Council
Ian Claydon-Butler	Director of AGMA Strategic Procurement Hub
Jim Judson	Director of Procurement, North London Waste Authority
John Lorimer	Capital Programme Director, Manchester City Council
Jonathan Cliff	Head of Procurement – Wigan Council
Malcolm Whitwood	Head of Procurement – Tameside Metropolitan Borough Council
Mark Brody	Lighting Engineer- Tameside Metropolitan Borough Council
Martin Gleave	Head of Procurement – Stockport Council
Martin Powell	Head of Procurement – Oldham Metropolitan Borough Council
Paul Dunn	Director, Greater Manchester Waste Authority
Peter Akid	Head of Procurement – North West Collaborative NHS Procurement Hub
Peter Holliday	Head of Procurement – Greater Manchester Fire and Emergency Service
Phil Chanin	Head of Procurement – Bolton Council
Sarah Janusz	Head of Procurement – Bury Metropolitan Borough Council
Stuart Norman	Head of Procurement – Greater Manchester Police

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Published: May 2010
PLG/51

