Chapter 12
UK

UK Public Procurement of Innovation:
The UK Case

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Abstract This chapter provides a review and assessment of public procurement of innovation in the UK. Public procurement of innovation has long been of significant policy and research interest in the UK, but particularly so in the last decade. Accordingly, a host of initiatives and reports have been introduced aimed at mobilising the use of UK public procurement to support competitiveness and innovation. Despite conflicting objectives in procurement policy and a recent shift in focus towards efficiency in government spending and away from innovation, the UK case has been widely used as an international exemplar. The chapter is structured as follows: First, the context for the wider practice and governance of public procurement in the UK is introduced, including broad statistical evidence of the breadth of public procurement expenditure in the UK. Against this background, we provide a description of key policy initiatives designed to embed public procurement in the innovation policy portfolio of the UK. As examples, we provide some short case studies to explore the reach and limitations of the policy approaches and instruments used. We finally provide some conclusions about the recent development and foreseeable future use of innovation procurement in the UK. In particular, we question the level of dissemination and impact of some of these measures.

12.1 Introduction

Until the financial crisis brought it to an abrupt halt in 2008, the economy of the United Kingdom had experienced a decade and a half of growth which was marked by an increasing dominance of the service sector, particularly knowledge-intensive
business services. Despite current rhetoric about rebalancing the economy towards manufacturing, high- and medium-tech manufacture account for the lowest proportion of output in any OECD economy (BIS 2011). The service-oriented structure of the British economy partly explains a lower-than-average BERD at around 1.6 % of GDP and falling. Nonetheless the UK has a strong position in some high-tech sectors, notably pharmaceuticals and aerospace. A relatively open economy and a high-quality science base make it a favored destination for mobile international R&D investment, receiving the highest share of internationally funded Business Expenditure on R&D (BERD). The national innovation policy approach has traditionally focused upon capitalizing the science base through support for collaborative R&D as well as the provision of grants and advice to small firms. These activities have been complemented by the provision of infrastructure such as the national measurement system.

Public spending as a percentage of GDP in the UK has risen rapidly, from 35 % in 2000 to 39 % in 2007 and to 45 % in 2010 (HM Treasury 2010a: 62). Against this backdrop, it is unsurprising that successive governments have sought public sector efficiency reforms, often with innovation as a recurring theme. Reforms have involved over 20 reorganizations of central government, with the establishment of ‘arms-length bodies’ (NAO 2010), and a drive towards outsourcing and commissioning of public services to the private and voluntary sectors. At the same time the dominance of public demand in sectors such as health, transport and social services means that there is significant potential for incentivizing innovation through procurement in these areas.

This chapter provides a review and assessment of public procurement of innovation in the UK. The UK is an interesting case to study in this area for several, mutually interconnected, reasons. Firstly, the UK has been a ‘first mover’ in the promotion of policies and initiatives seeking to stimulate innovation through procurement, as well as addressing the modernization of the procurement function more generally. Despite certain policy tensions, issues around implementation and a recent change of direction away from innovation, the UK case has become widely used as an international exemplar. Secondly, the UK has pioneered the application of a range of mechanisms such as Compulsory Competitive Tendering, private finance initiative (PFI) and other public–private partnership (PPP) models for the delivery of public services. Thirdly, as a result of the extent of private and third-sector involvement in the delivery of a wide range of public services, the UK public sector services industry (Julius 2008) is generally considered to be one of the largest and most developed in the world.

The chapter is structured as follows: after setting the scene for the wider practice and governance of public procurement in the UK, we next describe the extent to which public procurement has become a part of the innovation policy portfolio. With the aid of short case studies we explore the reach and limitations of the policy approaches and instruments used and draw conclusions on why the desired level of dissemination and impact has yet to be achieved.
12.2 Public Procurement in the UK

12.2.1 General Indicators

Government procurement has grown rapidly in the UK in the last two decades, although establishing the precise scale and nature of public procurement is problematic due to measurement and definitional issues. UK public bodies spent around £238 billion in 2010/11 on procurement of goods and services (see Table 12.1). Public procurement expenditure accounts for 35 % of UK total public expenditure on services and approximately 16 % of GDP, and has increased in parallel to public expenditure during 2006 and 2011. Such changes can be explained by the growth of public expenditure in areas such as health and by an increase in the use of outsourcing and contracting-out of government services and public–private partnership arrangements (Dey-Chowdhury and Tily 2007).

We can further draw a distinction between current and capital procurement. Current procurement corresponds to recurring spend on goods and services that are consumed in the process of providing public services, whereas capital procurement refers to purchase of fixed assets such as buildings and large-scale IT projects. Current procurement accounts for more than 80 % of public procurement in the UK.

Figure 12.1 shows the proportion of public procurement undertaken by central and local government in the UK. Local authorities are responsible for 33 % of public procurement while central government ministries, non-ministerial departments, devolved governments and the National Health Service (NHS) are responsible for the remaining 67 %.

Figure 12.2 shows the breakdown of procurement by departmental groups in 2007–2008 and in 2010–2011, and highlights how two departments, the Department of Health and the Ministry of Defence consistently dominate public expenditure in goods and services. The combined spend of these two departments corresponds to 58 % of central government’s procurement and 37 % of total public procurement.

A more detailed categorisation can be observed in Fig. 12.3. The Public Sector Procurement Expenditure Survey (PSPES) conducted by the Office for Government Commerce (OGC) categorizes government spending according to different public-sector supply market areas. The 2011 PSPES analysed £86.8 billion of

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expenditure by central government organizations and English Local Authorities (and excluding NHS). The data suggests that construction, social care and professional services are the biggest areas of government expenditure.

The economic importance of public procurement for the UK economy was highlighted in 2008 by the 2008 UK ‘public services industry (PSI) ’ Review¹ (Julius 2008). According to the Review, the revenues of the sector totaled £79 billion in 2007/8, generating £45 billion in value added and employing over 1.2 million people. Health constituted the largest sub-sector of PSI spending, totalling £24.2 billion in 2007/8, followed by social protection (£17.9 billion), defence (£10.1 billion) and education (£7.3 billion). Julius (2008) further reported

¹ 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’ (Julius 2008: i).
a growth rate in the industry of almost 130% during the period 1995/6–2007/2008, albeit with a slower growth towards the end of the period, with the fastest growing sectors including education, environmental protection and health.

**12.2.2 Governance of Procurement in the UK**

Public procurement in the UK is governed by the Public Contracts Regulations 2006 (for England, Wales and Northern Ireland) and the Public Contracts (Scotland) Regulations 2006. These Regulations implement into UK law the European Commission’s Directive on public procurement (2004/18/EC), adopted in March 2004.

The United Kingdom has a semi-centralised public procurement structure. Contracting authorities (government departments and agencies, local authorities, devolved administrations and non-departmental public bodies) are responsible for their own procurement. They are supported by a procurement landscape which comprises a plethora of organisations performing legislative, audit and improvement roles in relation to public procurement. Many of the structures in place have been the result of reforms undertaken to modernise public sector procurement. The National Audit Office (NAO) was set up in 1983 to replace the former Exchequer

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1 Unless otherwise indicated, the chapter will concentrate on public procurement in UK central government, (English) local government and (English) National Health Service.
and Audit Department in its role of scrutinising public spending on behalf of the UK Parliament. The NAO provides financial audits of all government departments and agencies as well as other public bodies. Its work includes producing practical procurement guidance, representing the UK on EU procurement policy and improving professional procurement skills through the Government Procurement Service. Following publication of the 1999 Gershon Review on Civil Procurement in Central Government, the Office of Government Commerce (OGC) was established to lead a programme of central government procurement reform. Since then, the OGC has been an independent office of HM Treasury tasked with providing policy standards and guidance on best practice in procurement, and facilitating collaborative procurement to deliver better value for money. OGC works with central government departments and other public sector organizations. It also has a partial remit in other parts of the public sector such as Local Authorities and Higher Education Authorities, and no remit in defence-related procurement activities. Since 2010, the OGC is part of the new Efficiency and Reform Group (ERG) in the Cabinet Office, created to promote government efficiency and public services reform. The ERG brings together expertise from different parts of Cabinet Office, HM Treasury, Directgov, OGC and Buying Solutions.

Within the ERG, the Major Project Review Group (MPRG) is in charge of reviewing procurement projects across the public sector that are particularly complex and high value-added and assessing their viability. Also within the ERG, the Gateway Reviews are mechanisms set up to monitor the progression of procurement projects, and which are mandatory in central civil government for procurement, IT and construction projects. At the local level, Gateway Reviews are conducted by the Local Partnerships (local government’s project delivery specialist, previously 4 ps). Local Partnerships provide support in the form of guidelines, training and sharing of best practices to local authorities in relation to the funding and the different stages of development, procurement and delivery of PFI projects, as well as other complex procurement projects.

The Department for Communities and Local Government (DCLG) is the government department responsible for local government policy in England. Its remit includes ensuring local service delivery and efficient use of resources. Local Authorities are responsible for their own procurement decisions, subject to public procurement law. Local Government Improvement and Development (formerly IDeA) supports improvement and innovation in local government, for instance through the Regional Improvement and Efficiency Partnerships programme (which has a procurement workstream).

The Audit Commission is the independent body responsible for ensuring value for money in English local government. Its remit includes raising standards in financial management and financial reporting; encouraging continual improvement in public services such as housing, health, criminal justice and fire and rescue services and promoting high standards of governance and accountability. The
Audit Commission produces value for money reports for local public services as well as reports on a wide range of local government issues and local government briefings.³

Finally, a number of professional and trade bodies are also, to different degrees, involved in training and the improvement of government procurement, including the Chartered Institute of Purchasing and Supply, but also the voluntary network of the Society of Procurement Officers (SOPO) in local government, and the Chartered Institute of Public Finance and Accountancy.

Separate arrangements are in place in Scotland, Wales and Northern Ireland. The Scottish Procurement directorate is responsible for the development of national procurement strategy, policy and guidance in Scotland. A number of Centres of Expertise are in place representing sector-specific interests, and a Policy Forum identifies areas of existing procurement policy where there is a need for further guidance and/or training (Scottish Government 2008). Procurement is a transferred matter also for Northern Ireland and Wales, with similar arrangements and structures, even though it falls within the scope of UK Regulations (which cover England, Wales and Northern Ireland).

The procurement landscape in the UK has been described as “inefficient, fragmented and uncoordinated” (HM Treasury 2009: 21), comprising around 44,000 public sector buyers, including schools, local authorities, housing associations and social care organisations, police forces, NHS trusts, central government departments, agencies and non-departmental public bodies (NDPBs). Furthermore, more than 50 Professional Buying Organisations (PBOs) operate in the UK at the sub-regional, regional and national levels, working along geographical and sectoral lines. Many PBOs at the local level grew out of local authority purchasing consortia and generally serve schools, fire and rescue authorities and often the police (DCLG 2009). The largest PBOs are the Government Procurement Service (GPS, previously OGC Buying Solutions), the NHS Purchasing and Supply Agency (NHS PASA) and the PRO5 (collaboration between Local Authority buying consortia). Created in 2011, Government Procurement Service now forms part of the ERG Group within the Cabinet Office, together with the OGC. GPS provides services, technical support and advice to organisations to enable them to achieve value for money in their commercial activities. It also develops UK-wide framework agreements, which are a set of pre-tendered contracts with a range of suppliers from which customers can purchase goods and services.

Successive government reviews, guidelines and reforms have been directed at further modernising the UK public sector and increasing efficiency in procurement. For instance, the focus of the 2004 Gershon Review was on greater efficiency to facilitate better services. Gershon (2004) identified efficiencies that could be realised within the public sector’s back office, procurement, transaction service

³ In 2010 there had been plans to disband the Audit Commission, however, as of summer 2012 it still was in operation, and discussions were still underway http://www.audit-commission.gov.uk/aboutus/future/Pages/default.aspx (accessed July 2012).
and policy-making functions, as well as in other frontline public services. More recently, the *Transforming Government Procurement Strategy* (HM Treasury 2007), launched as part of the 2007 *Comprehensive Spending Review*, also sought to raise procurement standards, develop the skills of procurement professionals, drive value for money through collaborative procurement and improve the delivery of major projects. Following the publication of 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 subsequently developed and implemented an Improvement Plan. Finally, the *Operational Efficiency Programme* (OEP) aimed to further achieve efficiency savings through collaborative procurement and improvement in other areas such as property-asset management (HM Treasury 2009).

At the local level, in 2000 an independent taskforce led by Sir Ian Byatt reviewed the state of procurement skills and practice in local government in England. Research conducted for the taskforce (Byatt 2001) highlighted important corporate capacity constraints in local government. Among the taskforce’s recommendations 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 (Byatt 2001). These recommendations led to a national procurement strategy (ODPM 2003) and the creation of the Centres of Procurement Excellence 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 were subsequently replaced by the Regional Improvement and Efficiency Partnerships (RIEPs) as a result of the *National Improvement and Efficiency Strategy* launched in 2008 by the Local Government Association (LGA) and the Department for Communities and Local Government. The focus of the strategy was to join up local and national improvement and development priorities and streamline and devolve resources to meet those priorities (LGA/DCLG 2008). The nine RIEPs were created in April 2008 through the merger of the Regional Improvement Partnerships and the Regional Centres of Procurement Excellence. The 2009 *Roots Review on Efficiency Arrangements in Local Government* (DCLG 2009) further recommended a stronger role for the RIEPs, a greater balance of attention and resources given to efficiency considerations, improved availability of contracts information and better supplier engagement. 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).

In parallel, local government has undergone a number of reforms to enable greater autonomy in local decision-making (particularly as set out in the 2006 *Strong and Prosperous Communities White Paper* (DCLG 2006). 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 increasingly act as strategic commissioners of services rather than
providers of services themselves. Among other things, it recommends ‘smart procurement’ and the use of competition in local government service markets. The strategy ‘improving the strategic commissioning of public services’ further notes that good commissioning “is much more than just procuring services” (CBI/LGA 2008: 5). 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.

12.3 Public Procurement Policy for Innovation in the UK

12.3.1 Public Procurement of Innovation: Ten Years of History (2003–2012)

The use of public purchasing as a deliberate tool to promote technical innovation is not a new debate in the UK. For instance Williams and Smellie (1985) note how ‘enlightened’ public purchasing policies were a concern since the early sixties and were raised in reports by the Advisory Council for Applied Research and Development (ACARD) in the 1970s and 1980s and also included in Government Accounting guidelines by 1989. Subsequently, the expansion of procurement in the context of the privatisation agenda of the 1980s and 1990s and the procurement modernisation agenda kick-started by the Gershon Review in the late 1990s provided additional fertile ground for this debate. The early 2000s witnessed a renewed impetus in this policy agenda, with the launch, both in the UK and elsewhere in the European Union (Edler and Georghiou 2007), of a host of initiatives and strategies aimed at mobilising the use of procurement to support competitiveness and innovation. This section focuses on this particular period.

A key reference to the potential of procurement to stimulate innovation can be found in the former Department for Trade and Industry’s 2003 report Competing in the Global Economy: The Innovation Challenge (DTI 2003). The report was concerned with how to increase the UK level of productivity and position in a context of heightened global competition. The report called for the public sector to boost innovation and to achieve the vision of the UK as a key knowledge hub in the global economy. In this context, the report stressed the vital role that public procurement could play as a lever for stimulating and enabling supplier innovation. One recommendation of the DTI report was therefore to develop new procurement guidelines designed to make government a more ‘intelligent customer’.

In response to the DTI report, the OGC published the report Capturing Innovation (OGC 2004) with suggestions on how to encourage innovation from government suppliers. It listed key ‘barriers’ preventing the public sector from fully ‘capturing innovation’, including inadequate early warning, risk aversion, and

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4 we are grateful to Colin Cram for this comment
client capability shortfalls in the public sector. To address them, the report proposed a framework for action throughout the procurement and contract lifecycle and highlighted that the greatest potential for innovation arises from involving suppliers early, namely when programmes and projects are being shaped; and in the formulation of procurement strategies.

Innovation and market shaping was also the focus of the Kelly Review. As part of the Chancellor’s Pre-Budget Report of November 2002, the OGC was asked to consider what steps could be taken to increase competition and long-term capacity planning in markets where government had significant purchasing power. A report led by Sir Christopher Kelly was produced in 2003 together with an action plan (OGC 2003). The OGC’s Kelly Programme was launched as a result, informed by a number of key principles, namely increased competition, more responsive markets, greater security of supply and reduced dependency on a limited group of key suppliers. Construction was the first ‘Kelly Market’ analysed, leading to a series of recommendations to improve procurement in the sector, followed by a similar analysis for municipal waste.

Similarly, the Cox Review on Creativity in Business, commissioned by the Chancellor of the Exchequer before the 2005 Budget (Cox 2005), aimed to examine ways in which UK business productivity could be enhanced by drawing on its creative capabilities. Chapter 7 of the Review was dedicated to ‘using the power of public procurement’. The Review noted that, despite much progress in shifting the policy agenda, change in procurement practices remained an important challenge, a difficulty compounded by the fragmented nature of procurement in the UK. Among the recommendations of the Review were to: allow more discussion pre-specification, adopt a more holistic approach to project needs, improve purchaser capability and consider the impact of purchaser decisions on supplier capability. Finally, it recommended that the Audit Commission and the NAO should monitor whether innovative solutions are being considered in procurement decisions rather than ‘lowest-cost, least-risk response to a narrowly defined need’ (Cox 2005: 39).

The 2007 Sainsbury Review on Science and Innovation Policies was tasked with examining the role of science and innovation in helping the UK more successfully compete with emerging economies. It highlighted the importance of demand-side factors such as procurement in encouraging innovation. The Review encouraged the government to deepen the Transforming Government Procurement agenda to improve procurement capability. It also recommended the use of outcome-based specifications as part of forward procurement programmes. Finally, it noted that a pre-commercial scheme that is focused on SMEs (SBRI, see Sect. 12.3.3) should be reformed. In particular, it recommended a greater engagement by departments, which should specify up-front the technological areas in which they would like to see projects performed, would fund necessary R&D service to get solutions developed and subsequently would purchase those solutions (Sainsbury 2007).

The 2008 Innovation Nation White Paper built on the Sainsbury Review and highlighted the potential of harnessing the power of public sector spending for innovation. It noted that “procuring innovative solutions has tended to be a low priority” (DIUS 2008a: 23), mainly due to a risk-averse culture, difficulties in
defining what constitutes innovation in procurement terms and a capability shortage among procurement professionals. It now made concrete operational suggestions. For example, it proposed that each government department should develop an Innovation Procurement Plan (IPP) as part of its commercial strategy, detailing how they will embed innovation in their procurement practices and seek to use ‘innovation procurement’ mechanisms. To this end a guide to driving innovation through public procurement was produced in 2009. An outcome of the Innovation Nation White Paper published by the Department for Business, Innovation and Skills (BIS) was the development of an Innovation Procurement Plan (IPP) by every government department (see Sect. 12.2.3.3).

The strategic importance of public procurement for the UK economy was again highlighted in the Public Services Industry Review, conducted by DeAnne Julius for BERR (now BIS) in 2008. The report highlighted how the ‘public services industry’ represents a significant part of the economy, and identified areas potentially inhibiting its development, including skills shortages, lack of a level playing field and the high cost of the procurement process (Julius 2008). In order to address these shortcomings, a number of recommendations were provided under the headings ‘long term commitment’, ‘clear and consistent objectives’, ‘competitive neutrality’, ‘partnerships’, ‘commissioning skills’ and ‘bid costs’. The report also highlighted 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.

As mentioned in Sects. 12.1 and 12.2, the UK has extensively applied delivery mechanisms such as PPPs and PFIs for the provision of public sector infrastructure. PFI investment has been used for the delivery of some 900 new public facilities, including hospitals, schools, water treatment, waste management infrastructure, etc. The early application of these vehicles partly explains the much more extensive adoption of procurement procedures such as competitive dialogue vis-à-vis other countries (Treumer and Uyarra 2012). A review of the use of competitive dialogue in the UK (HM Treasury 2010b) indeed suggested a wide use of the procedure and noted that “where it is used appropriately …, the Competitive Dialogue procedure has been a positive addition to the procurement spectrum”. However, it warned of its application in projects that were not particularly complex, suggesting that contracting authorities in the UK may view competitive dialogue as the default process (except for straightforward procurements) rather than utilising the full range of procurement procedures. Further, it identified instances where contracting authorities lacked the resources, capabilities, leadership and prior preparation needed for the delivery of competitive dialogue, resulting in delays and additional costs.

The potential of SMEs to contribute to innovation and better value for money through ensuring better access to public sector contracts was the focus of a review

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5 Improving access by small and medium-sized enterprises (SMEs) to procurement contracts was also the focus of the Better Regulation Task Force/Small Business Council Report ‘Government: Supporter or Customer?’ in 2003, which was taken up by the DTI and the OGC.
led by Anne Glover for the Treasury in 2008. The Review on Accelerating the SME Economic Engine (Glover 2008: 5) set out to assess the barriers for SMEs to access public sector procurement, noting 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 recommended that opportunities be transparent, procurement processes as simple as possible, and that a strategic approach to procurement be adopted that encourages innovation and gives SMEs a fair deal as sub-contractors. The Review called for 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.

A number of additional agendas, besides innovation and SME growth, have been linked to the government procurement policy in the UK, particularly during the Labour Government (up to 2010), for instance in relation to using procurement to improve sustainability. The UK Sustainable Development Strategy, published in 2005, already 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 coalescence of multiple policy agendas under a single procurement umbrella has led to a critique of excessive fragmentation and potential confusion (Uyarra 2010). Giving evidence to the House of Lords Science and Technology Committee (House of Lords 2011: 13), some of the authors of this chapter noted that “the problem lies in the implementation of all those intentions and report recommendations. The complex and changing procurement landscape and the ‘overcrowding’ of the ‘policy through procurement’ agenda has, over time, resulted in a proliferation of guidance and reports which can be confusing, even contradictory, to procurers”. The use of procurement to address multiple agendas was for the first time made explicit in the ‘Policy through Procurement Action Plan’ (OGC 2010), announced in the 2009 Pre-Budget Report. The procurement policy priorities included in the action plan were 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: 1). The development of the Policy through Procurement (PtP) agenda was 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. The PtP agenda has, however, been discontinued since the Coalition Government took office.
12.3.2 Procurement for Innovation Under the Coalition Government

With the change of government to a Conservative-Liberal Democrat coalition, the approach to public procurement has considerably shifted to a focus on efficiency in government spending, with innovation no longer an explicit goal of public procurement policy. In August 2010 a review on government efficiency was published, led by Sir Phillip Green. The report noted that the government was failing to leverage its scale and identified a number of inefficiencies associated with government procurement, including large differences in prices for similar basic commodities, multiple contracts with the same major suppliers by different departments at different prices, etc. Such inefficiencies were, according to the Review, due to poor and inaccurate data, inconsistent commercial skills across departments, the government acting as a series of independent departments rather than as one organisation and the lack of a clear mandate for centralised procurement (Green 2010).

Since the Efficiency Review, efforts have been undertaken by the government to streamline and centralise public procurement for common goods and services. One of the first actions introduced by the new government was to carry out a series of negotiations with the 50 largest suppliers of the government, which led to savings of around £800 million. Following this, the Cabinet Office appointed a Chief Procurement Officer and a network of Crown Commercial Representatives to manage relationships with major suppliers holding a portfolio of contracts across central government, in order for the government to act as a strategic ‘single’ client (Cabinet Office 2011).

Following the Efficiency Review, Frances Maude, Minister at the Cabinet Office, announced a Lean Review aimed at uncovering “wasteful practices and unnecessary complexity in the procurement process and to suggest actions to rectify them” (Cabinet Office 2011: 3). The Review, published in February 2011, focused on problems associated with long lead times, resourcing and processing costs of complex government procurements. It considered that overcoming these challenges required upskilling of procurement and commercial professionals, the allocation of resources to complex procurement projects, and the effective sharing of ‘best practices’ across government departments. Giving evidence to the House of Lords (2011), Frances Maude noted that the procurement process was overly burdensome: “the very process-heavy approach to procurement has resulted in massively highly specified tender documents with prequalification that has been very demanding”. The objective of the Efficiency and Reform Group was therefore to develop a simpler approach, “where the overwhelming objective is to procure effectively and with an emphasis on value for money”.

Following the Lean Review, several initiatives were announced including a series of recommendations to reduce the length of procurement processes and a

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commitment to award 25% of contracts to SMEs. In order to fulfil the latter aspiration, new measures followed to improve access of SMEs to public sector contracts. They included the launch of a new contracts finder website advertising all opportunities over £10,000, the appointment of a Crown Commercial Representative for SMEs, and a mandate for a single, simplified PQQ for all main commodities (and the elimination of PQQs for central procurements under £100,000). In addition, and in order to improve procurement competences, the government launched an interchange programme to allow civil servants to get commercial experience and bring private-sector expertise into the public sector.

The ‘one year on’ (Cabinet Office 2012) progress published by the government in March 2012 reported that the share of central government direct spending with SMEs was expected to double from 6.5% in 2009/10 to 13.7% in 2011/12 (up to 14.5% if indirect spending is considered). Commentators have however raised doubts about the accuracy of these results given the lack of reliability of SME procurement statistics.

Concerns have been expressed about the governments’ overwhelming objective to promote efficiency and the seemingly secondary objective of pursuing innovation. The emphasis on innovation is linked to more efficient procurement processes, competitive markets and the aggregation of demand to leverage purchasing power by more commercially-minded procurers. The expectation is that this would naturally lead to innovation, in other words that it would “ensure real value for money from the extra investment going into public services and, as a by-product, would stimulate far more innovation within industry”. Along these lines David Willets, Minister of State for Universities and Science, acknowledged in a speech: “it’s vital that the public sector uses that purchasing power effectively. There is a lot more that we can do here both to back SMEs and to back innovation.”

The House of Lords 2011 enquiry into Public Procurement as a Tool to Stimulate Innovation questioned the compatibility between the efficiency agenda and the promotion of innovation. Some evidence was provided that innovation may indeed conflict with short-term savings targets. Luke Georgiou thus stressed that demands for efficiency “could take us to the lowest common denominator and towards off-the-shelf goods rather than innovative ones” particularly considering that the “entry cost of innovations tend to be higher than when procuring an established product or service” (House of Lords 2011: 31). Frances Maude was, however, more positive about the complementarity between achieving savings and innovation, noting that: “in order to drive the much better value for money that is essential in the current fiscal climate we need to enlist innovative solutions … that is a kind of basic proposition that we have to articulate clearly much more vividly than we have done thus far” (Ibid: 32).

Procurement of innovation has received more attention in the context of industrial policy and the government’s growth agenda. The Growth Review published in November 2011 (HM Treasury/BIS 2011) recognised the role of

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procurement in shaping markets, and the Business Secretary of the Coalition Cabinet Vince Cable recently stated that “across many sectors, from health and transport to education and defence, the public sector can play a vital role as a first customer for innovative products and services.” The accompanying economics paper to the Growth Strategy (BIS 2011) made the case for the public sector acting as an intelligent and demanding customer, and highlighted its potential for “enabling innovative solutions to effectively address social challenges and improve service delivery, supporting the development and growth of innovative businesses and stimulating wider economic growth” (BIS 2011). The main report, however, resorts back to the lack of efficiency and excess bureaucracy, which works against “a competitive market by locking dynamic and innovative SMEs out of many government contracts”. It further restates the government objective to develop a more competitive and transparent procurement system.

Recent controversies such as the closure of the Bombardier plant in Derby have forced the government to articulate a response in relation to “the best way to balance short term cost considerations with longer term value for money and industrial competitiveness”. Vince Cable noted that the UK government had not traditionally fully considered how “public sector spending shapes markets and influences supply chains” and had been “too transactional, short-termist, risk averse and costly” in implementing European Union procurement rules, whereas “our key competitors in Europe, to varying degrees, view procurement as an integral part of their industrial strategy.” The government, he argued, should shift the emphasis in procurement away from excessive formalism and legalism, and should instead act as “a responsible customer, developing a collaborative and considered long-term relationship with our supply chain”. In particular, he highlighted potential business opportunities for UK industry in the strategic infrastructure sector such as rail, with projects such as High Speed Rail, and in energy, particularly nuclear.

It is also interesting to note that the reform agenda kick-started by the Coalition Government has concentrated on central government procurement. No clear strategy or roadmap has been adopted to extend reforms to the rest of the public sector. Giving evidence to the House of Lords (2011: 142) Frances Maude noted: “we will not seek to mandate how local government procures. … We will be quite mandatory about central government … but we will not seek to impose that on local government nor on the increasingly mixed economy in the NHS.” The House of Lords (2011: 42) concluded that “The Government’s laissez faire approach to the dissemination of best practice in procurement from central to local government

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8 The role of science, research and innovation in creating growth, By Vince Cable, 8 September 2010, Queen Mary University of London.
9 In July 2011, an announcement was made that more than 1,400 jobs were to be cut at Bombardier, the UK’s last train manufacturing plant, in Derby. Job losses were announced after Bombardier lost the £3 billion contract to supply 1,200 carriages for the Thameslink route, a contract that was won by Siemens of Germany.
10 By Vince Cable, Secretary of State, 26 October 2011, The Ideas Space, Policy Exchange, 10 Storey’s Gate, Westminster, London, SW1P 3AY.
appears to be overly optimistic” and recommended that a system of dissemination be put in place to share examples of procurement of innovative solutions across central and local government as well as mechanisms to assess its effectiveness.

12.3.3 Some Key Mechanisms and Initiatives

One key feature of public procurement in the UK has been the design and introduction of specific policy schemes to deliver on the innovation agenda. We single out four initiatives: the innovation procurement plans (IPPs), the reformed Small Business Research Initiative (SBRI) scheme, Forward Commitment Procurement (FCP), a new scheme to link private and public demand (Private–Public Procurement Compacts), and the Department of Health’s Innovative Technology Adoption Programme (iTAPP).

Innovation Procurement Plans

As mentioned in Sect. 12.3.1, the development of IPPs was a commitment in the ‘Innovation Nation’ White Paper (DIUS 2008a) under the Labour Government. The aim was to give ministries “an opportunity to fundamentally think about their procurement practices and to consider how these might be improved or used to drive innovation” (DIUS 2008b: 3) and to “[set] out how departments will embed innovation at the heart of procurement practices”. The IPPs should provide a good indication of the types of activities being carried out by departments to obtain innovative solutions; and a plan to embed processes for the procurement of innovation in their procurement procedures. An IPP development document was produced in May 2010, building on the original IPP guidance, to update on recent developments and suggest areas for departments to focus on when revising their Plans. The initial IPPs were valuable to a certain degree in identifying the extent to which innovative procurement is already effectively embedded into current practices. However, overall the plans did not demonstrate how departments would use procurement to really drive innovation through specific opportunities. Furthermore, the quality of these plans has been described as widely varying; the House of Lords Committee report (2011) further highlighted a lack of measurable objectives, which made it difficult to assess whether the department had delivered its stated objectives. To this end, the Coalition government decided to discontinue the requirement for IPPs as part of the wider programme of reform of government procurement.

The Small Business Research Initiative

An example of experimental procurement policy is the UK Small Business Research Initiative (SBRI). It was first established in the UK in 2001 to increase access of small and medium-sized enterprises (SMEs) to public sector procurement, and to support the procurement of R&D with a potential to procure the innovation
generated in the R&D contract. SBRI was modelled on the Small Business Innovation Research Programme (SBIR), which was introduced in the USA in 1982 to stimulate and support technological innovation. The first phase of the UK initiative (2001–2007) was widely regarded as far less successful than the American model (Connell 2009; Bound and Puttwick 2010). In April 2008, the SBRI was re-launched, administered by the Technology Strategy Board (TSB), the UK innovation agency, as part of its portfolio of policy tools designed to support industrial innovation and promote economic growth. This new SBRI was not limited to SMEs.

The TSB had a broad ambition with regards to SBRI; it was designed to stimulate outcome-oriented innovation as well as to procure R&D. By enabling the public sector to access novel ideas and companies (including SMEs) through a risk-managed mechanism, the SBRI would provide access to lead customers and a route to market, whilst supporting follow-on investment through the validation of ideas (Glover 2012). The total cumulative spending of the SBRI between 2011 and 2012 was £60 m.

The SBRI has two main roles: the first role can be described as ‘Operational Effectiveness’ and involves the government acting as a ‘lead’ customer for new products and services. This modality represented roughly two thirds of the calls and around 50% of the SBRI spending in the financial year 2011–2012. Departments such as the Ministry of Defence (MoD) and the Department of Health (DoH) have been the main clients for this action. Departments have tended to run the competitions and review processes themselves, with the TSB acting as facilitator. This would, in principle, ensure the necessary context-specific skills and understanding of the problem for which procuring an innovative technology delivers the solution.

The second role is to support ‘Strategic Objectives’, i.e. to provide a route to market for innovations that support broad policy objectives, with the solution developed through SBIR providing opportunities for the market more broadly. In this mode departments, such as the Department for Environment, Food and Rural Affairs (Defra) and the Department of Environment and Climate Change (DECC), would run competitions for innovations that support their policy objectives. In this role, the SBRI would drive the process, articulate the call, conduct the assessments and support the award process. The projects under this second modality have tended to be smaller, with the exception of the ‘Retrofit for the Future’ initiative, which ran 5 projects at a cumulative value of £18 million. Retrofit for the Future was run in conjunction with DCLG to identify innovative solutions to reduce carbon emissions and energy use in the existing social housing stock.

In a typical SBRI process, a departmental client would invite firms to tender with innovative solutions to a specified problem. The SBRI supports the department to articulate their problem. In Phase 1 (on average £60,000 per successful application),
applicants may be proposing competing or complementary solutions. Phase 2 (an average of £325,000 per successful application) of the programme then enables applicants to further develop their innovative solution through the creation of a prototype or alternative testing of the idea. The TSB estimates that approximately 40% of Phase 1 competition winners will successfully progress to Phase 2. This approach helps to maintain diversity in the innovation process and prevents the government from ‘picking winners’.

With its SBRI scheme, the UK appears to be at the forefront in Europe when it comes to pre-commercial procurement, with other countries following the UK example (Izsak and Edler 2011). Some have argued that the scheme fills a gap in the UK innovation policy toolbox and that it should be rolled out much more broadly (see e.g. House of Lords 2011: para 126 and 127). However there are no statistics available on how many competitions have led to new products being procured by departments. To date, there has been no external evaluation of the SBRI scheme, which would be essential to better understand the conditions under which the scheme and its two modes can exert their effects in a truly systemic way.

The scheme also faces challenges. As it is administered by the TSB, the willingness of other departments to apply the scheme, to buy into its logic and to ensure that the innovative solutions developed through the SBRI initiative are actually procured by departments and agencies, or advertised as part of strategic policy delivery, is critical. For the SBRI initiative to have maximum impact under the UK agency model, departments are required to take a strategic and holistic view of their objectives, to identify where innovation is needed and to engage strategically with industry. This is particularly difficult in complex, multi-layered organisations such as the NHS, where procurement is decentralised and fragmented, and uptake is therefore erratic.

Forward Commitment Procurement

Forward Commitment Procurement (FCP) is a procurement model introduced in 2006 designed to satisfy future outcome-based needs instead of purchasing for the immediate perceived needs. Initially conceived as a tool to address market failures in the area of environmental innovations (Defra 2006), it has subsequently aimed at delivering efficiency savings in other areas like healthcare. The purpose of the scheme is to resolve the problem that arises when an organisation requires a product or service that is either not available on the market or is too expensive to purchase. Therefore, the main feature of the FCP is the early communication with the market and the credible commitment to the market that solutions, should their prototype fulfil the requirements, will then be ordered and bought.

FCP consists of three stages (identification of need, market engagement, and procurement; see Fig. 12.4). In the first stage, the purchasing authority signals to the market the need for innovative solutions to a particular problem in a Prior Information Notice. The notice defines the requirements in terms of particular performance outcomes. A second stage consists of engagement with potential suppliers, followed by a formal procurement stage. Such procurement may
incorporate a forward commitment, namely an agreement to purchase the developed solution at a price that is commensurate with its benefits.

Through these stages, FCP is used to make the market aware of government needs and requirements. The objective is to buy solutions that meet these needs once they are available and their functionality demonstrated, at a price that is proportionate to their benefits—this is known as forward commitment (BIS 2011). This helps to lower the level of perceived risk associated with investing in innovation by increasing the confidence that there will be a market for the product or service once the solution is proven.

One well-documented example of FCP is the procurement of zero-waste mattresses by HM Prison Service (HMPS), which used the model to procure a solution that prevented disposal of mattresses and pillows into landfill. Importantly, the FCP process made the organisation’s unmet needs visible to the market, thus demonstrating a credible demand. This increased confidence that there would be a new market for the new product or service once it was proven, which influenced the investment by developers and suppliers to come up with innovative solutions. HMPS was able to use the information gathered through a market sounding and supply chain workshop to inform their procurement strategy and choose the most appropriate contracting approach. As a result, a ‘zero waste’ mattress was developed, the benefits of which were reduced turnover due to innovative new covers, eliminating the need for clinical waste disposal, and no contribution to landfill with end-of-life mattresses recycled into useful products instead. Most importantly, it brought about significant cost savings estimated to be around £5 million over the life of the contract. Other projects developed following this methodology include

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13 For more details, see: [http://www.bis.gov.uk/assets/biscore/corporate/migrateddd/publications/c/cs02_hmps.pdf](http://www.bis.gov.uk/assets/biscore/corporate/migrateddd/publications/c/cs02_hmps.pdf)
the procurement of ultra-efficient lighting at the Rotherham NHS Foundation Trust, with a solution that involved biodynamic lighting enabling energy consumption and maintenance savings of 30 and 88% respectively. The FCP initiative has not yet been evaluated. Evidence of impact stems from a number of good practice cases in the UK and abroad, but there is no evidence of the extent to which such practices have become embedded in public sector procurement.

Public–Private Procurement Compacts

In spring 2012 the Department for Business, Innovation and Skills (BIS) launched another pilot scheme labelled Procurement Compacts. The idea of this scheme was for large public and private organisations to join forces to buy products and processes that help reduce the carbon footprint of private and public actors. Organisations would not only bundle their demand, but also develop joint roadmaps of future demand, sending clear signals to the industry in order to both induce the generation of new innovations and to accelerate the diffusion of new products and services.

A first pilot of this new initiative was launched in the areas of transport, catering and biomethane. Again, the idea was to sound out suppliers in the market as to what innovative ideas were there in the pipeline that could contribute to the carbon reduction needs of selected areas, similar to the forward commitment procurement. However, the Procurement Compacts are:

- a statement of commitment of public and private sector customers to buy progressively lower-carbon goods and services providing they meet operational needs and can be delivered cost-effectively. This will give suppliers the opportunity to differentiate their offering on the basis of environmental credentials that are valued by the buyer, and represents a forward commitment by customers for low-carbon alternatives. The Procurement Compacts provide a means to bring together and make visible a previously fragmented demand for lower-carbon goods and services in a way that provides a strong and credible 'direction of travel' message to suppliers from some of their major customers, thus stimulating providers to align their supply chains to low to zero carbon objectives. (Prince of Wales Corporate Leaders Group/BIS 2012: 13 highlighted by the authors)

The signatories of the Procurement Compact commit themselves to changing their buying behaviour, i.e. to increasing the sustainability standards in their purchases, and to introducing the carbon targets explicitly in future requests for quotes. As of summer 2012, it remains to be seen how those compacts deliver and if the idea spreads towards new areas. However, the Procurement Compacts combine three major elements that could potentially increase the likelihood of innovation generation and diffusion: First, they start with a societal need that is

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14 Including the pilot cases conducted in the context of the EU project LCB-Healthcare as part of the EU Lead Market Initiative, in partnership with nine hospitals across Europe (European Commission 2012).

expressed in concrete demand (reduction of carbon); second, they combine the buying power of the public and the private sector, thereby signalling a breadth of demand that incentivises companies and reducing uncertainty; last but not least, they start and sustain consultations between buyers and potential suppliers.

The Innovative Technology Adoption Programme in Health

When the UK government introduced the Innovation Procurement Plans initiative the Department of Health (DH), responsible for the National Health Service (NHS), undertook a range of initiatives to bring innovation and procurement of innovation back into the centre of the NHS strategy. One notable example was the Innovative Technology Adoption Procurement Programme (iTAPP) launched in 2009. The programme was part of a larger agenda around Quality, Innovation, Productivity and Prevention, which placed innovation at the heart of a general improvement across the NHS. iTAPP was an initiative of the DH’s Procurement Investment and Commercial Division (PICD) in collaboration with the National Technology Adoption Centre and the medical technology industry. It sought to facilitate the procurement, implementation, adoption and diffusion of innovative medical devices. This programme encouraged NHS-wide adoption of high-impact innovative medical technologies that could increase the quality of care provided to patients, whilst reducing the overall cost of care. The basic mechanism was to invite industry suppliers of health technologies and products to report innovations that could increase quality and reduce cost for the NHS. The iTAPP team then conducted expert reviews involving practitioners (national clinical directors), and produce a long list of technologies which were categorised according to their stage of market introduction and diffusion. This list then became the reference for regional Strategic Health Authorities (SHAs), who subsequently selected those that fit their own regional innovation and improvement agendas. The National Adoption Centre, an organisation to support adoption in the NHS, was commissioned to provide support to the regional actors in the process of adopting technologies on the list.

The iTAPP process is an example of need-driven mobilisation of innovation diffusion, as a co-operation of a sectoral ministry with a specialised agency and a collection of credible experts in order to create visibility and credibility for innovations that contribute to improve services.

12.4 Conclusion: From Intent to Implementation

Against a background of a public service reform agenda, several waves of privatisation and most recently an emphasis on austerity measures and greater efficiency, the use of procurement to stimulate innovation has been a steady subtheme with varying degrees of prominence in the UK. In the past decade the government has published more than 20 documents, including guidance, strategies and White Papers making the case for procurement as an important tool to drive innovation. A steady stream of academic findings and policy statements from
industrial and sectoral bodies has supported the agenda. As we have seen in this chapter, this intent has been matched by a high level of experimentation with a series of innovative policy instruments such as FCP, IPPs, Procurement Compacts and a willingness to import and adapt others, notably the SBRI. With all of this activity the question that needs to be asked is why the real base of activity remains small, with initiatives functioning effectively at a pilot level?

At the core of the answer to this question is the problem of dissemination of good practice. As we have seen the procurement landscape remains highly fragmented with a very large number of points of decision. Despite the emphasis on promoting skills and guidelines, many of these remain beyond the reach of these campaigns, especially in local government and the National Health Service. Many decisions are taken even without professional input from procurers. This fragmentation creates a further problem; when an innovation is successfully stimulated through procurement, it can be difficult to ensure its subsequent diffusion across public sector markets, creating a discontinuity between the triggering of innovation and the broader response to it. The problem is magnified further when the solution has the potential to be applied across different policy domains and ministries. This disconnect between procurement and diffusion reduces the visibility of a wider customer base to suppliers. Lack of diffusion may even result in a problem of over-incentivising innovation by duplicating specifications that have already been met in similar circumstances.

The position of procurement within the wider scope of UK innovation policy is also a matter of interest. As with most countries the historical context was one of supply-side dominance with support for R&D through grants and fiscal incentives being the most visible instrument, along with various networking schemes. Despite declining resources being available for funding of this kind, the locus of innovation policy remained with agencies whose expertise was in these domains. In recent years this has been the Technology Strategy Board. It is not then surprising that a large amount of attention has focused on the SBRI scheme, which falls most easily into the research funding paradigm. To its credit the agency has sought to partner with sectoral ministries in this area and via innovation platforms but the net result is a small share of already small budgets and little impact on the real prize—the multi-billion national spending on procurement of goods and services. There has been some consciousness of these tensions in government. Both the previous government in Innovation Nation and the present one with its Innovation and Research Strategy for Growth have sought firstly to distinguish innovation policy from research policy and secondly to include the demand side and public procurement in the agenda. In the latter document the agenda is given additional emphasis by the lack of availability of funds in the current economic climate.¹⁶

¹⁶ In the industrial strategy of the UK Coalition government public procurement that is based on the Innovation and Research Strategy for Growth public procurement is still one of the key pillars, but with less emphasis on innovation, and more emphasis on the attempts to better use public procurement for economic effects more generally, shaping markets and supporting supply
Possibly running counter to this impetus is the intersection with the efficiency agenda in public procurement. There are positives for innovation in terms of the drive for simplification. There are reasonable arguments, too, that increased access for SMEs to government contracts will increase the level of innovation. SMEs as a class are not more innovative than large firms but the greater variety and competition that results from wider access is a likely positive force. On the other hand, the aggregation and centralisation of public contracts could lead to their award on a lowest common denominator basis, exclude the niche applications from which innovations often diffuse and reduce the breadth of interaction between suppliers and public buyers, not to mention a reduction in the variety and quality of public service provision.

The termination of initiatives such as the Innovation Procurement Plans after only one cycle also diminishes the possibility that the innovation agenda is embedded across government rather than being carried only by a select group of advocates. The criticism of the IPPs for a lack of measurable objectives highlights a more generic problem, the overall absence of metrics in this area (Edler et al. 2012). Progress in innovation procurement cannot be assessed through any recombination of current public statistics—new and regularised data collection is needed, standardised on an international basis. A reliable method to chart progress on a comparable basis would provide an important stimulus towards realising the benefits in this area. The UK remains a pioneer in this area and much has been achieved but as of summer 2012 a renewed impetus is needed to move from proof of concept to making innovation through procurement a mainstream element of practice in the public sector.

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