

Citizen Contracting – Does Radical Decentralisation Improve Procurement Outcomes?

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Abstract

Many governments now endorse green and socially responsible public procurement, as well as using public contracts to promote economic and industrial policies, such as innovation and support for small and medium-sized enterprises (SMEs). While international procurement regulation has adapted to these political mandates, the number and complexity of objectives attached to procurement means that a gap remains between the ambition of such policies and their impact. At the political level, procurement law is frequently identified as a bureaucratic barrier which undermines policy implementation. Increasing centralisation and professionalisation of procurement is one response to this gap, but several jurisdictions have also experimented with the opposite approach: allowing the recipients of public services (citizens) to make procurement decisions. While approaches such as voucher schemes for schools, healthcare, or childcare have been widely debated, this paper focuses on two novel approaches adopted in the UK between 2010 and 2015: the Green Deal for energy-saving home renovations and the Verify system for online identity assurance. These schemes targeted environmental and innovation objectives respectively – and both failed to achieve the intended results. The paper asks how such schemes fit within the broader taxonomy of public service delivery models which involve an element of citizen choice, and how they should be characterised legally under the EU Procurement Directives, in light of recent case law. Drawing lessons from the Green Deal and Verify, it proposes criteria for designing citizen contracting models which take account of the full range of desiderata attached to public procurement.

Introduction

Public procurement is a servant with many masters. Accounting for almost 20% of global GDP,¹ it is unsurprising that governments seek to use this spend to achieve many, sometimes conflicting, objectives. International regulatory frameworks, such as the WTO Government Procurement Agreement, EU Procurement Directives and UNCITRAL Model Procurement Law, traditionally focus on market opening and competition but increasingly also accommodate environmental, social and wider economic objectives. Such policies have long formed part of national procurement practice; public works contracts awarded under Roosevelt's New Deal were aimed at creating employment as well as infrastructure. More recently, public procurement of innovation has been adopted by many countries, for example South Korea aims to spend 5% of its public procurement resources on developing and 20% on deploying innovative solutions.² In Europe, the 2014 reform of the Procurement Directives included a number of new provisions supporting environmental and social sustainability, as well as innovation and inclusion of SMEs.³ The urgency of the climate crisis has pushed more public authorities to pursue approaches such as circular procurement or life-cycle costing which target reductions in greenhouse gas emissions.⁴ With an increasing number of countries committing to net zero emissions by 2050 (or earlier), significant public and private investment in infrastructure will be required – bringing new impetus to strategic⁵ procurement.

Despite the increasing prevalence of such policies in public procurement, evidence of its efficacy and efficiency in achieving them remains limited. While many case studies of strategic procurement exist, there is a lack of quantitative research demonstrating its overall impact.⁶ In areas such as social value procurement, the difficulty in measuring outcomes has been acknowledged and various approaches proposed and implemented to address this.⁷ Amongst the challenges faced by public authorities seeking to use procurement strategically are:

- Difficulty securing internal consensus on the objectives to be addressed;
- Concerns about the legality of strategic procurement, or its impact on costs;
- Lack of market capacity to deliver alternative goods or services;
- Lack of expertise or tools to verify supplier claims;
- Concerns about impacts on the time and complexity of procedures.

In some cases, the procurement approach chosen to pursue one strategic objective conflicts with another: larger contracts may allow for greater investment in

¹ World Bank (2017) at p 17. The average for OECD countries is close to 12%, whereas in many developing countries public procurement accounts for a much larger share of the economy.

² European Commission (2018) at p 12. For discussion of innovation procurement policies in OECD countries, see OECD (2017).

³ For detailed discussion of these measures, see Semple (2016) and (2017)

⁴ For an overview of such measures, commonly referred to as green public procurement (GPP) or sustainable public procurement (SPP), see UNEP (2017).

⁵ This is the term used by the European Commission to refer to environmental, social and economic objectives in procurement – other terms used include 'horizontal objectives' or 'secondary objectives.'

⁶ Studies carried out on behalf of the European Commission have attempted to quantify the extent of strategic procurement, but have only indirectly examined its impact. See PwC (2016).

⁷ See Hebb and Hachigian (2017) for an overview and evaluation of 20 different approaches to measuring social value in procurement across different jurisdictions.

environmental sustainability but be less SME-friendly, and innovation may come at the cost of social inclusion, for example where new technologies are not yet accessible to all users.⁸ While many procurements successfully target multiple policy objectives, and replication of successful approaches across and between jurisdictions can be observed, the overall level of uptake for strategic procurement remains low.⁹

In this context, the critique of procurement as an inefficient bureaucratic beast becomes relevant. Attaching ever more policy objectives to procurement makes it more complex, and in some jurisdictions has contributed to increasing centralisation of procurement.¹⁰ This is driven in part by the higher professional standards required of procurement officers, who may be expected to understand environmental, social and economic policies as well as the mechanics of purchasing. At the same time, constraints on public budgets and well-publicised procurement failures have driven a more experimental trend in public contracting, often involving elements of private finance or public-private partnership (PPP). This trend has been particularly visible in the UK over the past 20 years, with many novel approaches emerging – and almost as many quietly disappearing.¹¹ While experimentation and failure are welcomed in many fields, this is less true for public policy and in particular public expenditure. Getting procurement wrong can come with a sizeable political price tag. This is magnified where the procurement relates to an essential or highly visible public service. In the UK, blame has often been laid on the EU public procurement rules when things go wrong¹² – although they are seldom if ever credited when things go right. Despite the effort to increase the flexibility of the rules which was part of the 2014 reform,¹³ many public authorities still expend considerable effort to avoid their application, and this is one of the motivating factors for the type of scheme discussed in this paper.

Section I presents a definition and taxonomy of citizen contracting arrangements and asks how they should be characterised under EU procurement law, in light of the *Falk Pharma* and *Tirkkonen* cases. Section II looks in more detail at two examples drawn from the United Kingdom during the period 2010-2015: the Green Deal for energy-saving home improvements, and the Verify programme for identity assurance in access to digital government services. These examples were selected due to their explicit environmental and innovation objectives, as well as the availability of detailed information regarding their results. Both aimed to make use of market mechanisms to replace procurement decisions traditionally made by the State. Section III asks how such schemes should be evaluated, defining a number of 'existential' questions as well as more specific criteria to evaluate their potential impact on cost, quality, and strategic objectives. Section IV draws conclusions about

⁸ This can be observed in the digitisation of government services, which can limit their accessibility to older users or those without access to the internet.

⁹ A study of 10 EU Member States (Austria, France, Latvia, the Netherlands, Poland, Portugal, Slovakia, Spain, Sweden and the United Kingdom) suggested that in 2013 14% of procurement procedures included environmental criteria, 10% included social criteria and only 1% targeted innovation (PwC, 2016, at p 6).

¹⁰ For example, Italy and Ireland have expanded centralised purchasing in recent years.

¹¹ Private Finance Initiative (PFI), first implemented in the UK in 1992 under John Major's government and heavily criticised, was replaced by PF2 in 2012 before being abandoned in 2018.

¹² For example, following the collapse of the major outsourcing company Carillion in January 2018, Cabinet Office minister David Lidington and head of the civil service John Manzoni both referred to the EU rules as preventing more robust approach to excluding companies in financial difficulty.

¹³ Leading to the adoption of Directives 2014/23/EU, 2014/24/EU and 2014/25/EU – hereafter 'the EU Procurement Directives'

the role of citizen contracting within the broader landscape of public service provision.

Section I – Taxonomy of Citizen Contracting

Public procurement traditionally involves the state (or contracting authority) specifying the goods or services it wishes to purchase, selecting the contractor, and entering into a contract with them. The term ‘citizen contracting’ is used here to refer to models in which one or more of these functions is taken on by the recipient of the service. It should be noted that many forms of PPP involve private financing of public services, and concession contracts in which citizens directly pay a contractor appointed by the state (for example, the operator of a toll highway) are also common. What distinguishes citizen contracting from these models is that key decisions about the nature of the service or its provider are made by the recipients. They are thus more ‘consumer driven’ than other forms of public contract, and reflect an underlying philosophy that those closest to the point of service delivery are best placed to decide on what they receive. Voucher schemes are the classic form of citizen contracting, and these often do not involve public procurement, as they take the form of subsidies which citizens can spend directly with private providers. More novel approaches retain the state’s involvement in some aspects of procurement or contract delivery, and these ‘hybrid’ models form the focus of this paper.

The universe of schemes which involve some element of citizen choice in the delivery of public services is extensive. Voucher schemes exist for schools, food, housing, childcare, healthcare, transport, broadband services, legal aid, training and higher education, and a wide range of environmentally or socially desirable goods and services (e.g. home insulation, energy or water saving devices, bicycles, electric cars, neutering of pets).¹⁴ Most often associated with the United States, vouchers also figure in public service provision in Belgium, Canada, Chile, India, New Zealand, South Korea and Sweden, amongst other jurisdictions. Potential benefits which motivate the development of voucher schemes include:

- Delivering services which are more responsive to public needs
- Reducing bureaucracy/red tape associated with procurement
- Removing government from the role of ‘picking winners’
- Reducing costs of delivering public services
- Encouraging wider competition and self-sufficiency of markets
- Stimulating private investment by limiting scope of government intervention

Evidence regarding these benefits in comparison with conventional procurement is limited. While a significant literature exists on voucher schemes, these are often evaluated on an individual case basis with a focus on their distributional impact,¹⁵ rather than their impact on the cost and quality of public services. The above list reflects an underlying ‘small state’ philosophy, in particular the idea that government intervention serves to distort private markets. In contrast, the positive role of the state in encouraging innovation through R&D funding and public

¹⁴ Steurle et al (2001) define a voucher as ‘a subsidy that grants limited purchasing power to an individual to choose among a restricted set of goods and services’ and discuss a range of schemes.

¹⁵ For example, much of the literature on education vouchers focuses on their effect on educational inequalities. See Cave (2001), Ladd (2002).

procurement of innovation has been identified in qualitative and quantitative studies.¹⁶

Potential drawbacks associated with replacing the state as decision maker in the provision of public services include:

- Reduced transparency and accountability in the contracting process
- Reduced transparency and accountability in delivery of service
- Unpredictable take up and costs of service delivery
- Inability to control quality or enforce broader public sector objectives (e.g. economic, environmental, social)
- Poor market response, due to complexity and risks of schemes
- Erosion of citizen confidence in public services, due to poor service delivery and/or confusion about the role of the State

The extent to which these problems arise will depend upon a number of factors, including the degree of control retained by the State. While some citizen contracting models retain the state as contracting authority but introduce elements of recipient choice, others empower citizens to enter into contracts for publicly funded services themselves. Figure 1 illustrates the spectrum of models based on the level of public control retained.

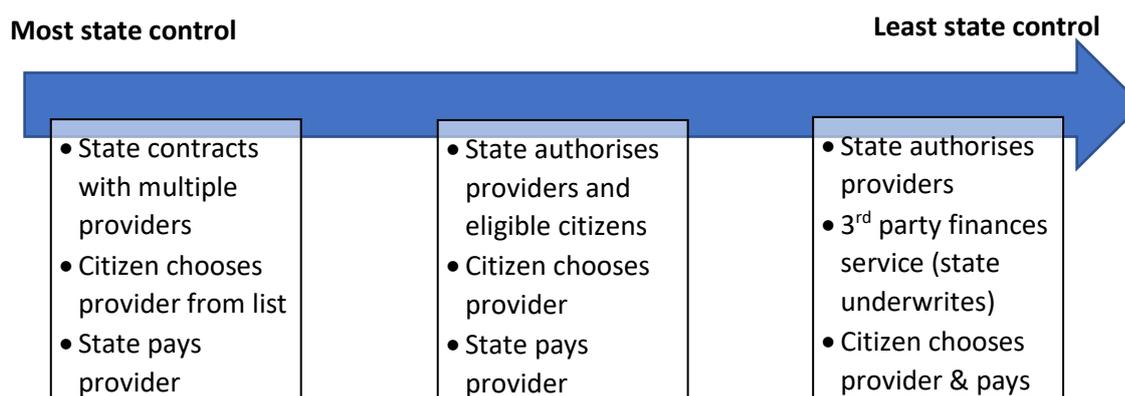


Figure 1. Citizen contracting models: State control

Numerous variations on the three models set above can be envisioned. The two schemes discussed in Section II, *Verify* and the *Green Deal*, fit into the left hand and right hand boxes respectively. Most voucher schemes fit into the central box.

The desire to avoid application of the procurement rules, which are broadly seen as a source of inefficiency in both the public and private sectors, can be a motivation for such schemes – although this is seldom made explicit. Few if any studies examine the characterisation of citizen contracting from the perspective of procurement regulation. Broadly speaking, procurement law does not cover subsidies, grants or tax breaks – where the recipient is not contractually bound to provide the state with supplies, works or services. State aid rules apply to such arrangements. However, there is a considerable grey zone consisting of

¹⁶ For an overview, see Georghiou et al (2014). Mazzucato (2013) questions the critique of the state 'picking winners', pointing to a number of technological innovations achieved via public funding.

arrangements which fall between procurement *stricto sensu* and other forms of public funding.

In the EU, contracts in which an economic operator receives some benefit from the state, even if it is not directly paid to deliver services, may be covered by the Concessions Directive.¹⁷ A simple example is a contract to operate the canteen in a public sector building – the operator pays the public authority for the right to be located on its premises and sell food to its employees. In this case, if the concession is valued above the EU threshold,¹⁸ it must be advertised and transparent procedures applied. Prior to the adoption of the Concessions Directive, the Court of Justice of the European Union (CJEU) had held in a number of cases that service concessions were subject to the fundamental Treaty principles of transparency, equal treatment and proportionality.¹⁹ Other jurisdictions also regulate concessions under procurement law, and several parties to the WTO Government Procurement Agreement include concessions within their scope of coverage schedules.²⁰

Recent CJEU case law has established that in order for a public contract to exist (and therefore the procurement directives to apply), the contracting authority must select a successful bidder. In contrast, schemes which authorise all private operators who meet particular conditions to perform an activity do not fall within the definition of public procurement.²¹ This appears to apply even if the contracting authority pays the operators to perform the activity. This interpretation of the scope of the procurement rules was first advanced by the Court in its 2016 judgment in the *Falk Pharma* case.²² A German health insurance fund advertised a procedure whereby the manufacturers of generic drugs would be paid a set percentage above their production costs in return for prescription drugs supplied to pharmacies. In an earlier case, the Court had held that German statutory health insurance funds (*Krankenkasse*) are bodies governed by public law, and therefore must apply the procurement rules.²³ However in *Falk Pharma* the Court held that the fact that all manufacturers who met the conditions set out to supply drugs were accepted on the scheme meant that no procurement procedure within the meaning of the directives took place. In reaching this finding, it referred to the underlying purpose of the procurement rules in preventing favouritism towards national operators, and found

¹⁷ Directive 2014/23/EU.

¹⁸ Currently €5,548,000, based on the total value of the concession over its lifetime.

¹⁹ Beginning with Case C-324/98 *Telaustria*. Works concessions were partially regulated under Directive 2004/18/EC.

²⁰ For example, Korea includes build-operate-transfer agreements within its Annex 6 coverage of construction services, and the EU and Montenegro include concessions within Annex 6. There is some ambiguity regarding the coverage of PPPs under the GPA text, as it does not define procurement or the essential elements of contracts which it applies to, leaving individual parties to specify this (or not) in their annexes.

²¹ Article 1.2 of Directive 2014/24/EU includes for the first time a definition of public procurement as “the acquisition by means of a public contract of works, supplies or services by one or more contracting authorities from economic operators **chosen** by those contracting authorities, whether or not the works, supplies or services are intended for a public purpose.” (emphasis added)

²² Case C-410/14 *Dr. Falk Pharma GmbH v DAK-Gesundheit*. Although the case was decided under Directive 2004/18/EC, the Court specifically referred to the definition of public procurement under Directive 2014/24/EU in its judgment.

²³ Case C-300/07 *Hans & Christophorus Oymanns*

that schemes which did not affect competition by selecting a particular operator did not present this risk and therefore fell outside of the scope of the directives.²⁴

This finding was surprising on a number of fronts. For many years, CJEU jurisprudence served to expand the scope of activity subject to the procurement rules – for example the *Telaustria* case established that certain transparency obligations applied to service concessions; a series of cases including *Teckal*²⁵ and *Hamburg*²⁶ extended the rules to various forms of public-public cooperation; and the *Presstext*²⁷ line of jurisprudence established that changes to pre-existing public contracts could trigger the need for a new competition. *Falk Pharma* appears to set a new more conservative tone in interpreting the scope of public procurement, with potential implications for competition.²⁸ In *Tirkonnen*,²⁹ the Court confirmed this approach and extended it to schemes which were closed to new entrants after a particular point in time, provided certain initial transparency obligations were met. *Tirkonnen* concerned a Finnish scheme for authorisation of agricultural advisors – the costs of whose services would be paid by the State. In reaching its conclusion, the CJEU stated that:

the fact that the contracting authority does not designate an economic operator to whom contractual exclusivity is to be awarded means that there is no need to control, through the detailed rules of Directive 2004/18, the action of that contracting authority so as to prevent it from awarding a contract in favour of national operators.³⁰

While a full discussion of the implications of this line of cases falls outside the scope of this paper, it is significant for the evaluation of the legal status of citizen contracting schemes which remove the state from the role of selecting a successful contractor.

The judgments in *Falk Pharma* and *Tirkonnen* could be read as requiring selection of a *single* contractor in order for the procurement rules to apply. However, there are several procedures explicitly covered by the EU procurement directives which involve selection of *multiple* contractors. The directives provide for framework agreements with multiple operators (which are closed to new entrants after the establishment of the framework), dynamic purchasing systems (which remain open to new entrants) and contracts with multiple lots. It is clear then that the directives do not only seek to regulate arrangements which guarantee exclusivity to economic operators or even those which limit competition, as dynamic purchasing systems remain open to all operators who meet the authority's defined criteria. A difference between these arrangements and the schemes in *Falk Pharma* and *Tirkonnen* might be discerned in the fact that they eventually lead to certain contractors being preferred over others, as the contracting authority does not commit to awarding contracts to all participants. In terms of the impact on competition however, the distinction appears illusory. In *Falk Pharma* there was in fact only one drug

²⁴ *Falk Pharma*, paras 34-38 of judgment.

²⁵ Case C-107/98 *Teckal Srl v Comune di Viano*

²⁶ Case C-480/06 *Commission v Germany (Hamburg)*

²⁷ Case C-454/06 *Presstext Nachrichten GmbH*

²⁸ For discussion of competition impacts of the two cases, see Sanchez Graells (2016) and (2018).

²⁹ Case C-9/17 *Maria Tirkonnen v Maaseutuvirasto*

³⁰ *Tirkonnen*, at para 31.

manufacturer who had been awarded a contract, and in *Tirkonnen* the challenge was brought by an agricultural advisor who had been excluded from the scheme for a period of six years due to an administrative oversight – an exclusion which could have been contested under procurement law.³¹

It seems likely that this new exemption from the procurement rules, if maintained in the Court's case law, will serve to increase the attractiveness of citizen contracting schemes where the choice of contractor rests with the private recipient of a public service. Compliance with the EU procurement directives is seen by many public authorities as an administrative burden to be avoided whenever possible.³² One reason for this is the time and expertise needed to run competitions, and another is the possibility of challenge under the Remedies Directives³³ which apply to regulated procurements. While the CJEU was at pains to point out that the authorisation schemes in *Falk Pharma* and *Tirkonnen* were subject to certain transparency requirements under the Treaty, these are not nearly as extensive as the procedural rules which apply to procurement. It remains of course to be seen whether the UK eventually departs from this regime and implements a less comprehensive one – although any such move will be closely watched by potential trade partners including those in the EU27. The failure of the Green Deal and Verify points to a need to consider whether schemes which do not require the government to select a contractor are subject to sufficient *ex ante* evaluation. Where such schemes fall outside of the procurement rules, the reduced transparency requirements which apply to them may also make it more difficult for the market to reach appropriate judgments about participation. While many regulated procurements fail, this typically happens during or just after the award process – which limits the costs of failure to the public purse. In contrast, for both the Green Deal and Verify it took a number of years and successive injections of public finance before it became clear that the market could not deliver what was required on the terms set out.

Section II – Examples of Citizen Contracting in the UK

II.i Green Deal

The British climate encourages optimism and despair in equal measures. Despite (or perhaps because of) its fickle nature, the British summer enjoys an outsized place in the national psyche – and so home insulation is at best an afterthought, and at worst non-existent. With the UK's housing stock some of the least energy-efficient in Europe,³⁴ the coalition government set out in 2010 to improve matters – one of the manifesto commitments of the Liberal Democrats who held the Department of Energy and Climate Change (DECC). Their coalition partners, the Conservatives, were keen that this be done with little impact on the public purse, having themselves made a manifesto pledge to cut the deficit and reduce spending on public services. The UK's economy had been hard hit by the financial crisis and recovery was fragile in 2010. In this setting, a scheme which encouraged

³¹ The CJEU has held in several cases that exclusion of a tender due to a minor clerical error was disproportionate: Case T-211/02 *Tideland Signal Ltd v Commission*; Case C-27/15 *Pippo Pizzo v CRGT Srl*; Case C-131/16 *Archus and Gama*.

³² See Bouwman (2018) for a discussion of how the exemption for authorisation schemes developed in *Falk Pharma* and *Tirkonnen* is being used by Dutch public authorities for the award of social care services.

³³ Directives 89/665/EEC and 92/13/EEC as amended by Directives 2007/66/EC and 2014/23/EU.

³⁴ Guertler, Carrington and Jansz (2015)

citizens to invest in energy improvements without significant government expenditure was extremely attractive, and so the Green Deal was born. It was designed to accelerate energy efficient renovations by providing access to finance and an approved list of contractors. The cost of renovations would be paid back via household or business energy bills over a number of years – with this charge remaining with the property regardless of ownership or occupancy. The scheme thus aimed to address the problem of split incentives, where those who pay for renovations (normally the owner of a property) do not benefit directly from savings on bills.

At the heart of the Green Deal was a ‘golden rule’: the cost of renovations (including interest on money borrowed) could not exceed the projected savings on energy bills over the expected lifetime of the measures. This was intended to ensure the scheme was both attractive to households and financially viable for lenders. Capital finance for renovations would be provided by the Green Deal Finance Company, set up to manage private investment in the scheme, and underwritten by a government loan. Renovations could only be carried out following an assessment by a government-approved Green Deal Assessor. Following an assessment, the householder would agree a finance and payback plan with one of the Green Deal Providers, who would then contract with an approved Green Deal Installer. Figure 2 illustrates the process and actors.

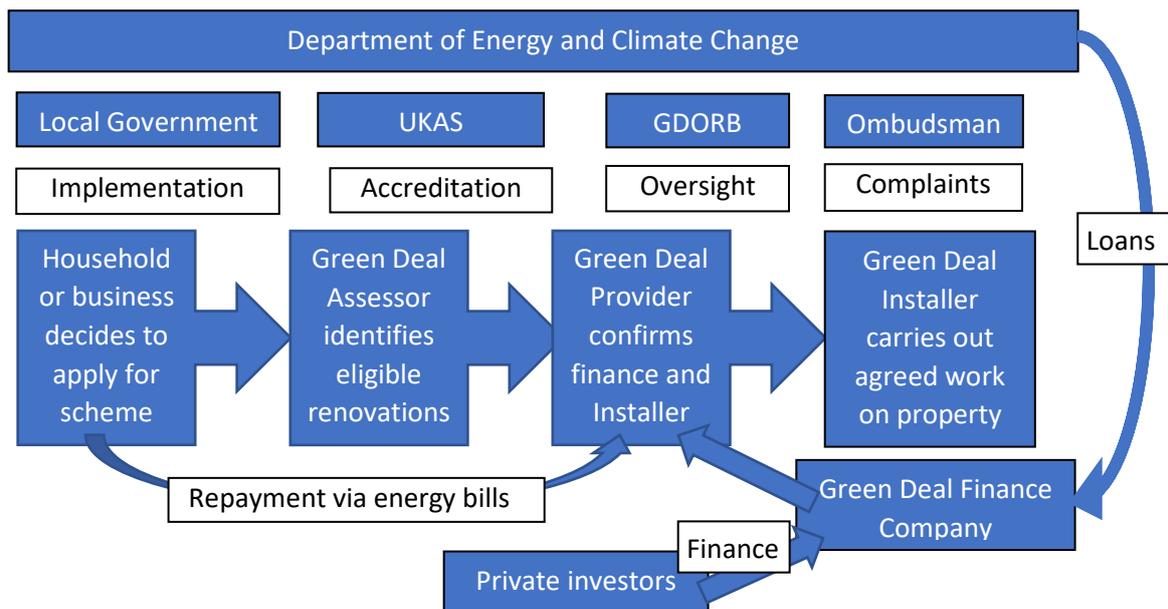


Figure 2. Green Deal Process and Actors

The process for approving assessors, providers and installers was assigned to local government and other bodies, with DECC providing funding for this. Assessor organisations were required to be certified by the UK’s national accreditation body (UKAS), comply with a code of practice, be registered with the Green Deal Oversight and Registration Body (GDORB), and have specific training on producing Green Deal reports. Bespoke software to support the assessments was also developed. The creation of a trustworthy supply chain was seen as essential to the success of the Green Deal, as research had pointed to a lack of consumer confidence in energy-

efficiency renovations.³⁵ A Green Deal Communities Fund was set up to help local authorities drive take-up of the scheme, with a total of £88 million being made available for this from DECC. To further encourage take-up, the Government offered cashback to Green Deal customers who had undertaken a Green Deal assessment and went on to install energy efficiency measures. One of the key ambitions of the scheme was to go beyond the 'low-hanging fruit' by targeting more difficult and expensive renovations such as solid wall insulation. In addition to the loan financing made available under the Green Deal, renovations for hard-to-treat and low-income households were financed under the Energy Company Obligation (ECO), paid for by a levy on all electricity consumers.

The consultation document published by DECC in 2011 clearly identifies the consumer-led philosophy of the scheme:

Previous Government schemes have been too top-down to take account of what consumers actually want. Green Deal changes all that. At its heart is an innovative new financial mechanism which eliminates upfront costs and provides reassurance that the costs should be covered by the savings. Allied to the finance are strong consumer protections including a Government-backed system of accreditation for impartial assessment, reliable measures and quality installation. Above all it will be consumer-led, creating a new and open market in which a diversity of firms will compete for consumer demand.³⁶

However, the Green Deal quickly ran into a number of problems, leading eventually to an announcement in July 2015 from DECC that it would no longer fund the scheme due to "low take-up and concerns about industry standards."³⁷ By 2015, only 15,600 Green Deal finance plans were in place, compared to initial projections of 14 million plans being in place by 2020.³⁸ Public expenditure on the scheme also exceeded projections: between 2011 and 2015, the DECC spent £240 million on the scheme, made up of grants to stimulate demand and (unplanned) support for the Green Deal Finance Company.³⁹ Overall, the scheme cost taxpayers over £15,000 per plan – or £94 per tonne of CO₂ saved (compared to a cost of £34 per tonne for previous schemes).⁴⁰ What went wrong?

The National Audit Office (NAO) and the House of Commons Energy and Climate Change Committee each published several reports on the Green Deal, which point to a number of factors which undermined its success. Chief amongst these appears to be that the interest rates under the scheme were too high to make investment attractive to a large number of households. At 7-10%, interest rates significantly exceeded other forms of finance available to households,⁴¹ reflecting the need to attract private investors to the Green Deal Finance Company, as well as the overheads involved in determining eligibility, arranging the plans and installing measures. The complexity of the assessment and application process was also off-

³⁵ DECC (2011) at p 45.

³⁶ DECC (2011) at p 11.

³⁷ DECC (2015)

³⁸ Barker (2011)

³⁹ NAO (2016a) at p 9. Loans totalling £48.5 million were made to the GDFC between 2012 and 2015.

⁴⁰ NAO (2016a) at p 4, p 38.

⁴¹ Rosenow and Eyre (2015) at p 142.

putting to many. Despite the intention to set up a trustworthy supply chain, multiple scams involving fake Green Deal assessors were reported, and by March 2015 10% of all certified Assessors and 12% of all certified Installers had been struck off for non-compliance with the Green Deal Code of Practice.⁴² A short-lived grant scheme, the Green Deal Home Improvement Fund, provided cash incentives in an attempt to boost take-up – but this created uncertainty for households deciding whether to take on a loan. Surveys indicated that property owners were concerned about the need to gain permission from their mortgage lenders, as well as potential difficulties in switching energy provider or selling their property.⁴³

These problems combined to make the scheme unattractive to householders. Not all of them were unforeseeable, as the NAO pointed out in its 2016 report:

Many stakeholders warned the Department that it would be difficult to persuade people to pay for measures themselves. Its own consumer survey did not provide a strong case for schemes like the Green Deal creating demand. The Department understood these concerns, but implemented the scheme anyway, as it believed its market-led model held little financial risk for the government.⁴⁴

The lack of take-up for the scheme undermined the finance model. The expectation was that the Green Deal Finance Company would become self-financing, however its loan book never reached sufficient volume for this. It ceased financing new Green Deal plans in 2015, effectively bringing the scheme to a halt. In addition to the loans made by DECC, the UK's government-created Green Investment Bank had offered to provide finance to the GDFC, however this offer was withdrawn when it became clear that its commercial terms could not be met.⁴⁵ In 2017 the GDFC was sold to private purchasers and has since recommenced lending to finance energy renovations – at higher interest rates.⁴⁶

The failure of the Green Deal illustrates the complexity of trying to guess what citizens will find attractive, and how they make financial decisions. Such questions are of course subject to extensive research, including by the UK Government's own Behavioural Insights Team.⁴⁷ In the case of the Green Deal, it appears that such insights were either missing or lost out to political and ideological motives.⁴⁸ Part of the problem may have been the unfamiliar role played by government in the Green Deal – neither funding, taxing or mandating an activity but setting up an elaborate structure in order to encourage citizens to engage with the private sector. Naturally citizens were suspicious – if the Green Deal was a good deal then why did the government need to sell it to them? Why was cashback being offered as an alternative and would this continue? A comparison might be made with pension contributions, another area where the government wants citizens to act

⁴² Gosden (2015)

⁴³ GfK NOP (2014)

⁴⁴ NAO (2016a) at page 11.

⁴⁵ NAO (2016b) at page 8.

⁴⁶ Capstick (2017)

⁴⁷ The UK's Behavioural Insights Team was established within the Cabinet Office in 2010, and is now a social purpose limited company.

⁴⁸ Rosenow and Eyre (2017) argue that these considerations were allowed to dominate, pointing out that a number of informed commentators (including themselves) predicted the failure of the scheme.

both in their own financial self-interest and the interest of society as a whole, by making adequate provision for their retirement. However, the UK approach in this area is very different: since 2012 employers have been required to automatically enrol employees in a pension, with employees able to opt out. This policy has been successful both at increasing the number of workers contributing to a pension scheme and increasing the total amount of contributions.⁴⁹ In contrast, the Green Deal depended entirely on citizens *choosing* to engage with the programme – a choice they overwhelmingly rejected.

⁴⁹ James (2016), p 6.

II.ii Verify

As government services have digitised, the need to reliably authenticate citizens' identity online has grown. Unlike many of their European neighbours, British citizens do not hold any universal form of identification.⁵⁰ The UK's Government Digital Service (GDS) set out in 2011 to develop a platform to support identity assurance across central government. The services to be supported ranged from filing tax returns, to applying for or renewing driving licences, to accessing social welfare payments. GDS, with input from the independent Privacy and Consumer Advisory Group (PCAG) and CESG,⁵¹ developed a framework which defined a set of principles for identity assurance⁵² and the required level of assurance for each service. Reflecting the public controversy surrounding ID cards, the principles include user control and data minimisation – meaning only the minimum amount of data required to complete a transaction is collected. They also include the principle of multiplicity, meaning users can choose between different identity assurance providers and terminate, suspend or change providers at any time. Pre-existing methods of accessing government services online, such as the Government Gateway system used by HMRC, often required a code to be sent by post. Verify aimed to replace such systems, as part of the broader Government as a Platform (GaaP) programme. In its 2016 business case, GDS set a target for 46 government services to be accessible through Verify by March 2018, with 25 million users by 2020.⁵³

Citizen engagement and innovation are key to GaaP, as described by Brown et al (2017):

GaaP emphasises the role of citizen engagement, including participation in the policy process. It thus partially echoes the earlier definition of e-Government, with its emphasis on citizen engagement, consultation and informed participation to develop policies that better address citizens' needs and hence increase support for, and trust in, Government and its policies... Investigating platform models in Government thus becomes a question of: How does government become an open platform that allows people inside and outside government to innovate? How do you design a system in which all of the outcomes aren't specified beforehand, but instead evolve through interactions between government and its citizens, as a service provider enabling its user community?

The procurement and delivery approach for Verify reflected these mandates. Figure 3 illustrates the role of citizens (users), private companies, independent bodies and government in the process.

⁵⁰ The Identity Cards Act 2006 provided for the creation of a National Identity Register, biometric ID cards and a common travel document. However this Act was repealed in 2010 due to widespread public concern about its scope and use, and the database was destroyed.

⁵¹ CESG was the UK's national technical authority for information assurance, now part of the National Cyber Security Centre.

⁵² Available at: <https://www.gov.uk/government/publications/govuk-verify-identity-assurance-principles/identity-assurance-principles>

⁵³ NAO (2019), p6. The original target, mentioned in the 2014 OJEU notice for the Verify framework, was for all central government services requiring identity assurance to use the system by March 2016.

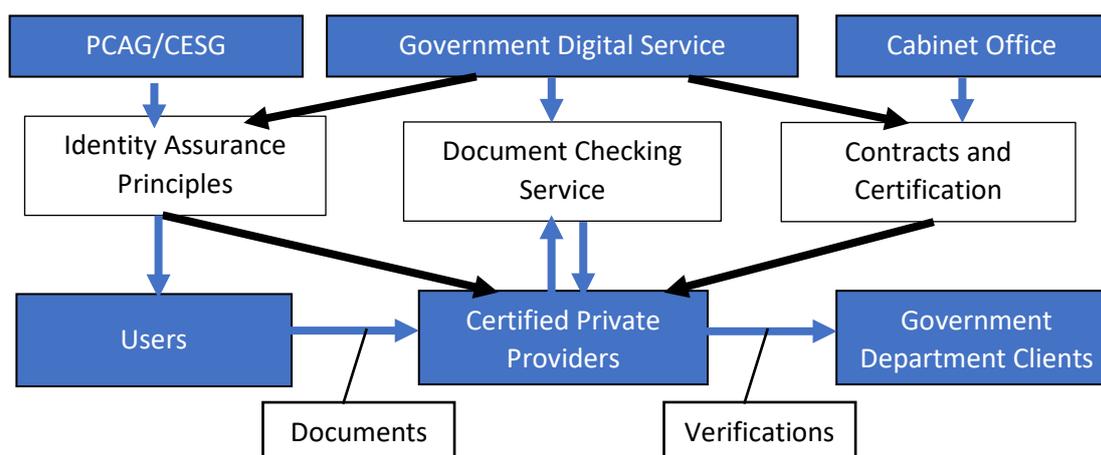


Figure 3. Verify Process and Actors

Following a procurement exercise in 2014-15, seven companies were appointed to a framework agreement to provide identity assurance services under Verify. Providers would be paid a fixed fee for each user signing up, and a further fee for each year their profile remained active. By appointing multiple providers, the GDS aimed both to enable citizen choice and to encourage innovation within a competitive marketplace, in particular to develop alternative approaches to identity assurance.⁵⁴ For example, young people often struggle to provide documents such as bills or driving licences which can be used to establish identity. Verify allowed provider companies to experiment with use of other data sources such as online transaction histories in order to prove identity to defined levels of assurance (LoA).⁵⁵ This addressed one of the key ambitions of the program to widen the demographic coverage of citizens able to prove their identity online, thus reducing the need for costly manual verification carried out by Departments.

Verify was intended to support the roll out of Universal Credit, the government's major reform of social welfare payments. However, it ran into a number of problems which have severely limited its take-up. These problems arose both internally, with departments reluctant to commit to switching to the service, and externally, with providers experiencing difficulty in meeting the target verification rates. These problems became mutually reinforcing, as low success rates meant departments did not feel confident in abandoning older systems, and low demand meant providers could not afford to invest in more effective approaches.⁵⁶ Like the Green Deal, Verify's financial structure relied upon a sufficiently high number of citizens using the service for providers to recoup their costs and make a

⁵⁴ Whitley (2018), p 33-34.

⁵⁵ *Ibid.*

⁵⁶ These problems can be discerned from the NAO and Public Accounts Committee reports on Verify published in 2019. However, neither report appears to have taken evidence from providers involved in Verify. The NAO report does include a very moving piece of written evidence from a frustrated user, Mr. P.G. Slater, who states: " I have a poor opinion of this Gov Verify system for all the hours of my time it has wasted, the inextricable complexity of the security, the fact that you have to deal with two organisations... who don't seem to be able to coordinate help for users. Just to prove your identity. Ultimately, no system can ever really confirm who you are. Ironically, I still have an Identity Card from the 1950s which was issued when you were born, so that you could use the post-war rationing system.

profit. The cost to government was also intended to reduce as user numbers increased. By February 2019, just 3.6 million people had successfully used Verify. The verification success rate across all providers and all government services was 48%, compared to the 2015 projection of 90%.⁵⁷ In the case of Universal Credit, the verification success rate fell to 38% - reflecting the difficulty in providing digital identity assurance to those in greatest need of public services. Twenty government services currently use Verify, less than half the number expected by March 2018. At least 11 of these services can be accessed through other online systems.

The low take-up means the ambition for Verify to be self-funding has not been met. The Cabinet Office has announced that it will stop funding the service in March 2020 – with the intention that the private sector will take over the service (as happened with the Green Deal). While developing a private market for identity assurance was always part of the plan for Verify, this was supposed to build upon its success as a service used across central government. A NAO report published in March 2019 summarises the uncertain future prospects for the service:

GDS is currently considering what the commercial model for Verify will look like post-April 2020, and how private sector providers will take over control and management of Verify. One possibility is that departments would procure identity verification services directly from the market of private sector providers. Departments currently do not pay their full usage costs for Verify but would have to under a market-based model. After April 2020 GDS will no longer set prices, so it cannot guarantee what prices will be determined by the market in future. There is consequently a risk that the market price for identity verification services could be unaffordable for government departments using Verify.⁵⁸

In evidence given to the House of Commons Public Accounts Committee, the head of GDS expressed confidence that the work done under Verify had helped to build a competitive market based on robust standards, and that this would eventually lead to mass private and public uptake of the system.⁵⁹ While it is too early to judge the accuracy of this statement, some conclusions about the effectiveness of Verify's citizen contracting model can be made.

While individuals are given a choice of which private provider to use, very little information is available to inform this choice. In trying to access a government service, users are redirected to the Verify landing page which offers a choice of five (originally seven) companies, represented only by their logos. In some cases, the choice is restricted based on the types of document which the user has available. Like the Green Deal, citizens seeking to use Verify are likely to be confused about the respective role of government and private providers in the scheme. Unlike the Green Deal, they are not required to pay for the service, meaning the barriers to take-up are technical and behavioural rather than financial. However, in common with the Green Deal, insufficient research was carried out into the motivations and constraints faced by potential users. While the Identity Assurance Principles underlying Verify reflect a concern to protect citizen privacy and security, the

⁵⁷ NAO (2019) The verification success rate measures users who succeed in signing up for Verify in a single attempt, but does not indicate whether the user succeeds in accessing a government service. It also excludes users who drop out before finishing their applications.

⁵⁸ NAO (2019), paras 3.8-3.11.

⁵⁹ Kevin Cunnington, evidence given to Committee on Public Accounts, 18 March 2019, Q122-131.

difficulty in providing a service accessible to all users appears to have been underestimated. The distributional challenge associated with providing identity assurance for all, as well as the administrative challenge of creating joined-up government demand, could not be effectively outsourced.

Section III – Evaluating the Impact of Citizen Contracting on Procurement Outcomes

The two citizen contracting models discussed here sit at opposite ends of the spectrum of government control. Verify employed a traditional procurement approach, only allowing citizens to choose a provider who performed tasks specified and paid for by the government. In contrast, the Green Deal involved citizens in both specifying and paying for services. In addition to the political and public spending constraints which informed both projects, each aimed to create a competitive private market for services which served a public purpose. They thus represent an alternative approach to strategic procurement, which encompasses environmental, social and economic objectives as well as aiming to secure delivery of specific goods or services. Citizen contracting models are likely to remain attractive to governments, in particular in the EU where recent case law indicates these may fall outside of the public procurement rules. It is important then that we try to understand what went wrong with these two schemes, and develop research questions and evaluation criteria for future proposed schemes.

If the intention is to import private sector efficiency into public services, three initial 'existential' questions must be asked:

1. *Is the service already delivered via private markets in a way which meets (most of) the objectives of public service delivery?*

If yes, there may be a strong argument for government providing a subsidy, tax break or grant to citizens to purchase the service on the private market, without further intervention.

2. *If the service is not adequately delivered via private markets, why not? Can government meaningfully address any missing incentives?*

This requires an understanding of why the market is not delivering particular outcomes, and the scope of intervention needed to shift incentives. Schemes which focus on distributional challenges, such as reaching isolated or deprived citizens, may require substantial government resources to overcome these gaps in market provision.

3. *What are the underlying risks/problems which need to be solved? How can these be addressed, rather than responsibility for them merely being shifted?*

The Green Deal and Verify both focused on technically challenging tasks. As originally conceived, the Green Deal avoided the 'low hanging fruit' of energy improvements and targeted jobs such as solid wall insulation which require considerable expertise and cost. Verify aimed to provide identity assurance in a way which avoided the intrusive and unpopular methods rejected under the previous ID card scheme, which included biometric data and a large, central database. However behavioural challenges were equally significant and were underestimated in the design of both schemes.

Once these initial existential questions about citizen contracting have been answered, there is a need to engage in more detailed evaluation of schemes. This should address the full range of desiderata attached to procurement, including strategic objectives. Table 1 proposes evaluation approaches for each of these.

Criterion	Evaluation Approach
Quality	How will the services meet or exceed current standards? What financial, technical and human resources will be available for delivery, and from whom? Which third-party quality assurance system will be applied? What happens when things go wrong?
Coverage	How will the services meet or exceed current scope of coverage? What specific measures are in place to cover hard-to-reach users/areas? Have hard-to-reach users been consulted directly? What happens when things go wrong?
Costs	At what stage will it be possible to have full visibility of costs? How can costs be compared to other delivery options, e.g. conventional procurement? What profit margins typically apply in the market? Who is best placed to provide capital, and what interest rate will apply?
Accountability	Will the public authority be party to the contract? How will political pressures be dealt with? Will there be independent oversight of the scheme? Can specific service commitments be enforced? Who will be able to control costs under the contract?
Choice	If citizen choice forms part of the scheme, has research been carried out into how similar decisions are made? Will citizens have access to sufficient information to make a meaningful choice? How will citizen choice affect the costs, quality and other aspects of service delivery?
Environmental	Have environmental baselines been defined? What measurable environmental benefits will be delivered? Would the market provide these environmental benefits without the scheme? If so, when? If not, why not? Will any environmental detriments be incurred? If so can these be measured and compared to the benefits?
Economic	Does the scheme address a market failure? If so, will it continue to exist after the scheme ends? What impact will the scheme have on competition, wages and employment? Which types of firm (SMEs/non-SMEs; for profit/not-for-profit; domestic/non-domestic) will be involved in delivery and have they been included in market consultation?
Social	Will the scheme deliver benefits to those most in need? Can social impacts be measured? Does the market have the capacity/experience/incentives to deliver social benefits? Have those expected to benefit from the scheme, or their representatives, been consulted on its design?

Table 1. Proposed evaluation approach for citizen contracting schemes

Section IV – Conclusions

This paper has examined two examples of citizen contracting in the UK, which largely failed to achieve their aims. Although they employed very different contract structures, the common feature of these two schemes is that they involved private decision-makers in activities traditionally undertaken by the state through procurement. In each case, the role of the public sector in specifying requirements, selecting a successful contractor and/or financing contracts was replaced with novel arrangements which required the state to take a step back. Reflecting an underlying 'small-state' philosophy, the Green Deal and Verify aimed to create competitive private markets for the provision of technically challenging services. The attraction is clear: where the ultimate beneficiary of a service is the citizen, surely removing an inefficient intermediary such as the state will yield better results? As has been seen, the picture is not so simple. A contradiction seems to lie at the heart of these initiatives: if private decision-makers are best placed to choose and/or finance public services, then why don't they do it without the need for elaborate state interventions which aim to create the correct incentives?

Areas where the state enjoys a true monopoly over service provision are increasingly rare in the United Kingdom (and many other countries): schools, healthcare, prisons, and local services all involve private contractors in a range of roles. Long-term contracts are common and many of these are awarded following extensive engagement with market players, leaving plenty of room for private operators to propose new means of service delivery, incentives or financing. Various forms of payment-by-results are found in these contracts, although these have sometimes been blamed for pushing contractors into financial straits.⁶⁰ Is the problem too much state control, or not enough? These questions form part of an increasing chasm between the left and right in UK politics, with deeply contrasting visions for public procurement and other forms of state activity in the post-Brexit era.

Some would argue that the problem with the contracting models discussed here is that they did not go far enough: why not remove the state from these areas entirely and simply reduce taxes in order to leave citizens with more disposable income to spend on the services they choose? One reason is that both schemes targeted the delivery of public goods which arguably would not be delivered without government intervention. Environmental protection and security (of which identity assurance forms a part) are considered classic public goods by economists.⁶¹ In the case of the Green Deal, delivery of a public good in the form of reduced greenhouse gas emissions was accompanied by delivery of a private good in the form of reduced energy costs. Likewise, Verify provided a service both to private users and to society as a whole, as identity assurance is necessary for security in the digital age. To the extent that these are public goods, some degree of market failure is to be expected – and this appears to have been underestimated in the design of the schemes.

Innovative approaches to public service delivery are typically developed in response to a specific political motive, and often do not involve extensive review of

⁶⁰ This was the case for Carillion, see note 12.

⁶¹ The economic definition of public goods rests on the idea of non-excludability and non-rivalry. Arguably the specific services delivered by both the Green Deal and Verify do not fully meet this definition, but the broader objectives they contribute to – environmental protection and security – do.

previous projects before choices are made about how to proceed. Public procurement involves the state in a number of complex tasks including specification of requirements, evaluation of competing market offers, selection of the preferred bid based on pre-defined cost and quality criteria, and contract management to ensure results are delivered. Performing these tasks is time-consuming. Because these tasks are not fully visible to those not directly involved in procurement, it is often perceived as unnecessarily bureaucratic. Unflattering comparisons are made with the private sector, where decisions appear to be taken more quickly without the need for lengthy documents or ponderous evaluation panels. Some of these criticisms may be well-founded, however the comparison with private sector decision making is misleading on a number of fronts. To begin with, much less information is available about procurement decisions made by firms, as they are not subject to the same transparency requirements as governments. Failed private sector procurements are also much less likely to make it into public view, as confidentiality and non-disclosure agreements are more easily enforced. Even if we accept the anecdotal view of private procurement as more efficient, this must be seen in light of the different nature of public and private purchasing, both in terms of what is being bought and the economic, environmental and social imperatives attached to it.

Far from just being an *apologia* for public procurement, this view allows us to evaluate more clearly the use of market mechanisms such as citizen contracting. The 'existential' evaluation questions set out in Section IV aim to identify the extent and nature of market failure where citizen contracting schemes are proposed, to determine whether they are an appropriate intervention. The more detailed evaluation questions aim to apply some of the rigour which regulated procurement procedures normally bring to public expenditure, while recognising the unique benefits and potential pitfalls of citizen contracting. Subject to proper scrutiny, citizen contracting may help governments deliver public services which are fit to address climate change, digitisation and other twenty-first century challenges.

References

- Barker, G. (2011) Speech at Green Deal and Big Society event, 20 June 2011. Online: <https://www.gov.uk/government/speeches/greg-barker-speech-green-deal-and-big-society-event> (accessed 20 June 2019)
- Bonfield, P. (2016) *Each Home Counts: An Independent Review of Consumer Advice, Protection, Standards and Enforcement for Energy Efficiency and Renewable Energy*
- Bouwman, G. (2018) "Externalising Dutch Public Social Care Services: demarking the lines between public contracts and a new instrument in between authorisation schemes and public contracts."
- Brown, A., Fishenden, J., Thompson, M., Venters, W. (2017) "Appraising the impact and role of platform models and Government as a Platform (GaaP) in UK Government public service reform: Towards a Platform Assessment Framework (PAF)" 34 *Government Information Quarterly* 167
- Böhlmark, A. and Lindahl, M. (2015) "Independent schools and long-run educational outcomes: evidence from Sweden's large-scale voucher reform" 82 *Economica* 508
- Capstick, A. (2017) "Green Deal relaunched under private ownership - how does it stack up?" Online: <https://www.moneysavingexpert.com/news/2017/06/green-deal-relaunched-under-private-ownership---how-does-it-stack-up/> (accessed 20/6/2019)
- Cave, M. (2001) Voucher Programmes and Their Role in Distributing Public Services *OECD Journal of Budgeting*
- Chandler, J. (2015) "Energy Efficiency in the United Kingdom: The Failure of the Green Deal" 6 *Renewable Energy Law & Policy Review* 191
- DECC (2011) *The Green Deal and Energy Company Obligation: Consultation Document* Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/42980/3607-green-deal-energy-company-ob-cons.pdf (accessed 10/6/2019)
- DECC (2014) *Green Deal Assessment Mystery Shopping Research* Online: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/388197/Green_Deal_Assessment_Mystery_Shopping_FINAL_PUBLISHED.pdf (accessed 8/6/2019)
- DECC (2015) "Changes to green home improvement policies announced today" Online: <https://decc.blog.gov.uk/2015/07/23/changes-to-green-home-improvement-policies-announced-today/>
- European Commission (2013) *Guide to the application of the European Union rules on state aid, public procurement and the internal market to services of general economic interest, and in particular to social services of general interest* SWD (2013) 53 final
- European Commission (2018) *Commission Notice: Guidance on Innovation Procurement* C (2018) 3051 final Brussels 15.5.2018
- Freeguard, G. (2019) "Verify problems highlight four challenges for digital projects" Institute for Government Online: <https://www.instituteforgovernment.org.uk/blog/verify-problems-highlight-four-challenges-digital-projects> (accessed 20/6/2019)

Georghiou, L., Edler, J., Uyarra, E. and Yeow, J. (2014) "Policy instruments for public procurement of innovation: Choice, design and assessment" 86 *Technological Forecasting & Social Change* 1

Gosden, E. (2015) "One in ten Green Deal companies 'struck off' for breaking the rules" *The Daily Telegraph*, 14 March 2015

Guertler, P. Carrington, J. and Jansz, A. (2015) "The Cold Man of Europe 2015" Association for the Conservation of Energy. Available at: <https://www.nea.org.uk/wp-content/uploads/2016/04/ACE-and-EBR-briefing-2015-10-Cold-man-of-Europe-update.pdf> (accessed 20/6/2019)

GfK NOP (2014) *Green Deal Assessment Customer Research: Summary report of further analysis and new findings from quantitative studies* Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/299499/green_deal_evaluation_additional_analysis_and_synthesis_report.pdf (accessed 8/6/2019)

Hebb, T. and Hachigian, H. (2017) *Social Value Procurement Measurement and Evaluation: A Global Review and Assessment of Social Value Procurement Evaluation Toolkits and Frameworks* Ottawa: Carleton Centre for Community Evaluation

House of Commons Energy and Climate Change Committee (2016) *Home energy efficiency and demand reduction* Fourth Report of Session 2015–16, HC 552

House of Commons Committee of Public Accounts (2019) *Accessing public services through the Government's Verify digital system* Online: <https://publications.parliament.uk/pa/cm201719/cmselect/cmpubacc/1748/1748.pdf> (accessed 19/6/2019)

Howes, S. and Bishop, T. (2018) *The Hidden Obstacles to Government Digital Transformation* Institute for Government Online: https://www.instituteforgovernment.org.uk/sites/default/files/publications/Digital_Transformation_final_WEB.pdf (accessed 20/6/2019)

James, H. (2016) *The impact of automatic enrolment in the UK as at 2016* Pensions Policy Institute: PPI Briefing Note No. 87

Kwon, S. and Guo, B. "South Korean non-profits under the voucher system: Impact of organizational culture and organizational structure" 62(2) *International Social Work* 669

Ladd, H. (2002) "School vouchers: a critical view" 16(4) *Journal of Economic Perspectives* 3

Mason, P., Lloyd, R. and Nash, F. (2017) *Qualitative Evaluation of the London Homelessness Social Impact Bond: Final Report* London: Department for Communities and Local Government

National Audit Office (2016a) *Report by the Comptroller and Auditor General – Department of Energy & Climate Change – Green Deal and Energy Company Obligation* London: Cabinet Office

National Audit Office (2016b) *Report by the Comptroller and Auditor General – Department of Energy & Climate Change – Investigation into the Department of Energy & Climate Change’s Loans to the Green Deal Finance Company* London: Cabinet Office

National Audit Office (2019) *Report by the Comptroller and Auditor General – Investigation into Verify* London: Cabinet Office

OECD (2017) *Public Procurement for Innovation: Good Practices and Strategies* OECD Public Governance Reviews Online: <http://dx.doi.org/10.1787/9789264265820-en> (last accessed 24/5/2019)

Pettifor, H., Wilson, C., Chrysochoidos, G. (2015) "The appeal of the Green Deal: Empirical evidence for the influence of energy efficiency policy on renovating homeowners" 79 *Energy Policy* 161

PwC (2016) *Strategic use of public procurement in promoting green, social and innovation policies* Brussels: European Commission, DG GROW

Preston, I. and Mallett, G. (2017) *Learnings from Green Deal Communities* Online: <https://www.cse.org.uk/downloads/file/green-deal-communities-learning-recommendations-2017.pdf> (accessed 9/6/2019)

Ranerup, A. and Norén, L. (2015) "How are citizens' public service choices supported in quasi-markets?" 35 *International Journal of Information Management* 527

Rosenow, J. and Eyre, N. (2016) "A post mortem of the Green Deal: Austerity, energy efficiency, and failure in British energy policy" 21 *Energy Research & Social Science* 141

Sanchez Graells, A. (2016) "ECJ gets first principles of public procurement wrong, as demonstrated by the regulation of dynamic purchasing systems (Case C-410/14)" At: <https://www.howtocrackanut.com/blog/2016/6/3/6dmoau4vg7cuvwdswixj9zdclyk19h> (accessed 17/6/2019)

Sanchez Graells, A. (2018) "The end of procurement as we knew it? CJEU consolidates *Falk Pharma* approach to definition of procurement in *Tirkonnen* (C-9/17)" Online: <https://www.howtocrackanut.com/blog/2018/3/5/the-end-of-procurement-as-we-knew-it-cjeu-consolidates-falk-pharma-approach-to-definition-of-procurement-c-917> (accessed 17/6/19)

Semple, A. (2016) "The Link to the Subject-Matter: A Glass Ceiling for Sustainable Public Contracts?" in Sjaafjell and Wiesbrock (eds.) *Sustainable Procurement under EU Law* Cambridge: Cambridge University Press

Semple, A. (2017) "Socially Responsible Public Procurement under EU Law and International Agreements" 12(3) *European Procurement & Public Private Partnership Law Review* 293

Steuerle, C.E., Ooms, V.D., Peterson, G.E. and Reischauer, R.D. (2010) (eds) *Vouchers and the Provision of Public Services* Washington, D.C.: Brookings Institution Press

Sutherland, V., McTier, A., Glass, A. and McGregor, A. (2015) *Analysis of the Impact and Value of Community Benefit Clauses in Procurement* Glasgow: University of Glasgow.

United Nations Environment Programme (UNEP) (2017) Global Review of Sustainable Public Procurement. Available at: <https://wedocs.unep.org>

Whitley, E. A. (2018) *Trusted digital identity provision: GOV.UK Verify's federated approach* LSE Research Online:
http://eprints.lse.ac.uk/90577/1/Whitley_Trusted%20digital%20ID_2018.pdf

World Bank Group (2017) Benchmarking Public Procurement 2017 – Assessing Public Procurement Regulatory Systems in 180 Countries Online: <http://pubdocs.worldbank.org> (accessed 10/5/2019)