



CabinetOffice

Government Construction

Cost Reduction Validation Method

Cost Reductions May 2010 to September 2011

10th February 2012

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INTRODUCTION

This document sets out the key principles of the method that will be applied from April 2012 to measure the progress made in achieving the Government Construction Strategy's (GCS's) overarching target of a sustainable¹ reduction in construction costs of 15-20% by the end of this Parliament. The method was developed with the Joint Data and Benchmarking Task Group.

It also gives details of the departmental construction cost reductions achieved from May 2010 to September 2011 (the period prior to the establishment of the key principles set out in this document) and of how they were calculated. The methods used by departments are detailed at the end of this document in Table 9. Typically, cost reductions have been calculated with reference to outline business cases, funding calculations or framework rates that adopted benchmarks from the baseline year 2009-10 or before.

Table 1 below sets out the overarching cost reduction trajectory against which cost reduction outcomes will be tracked and reported.

		2011/12	2012/13	2013/14	2014/15
Forecast Construction Expenditure		£8bn	£8bn	£8bn	£8bn
Forecast Cost Reduction Range	Forecast achieving 15% reduction by 2014/15	£160m	£350m	£650m	£1200m
	Forecast achieving 20% reduction by 2014/15	£180m	£400m	£850m	£1600m
	% Reduction ²	ca.2%	ca. 4-5%	ca. 8-10%	ca. 15-20%

¹ Without adversely impacting either whole life value or the long term financial health of the construction industry.

² % Reduction refers to overall annual Government construction expenditure of circa £8Bn and is therefore different to the figures stated on page 4 and in Section 11 below, which are based on the total expenditure relating to the corresponding Department cost reductions over an 18 month period. Over the course of the programme to deliver the Government Construction Strategy, cost reductions relating to an ever increasing proportion of total Government expenditure will be captured and reported.

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The trajectory above is underpinned by each department's trajectory, which for Department of Health/P21, DEFRA/Environment Agency, DfT/Highways Agency, Ministry of Justice and DfE/Partnerships for Schools has been published for the first time with the departmental Cost Benchmarks. These, together with those in Table 1, will be revised as necessary in the light of the development of work to promote the government construction strategy, notably the outcome of the new trial projects.

The overarching GCS cost reduction reported for the period May 2010 to September 2011 is £188m on an expenditure of £4969m (3.8%). In general, this overarching cost reduction represents lower spending on specific projects by departments and devolved bodies.

COST REDUCTION VALIDATION METHOD

1) Introduction

The Government Construction Strategy (GCS) was published by Cabinet Office in May 2011 and was formally launched by the Minister for the Cabinet Office on 19 July 2011.

<http://www.cabinetoffice.gov.uk/resource-library/government-construction-strategy>

The strategy formalises the work which started in 2010/11 with departments to identify and commence work to deliver a reduction of 15-20% on the cost of construction (this target having been agreed by the Government Construction Board, September 2010). Intervention started with a challenge to departments to renegotiate their individual contracts to find ways of providing immediate cost reductions.

Cabinet Office is accountable for implementation and delivery of the strategy, while the GCS cost reduction validation method has been developed in conjunction with departments through the Joint Data and Benchmarking Task Group.

The key interventions from the GCS that are being implemented by departments are outlined in Section 10 below and encompass Standardisation, New Commercial Arrangements, New Volumes and Demand Management.

2) Calculation Method And Evidence Base

In summary, the calculation method to be adopted across Government from April 2012 consists of the following:

- A. Benchmarks are established by department and product e.g. the cost of a school by floor area (£/m²) or the cost of a road by kilometre run (£/km).

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- B. Cost reductions reported by departments are derived by comparing current benchmarks with baseline benchmarks multiplied by the volume of activity (overall spend or creation of area or length by department).

The baseline for this cost reduction validation method consists of the departmental construction benchmarks that were recorded during the financial year 2009/10 and which have been published for the first time in parallel with this document.

On account of the lengthy time lag between the implementation of an efficiency initiative on a construction project and its effect being discernable in the Outturn (Throughput) Data, the year on year comparison of benchmarks will be based primarily on Contract Award (Commitment) Data. This will be implemented on the basis that departments can demonstrate the available contract award data represents a reliable indicator of outturn costs.

Where Contract Award (Commitment) Data is not available, Outturn (Throughput) Data will be submitted instead, the key requirement being that a department is consistent in which type of data is submitted. Over the longer term, the validity of this method will be confirmed by ensuring that the cost reduction trends visible in the Contract Award Data are also discernable in the subsequent Outturn Data.

In relation to the departmental construction cost reductions achieved from May 2010 to September 2011 (the period prior to the establishment of the key principles set out in this document), the methods used by departments are detailed at the end of this document in Table 9. Typically, cost reductions have been calculated with reference to outline business cases, funding calculations or framework rates that adopted benchmarks from the baseline year 2009-10 or before, and these cost reductions therefore represent lower spending on specific projects by departments and devolved bodies.

3) Background to the method

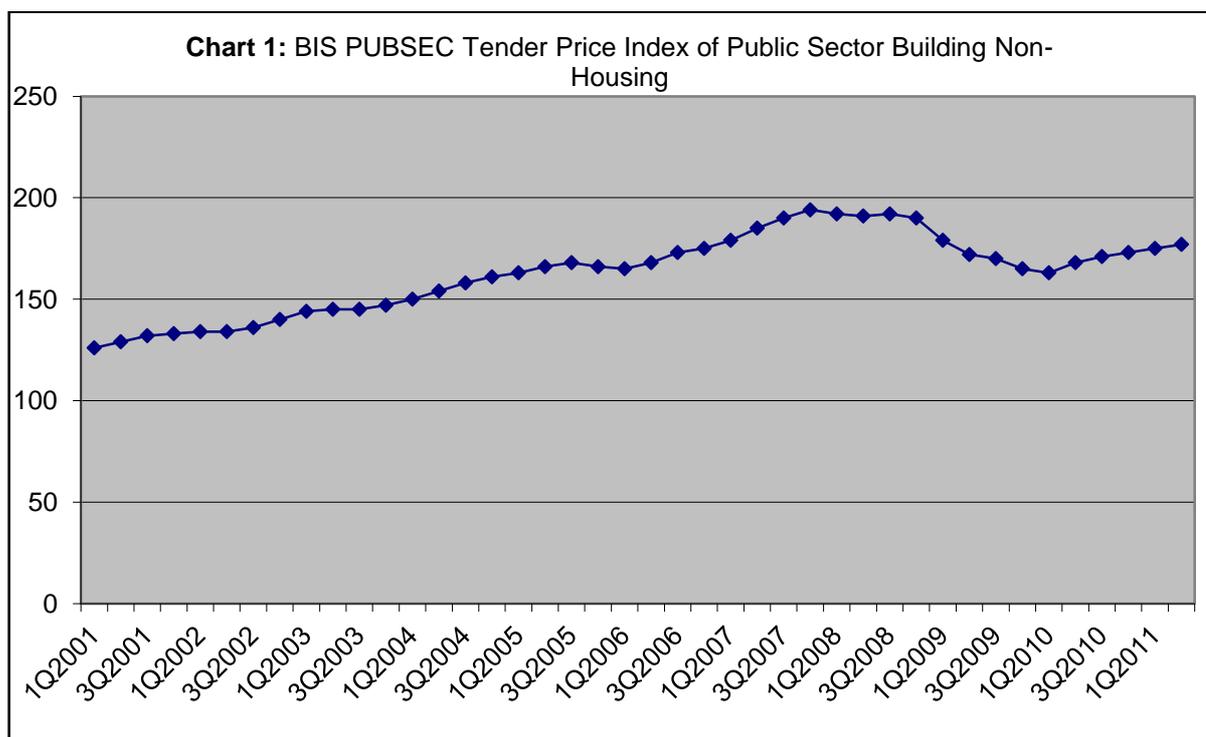
The adoption of benchmarks (unit rates such as £/m²) and percentage year on year reductions reflects the construction industry's traditional way of showing cost and price adjustments. The changing basket of project types delivered and fluctuations in overall construction expenditure mean that tracking year on year changes in overall spend are not instructive.

Similarly, over the last decade or more, the UK Construction Market has been characterised by steadily rising prices as evidenced by the industry's price indices (refer to

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Chart 1 below). Throughout this period industry margins tended to remain keen, indicating rising underlying costs, while in recent years - as investment has fallen as a consequence of the Financial Crisis - prices have fallen accordingly, though perhaps “unsustainably”, since prices started to rise again fairly quickly.

The key challenge in measuring progress towards the target of 15-20% is therefore to identify the components within these ongoing price adjustments that represent sustainable cost reductions rather than rising commodity prices and/or temporary and unsustainable price adjustments by businesses “buying work” to maintain volume.



Other factors that have been taken into account in determining an appropriate quantifiable cost reduction validation method include the:

- fact that spending review settlements typically resulted in cash being taken from departments, so that the inability of any particular department to achieve its required cost reductions will lead to fewer construction projects being delivered than planned, with possible operational consequences;
- variety of project types delivered and changing proportions in any given year – for example, a shift away from new build towards refurbishment – that can affect benchmarks, while signifying little about efficiency;

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- lengthy timescales involved in construction projects, which mean that efficiency initiatives implemented from May 2010 may not generate outturn benchmarks by April 2015;
- dependence of the scale of cost reduction possible on the volume of work delivered;
- range of cost reduction measures being implemented by departments (refer to Section 10 below) and the different types of cost reductions being generated: cashable, value enhancement, cost avoidance;
- existing recording of cost reductions between May 2010 and publication of this method.
- for some departments, such as MoJ - where the majority of construction spend is currently focused on relatively small scale refurbishment and repairs, with low levels of repetition - there will inevitably be wider ranges in some of the resulting £/m² benchmarks reducing their usefulness.

In general, therefore, it has been important to reflect the factors set out above and standard industry practice in the calculation of cost reductions.

4) Terminology

£ benchmarks: The notation “£ benchmarks” is used throughout the remainder of this document to avoid confusion in the interchangeable terminology “price benchmarks” and “cost benchmarks”. In general suppliers offer prices to clients (i.e. their internal costs plus overheads and profit), which then become client costs and what is in effect the same benchmark is therefore denoted “£ benchmark”.

Types of Benchmarks: The following benchmark types are referred to within this document.

Type 1 Benchmarks (Spatial Measures) encompass the most common formats used by clients and industry to benchmark total construction costs, for example: £/m, £/m², £/m³. They are related to *throughput* (quantity) in the sense, for example, of square metres of accommodation delivered by a project.

Type 2 Benchmarks (Functional Measures) encompass a range of more department-specific benchmarks, which address *business outcomes* per £ for example: £/Place; Flood Damage Avoided £ / Investment £.

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Type 3 Benchmarks address a range of more department-specific benchmarks but where *business outcomes* are related only indirectly to the benchmark, for example: ratio of product cost (or alternatively development cost) to total construction cost.

Type 4 Benchmarks are similar to Type 1 benchmarks but applied at an *elemental throughput* (quantity) level, for example: foundation costs £/m, £/m² or £/m³. Only applied within this document, when elements taken together represent majority of spend.

5) Counterfactual

This cost reduction validation method will take account of the counterfactual - *i.e. the circumstances that would have prevailed had the Government's broader range of efficiency initiatives and sector specific Government Construction Board joint programme not have been introduced, or construction costs not have been affected by external factors such as increased regulation or policy changes* - in the following ways.

Inflation

As highlighted in the section above, there has been a tendency historically for construction prices to move up over the long term with relatively brief periods of price stagnation or deflation in between. The 15-20% reduction is therefore to be measured for each department as the percentage difference between the 2009/10 baseline benchmarks and the benchmarks achieved in the current period adjusted for inflation to allow sensible comparison. The objective is therefore to demonstrate the Government's ability to "beat the market" by changing an upwards cost curve to a downwards trajectory.

However, should there be an extended period of construction price stagnation or deflation, then the method may need to be reviewed in order to consider the particular circumstances that pertain, since price stagnation or deflation could be because of one or more of the following reasons:

- The Government Construction Board joint programme has immediate effects that go beyond public and regulated projects, shifting the construction industry onto a "sustainable" downward price trajectory earlier than expected *i.e. part of the 15-20% efficiency improvement will have already been achieved.*
- Keen pricing to maintain volume ("buying work") leads to efficient practices rather than the usual restoration of construction inflation, as "unsustainable" pricing is translated into

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efficiencies that allow “sustainable” pricing at a lower level *i.e. again part of the 15-20% efficiency improvement will have already been achieved.*

- Global commodity prices suppress the restoration of construction inflation *i.e. the state of the global economy presents an “unsustainable” windfall that may have generated little of the 15-20% efficiency improvement targeted.*

Sector Specific Inflation

Broader measures of construction inflation – such as that shown in Chart 1 – may not be representative of the inflation experienced within specific sectors, for example, in the highways sector where the cost of bitumen represents a significant proportion of the cost and relates to global oil price movements.

Controlling for External Factors

External factors such as policy and regulatory changes can adversely impact construction costs beyond the ability of the departmental clients to mitigate increases. Therefore in parallel with the tracking of the above measures and inflation, step changes in construction costs due to external factors will also be recorded by each department and will be accepted by Cabinet Office after review of the evidence submitted to support the inclusion of percentage uplifts to what will be known as the “control curve”.

6) Forecast Cost Reductions: Calculation

The Overall Forecast Cost Reduction profile given in Table 1 above is based on:

- an assumed cost reduction profile – worked back from the Government Construction Strategy commitment to “reduce costs by up to 20% by the end of this parliament” and;
- an estimated spend– which is based on the published construction project pipeline (latest version of which from November 2011 can be found at http://www.hm-treasury.gov.uk/infrastructure_pipeline_data.htm).

Each department will also generate its own cost reduction trajectory (first publication of which accompanies this document), which in aggregate form will be used to confirm and/or update the Overall Forecast Cost Reduction profile given in Table 1.

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Table 2: Format for Departmental Cost Reduction Trajectories						
Department	Cost Reduction Trajectory showing Cumulative Period % Reduction					
	2009/10 (Baseline)	2010/11	2011/12	2012/13	2013/14	2014/15
Dept A	0.0%	2.5%	5.5%	9.0%	13.0%	17.5%
Dept B						
Dept C						
Etc...						

The expectation is therefore that departments will use their cost reduction trajectories to calculate - on the following basis - target £ benchmarks for each period which are then used to generate subsequent project budgets / business cases:

Primary Period £ Benchmarks (applying to either Type 1 or Type 4 benchmarks):

$$\text{Period } \pounds \text{ Benchmark} = \text{Baseline Type 1 Rate} \times (100\% - \text{Forecast Period } \% \text{ Reduction})$$

Where:

$$\text{Baseline Type 1 Rate} = \text{baseline } \pounds \text{ benchmark} \pm \text{counterfactual}$$

Secondary (or alternative) Period £ Benchmarks, where departments are unable to offer representative Type 1 or Type 4 benchmarks:

$$\text{Period Outcome per } \pounds = \text{Baseline Type 2 Rate} \times (100\% - \text{Forecast Period } \% \text{ Reduction})$$

Where:

$$\text{Baseline Type 2 Rate} = \text{baseline outcome per } \pounds \pm \text{counterfactual}$$

7) Actual Cost Reductions: Calculation

The basis of the calculation of actual cost reduction is the construction £ benchmarks. In parallel with the measurement and recording of GCS cost reductions, construction £ benchmarks are also being published and it is important to distinguish between the different objectives involved (refer to Table 3).

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Table 3: Comparison of the objectives of Cost Reduction Validation Method and Publication of Benchmarks	
Objectives of Cost Reduction Validation Method	Objectives of Publication of Benchmarks
<p>Use £ benchmarks to calculate the overall cost reduction achieved by GCS initiatives. £ benchmarks therefore need to:</p> <ul style="list-style-type: none"> - Be representative of the whole statistical population through the use of corresponding averages. - Distinguish between different project types to take account of the year to year variations in the mix of project types. - Be used only with corresponding quantities or expenditures, which in aggregate are representative of the total construction activity within the period. - Encompass either benchmark types 1, 2 or 4. 	<p>Provide industry with £ benchmarks and cost reduction trajectories against which current performance can be compared and industry responses can be planned, particularly in relation to strategic innovation. £ benchmarks therefore need to:</p> <ul style="list-style-type: none"> - Distinguish between different project types to take account of corresponding differences in £ benchmarks (i.e. resulting from different mixes of components and resource inputs). - Be statistically representative i.e. highlight statistically significant averages and clusters of £ benchmarks rather than unrepresentative outliers. - Sufficiently self evident in their composition to facilitate wider industry engagement i.e. benchmark types 1 or 4 could prove more useful in this respect than types 2 and 3.

To take account of the lengthy periods related to project development and implementation of construction projects, actual cost reduction will be reported primarily in terms of Contract Award (Commitment) £ benchmarks. Over the longer term, the validity of this method will be confirmed by ensuring that the cost reduction trends visible in the Contract Award £ benchmarks are also discernable in the subsequent Outturn (Throughput) £ benchmarks.

The **Primary** Cost Reduction Calculation is defined as follows (applying to either Type 1 or Type 4 benchmarks):

$\text{Period Cost Reduction } \pounds = \Delta \text{Type 1 Rate} \times \text{Period Quantity}$

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Where:

Δ Type 1 Rate = baseline £ benchmark +/- counterfactual **minus** actual £ benchmark

£ benchmarks are in units such as £/m, £/m², £/m³

Quantities (Commitments / Throughputs) are in corresponding units such as m, m², m³

The **Secondary** (or alternative) Cost Reduction Calculation is defined as follows and is used where departments are unable to offer either representative Type 1 or Type 4 benchmarks:

$\text{Period Cost Reduction } \pounds = \Delta \text{Type 2 Rate} \times \text{Period Expenditure } \pounds$

Where:

Δ Type 2 Rate = baseline outcome per £ +/- counterfactual **minus** actual outcome per £

Given the mix of project types can change from year to year, the calculations above will be generated for each Project Type identified by departments, and aggregated as shown in Tables 4 and 5 below to generate a Total Cost Reduction.

Table 4: Format for recording cost reductions based on Contract Award (Commitment) Benchmarks				
Department X: Cost Reductions (based on benchmarks achieved at Contract Award)				
Project Type	Baseline Benchmark +/- Counterfactual (whether Type 1, 2 or 4)	Actual Benchmark (whether Type 1, 2 or 4)	Actual Quantity (or Expenditure for Type 2)	Calculated Cost Reduction
Type A		Period Average		
Type B		Period Average		
Type C		Period Average		
Etc....		Period Average		
Control Totals		n/a	Period Quantity or Expenditure stated by departments	n/a
Total period cost reduction reported				Total £

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Table 5: Format for recording cost reductions based on Outturn (Throughput) Benchmarks				
Department X: Cost Reductions (based on benchmarks achieved at Project Outturn)				
Project Type	Baseline Benchmark +/- Counterfactual <i>(whether Type 1, 2 or 4)</i>	Actual Benchmark <i>(whether Type 1, 2 or 4)</i>	Actual Quantity <i>(or Expenditure for Type 2)</i>	Calculated Cost Reduction
Type A		Period Average		
Type B		Period Average		
Type C		Period Average		
Etc....		Period Average		
Control Totals		n/a	Period Quantity or Expenditure stated by departments	n/a
Total period cost reduction reported				Total £

Progress against the Forecast Cost Reduction trajectory can then also be checked by comparing the Total Period Cost Reduction / Period Expenditure percentage against the period forecast.

8) Achievement of Cabinet Office “Tight” Standards

The “tight” standards set out in Table 6 below will apply to the calculation of cost reduction figures.

Table 6: Achievement of Tight Standards	
Mandatory Requirement	Commentary
Must release cash, net of disbenefits	Cost reductions achieved on priority construction projects provide some departments with the option to either implement projects lower down the priority list or spend cash elsewhere.
Must not just reallocate or defer cost	The adoption of benchmarks in the method is one that should avoid including cancelled or deferred projects.
Must have already happened	On account of the lengthy time lag between the implementation of an efficiency initiative on a construction project and its effect being discernable in the Outturn

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Table 6: Achievement of Tight Standards	
Mandatory Requirement	Commentary
	<p>(Throughput) Data, the year on year comparison of benchmarks will be based primarily on Contract Award (Commitment) Data. This will be implemented on the basis that departments can demonstrate the available contract award data represents a reliable indicator of outturn costs.</p> <p>Where Contract Award Data is not available, Outturn (Throughput) Data will be submitted instead, the key requirement being that a department is consistent in which type of data is submitted. Over the longer term, the validity of this method will be confirmed by ensuring that the cost reduction trends visible in the Contract Award Data are also discernable in the subsequent Outturn Data.</p>
Must be fairly calculated and clearly positioned	The method adopted relies on averaged benchmarks.
Must be “proper period” i.e. in year, accumulating but non compound	Contract Award (Commitment) £ benchmarks will be reported in the year that a multi year construction project commences. Outturn (Throughput) £ benchmarks will be reported in the year that a multiyear construction project completes.
Must be claimed just once	Achieved cost reductions will be reported primarily on the basis of results generated using departmental Contract Award (Commitment) £ benchmarks. The cost reductions reported for multi-year projects will be split equally across the different reporting periods.

9) Application of Cabinet Office “Loose” Standards

The “loose” standards set out in the Table 7 below will also apply to the calculation of cost reduction figure where relevant.

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Table 7: Application of Tight Standards	
Clarification Requirement should not all tight standards be achieved	Commentary
Baseline and Counterfactuals	The data will be baselined primarily against Contract Award (Commitment) benchmarks from 2009/10 (except where only Outturn (Throughput) benchmarks are available).
Sustainability	An objective of the GCS is sustainable ³ cost reductions (refer also to Section 3).
Data Quality and Levels of Evidence	Periodic submission by departments of: <ul style="list-style-type: none"> - Benchmarks - Corresponding quantities and expenditure - Possible submission of departments' own calculations of cost reductions (e.g. savings registers, highlighted in Section 11) - Possible submission of further data relating to tracking of Contract Award and Outturn Costs
Properly calculated	Refer to Section 7 above.
Netting of costs	Where practicable, costs of benchmarking and running initiatives will be separated from those that represent the existing overall cost of departmental performance management arrangements.

³ Without adversely impacting either whole life value or the long term financial health of the construction industry.

COST REDUCTIONS ACHIEVED MAY 2010 TO SEPTEMBER 2011

10) Methods deployed by departments to achieve cost reductions under Government Construction Strategy⁴

To achieve their construction related cost reductions, departments are adopting a range of measures as outlined in Table 8 below.

Table 8: Methods deployed by departments to achieve cost reductions under Government Construction Strategy				
Interventions	Standardisation	New Commercial Arrangements	New Volumes (Quantities)	Demand Management
Different approaches to packaging of projects and procurement (including introduction of mini competitions on frameworks; commercial / improved cost targeting)		✓		
Streamlining project development and approvals processes	✓			
Value engineering using innovation and alternative methods to deliver the same outcome more efficiently	✓			
Improved delivery process / contractor efficiencies through reducing waste / increasing productivity	✓			
Lean initiatives to increase the proportion of spend on the end product and a corresponding reduction in non productive costs (particularly those related to upfront design and site overhead costs / schedule duration)	✓			
Amendment of output specification requirements and floor areas (achieving tighter fit between specification and				✓

⁴ Based on the document *Government Construction – Initiative Update* published 30 November 2011: <http://www.cabinetoffice.gov.uk/resource-library/government-construction-strategy>.

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Table 8: Methods deployed by departments to achieve cost reductions under Government Construction Strategy				
Interventions	Standardisation	New Commercial Arrangements	New Volumes (Quantities)	Demand Management
requirement)				
Shift from new build to refurbishment options				✓
Standardisation of materials products and components: bulk purchasing / category management of materials, products and components	✓	✓	✓	
Introduction of Building Information Modelling (BIM)	✓			
Certainty of funding allowing the planning and managing of work as a programme rather than as a series of discrete projects, enabling better collaboration with the supply chain to develop a more efficient delivery strategy that comes with a large and visible programme				✓
Improved risk and value management through portfolio risk management				✓
Confidence in the forward pipeline leading to the opportunity to reduce overhead and profit fee rates in awarding new construction frameworks		✓		

11) Construction related departmental cost reductions achieved between May 2010 and September 2011

Table 9 below outlines the construction related cost reductions declared by departments that were generated between May 2010 and September 2011 (unless noted otherwise) baselined to 2009/10 or before. For differing reasons, which are explained in the table, cost reductions declared by Ministry of Defence and Highways Agency fall outside of this period.

Typically, cost reductions have been calculated with reference to outline business cases, funding calculations or framework rates that adopted benchmarks from the baseline year 2009-10 or before. In general, these cost reductions represent lower spending on specific projects by departments and devolved bodies, and relate to the period prior to the establishment of the key

Cost Reduction Validation Method / Cost Reductions May 2010 to September 2011

principles set out in this document. The methods used by departments are also detailed in Table 9.

Validation of declared Department Cost Reductions: Evidence submitted by the relevant Departments was reviewed by Cabinet Office with assistance from an external Quantity Surveyor from Rider Levett Bucknall (providing their services as part of their membership of the Joint Data and Benchmarking Task Group). Although relatively cursory, this process resulted in figures for some departments being challenged by Cabinet Office and subsequently updated.

Table 9: Construction related Departmental Cost Reductions achieved between May 2010 and September 2011			
Department	Declared Cost Reductions	Corresponding Expenditure	Commentary on the source of cost reductions
Ministry of Defence	-	-	MoD / DIO approach to demonstrating VFM of projects delivered by the Regional PRIME Contracts (RPC) is based on Time, Quality and Cost criteria that emphasise functionality, whole life value (buildability, maintainability, sustainability) and speed of implementation (ensuring timely support for front line personnel). The corresponding emphasis on collaborative working and integrated teams has led to a marked reduction in the numbers of defaults and claims (for example, only 3 contractor claims have been generated since 2005, compared with 53 during the period 2002 to 2004), the time taken to mobilise the project team and corresponding project duration (between 4 and 8 months quicker) with consequent improvements in customer satisfaction (8.3 vs industry target of 7.0).
DEFRA / Environment Agency	£15m	£361m	Relevant Period: May 2010 to September 2011 Cost reduction comes from initiatives addressing packaging of projects and procurement (25%), streamlining project development and approvals process (20%)

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Table 9: Construction related Departmental Cost Reductions achieved between May 2010 and September 2011			
Department	Declared Cost Reductions	Corresponding Expenditure	Commentary on the source of cost reductions
			and value engineering using innovation and alternative methods to deliver the same outcome (55%). These are logged via a savings register and represent costs avoided prior to business case sign off (from procurement initiatives or where a new issue arises and is addressed without additional outlay) and cash released after the approval of the business case.
Department of Health / P21	£30m	£1000m	Relevant Period: May 2010 to September 2011 Cost reductions come from reduced overhead and profit fee rates tendered in awarding new construction framework October 2010 and applied to the value of projects registered on the framework i.e. projects that are ongoing and therefore benefitting from the reduced fee rates. The reduced rates reflect the increased confidence by framework suppliers in the forward project pipeline.
DfT / Highways Agency	-	-	No cost reduction has been recorded to date, since the target cost has only recently been negotiated for the first 2 major projects - which start in Oct 2011 and Jan 2012 - of the 14 major projects confirmed as part of SR2010, the final scheme of which will be completed in 2016. Over the lifetime of the programme, forecast cost reductions of £443m have been declared against gross estimated expenditure of £2216m. Schemes already under construction as part of the pre-SR2010 programme are delivering cost reductions against their target costs.

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Table 9: Construction related Departmental Cost Reductions achieved between May 2010 and September 2011			
Department	Declared Cost Reductions	Corresponding Expenditure	Commentary on the source of cost reductions
DCLG / Homes & Communities Agency	£19m	£248m	<p>Relevant Period: May 2010 to March 2011</p> <p>Drivers for cost reductions achieved in 2010/11 include aggregation (and the corresponding standardisation of specifications), direct supply chain procurement and supply chain re-engineering. Particular drivers of additional gains during this period include: enhanced inter-consortia collaboration; adoption of successful innovation across consortia, such as direct supply chain procurement; and the expansion of newly formed consortia in the East and West Midlands.</p>
Ministry of Justice	£20m	£160m	<p>Relevant Period: May 2010 to September 2011</p> <p>Cost reductions have come from an ongoing lean initiative to increase the proportion of spend on the end product and a corresponding reduction in non productive costs (particularly those related to upfront design and site overhead costs / schedule duration). Cost reductions have also come from the introduction of mini competitions into the existing framework and the increased bundling of projects. These have been calculated on the basis of the difference between the project value at Outline Business Case / initial Tender Price (if higher) and the project value at Final Business Case / Contract Award.</p>
DfE / Partnerships for Schools	£104m	£3200m	<p>Relevant Period: May 2010 to September 2011</p> <p>Cost reductions have come from amendment of output specification</p>

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Table 9: Construction related Departmental Cost Reductions achieved between May 2010 and September 2011			
Department	Declared Cost Reductions	Corresponding Expenditure	Commentary on the source of cost reductions
			requirements and floor areas (reduced by up to 15% i.e. achieving tighter fit between specification and requirement), grouping projects differently, through value engineering to meet new policy direction and contractor efficiencies. In some instances cost reductions have also been achieved through shifting from new build to a refurbishment option. The baseline for the measurement of these cost reductions is the original funding that was allocated to each project through PfS' Funding Allocation Model before PfS sought reductions from projects.
Total	£188m	£4969m	3.8%

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