

**Department of Finance**

**Value for Money and Policy Review  
of the  
Construction Procurement Reform  
Initiative**

**January 2011**



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## **Executive Summary**

### **Context**

The Value for Money and Policy Review (VFM&PR) Initiative is part of a framework introduced to secure improved value for money from public expenditure and to provide greater accountability to the Oireachtas and the taxpayer on what is being achieved with public expenditure. The objectives of the VFM&PR Initiative are to analyse Exchequer spending in a systematic manner and to provide a basis on which more informed decisions can be made on priorities within and between programmes.

### **Terms of Reference**

The purpose of the VFM&PR of the Construction Procurement Reform Initiative (CPRI or the Initiative), as set out in its terms of reference, is to:

1. Identify the objectives of the Construction Procurement Reform Initiative.
2. Examine the current validity of those objectives and identify the link between the purpose of the Construction Procurement Reform Initiative, the policy objectives of the Government in construction procurement and the strategic aims of the Department of Finance.
3. Identify and analyse the level and trend of costs, staffing resources and outputs associated with the Initiative and comment on the efficiency with which it has achieved its objectives.
4. Examine the scope for alternative policy or organisational approaches to achieving these objectives on a more efficient and/or effective basis.
5. Design a framework for assessing the effectiveness and impacts of the Initiative and establish appropriate performance indicators to measure its long term performance.
6. Evaluate the degree to which the objectives continue to warrant the allocation of public funding on a current and ongoing basis.

## **Construction Procurement Reform Initiative**

The CPRI is a response to concerns about cost overruns, delays and value for money issues in respect of public sector construction projects. A number of features of established practice which were in need of reform were identified, namely:

- The use of negotiated procedures in relation to consultants' fees, with such fees being based on a percentage of the final outturn cost;
- Outdated construction contracts used by the public sector;
- A lack of public sector guidance material on all stages of the construction procurement process; and
- Inaccurate cost estimation at project planning stage, coupled with design changes during the construction phase, leading to costs escalating under contracts permitting re-measurement of the works.

The Government addressed these issues by way of a Government Decision in May 2004 which sought to introduce new fixed price lump sum standard forms of construction contracts, new conditions of engagement for construction-related consultants and a suite of supporting guidance notes.

The CPRI is still at a relatively early stage and the medium and longer term outcomes and impacts of the new initiative cannot yet be fully determined as the new forms of contract only came into use by contracting authorities in early 2007. An additional form, dealing with low value public works projects, was introduced in March 2008. An investigation contract to deal with heritage works and a short public works contract to deal with specific areas of public sector construction were subsequently drafted. A term maintenance and refurbishment works contract, some additional guidance documents and innovative contracts are under development. This VFM&PR looks at how the elements of the CPRI that had already been introduced by March 2008 were drafted, developed, consulted upon and introduced into the public sector.

## **Findings**

A summary of the review findings is presented in terms of the five evaluation criteria proposed for all VMF&PRs, - rationale, continued relevance, efficiency, effectiveness and impact. This section also summarises some of the key elements of the outputs of

the CPRI, the new public works contracts and the conditions of engagement for consultants.

#### *Rationale/Objectives and Continued Relevance*

The review identified a number of issues relating to value for money outcomes from construction procurement that were relevant to the Government Decision in May 2004. These included:

- Problems with cost estimation and design development and control which indicated that there were project management issues at the early stages of contracts;
- Problems with the forms of contracts in use at the time given their age, the variants that existed and in particular the fact that the re-measurement contracts created difficulties with the management of risks that led to cost overruns on projects;
- The mechanism by which consultants' terms and conditions were agreed with fees being based on a percentage of the final project cost.

In this context, the review examined the objectives of the CPRI i.e. greater cost certainty at tender stage, achieving better value for money outcomes, and contributing to timelier and more effective delivery of projects, and concluded that they continue to be relevant and remain central to all construction procurement procedures.

#### *Efficiency*

The focus of the review was on examining the efficiency of the process which created the construction contracts, conditions of engagement and supporting material. The period under review spanned from May 2004 to March 2008, during which time a total of €4.35m of Exchequer expenditure was incurred by the Department of Finance on the CPRI process of which: €1.8m comprised external fees for legal work relating to the drafting and review of contracts; €0.4m arose from the drafting of a comprehensive set of guidance notes; €0.7m was incurred on the intensive training programme that supported the implementation of the Initiative; and €1.4m was for internal salary costs.

To put this expenditure in context, the projected annual savings arising from the implementation of the CPRI have been estimated at between €75m and €150m by the National Public Procurement Policy Unit (NPPPU).

In carrying out the analysis the process was split into four distinct but interrelated phases; initial contract drafting, public sector consultation, consultation with external stakeholders, and implementation. During the initial contract drafting phase two civil engineering contracts, nineteen model forms to be used with the contracts, conditions of engagement and price variation clauses were drafted.

Given the scale and complexity of the changes being proposed by the Initiative, it was critical to its success that there was real and meaningful consultation with key public sector and external stakeholders. Consequently, there was a detailed two phase consultation process.

The first phase of the consultation process involved detailed discussions with the public sector construction practitioners on the Government Construction Contracts Committee (GCCC). These public sector technical experts, with experience of a wide range of public sector construction contracts, would be required to operate the new contracts and conditions of engagement and consequently they played a central role in refining the documents prepared at initial contract drafting stage. The legal advisors also drafted two building works contracts, guidance material and dispute resolution procedures. The GCCC were consulted regarding these draft documents and their comments were incorporated in the revised documents that were circulated to the external stakeholders.

The longest part of the process was the consultation with the construction industry and professional bodies on the new contracts, conditions of engagement and supporting material. This consultation process, which was expected to conclude at the end of 2005, was finalised in June 2006. It was not possible to anticipate fully the extent to which the affected parties would engage with this process. As there was considerable resistance to the proposed changes, this phase of the process involved twenty five full day consultations with the construction industry and the professional bodies. This consultation produced positive outcomes in terms of improved versions



of the construction contracts and conditions of engagement, and also resulted in a new form of contract for works with a value under €5 million.

The implementation of the CPRI was preceded by the development of a detailed training programme. A total of 160 specially nominated staff received six days of intensive training on the new contracts and conditions of engagement. This training was of fundamental importance to the implementation of the CPRI as it meant that such trained personnel were then available to assist other public officials in their sectors that were involved in live projects.

The review concluded that the resources of the National Public Procurement Policy Unit (NPPPU), the Government Construction Contracts Committee (GCCC) and the external advisors were used effectively during the development of the suite of documents that underpin the CPRI. In examining the alternative approaches that could have been used to develop the CPRI such as amending existing contracts, the analysis concluded that such an approach would have been sub-optimal, as the existing forms of contract were out of date in areas such as prompt payments legislation and health and safety, did not cater for design and build contracts, contained provisions which allowed for the contract sum to be increased and were ambiguous with regard to liability for nominated sub-contractors. Consequently, the drafting of completely new standard forms of contract was the best strategic and practical option.

#### *Effectiveness and Impact*

The new conditions of engagement and public works contracts were introduced with effect from 1 January and 19 February 2007 respectively with the short public works contract following in March 2008. Transitional arrangements were put in place to allow a number of projects with advanced designs to proceed on the basis of the old contracts. Because of the long term nature of capital works projects it is not possible to make definitive comments regarding the effectiveness or impact of the CPRI at this stage. Consequently, the review focussed on the development of performance indicators that could be used at a future date to assess the effectiveness and impact of the CPRI. The suggested indicators relating to the public works contracts consider issues such as comparisons between the contractual fixed price lump sum figure and the final outturn costs of projects, and the period stated for delivery of the contract

and the actual time taken to deliver the project. In reviewing the effectiveness of the new conditions of engagement for consultants, the proposed approach would involve a comparison being made between the historical fees typical for each consultancy service and the competitively tendered lump sum fixed price fees under the new conditions of engagement.

### *Outputs*

The main outputs of the CPRI are the new public works contracts and the conditions of engagement for construction consultants.

The introduction of fixed price lump sum contracts is seen to be central to the delivery of the CPRI objectives (i.e. greater cost certainty at tender stage, achieving better value for money outcomes, and contributing to timelier and more effective delivery of projects) as it requires that the tender price reflect comprehensive design work and a realistic consideration of project risks. The principal features of the new contracts are:

- Optimal risk transfer by allowing for risk allocation in two distinct ways.
  - i. Contracting authorities now have options with regard to procurement strategy, such as between the contracting authority designing the works under the traditional contract or the contractor taking responsibility for the designs under the design and build contract; and
  - ii. Contracting authorities can also choose whether to retain or transfer a particular risk;
- The introduction of specialists in the place of nominated subcontractors ensures that there is now no ambiguity regarding the contractor's responsibility for specialists' performance and designs;
- The introduction of a fixed price in relation to construction inflation;
- Provisions in the new contracts that encourage contractors to pay rates of pay and observe conditions of employment in the registered employment agreements with a sanction imposed if the contractor fails to comply with these standards;
- Sanctions introduced if a contractor does not keep the construction programme up to date;

- Fitness for purpose provision for works designed by the contractor; and
- A limitation placed on the value and number of variations (change orders) that an employer's representative can order under a contract without having them cleared by the client.

The new contracts are also aligned with established best practice project management processes.

The conditions of engagement set out for the first time defined conditions for engaging consultants and the introduction of competitive fee bidding. The key features of the new conditions of engagement are:

- There is a single public sector form for use on all commissions for construction contracts;
- The norm is for the fees to be expressed as a fixed price lump sum;
- Contracting authorities are required to clearly define the scope of services;
- There is now a contractual provision for consultants to coordinate, communicate and cooperate with each other;
- There is a control mechanism in relation to the ordering of variations during construction;
- A budgetary control mechanism is included which is to be applied at main contract tender stage if there is an unacceptable difference between the tender amount and the approved pre-tender budget figure for the main works;
- The total performance or duration period of the commission has to be stated;
- There are specific provisions to deal with a situation where a contracting authority suspends work under the conditions of engagement;
- Copyright is dealt with in the context of the contracting authority owning it or just having a licence to use the designs;
- There are specific rules if a commission is abandoned and the design team's appointment is terminated;
- There is a management services section that specifies how all management issues are to be dealt with during the project lifecycle.

## **Recommendations**

The key recommendations of the review are summarised below.

1. The GCCC should keep the construction contracts and conditions of engagement under review to ensure that they are functioning properly.
2. The GCCC was significantly involved in the CPRI process. This model, of involving relevant public sector expertise in an in-depth and pro-active way, should be followed when undertaking other such reform initiatives.
3. The outstanding documentation, including guidance material and innovative contracts, should be finalised.
4. The NPPPU should continue to support the ongoing management of the CPRI.
5. As significant contracts are completed, performance indicators such as those proposed in Chapter 6 should be used to assess the effectiveness and impact of the CPRI. These performance indicators focus on comparing measures such as; contractual fixed price lump sum figures and final outturn costs, contractual delivery periods and actual time for delivery, and consultancy fees paid versus historical fees for similar projects.
6. It may be beneficial to refine the proposed performance indicators based on experience of their operation. The GCCC should take a lead role in implementing any such refinements.
7. The secretariat of the GCCC (NPPPU) should take responsibility for collecting the data required for the performance indicators from contracting authorities and play a pivotal role in assessing the information, and then spearheading any necessary actions.

## **Chapter 1**

### **Context, Focus and Terms of Reference of the Review**

#### **1.1 Background to the Value for Money and Policy Review Process**

The Expenditure Review Initiative (ERI), which has now been renamed and replaced by the Value for Money and Policy Review (VFM&PR) Initiative, is a process which requires that each expenditure programme should be subject to a review every three years. It is an integral part of the Strategic Management Initiative (SMI) process.

The objectives of VFM&PRs are to analyse in a systematic manner what is being achieved by Exchequer spending and to provide a basis on which more informed decisions could be made on priorities within and between programmes. All VFM&PRs are published and presented to the relevant Select Committee of the Oireachtas. The VFM&PR is drafted internally, but part of the process involves a peer review of the methodology used. This is undertaken by an independent external evaluator.

#### **1.2 Selection of the Review Topic**

The focus of any VFM&PR requires that the topic is significant and relevant and involves major policy issues or significant levels of expenditure in the context of the subhead. The Department of Finance ensures that all programme subheads are reviewed every three years. Therefore, for the 2005-2007 expenditure review cycle, the Department of Finance proposed that the Construction Procurement Reform Initiative (subhead O) would be subject to an expenditure review. Subhead O (Procurement Management Reform) of Vote 6 (Office of the Minister for Finance) funds a number of different, but interrelated, activities all of which aim to contribute to improving the procurement of works, goods and services in the public sector. The Construction Procurement Reform Initiative, hereafter called the CPRI or the Initiative, is the single largest component of subhead O.

The CPRI is a response to concerns about cost overruns, delays and value for money in respect of public sector construction. A number of features of established practice which were in need of reform were identified, namely:

- Outdated construction contracts;
- A lack of public sector guidance material on all stages of the construction procurement process;
- Inaccurate cost estimation at project planning stage, coupled with design changes, leading to costs escalating under contracts permitting re-measurement of the works; and
- Consultants' fees being based on a percentage of the final outturn cost.

The Government addressed these issues by way of a Government Decision in May 2004 which sought to introduce new fixed price lump sum standard forms of construction contracts, new conditions of engagement for construction-related consultants and a suite of guidance notes to support the process.

The CPRI is at a very early stage and the medium and longer term outcomes and impacts of the Initiative cannot yet be fully determined as the new forms of contract only came into use, by contracting authorities, in early 2007. An additional form, dealing with low value public works projects, followed in March 2008 with a number of supporting contract forms and additional guidance documents being subsequently developed. Therefore, this VFM&PR looks at how the elements of the CPRI that had already been introduced by March 2008, were drafted, developed, consulted upon and introduced into the public sector.

### **1.3 Terms of Reference**

The terms of reference, for the VFM&PR of the CPRI, are largely based on the standard terms of reference as set out in the *Value for Money and Policy Review Initiative Guidance Manual* issued by the Department of Finance. The terms of reference are as follows:

1. Identify the objectives of the Construction Procurement Reform Initiative.
2. Examine the current validity of those objectives and identify the link between the purpose of the Construction Procurement Reform

Initiative, the policy objectives of the Government in construction procurement and the strategic aims of the Department of Finance.

3. Identify and analyse the level and trend of costs, staffing resources and outputs associated with the Initiative and comment on the efficiency with which it has achieved its objectives.
4. Examine the scope for alternative policy or organisational approaches to achieving these objectives on a more efficient and/or effective basis.
5. Design a framework for assessing the effectiveness and impacts of the Initiative and establish appropriate performance indicators to measure its long term performance.
6. Evaluate the degree to which the objectives continue to warrant the allocation of public funding on a current and ongoing basis.

#### **1.4 Membership of the Steering Group**

For this review, a steering committee comprising the following representatives from the Department of Finance (DOF) and the Department of Communications, Energy and Natural Resources (DCENR) was established:

<sup>1</sup> Dermot Quigley	Principal, Sectoral Policy Division, DOF (Chairperson)
<sup>2</sup> John Kinnane	Administrative Officer, Sectoral Policy Division, DOF (Lead Evaluator)
Nicholas O' Loughlin	Principal Quantity Surveyor, Sectoral Policy Division, DOF
<sup>3</sup> Una Nic Giolla Choille	Principal, Finance Division, DCENR
Pat Leahy	Assistant Principal, Sectoral Policy Division, DOF
Patrick Brennan	Assistant Principal, Finance Unit, DOF

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<sup>1</sup> John Thompson replaced Gráinne McGuckin in May 2007. Dermot Quigley replaced John Thompson in January 2008.

<sup>2</sup> John Kinnane replaced Grainne Goggin in November 2007.

<sup>3</sup> Una Nic Giolla Choille resigned from the steering group in November 2007.

## **1.5 Methodologies**

The steering group examined relevant documentation, including the Government Decision, Government and Ministerial Statements, Parliamentary Questions, Department of Finance Strategy Statements, Comptroller and Auditor General (C&AG) reports and National Public Procurement Policy Unit (NPPPU) files. Desk research informed much of the report. Information relating to expenditure on the CPRI was examined and extracted from the JD Edwards system (the Department of Finance financial system). Structured interviews were conducted with the members of the Government Construction Contracts Committee (GCCC).

## **1.6 Format of the Report**

Chapter 2 provides a background to the cost overruns and other problems that had arisen with construction procurement and sets out the context to the contractual arrangements that were in place for consultants and contractors before the implementation of the CPRI. In Chapter 3, the objectives of the CPRI are identified and the current validity of those objectives is examined. Chapter 4 identifies and analyses the level and trend of inputs and outputs including staffing and other costs associated with the CPRI and examines whether the process was efficient. Chapter 5 sets out the scope for using alternative policy or organisational approaches to implementing the CPRI and provides an overview of the contractual provisions. Chapter 6 considers a framework for assessing the effectiveness, impact and long term performance of the CPRI using performance indicators. Chapter 7 summarises the report's conclusions and recommendations.



## **Chapter 2**

### **Background to the Construction Procurement Reform Initiative (CPRI)**

#### **2.1 Introduction**

This chapter provides an overview of some of the issues surrounding public sector construction which helped influence the Government Decision of May 2004. It also outlines the value of the construction sector, including public sector construction, providing a context for the potential impact of the CPRI.

#### **2.2 Value for Money Issues and Public Sector Construction**

This section focuses on:

- Consultancy fees;
- Cost estimation and the definitive project brief; and
- Contractual arrangements before January 2007.

The material used here provides general examples of these issues and is not intended to reflect on particular sectors or bodies.

#### **2.3 Consultancy Fees**

Traditionally the contractual conditions for engaging professionals (e.g. engineers, quantity surveyors and architects) on capital works projects were based on terms and conditions that were negotiated in accordance with the Department of Finance Circular 11/87 on the Procedures for the Engagement of Consultants and Settlement of Fees. The fee scales of professional institutes such as the Society of Chartered Surveyors (SCS), Engineers Ireland (EI) and the Royal Institute of the Architects of Ireland (RIAI) were used as the basis for the negotiated fee. There was generally no competition on price for engaging engineers, architects or quantity surveyors because the fee negotiated was normally guided by the percentage fees recommended by the various professional institutes. Under this system, the higher the project cost, the higher the professional fees. Furthermore, no public sector standard form of appointment existed for consultants. Generally, all that was in use was the issue of a letter of appointment to the consultant. The content of these letters varied from a

simple expression of appointment, with few or no details as to what were the consultant's obligations, liabilities and responsibilities, to more formal detailed documents which were signed by the consultant.

Concerns were publicly raised about the mechanism by which fees were paid to consultants on capital projects in the *C&AG Special Report: NRA Primary Routes Improvement Programme (2004)*. It questioned whether value for money was being achieved from the practice of professional consultants' fees being based on a percentage of the final outturn cost of a project as this was not considered to provide consultants with an incentive to control costs. An example of how consultant fees could escalate proportionately with the cost of the project can be seen from the example of the National Roads Authority (NRA) fee arrangement. The scale of fees for contracts in excess of €25.4 million was €162,000 plus 4% of the cost of the works with payments broken down as follows:

- At preliminary report stage – 35% of 4% of an estimate of the cost of the work agreed between the consultant and the contracting authority;
- At design and preparation of contract document stage – 35% of 4% of the actual tender sum plus a further allowance where reinforced concrete is used; and
- At supervision of construction stage – 30% of 4% of the final cost of the construction works.<sup>1</sup>

If the scope of the works increased substantially at any time during project delivery from the original brief (e.g. an extra bridge was requested), the consultant would get a proportionate increase in fees. The practice of basing the final 30% of the fee on the final cost of the project often resulted in very substantial increases in the design and management costs (i.e. consultancy fees). Similar issues with regard to the fees paid to consultants were raised in the hearing of the Public Accounts Committee on the Campus Stadium Ireland Development.<sup>2</sup> The C&AG concluded that “*there may be scope for renegotiating professional fee levels to better reflect the purchasing power*

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<sup>1</sup> NRA Primary Routes Improvement Programme, C&AG Special Report (April 2004), p.41

<sup>2</sup> Committee of Public Accounts 27 March 2002

*of the State*<sup>3</sup>. These examples highlighted the potential for significant increases in consultants' fees as the project costs increased. This was typical for all public sector civil engineering and building works projects at the time. The C&AG emphasised the need for reform of this practice.

## **2.4 Cost-estimation and the definitive project brief**

This section draws on information from the 1999 and 2004 reports by the C&AG on two road programmes where particular difficulties arose with cost estimation and design changes.

A mid-term evaluation of the Operational Programme for Transport 1994-1999 (OPT) by independent consultants<sup>4</sup> examined the cost estimate increases of the road development programme 1994-1999 and concluded that they occurred for three main reasons, excluding the inflationary effects, namely:

- Cost estimation;
- Design changes; and
- Cost control.

These road programmes were evaluated, in a value for money review, by the C&AG in March 1999 which incorporated the work of the independent consultants.

### *Cost estimation*<sup>5</sup>:

Cost estimation for a project should be finalised during the detailed planning stage and before the tender process begins. The C&AG's 1999 evaluation indicated that "many of the cost estimates prepared for projects were found to be poor and there was a lack of consistency in the items which were included in costings. There was no provision for many of the difficulties which were likely to arise. In effect, there was a bias towards underestimation of costs".<sup>6</sup> A further analysis on cost estimation carried

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<sup>3</sup> NRA Primary Routes Improvement Programme, C&AG Special Report (April 2004), p.45

<sup>4</sup> DKM Economic Consultants, Operational Programme for Transport: Mid-term Evaluation, February 1997.

<sup>5</sup> "Cost estimation is the determination of quantity and the predicting, or forecasting, within a defined scope of the costs required to construct and equip a facility to manufacture goods." *Cost engineering in the US Department of Energy*, for the US Department of Energy Office of Engineering and Construction Management(ME-90) (January 2003)

<sup>6</sup> *Development of the National Roads Network* (Value for Money Examination, C&AG) (March 1999), p.24

out by the C&AG in his 2004 report on the *Primary Routes Improvement Programme* found that the original estimate for some roads was understated by 40% due to systemic failure to fully cost certain project elements and a failure to take full account of construction inflation.<sup>7</sup> He also found that while the introduction of standard costs (the NRA set up a cost estimation function in mid-2000) brought a greater rigour to the estimation process, they needed to be further refined so as to distinguish the fixed and variable elements associated with schemes.

### *Design changes*

The design work for a project should be finalised during the detailed planning stage and before the tender process begins. However, the C&AG in his 1999 report found that “some projects increased in scope and quality after the project had been approved by the NRA to proceed to planning and design stage..... The consultants concluded that the system for project supervision relied on at the time by the NRA and by the Department of the Environment and Local Government had failed to prevent this happening”<sup>8</sup>.

### *Cost control*

The budget for a project should be finalised during the detailed planning stage and before the tender process begins. The C&AG’s 1999 report, in referring to the independent consultants’ mid-term evaluation report, noted that “once a construction project is underway, costs can escalate under the re-measurement system employed for civil engineering contracts in the Irish construction industry”<sup>9</sup>. However, the report concluded that there was little evidence that cost control during construction had been particularly weak and found that claims by contractors had been strongly resisted”<sup>10</sup>. One of the conclusions of the report was that “the primary difficulties in containing cost increases arise at the planning and design stage”<sup>11</sup>. From this we can conclude that the contracts used, that allowed for re-measurement, resulted in a relaxation in

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<sup>7</sup> NRA Primary Routes Improvement Programme, C&AG Special Report (April 2004), p.29

<sup>8</sup> *Development of the National Roads Network* (Value for Money Examination, C&AG) (March 1999), p.24

<sup>9</sup> In civil engineering contracts, the quantities of work to be carried out by the contractor are estimated provisionally at the outset and are subject to re-measurement as work is being executed. This re-measurement forms the basis for both interim and final payments under the contract.

<sup>10</sup> *Development of the National Roads Network* (Value for Money Examination, C&AG) (March 1999), p.25

<sup>11</sup> Ibid

relation to early project planning which led to weaknesses at the design and development stage of project delivery. This militated against the effective control of project costs during the construction stage.

## **2.5 Contractual arrangements before January/February 2007.**

Contractual arrangements are used to manage the relationship between the contractor and the public body. This section examines the contractual arrangements for public sector procurement works that were used before January/February 2007. It highlights a number of issues about these contractual arrangements which contributed to the Government decision of May 2004.

### *Construction Contracts*

There were two contracts in general use by contracting authorities in the State before the introduction of the new conditions of engagement on 1 January 2007 and the new construction contracts on 19 February 2007. These were

- the Government Department and Local Authorities contract (GDLA) (1982) for building works; and
- the Institute of Engineers contract (first developed in 1980), 3<sup>rd</sup> edition (IEI) (1990 & 1993) for civil engineering works.

The GDLA form of contract was used for public sector building contracts and this was a public sector drafted contract modelled generally on the RIAI and Royal Institute of British Architects (RIBA) private sector form in use at the time. For public sector civil engineering works the IEI 3<sup>rd</sup> edition form of contract was used with appropriate public sector amendments attached. Both are full or partial re-measurement contracts that permit provisional quantities and sums to be used which by their nature allow design work to be deferred until a contractor is on site constructing the work at which time it is re-measured and valued. In building contracts, some of the quantities for the works to be carried out by the contractor are estimated provisionally at the outset and are then subject to re-measurement as work is being executed. In civil engineering contracts, all the quantities of work to be carried out by the contractor are estimated provisionally at the outset and are subject

to re-measurement as work is being executed. This is particularly evident with ground works. This re-measurement forms the basis for both interim and final payments under the contract.

These contracts had been used for over 25 years in public construction and there were a significant number of bespoke and amended contracts in use which had been prepared for individual contracting authorities. There was significant duplication of effort and Exchequer cost, which in turn, led to major variations in approach and cost overruns. The contracts themselves tended to incentivise contractors to bid initially low in order to win a contract and later to successfully exploit price variation and risks residing with the public contracting authority in order to maximise the final contract cost.

Evidence that traditional re-measurement contracts were prone to significant differences between original tenders and outturn costs was set out in the 2004 *Implementation and Administration of EU Structural and Cohesion Funds in Ireland* Report. That report attributes these differences between original tenders and outturn costs to a number of inherent elements:

- “a) The ‘risk allocation’ is such that large elements of ‘risk’ are assigned to the contracting authority on the principle that over a large number of projects they are better off paying for what actually happens on each individual job rather than having tenderers price for all eventualities on all jobs with the contracting authority paying whether or not the eventualities arise
- b) Changes to design during the course of the works
- c) Additional elements of work
- d) Price fluctuation”.

The C&AG in his 2004 *NRA Primary Routes Improvement Programme* report commented on the management of risks associated with procurement. He indicated that: “they impact on cost to the extent that they materialise where the risk is retained by the State or are included in the contract price in cases where the State attempts to transfer the risk”. He indicated that “the thinking, until recently, has been that over a

large number of projects the State is better off paying for what happens on each individual job rather than having tenderers price for all risks and eventualities.”<sup>12</sup>

In terms of traditional re-measurement contracts, the C&AG found in his 2004 report that traditional contracts had given rise to major cost movements between tender and completion. In an examination of the extent of post-tender increases in prices on contracts completed in the period 2000 – July 2003 he found that the increase included in the final outturn<sup>13</sup> on conventional contracts represented 42% of the agreed tender price.<sup>14</sup> The report stated that the major risks associated with traditional re-measurement contracts are:

- Unforeseen ground conditions e.g. more rock than anticipated;
- Exceptional weather conditions e.g. an unusual weather event;
- Additional work arising in the course of construction e.g. extra work arising out of poor tender documents;
- Design changes e.g. the client seeks an extra room to be added onto a building;
- Risks associated with utilities (e.g. electricity, telecom services) and archaeology;
- Changes in legislation; and
- Price fluctuations e.g. recovery in relation to labour and material increases.

**Table 1**

<b>Range of Increases</b>			
		<b>Range</b>	<b>Average</b>
<b>Scope Changes/Variations</b>		2-56%	21%
<b>Price Variation</b>		4-22%	14%
<b>Claims</b>		0-65%	7%
Source: NRA Primary Routes Improvement Programme, C&AG Special Report (April 2004), p.32			

<sup>12</sup> NRA Primary Routes Improvement Programme, C&AG Special Report (April 2004), p.31

<sup>13</sup> Where actual final outturns were yet to be agreed, the NRA’s best estimate was used.

<sup>14</sup> NRA Primary Routes Improvement Programme, C&AG Special Report (April 2004), p.32

Typically the price increase on such contracts would amount to 25-30% (with inflation in recent years adding some additional 10-15% to a project) measured between contract award and completion. An internal NRA analysis shows an average overrun of 25% plus 15% on price variation clauses<sup>15</sup>. The C&AG made the following important conclusion that *“in managing road procurement the challenge is to ensure that each risk is borne by the party best positioned to manage it. For most risks, up to recently, the thinking was that it was better for the State to bear the risk and so pay only on the basis of measured outcome whether for price increases or variations to the contract. In light of this experience with re-measured contracts, where the increase between tender and final contract cost has, in recent time, been in the order of 40%, a fundamental rethink on their use is justified”*.<sup>16</sup>

The following example from the C&AG’s 2003 annual report indicates the difficulties with existing contractual arrangements. It documents how an Office of Public Works (OPW) contract for the *River Nore (Kilkenny City) Drainage Scheme* initially estimated at €13.08 million in July 1998 had a revised estimate for completion of €47.8 million in August 2003. In February 2007, the *Committee of Public Accounts Ninth Interim Report on the 2003 Report of the Comptroller and Auditor General (Committee Hearings October 2004 to July 2005)* was published. In this Report the Public Accounts Committee (PAC) noted that:

*“The OPW exercised its option of buying out overruns on labour and material on the part of the contractor when it bought out overruns of €2.9 million, plus VAT. It also bought out price inflation for €1.3 million more than what had been provided for at contract stage. A number of additional bills, presented by the contractor, were not covered by the buy-out option. The contractor would have to be compensated for all additional works not covered by the price variation costs. The contractor, the sub-contractors and all of the consultants involved had vested financial interests in the biggest possible outturn. All the risk was borne by the purchaser rather than by the contractor.”<sup>17</sup>*

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<sup>15</sup> *Implementation and Administration of EU Structural and Cohesion Funds in Ireland*, (NDP), March 2004, pp.167-168

<sup>16</sup> NRA Primary Routes Improvement Programme, C&AG Special Report (April 2004), p.39

<sup>17</sup> Committee of Public Accounts Ninth Interim Report on the 2003 Report of the Comptroller and Auditor General (Committee Hearings October 2004 to July 2005) (February 2007) p. 11



## **2.6 Potential alternative contractual arrangements**

Although the re-measurement contracts already referred to were almost universally used in public sector construction, as part of his remit the C&AG in his 2004 report examined alternative contractual arrangements in particular design and build and fixed price contracts.

### *Design and build contracts*

In his 2004 report, the C&AG indicated that up to this point traditional re-measurement contracts had been the general method used to procure public construction work in Ireland but that there had been a shift in recent years to design and build contracts in the roads sector. Some of the main potential benefits which these contracts contained were the ability to:

- Improve efficiency because the contractor can influence buildability;
- Provide greater certainty of outturn by passing more risk to the contractor in cases where he is better positioned to manage it; and
- Eliminate the opportunity for a contractor to use a strategic pricing strategy.

The C&AG's report stated that "in contracts completed to date the uplift in design and build contracts was 14%, almost all of which was due to price increases. A comparison of the tenders for design and build contracts awarded in 1999 indicated that the quoted prices corresponded closely with standard costs in 2000. This appears to indicate that design and build contracts may hold out the prospect of price certainty at or around the estimated cost of conventional re-measurement procurement adjusted for normal uplifts".<sup>18</sup>

### *Fixed price contracts*

The C&AG looked at fixed price contracts in his 2004 value for money study as an alternative procurement method. At that stage fixed-price contracts were not used for any form of construction projects, although he had referred to the possibility of moving to such a system in his 1999 value for money report on the development of the roads network. Fixed price lump sum contracts allow a greater level of risk transfer to take place (including the risk of construction inflation) than in the existing

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<sup>18</sup> NRA Primary Routes Improvement Programme, C&AG Special Report (April 2004), p.33

contracts. Contractors are required to take these risks into account when tendering their bids for projects. The C&AG pointed out that “the capacity of the NRA to move to fixed price contracts is limited since current arrangements with the industry do not permit the fixing of prices for terms exceeding eleven months”.<sup>19</sup> Indeed there had been little recourse to fixed price projects by the NRA at that point. The C&AG indicated one example of an NRA project which was a design and build contract without a price variation clause<sup>20</sup>. This project ended up in arbitration after the contractor sought a price variation on some items and a payment was made to the contractor for exceptional unforeseen price increases. The result of this was the inclusion of a price variation clause into design and build contracts following this decision.

## **2.7 Policy responses in the UK and Ireland**

These cost overruns were not just confined to Ireland. In the UK, the Latham and Egan Reports (1994 and 1998 respectively) on the construction industry led to radical reforms of the industry ranging from changes in legislation and conditions of contract through to a much greater emphasis on ‘building together’ and partnering. Having been influenced by the success of the Latham Report, in 1997 the Minister for the Environment and Local Government established the Strategic Review Committee (SRC) to formulate and develop a strategy for the construction industry. One of the recommendations from the SRC Report was that new standard forms needed to be developed and that these should be in plain language reflecting modern drafting techniques.

*“A new set of standard forms of contract should be produced for main contracts and both nominated and domestic sub-contracts. There should be standard wordings for collateral agreements, performance bonds, retention bonds and insurances. These new documents, should not, in general, be modified for particular projects. Where special circumstances make modifications necessary, these should be set out in clearly identified addenda.”<sup>21</sup>*

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<sup>19</sup> NRA Primary Routes Improvement Programme, C&AG Special Report (April 2004), p.34

<sup>20</sup> A price variation clause allows for the recovery by the contractor of the increased costs of approved wage rates, and price increases of materials used on the construction of the building.

<sup>21</sup> *Strategic Review of the Construction Industry* (SRC), (Government of Ireland, 1997), p.xi

## 2.8 The construction sector in Ireland

In 2008, it was estimated that the value of output in the construction industry was almost €32 billion. This compares to €17.6 billion in 2000.<sup>22</sup> **Table 2** below provides further details regarding the level of construction output in current prices during the period 2005 – 2008 and illustrates the percentage increase each year.

<b>TABLE 2: Construction output in current prices<sup>23</sup> 2005-2008 (public &amp; private)</b>						
		Unit	2005	2006	2007	2008
<b>Current prices</b>						
Construction output		€m	33,778	37,661	38,361	32,037
Annual change		%	18	11	2	-16
<b>Source:</b> DKM Economic Consultants <i>Review of the Construction Industry 2008 and Outlook 2009-2011</i>						

The public sector represents a significant element of construction output with the value of new construction output by the public sector growing to approximately €8.6 billion in 2008. As the CPRI will apply to a significant element of the NDP, the initiative has potentially far reaching impacts and implications for public sector construction activity.

## 2.9 Conclusion

It is clear that there were potential cost and value for money issues in having a percentage fee for consultants involved in construction projects. There is evidence that there were problems with cost estimation and design control indicating project management issues with the early stages of contracts. There were problems with the use of the GDLA and IEI forms of contract given their age and the variants that existed. The re-measurement contracts created difficulties with the management of risks and helped create cost overruns on projects. There was by 2004 some consideration of alternative contractual approaches which could overcome these deficiencies and an awareness of the need for reform at a policy level. The effect of

<sup>22</sup> CSO, *Construction and Housing in Ireland*, p.5 (July 2006)

<sup>23</sup> Series of prices that express values pertaining to a given time that have not been adjusted to take account of changes in purchasing power.

moving from the GDLA and IEI contracts to new arrangements and introducing a defined project management approach has the potential to influence significant Exchequer expenditure in the NDP 2007-2013.

## **Chapter 3**

### **The validity of the objectives of the Construction Procurement Reform Initiative (CPRI)**

#### **3.1 Introduction**

This chapter identifies the objectives of the CPRI and examines the current validity of those objectives. It identifies the link between the purpose of the CPRI, the policy objectives of the Government in construction procurement and the strategic aims of the Department of Finance.

#### **3.2 The Objectives of the CPRI and the Government Decision of May 2004**

The Government introduced the CPRI by way of a Government Decision in May 2004. The high level objectives of the CPRI were:

- Greater cost certainty at tender stage;
- Better value for money outcomes; and
- Contributing to timelier and more effective delivery of projects.

These high level objectives were to be achieved by the introduction of new standard forms of construction contracts which would transfer appropriate risks to those best able to manage them. These contracts were to be lump sum fixed price contracts with tendering on a competitive basis as the norm. Standard conditions of engagement for construction consultants were also to be introduced with competitive tendering on a fixed price lump sum basis for the procurement of construction consultancy services (e.g. architects, engineers, quantity surveyors etc) as the norm.

The development and implementation of these contracts were expected to help achieve the high level objectives of the CPRI.

#### **3.3 Relating the CPRI objectives to the Department's overall strategy**

The Department of Finance has a central role in implementing Government policy, in particular the Programme for Government, and in advising and supporting the Minister for Finance and the Government on the economic and financial management of the State and the overall management and development of the public sector. In

formulating this advice the Department is guided by its Statement of Strategy. The CPRI emanates from Strategic Priority No. 2 in the Statement of Strategy 2005-2007 which is “*to maximise delivery of the Government’s economic and social objectives through the development and management of effective taxation and public expenditure*”. Specifically under this heading the Department of Finance aims “*to facilitate procurement management reform across the public sector, in conjunction with other Departments, through the promotion of improved procedures and practices, including e-procurement*”. The CPRI is one of the main strands of the procurement management reform process with its implementation being a contributor towards the achievement of the Department’s Strategic Priority 3, relating to public expenditure, as set out in the Statement of Strategy 2008-2010.

### **3.4 The ongoing relevance of the CPRI**

The ongoing policy and practical relevance of the CPRI can be seen in a number of key documents.

#### *Department of Finance Secretary General’s letter of 25 January 2006*

The Secretary General’s circular letter of 25 January, which covers a number of value for money issues, reiterates the comments of the Minister for Finance in a speech of 20 October 2005 regarding the achievement of improved cost certainty and value for money on construction projects. It indicates: “To achieve this, standardised contracts for use across relevant public sector bodies are being developed. In addition, comprehensive conditions for the engagement of construction-related consultants have also been developed to end the practice of fees escalating with project costs”.

*Department of Finance Circular 33/06: Construction Procurement Reform – revision of arrangements for the procurement of public works projects and for the engagement and payment of construction consultants<sup>1</sup> and Department of Finance Circular 4/08: Construction Procurement Reform – additional measures to the revised arrangements for the procurement of public works projects and for the engagement and payment of construction consultants<sup>2</sup>.*

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<sup>1</sup> Circular 33/06 issued on 27 October 2006.

<sup>2</sup> Circular 4/08 issued on 13 February 2008.

The circulars deal with and require the implementation of the new construction contracts and conditions of engagement across the public sector. The continued relevance of the CPRI is highlighted by these circulars.

*The National Development Plan (NDP) Transforming Ireland – A Better Quality of Life for All 2007-2013*

The validity of the policy objectives of the CPRI can be seen in the Value for Money framework included in the NDP. It states that *“Project procurement under the NDP will be firmly focussed on securing value for money for the taxpayer. The Government is introducing new standardised public works contracts terms and new conditions of engagement for construction-related consultants (i.e. architects, engineers etc.). Cost certainty, value for money and cost effective delivery of public capital projects are at the core of the reforms. The scope of the reforms covers contractors, consultants and public service clients. The new public works contracts will provide for fixed price lump sum contracts with appropriate risk transfer tendered on a competitive basis. The new arrangements for consultants also introduce fixed fees, tendered on a competitive basis. Public sector clients will also have to define their requirements comprehensively so that the project scope is very clear before going to tender. The overall objective is to secure greater certainty for the State on project outturns and to greatly reduce cost overruns over project tender prices. The implementation of the procurement reforms is one of the key elements in the drive to secure better Value for Money outcomes from the very significant expenditure allocated for infrastructure development in the Plan<sup>3</sup>.*

At the launch of the NDP in January 2007, the Minister for Finance indicated that:

*“Key elements of this framework include:*

- All projects will be subject to project appraisal to ensure that NDP programme objectives and Value for Money are being achieved;*
- All capital projects over €30 million will require a full cost benefit analysis in line with the Department of Finance guidelines of February 2005;*

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<sup>3</sup> The National Development Plan (NDP) Transforming Ireland – A Better Quality of Life for All 2007-2013, p.274

- *New procurement arrangements which will deliver greater cost certainty for public capital projects;*
- *NDP Programme Evaluations and Value for Money and Policy Reviews will be published and submitted to the relevant Select Committees of the Oireachtas; and*
- *As provided for under the Budget and Estimates Reform proposals set out in Budget 2006, all Ministers will submit an Annual Output Statement with their Annual Estimates to the relevant Oireachtas Committee. This will detail target outputs for the Estimates and the following year's Statement will set out achievements against target. This process will encompass Exchequer funded NDP spending".<sup>4</sup>*

The CPRI is therefore at the heart of the Government's strategy in terms of implementing its value for money framework in relation to construction and in how Exchequer funds are being spent on capital projects.

### **3.5 The ongoing validity of the CPRI**

The Capital Works Management Framework (CWMF) is the name given to an integrated set of contractual provisions, guidance material and technical procedures that form the core element in the strategy to achieve greater cost certainty, better value for money outcomes and timelier and more efficient delivery of projects from project inception through to final project delivery and review. The structure of this strategic framework is closely aligned with the *Guidelines for the Appraisal and Management of Capital Expenditure Proposals in the Public Sector* (2005) issued by the Department of Finance. The framework is intended to encourage more cost effective delivery of public works projects by introducing a more systematic approach to, among other things, planning (both preparatory and detailed) and capital budgeting as well as design cost control. The CWMF is well advanced with its key documents, such as the six new contracts<sup>5</sup>, the standard conditions of engagement, and investigation contract to deal with heritage works being complete. The framework

<sup>4</sup> Address by Minister for Finance, Mr Brian Cowen T.D. on the occasion of the launch of the National Development Plan 2007-2013, Dublin Castle, 23 January, 2007

<sup>5</sup> Public Works Contract for Civil Engineering Works Designed by the employer; Public Works Contract for Civil Engineering Works Designed by the Contractor; Public Works Contract for Building Works Designed by the employer; Public Works Contract for Building Works Designed by the Contractor; Minor Civil Engineering and Building Works Designed by the Employer Contract; and the Short Public Works Contract for Civil Engineering and Building Works Designed by the Employer.



was launched in August 2009 and is available on the website [www.constructionprocurement.gov.ie](http://www.constructionprocurement.gov.ie). Under *Department of Finance Circular 6/10 – Construction Procurement Reform – the new Capital Works Management Framework dated 5 May 2010*, the framework became mandatory for all Clients<sup>6</sup> involved with public works projects.

### **3.6 Conclusion**

The high level objectives of the CPRI have been identified and they continue to remain valid as demonstrated by key documents/programmes such as the Partnership Agreement, the NDP, and the Department of Finance value for money circular.

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<sup>6</sup> The term Client in this case is a generic term that means a Sponsoring Agency (as defined in the Department of Finance *Guidelines for the Appraisal and Management of Capital Expenditure Proposals in the Public Sector (February 2005)*) and a Contracting Authority (defined as those bodies referred to in Sections 7,8 and 9 of Circular 33/06 and Section 6 of Circular 04/08 and as defined in Directive 2004/18/EC and SI No 329 of 2006).

## **Chapter 4**

### **Analysis of inputs and efficiency of the process**

#### **4.1 Introduction**

This chapter seeks to examine the third term of reference, namely to identify and analyse the level and trend of costs, staffing resources and outputs associated with the Initiative and comment on the efficiency with which it has achieved its objectives. However, it is not possible to comment on the efficiency with which the objectives of the CPRI have been achieved at this stage since the success of the CPRI can only be determined when an appropriate number of public works projects have been completed under the new contractual arrangements. Given this context, the chapter seeks to examine the efficiency of the process which created the construction contracts, conditions of engagement and supporting material. Some of the detail of the changes arising from the development of new contracts and conditions of engagement is considered as part of chapter 5.

As part of this analysis, a series of structured interviews was carried out with members of the GCCC.

#### **4.2 Overview of the process**

The introduction of fixed price lump sum contracts for both public works and construction-related services, tendered on a competitive basis, represented a significant change in approach for public sector contracting authorities, the construction industry and the professional bodies. As required under the terms of social partnership, the implementation of such a major structural and cultural change required consultation with potentially affected parties. Given the scale and complexity of the changes arising from the Initiative, it was imperative that the public commitment to real and meaningful consultation was honoured in full.

Such a requirement presented the challenge of developing new contractual arrangements that met the CPRI's objectives of: greater cost certainty at tender stage, better value for money outcomes, and timelier and more effective delivery of projects, while also taking account of the legitimate concerns of the key stakeholders. When

consultation commenced, the new arrangements proposed by the CPRI encountered a considerable degree of resistance from key external stakeholders resulting in extensive lobbying by interested parties. Consequently, consultation with external stakeholders continued for a period of just over 12 months and resulted in an iterative drafting process based on the outcome of each stage of the consultations, with changes being made to address the legitimate concerns of stakeholders without compromising the overall policy objectives.

In reviewing its efficiency the process is split into four interrelated but distinct phases: initial contract drafting (Phase 1), public sector consultation (Phase 2), consultation with external stakeholders (Phase 3) and implementation (Phase 4). During initial contract drafting, draft contracts and conditions of engagement were prepared by external legal advisors, the NPPPU's in-house expert and an expert on short secondment from Queensland Australia. Phase 2, the first part of the consultation process, involved consulting with the public sector through its technical representation on the GCCC. These public sector technical experts were very experienced in a wide range of public sector construction contracts and are of key importance in implementing the use of the new contracts and conditions of engagement. They provided technical input in relation to the drafts prepared during Phase 1 before the documents were released to the construction industry and professional bodies for comment. This public sector consultation, which took about six months to complete, was very inclusive and extensive with the legal drafters accommodating as many of the substantial comments received as was possible.

The public sector consultations overlapped with Phase 3, the consultation with external stakeholders. During this part of the consultation process there were extensive discussions with representatives of the construction industry, the professional bodies, and to a lesser extent with the unions, on the new forms of contract, the conditions of engagement and supporting material which resulted in the legal drafters accommodating more extensive changes.

The implementation phase (i.e. Phase 4) involved intensive training of 160 specially nominated public sector staff on the new contracts and conditions of engagement. A

number of changes arose out of these training courses which the legal drafters accommodated in refining the final drafts.

The complex and iterative nature of the process required that the Department of Finance put in place appropriate financial and human resources to ensure its effective management. In addition to the significant involvement in the process of senior management within the Department, the following staff from the NPPPU were assigned to manage the day-to-day activities:

- Principal Officer (Quantity Surveyor) (full time);
- Principal Officer (Administrator) (60% of time);
- Assistant Principal Officer (full time); and
- Administrative Officer (replaced September 2006 with Higher Executive Officer) (full time).

The assignment of these officials to deal with the day-to-day activities of the process ensured that:

- Internal communication was maintained by regular informal contact (e.g. emails and meetings) with senior management of the Department of Finance throughout the process, and also through more formal communications with progress update reports provided to senior management, the Minister and the Cabinet as required;
- In conjunction with senior management, investment funding was in place to finance the process;
- Budgetary controls were in place that took account of the complex consultation process;
- The merit of submissions from external stakeholders could be examined and assessed for consistency with the overall objectives of the CPRI, with senior management within the Department and the Minister deciding on key policy issues;
- When consultations resulted in proposed amendments, lump sum figures could be agreed with the legal advisors to the greatest extent possible for the incorporation of such changes into the forms of contract and conditions of engagement.

Due to the complex nature of the process it was not possible, at the outset, to estimate the time and investment required for the necessary consultation and its consequent effect on the implementation of the new arrangements. A detailed management template was put in place to deliver the outputs and control the expenditure of a prolonged process involving a complex inter-relationship between the NPPPU, senior management in the Department of Finance, politicians, the public sector, consultants, contractors and the unions.

Two legal firms with international expertise in contract drafting were engaged to draw up the contracts and the conditions of engagement; they were also contracted to carry out amendments to these documents required as a result of developments in the consultation process with the public sector, industry and professional bodies. The contracts were awarded on the basis of legal services to be provided before and during the consultation process. The cost of legal services provided before consultation was quantified. Competitive tenders were sought in each case and, following evaluation, the highest ranking tender was accepted on a fixed price basis. The work during consultation was not quantified in advance, but tendered hourly fixed rates were agreed.

This procedure was followed because the essence of the Initiative entailed the procurement of an extensive degree of legal advice on a continuous basis. This was a direct result of the detailed and long-running negotiations with construction-related interests on the substance of the proposed forms of contract and conditions of engagement, which in turn were the inevitable by-product of relevant Government and Ministerial decisions. Proper procedures for the sanctioning of payments were followed throughout the project, a fixed price was negotiated in advance each time new work emerged to be done and expenditure was continually monitored and managed through the setting of budgets which were reviewed annually. The procedures adopted were appropriate to the nature of the process involved in the CPRI and represented the best method of monitoring and controlling expenditure in an environment where the requirement that the public commitment to real and meaningful consultation be honoured in full played a significant role in the final costs incurred as a result of the Initiative. If the process had been cut short arbitrarily to meet the terms of a lump sum budget, predetermined before the process had

commenced, it would have been seen by outside interests as a sign of bad faith, which would have been gravely detrimental to the project and might well have rendered nugatory the expenditure involved.

### **4.3 Analysis of inputs and outputs**

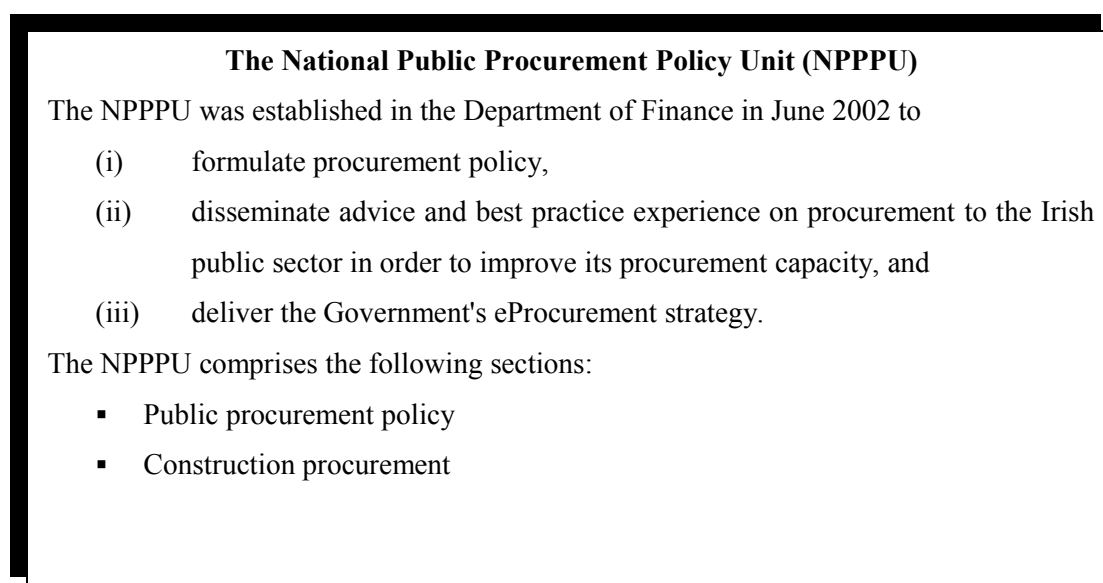
The analysis of the inputs and outputs associated with the CPRI is carried out under the four interrelated but distinct headings identified above namely:

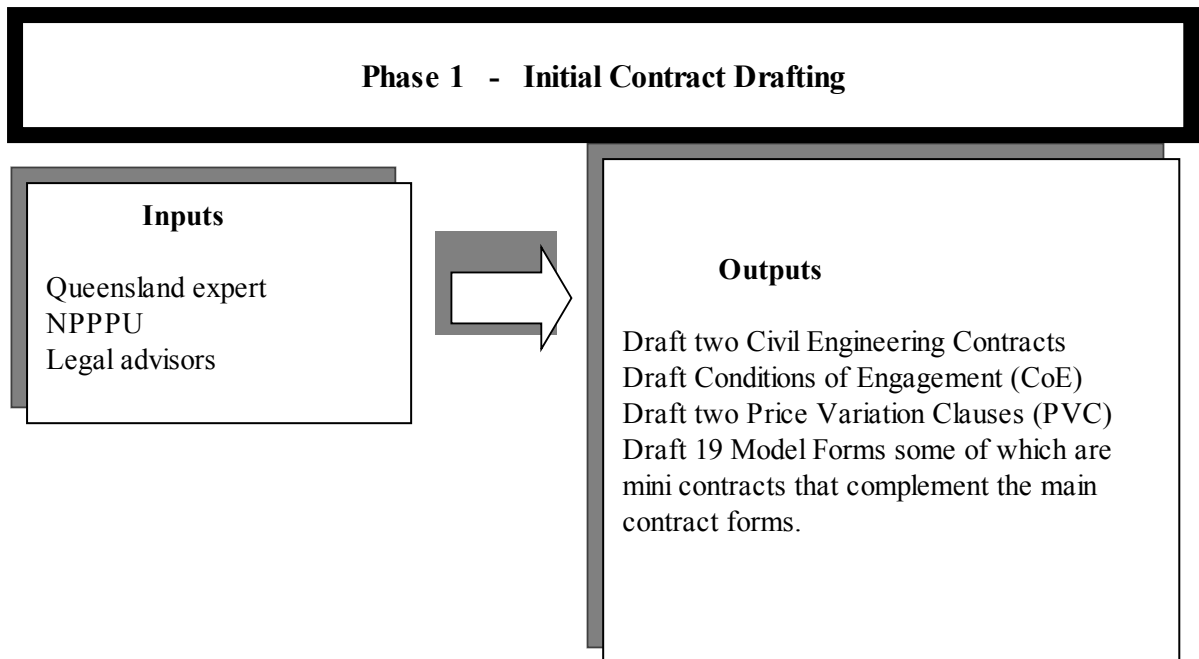
- The initial contract drafting phase;
- The consultation phase with the public sector;
- The consultation phase with the industry, professional bodies and unions, and
- The implementation phase.

### **4.4 NPPPU and Staffing Costs for the CPRI**

From May 2004 to March 2008, the total salary cost, including employers' PRSI and imputed pension contribution, of the NPPPU staff involved in the CPRI was estimated at €1,437,000. This staff expenditure annualised is 0.7% of the total salary cost of the Department of Finance in 2007. It represents a small cost relative to the potential public capital expenditure in the NDP which is likely to be influenced by the introduction of the CPRI. An overview of the role and functions of the NPPPU is set out in Figure 1 below.

**Figure 1**





#### **4.5 Recruitment of skilled construction procurement and legal expertise to develop the contracts**

The NPPPU acquired the services of the Acting Director of the Building Division of the Department of Public Works of the Government of the Australian State of Queensland for a six week period from October 2004.

Part of the function of the Department of Public Works is to procure public works for public bodies in Queensland and it also exports its experience internationally to other jurisdictions in the Asia Pacific region. It is considered a model of excellence and world leader in construction procurement best practice.

This transfer arose following a visit by NPPPU staff to examine practices and procedures in Queensland in mid 2004. This transfer of skills was possible arising from the signing in 2002 of a Memorandum of Understanding on economic co-operation between the Government of Ireland and the Government of Queensland.

In September 2004, the NPPPU held a restricted tender competition for the legal services of expert construction solicitors to draft the new construction contracts. The brief was to develop:

- Standard Conditions of Contract for Civil Engineering work procured in the traditional way with associated documents (i.e. articles of agreement, contract appendices, forms of bond, guarantees, and letters of tender) including explanatory material; and
- Standard Conditions of Contract for Design and Build Civil Engineering projects with associated documents including explanatory material.

A&L Goodbody was successful in the tendering competition for the drafting of these contracts. They were selected on the basis of relevant legal experience in particular in construction law. They acquired the services of a quantity surveyor and a civil engineering expert as part of their technical and legal team.

#### **4.6 Developing the civil engineering contracts**

The A&L Goodbody team along with the Acting Director of the Building Division in the Queensland Department of Public Works and the NPPPU provided the initial framework and commenced drafting the civil engineering (traditional) contract in October 2004. The civil engineering (traditional) contract went through eleven iterations before it was sent for comment to the GCCC with a range of international and Irish standard forms of construction contracts being used in the development of the initial base document for the contract. This range of contracts, along with the revised civil engineering (traditional) contract, was then used in the subsequent drafting of the civil engineering (design and build) contract. This contract was the subject of five iterations before being sent for comment to the GCCC in February 2005.

#### **4.7 Standard conditions of engagement and price variation clauses**

The Government decision of May 2004 provided for the introduction of conditions of engagement for consultants engaged on capital projects and the introduction of competitive tendering as the norm on a fixed price lump sum basis for the procurement of such consultancy services. In May 2004, the NPPPU undertook a restricted tendering competition for two bodies of work:

- As an interim measure, to draft amendment clauses to existing contracts to allow for transferring the price variation risk to contractors, and



- To develop standard conditions of engagement for consultants engaged on capital projects in clear plain language.

The request for tender had included suggested draft amendment price variation clauses which were to be legally drafted to give effect to Government policy in this area. The amendment clauses to allow for transferring the price variation risk to contractors had originally been envisaged as replacing the relevant clauses in the GDLA and IEI forms of contract<sup>1</sup> as a temporary measure because when this work commenced in early 2004 it was thought that the time required to draft new contracts could unnecessarily delay the introduction of the transfer of inflation risk to contractors.

#### *Price Variation Clause*

McCann FitzGerald Solicitors were appointed to draft the new conditions of engagement and draft an amendment clause which permitted inflation to be recovered under the existing contracts in extremely limited circumstances using the ‘proven cost method’<sup>2</sup>. However, during the evaluation of the tenders received, Philip Lee Solicitors identified a separate option to deal with price increases in such extremely limited circumstances. This option was to use a formula fluctuation method<sup>3</sup>. It was decided to appoint that firm to develop a price variation clause using an index system. Thus McCann Fitzgerald drafted the ‘proven cost method’ price variation clause which was circulated to the GCCC in July 2005 and the ‘formula fluctuations method’, once drafted by Philip Lee, was also issued to the GCCC.

The drafting of two price variation clauses allowed for a choice in the type of clause a contracting authority could elect to use, i.e. either the formula fluctuations method or the proven cost method. Both price variation clauses were finalised in March 2005 and then made available for consultation with representatives of the construction industry and professional bodies.

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<sup>1</sup> GDLA 82 [June 2003 revision & reprint], Clauses 1(a) & 36 and Supplement A. IEI 3<sup>rd</sup> edition [October 1990 revision & reprint], Clauses 67 and 69.

<sup>2</sup> ‘proven cost method’ is an invoice and records based system whereby the contractor establishes his entitlement after the fixed price period, by invoices and employee time records which are checked by the employer.

<sup>3</sup> ‘formula fluctuation method’ is based on the use of CSO Indices for different categories of Materials, Fuels, CPI as published mainly in the Wholesale Indices.

### *Conditions of Engagement*

The NPPPU had outlined in the tender document the key issues to be considered when drafting the conditions of engagement. McCann Fitzgerald, using the technical material in the tender as a guide, drafted the conditions of engagement for the NPPPU and this was issued to the GCCC in June 2004. These conditions went through nine iterations before a consensus on the document was reached in March 2005.

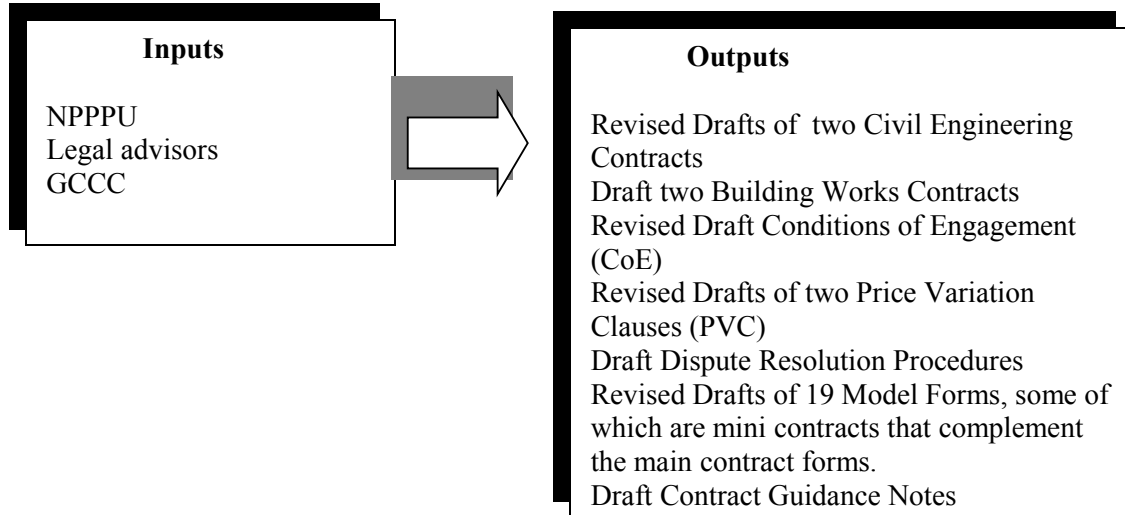
#### **4.8 Exchequer cost for the initial contract drafting**

The fees for the legal advisors and the Acting Director of the Building Division of the Department of Works relating to the initial drafting of the contracts are estimated at €287,000.

#### **4.9 How effective was the initial contract drafting process?**

- Work on the development of the public works contracts, the conditions of engagement and the price variation clauses commenced at the same time making effective use of the time and resources of the NPPPU and the external expertise.
- The contract development work was tendered for on a fixed price basis for all the work involved.
- The use of tendering resulted in an innovative additional solution to the price variation clause.
- The recognition of the need for and the acquisition of relevant external and internal legal, construction contract and administrative experience and expertise enhanced the quality of the documents produced.

## Phase 2 - Public Sector Consultation



### 4.10 Public sector consultation

It was recognised at the outset of the process that the implementation of the new forms of contracts would represent a significant change in approach for public sector construction practitioners. Consequently, it was critical to the success of the process that there was adequate consultation with these stakeholders to ensure that the draft civil engineering contracts, conditions of engagement and price variation clauses would be suitable for the many varied public works projects to which they would apply. This public sector consultation was carried out through the GCCC. In the course of the consultation, when comments regarding the civil engineering contracts were being considered, it became apparent that these draft contracts could also form the basis for the building works projects. Consequently the building works contracts were drafted and reviewed during this phase of the process.

### 4.11 Developing the building works contracts

Work on drafting two building works contracts, one traditional and one design and build, commenced in April 2005 and concluded before June 2005. A&L Goodbody who were contracted to develop the civil engineering contracts were retained for this process as:

- They had gained extensive experience from developing the civil engineering contracts and consequently time and money could be saved by retaining them for the building contracts;
- The time spent understanding the NPPPU approach to the implementation of the Government decision, in addition to the experience gained from meetings with the public sector construction practitioners, and the research and resolution of problems with public sector input, would have been difficult to repeat with a new firm of legal advisors and would have resulted in significant delays and higher costs; and
- Different firms of legal advisors drafting the building works contracts would have introduced differences in style, emphasis, the way clauses were nuanced and how risk would be allocated. This would have resulted in the Government's objective of standardisation being compromised, and could also have resulted in ambiguities, variations and inconsistencies existing between the different forms, which could be used against a contracting authority in a dispute situation.

#### **4.12 Dispute resolution procedures and contract guidance notes**

The dispute resolution procedures are intended to aid the resolution of disputes relating to the new contracts between a contracting authority and a contractor. Originally there were two sets of rules, adjudication and arbitration, drafted by A&L Goodbody and the NPPPU in May 2005 that were issued to the GCCC for comment. A&L Goodbody also commenced drafting contract guidance notes, in March 2005, to assist and advise public sector users on the new contracts and the GCCC steered the approach to drafting the guidance notes.

#### **4.13 The role of the GCCC in the public sector consultation process**

Once the base contract documents had been developed by A&L Goodbody and issued to the GCCC for comment, the GCCC had a central role in the refinement of the contract work carried out during this phase of the CPRI. The role of the GCCC and the expertise of the members are set out in Figure 2.

**Figure 2**

**The Government Contracts Committee for Construction (GCCC)**

In 2002, Department of Finance Circular 40/02 established the GCCC which is a committee of construction experts from different disciplines (quantity surveyors, architects, engineers & administrators) from across Government departments and agencies who have a public sector perspective. It draws on expertise in relation to construction issues across the public sector and develops, in conjunction with the NPPPU, guidance and documents to underpin construction procurement. Before the CPRI commenced, the committee was utilised primarily to deal with submissions from departments/agencies that had to seek its approval for any changes to the existing contracts approved by the Department of Finance for use on public projects or for the use of once-off conditions of contract.

Members of the GCCC include representatives of: the Department of Finance, the Department of Defence, the Department of Education & Skills, the National Roads Authority (NRA), the Department of Health & Children, the Department of the Environment, Heritage & Local Government, the Department of Transport and the Department of Communications, Energy & Natural Resources. The committee meets on a monthly basis and is chaired by the NPPPU.

The GCCC carried out the following work during this phase of the CPRI. They examined and commented on:

- Four drafts of the civil engineering (traditional) contract;
- Three drafts of the civil engineering (design and build) contract;
- Three drafts each of the two building (traditional and design and build) contracts;
- Four iterations of the proven cost method price variation clause;
- Eight iterations of the formula fluctuation method price variation clause;
- Nine iterations of the conditions of engagement;
- Five iterations of the dispute resolution procedures;
- The initial contract guidance notes; and
- Three drafts of the nineteen model forms.

Significant levels of work and input were provided by members of the GCCC during the public sector consultation. They responded comprehensively in writing to aspects of the new contracts and conditions of engagement at short notice, notwithstanding the work commitments in their own organisations. This involvement benefited the process in a number of ways. The quality of the comments and assistance that they provided was considerable. As noted during the structured interviews with members of the GCCC, they were able to bring their practical experience, gained from a wide range of public sector construction contracts, to bear on the contractual conditions and guidance material. This improved the quality of the material before the Phase 3 consultation process started. Financial benefits also arose from the participation of the GCCC as this removed the need to acquire appropriate external technical assistance. While not quantified, this will have represented a significant Exchequer saving and contributed towards the efficiency of the process.

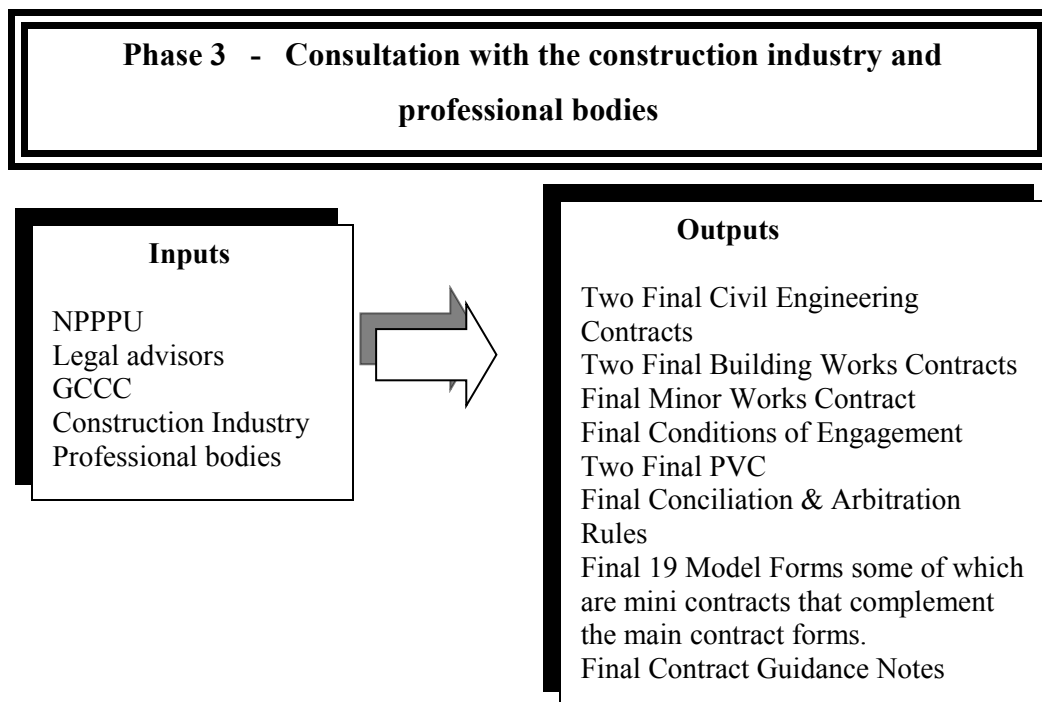
#### **4.14 Exchequer cost for the public sector consultation**

The fees for the legal advisors are estimated at €364,000 for the public sector consultation, and the drafting of the building works contracts, dispute resolution procedures and contract guidance notes. Further detail on costs is contained in appendix II.

#### **4.15 How effective was the public sector consultation?**

This part of the consultation process is considered effective for the following reasons:

- The recognition by the NPPPU and others early in the process that the civil engineering contract (traditional) could be used as the template for the other contracts resulted in significant efficiency in the contract development process, allowed for consistency in the process and in the documents produced, and permitted standardisation of the text and the concepts in the contracts.
- Although the scope of the contract drafting work was extended to include building works contracts, it is considered that the value of the experience of the CPRI gained by the legal advisors outweighed any advantage of re-tendering.



#### **4.16 Requirement for consultation with the construction industry and the professional bodies**

Consultation with potentially affected parties is a core principle of the social partnership process where significant structural or other changes are being introduced by the State. The Government in making its decision in May 2004 in relation to public sector construction procurement reform recognised the need for consultation by including in its decision a requirement that the details for the implementation of the proposed arrangements and contract related material be worked through, as appropriate, with key stakeholders including the Construction Industry Federation, the Forum for the Construction Industry and the Professional bodies. There was therefore a requirement for the NPPPU to consult with the construction industry and the professional bodies on the four new contracts, the nineteen model forms, the conditions of engagement, the two price variation clauses and the dispute resolution procedures.

#### **4.17 Overview of the Phase 3 process**

This part of the consultation process was commenced through the Forum for the Construction Industry (FCI)<sup>4</sup>. Thus, at a meeting of the FCI in early 2005, a number of key private sector members (i.e. the CIF, RIAI, SCS, ACEI and EI) decided that there would be a consultation group for each of the following areas:

- Civil engineering contracts (traditional and design and build);
- Building works contracts (traditional & design and build);
- Price variation clauses (formula fluctuations method and proven cost method);
- Dispute resolution procedures; and
- Conditions of engagement.

It was initially envisaged that this phase of the consultation process would be concluded by the end of 2005. However, as there was a considerable degree of resistance to the changes proposed by the CPRI, the process extended through to June 2006. This extension allowed for the commitment to real and meaningful consultation to be honoured and avoided the possibility of appearing to act in bad faith by arbitrarily cutting the consultation process short. If such action was seen as bad faith it would have been gravely detrimental to the process and could have resulted in failure to implement the proposed changes.

Contact was usually made between representatives of the construction industry and professional bodies and the GCCC and the NPPPU. Each of these consultation groups had representatives from the professions (RIAI, EI, SCS, ACEI) and the construction industry federation (CIF). The GCCC made a significant input into the consultation process and four members of the GCCC attended all the consultation groups and commented on and analysed the material. The format of the meetings varied, but in most cases, the relevant group submitted comments on the contracts, conditions of engagement, price variations clauses and other documents that had been circulated to them. These submissions were the basis for the detailed discussions at the

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<sup>4</sup> The FCI is an umbrella group for the construction industry and related professional bodies. The membership is comprised of the Construction Industry Council (CIC), (the CIC includes Construction Industry Federation (CIF), Society of Chartered Surveyors (SCS); Association of Consulting Engineers of Ireland (ACEI), Engineers Ireland (EI), Building Materials Federation (BMF); Royal Institution of Architects of Ireland (RIAI)), Irish Congress of Trade Unions (ICTU), public sector clients, private sector clients and an independent chair.



consultation meetings. Contracts and other documents were examined, re-drafted and re-examined by all the participants in the process. The legal advisors attended most of the meetings to provide advice where necessary.

During this phase of the consultation process (Phase 3), individual members of the Oireachtas made representations to the Minister for Finance on issues of interest to them. The NPPPU drafted responses to relevant Parliamentary Questions. As consultation advanced, senior managers from the Department of Finance participated in the consultation process by discussing outstanding issues directly with the industry and professional bodies. Towards the end of the process, the Department of Finance, together with the Department of the Taoiseach, were involved in discussions on the remaining key outstanding issues. During this phase, issues in relation to compliance with labour conditions and standards in the contracts were discussed with ICTU under the negotiations of a new partnership agreement.

The consultation process with external stakeholders was brought to a close in June 2006 with meetings between the Minister of Finance, Departmental officials, the CIC and CIF. Following these meetings, the Minister communicated, by letter, his final position on the concessions to be made on the standard conditions of engagement of construction consultants to the professional bodies and on the new forms of construction contracts to the CIF. However, following the Minister's letter setting out the final position the President of the CIF wrote regarding a number of key issues which the industry still wanted to discuss. The Minister responded in October 2006 without granting any further concessions.

#### **4.18 Consultation Groups on Civil Engineering & Building Works Contracts and Model Forms**

The draft civil engineering contracts and the model forms were issued to the consultation groups in May 2005 and the draft building works contracts were issued to them in June 2005. Between July 2005 and June 2006 nineteen consultation meetings were held to examine the new draft contracts and the model forms. Redrafts of the contracts were issued in December 2005 and April 2006 which would have reflected any amendments that had been agreed as a result of the consultation process.

Other than changes to the clauses of the four existing contracts and some changes to the model forms, there were two other main outputs that emerged from the consultation process. They were (a) an agreement that contract guidance notes for contracting authorities would be developed and published, and (b) the development of a minor works contract which was additional to the existing four contracts. This was a contract (using the traditional approach for building works and civil engineering works) for contracts valued at €5 million or below. It was based on the same template as the other contracts to ensure standardisation and consistency, was developed by the legal advisors, GCCC and NPPPU and was subject to a process of analysis and re-drafting.

In February 2006, the NPPPU engaged three highly regarded solicitors to independently review the four contracts and to specifically check the syntax, structure, sense and understanding of the clauses. This was a further quality check on the contracts. In general, many of the comments received from the independent reviewers related to phraseology and layout in the documents with some clauses in the contracts being amended.

#### **4.19 Conditions of Engagement Consultation, Price Variation Clause Consultation and Dispute Resolution Procedures Groups**

The conditions of engagement were issued to the group in April 2005 and it met six times between July 2005 and June 2006 examining each clause of the conditions. The price variation clause consultation group met twice to discuss these clauses with submissions from the construction industry and professional bodies forming the basis for discussion. These clauses were integrated into the draft construction contracts in mid 2006 and were then dealt with in the context of the new contracts.

The ‘Adjudication and Arbitration Rules’ were issued to the relevant construction industry and professional bodies in October 2005 and a consultation group was established to discuss the document. The group met once and it was decided not to proceed with the ‘Adjudication Rules’ but instead to draft a clause on ‘Conciliation’ which was to be included in the contracts. The Arbitration Rules remained separate. There were further discussions on the conciliation clause as part of the consultation on

the construction contracts. The dispute resolution procedures were integrated into all five draft contracts and finalised in April 2007.

#### **4.20 Contract Guidance Notes**

The contract guidance notes, drafted by A&L Goodbody in conjunction with the GCCC, were provided to the construction industry and professional bodies during the consultation phase of the CPRI. Useful comments were provided on the documents, with further iterations of the guidance notes then being issued to the construction industry and professional bodies in April 2006 for information.

#### **4.21 Exchequer cost for the consultation with external stakeholders**

The external costs borne by the Exchequer for this stage of the CPRI are estimated at €895,000.

#### **4.22 How effective was the consultation with external stakeholders?**

- There was significant consultation with representatives of the construction industry and professional bodies as they had concerns about the proposed introduction of the CPRI. This resulted in longer and more intensive meetings, more legal input into the submissions received and hence a higher than anticipated level of expenditure on this stage of the process.
- There was effective use of the resources of the NPPPU and the GCCC. The NPPPU provided effective administrative and technical support and also contributed to the wider debate. Four members of the GCCC attended the consultation meetings, and reviewed submissions, comments and redrafts of the contracts. The GCCC members believe that their presence on the consultations teams was important in showing public sector buy-in to the process and also in terms of getting the public sector practitioners' views across to the industry and professional bodies. One example recounted was that as the documents were examined and discussed at the meetings, there

were instances where the industry's perception of the operation of certain clauses differed from the intention of the NPPPU.

- There was effective use of the legal advisors. Their attendance at meetings allowed them to provide immediate advice and clarify the legal issues on the interpretation or meaning attached to certain clauses. This allowed meetings to progress without residual issues being set aside to be discussed and resolved at a subsequent meeting or meetings. Their attendance at meetings also allowed for speedy redrafting of the contracts and conditions of engagement.
- The use of the three independent reviewers, who were practitioners in construction procurement, allowed for a peer review and an independent assessment of the contract documents to ensure that the contracts were clear, flexible and workable for all. This was useful in establishing the credibility of the process for the construction industry and professional bodies, the GCCC and the NPPPU as it externally validated the content of the contracts.
- This phase of the process produced positive outcomes in terms of improved versions of the construction contracts and conditions of engagement, price variation clauses and guidance notes.
- The involvement of the construction industry and professional bodies in the consultation process allowed for an examination of the viability of the contracts, conditions of engagement and accompanying documentation. The individuals representing the construction industry and professional bodies on the consultation teams had a wealth of experience in terms of public sector construction and construction contractual arrangements. While there were many areas on which there were fundamental disagreements between these individuals and the public sector, the consultation process provided a meaningful platform where views were exchanged and it undoubtedly produced improved contracts and conditions of engagement through the interaction of all the parties involved.

## The implementation of the CPRI in the public sector

### 4.23 Introduction

*Circular 33/06: Construction Procurement Reform – revision of arrangements for the procurement of public works projects and for the engagement and payment of construction consultants* was issued by the Department of Finance on 27 October 2006. It informed the public sector that revised arrangements were being put in place from 1 January 2007 (the Standard Conditions of Engagement for Construction Consultants) and with effect from 19 February 2007 (the new Public Works Contracts) for the procurement of public works projects and for the engagement and payment of construction consultants. It contained detailed information on the use of the new contracts and the conditions of engagement.

The implementation of the CPRI in the public sector was preceded by the development of a detailed training programme, the compilation of appropriate training material and a two year training framework agreement to allow public sector bodies access appropriate training.

### 4.24 Training programme and training manuals

The NPPPU had recognised that in order for the CPRI to be effectively understood, communicated and adopted by public sector clients, appropriate training was required. In February 2006, it tendered separately for the development of a central training programme for the public sector for the construction contracts and the conditions of engagement. The tender sought to secure the appointment of an expert(s) to assist in the development and delivery of an intensive central training programme to 160 public sector officials on the new contracts and conditions of engagement and the development of training manuals. A consortium of firms, Project Management, McCann FitzGerald Solicitors and TOBIN Consulting Engineers was successful and was appointed in May and June 2006. The training manuals were drafted and re-drafted between July and October 2006 with the assistance of the GCCC.

A total of 160 staff (nominated by the GCCC members) received six days of intensive training on the new contracts and the conditions of engagement over the period 31 October 2006 to 15 February 2007. The training sessions introduced an initial batch of public sector professionals to the new contracts and conditions of engagement. The NPPPU worked to direct this training on the civil engineering or the building works contracts so that the training was appropriate. These individuals were trained in-house in the Department of Finance and the material for the training was produced by the Department of Finance's printing unit. The total external cost incurred by the Department of Finance in relation to development of the training materials and provision of the training courses amounts to €0.66m and is included as part of the total cost of the implementation phase. The imputed salary cost relating to the attendance by the 160 staff at the training is estimated at just under €0.4m.

There was also some limited input from the legal advisors when the training manuals were being finalised. They commented on and made minor amendments to the contracts and the conditions of engagement on issues that arose as a result of the training programme.

The GCCC believed that the training of 160 key public officials was of fundamental importance in the implementation of the new contracts and conditions of engagement as it meant that such personnel were, when trained, available to assist other frontline public officials in their sectors that were involved in live projects. The centralised training programme also acted as a platform to address questions from delegates about the contracts and conditions. These then became part of the training material and were included in a frequently asked questions (FAQs) section in the training manuals. The GCCC also considered that the roll out of the training programme helped focus public sector management's attention on the introduction of the CPRI and on the need for a more widespread training approach within sectors and individual organisations on the new contracts and the conditions of engagement. The discussions and comments from those being trained also highlighted aspects of the manuals that required refinement, amplification or clarification. The training process therefore proved invaluable in improving the final quality of the training manuals, and provided a real insight into the needs of public officials involved in implementing the new construction contracts

and conditions of engagement as well as training those key officials on how to use the new contracts and conditions of engagement.

#### **4.25 Development of framework arrangement for the training of individuals in the wider public sector.**

To further assist the implementation of the CPRI, the NPPPU conducted a tender competition for a national training framework arrangement which pre-qualified consultants to provide training that met the specific training needs of public bodies. Under the framework agreement public bodies wishing to procure training services are required to conduct a mini competition with those service providers on the framework agreement. During 2007, this framework agreement was used to train approximately 3,000 officials from a wide range of public sector organisations. The imputed salary cost, relating to the time spent on training by the relevant public officials, amounts to almost €2.1m. The guidance notes and training manuals devised as part of the initial training programme have been made available to those delegates attending training courses procured under the framework agreement.

#### **4.26 Contract Guidance Notes**

In August 2006, the NPPPU updated the contract guidance notes following GCCC input so that it was consistent, in terms of content, with the contracts. The NPPPU then tendered for the formatting and simplification of the technical contract guidance notes. The NPPPU wanted to:

- Address any formatting deficiencies;
- Simplify text where possible into clear accessible language without loss of technical meaning;
- Make the document more user-friendly;
- Improve existing graphics so that they were clearly and easily understood;
- Provide new graphics where required; and
- Separate the document into manageable and easily usable parts.

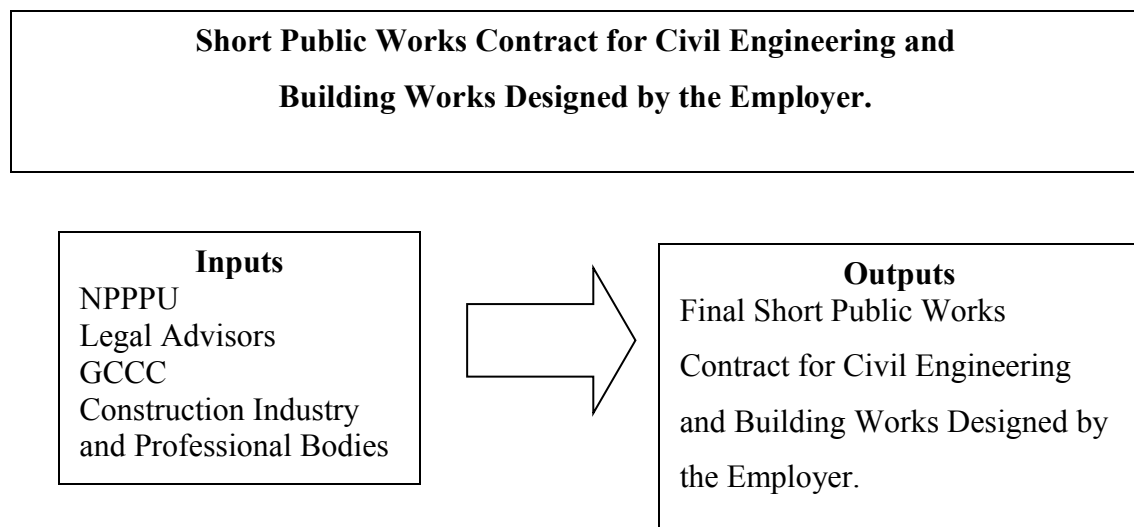
After the competitive process, Redacteurs Limited was appointed to carry out this work. These guidance notes were drafted and re-drafted a number of times and include comments made by delegates on the centralised training programme, with the

drafts being made available for use at the training programme on the contracts in October 2006.

#### **4.27 General Guidance Notes**

There are a number of general guidance notes that form part of the Capital Works Management Framework (CWMF) which were drafted and examined by the NPPPU and the GCCC prior to the commencement of the consultation process. The full suite of documents in the CWMF is set out in Appendix I.

In the course of drafting these documents it was generally felt that some of the material was very technical and needed to be expressed in clear, plain, and easy to read language for the non-technical person. To achieve this, the NPPPU sought competitive tenders for the formatting and simplification of four of the technical guidance notes, and in October 2005 Redacteurs Limited was appointed as consultants to provide the service.



#### **4.28 Introduction**

Just prior to the introduction of the new Public Works Contracts on 19 February 2007 the NPPPU recognised that there was a requirement for a short works contract to be developed to deal with very low value public works projects. It decided to develop such a contract with A&L Goodbody's legal and technical team producing the initial draft which was then sent for comment to the GCCC. The document went through nine iterations before it was finalised. The industry and professional bodies were invited to engage in a consultation process on the document before its introduction.



#### **4.29 Consultation with industry and the professional bodies on the Short Public Works Contract.**

The Short Public Works Contract was issued to the industry and the professional bodies on 11 June 2007 and those bodies were invited to comment as part of the consultation process required under social partnership. The professional bodies as a group responded on 27 July 2007 with a separate submission from the RIAI on 31 July 2007. These responses were followed by an industry response through the CIF on 3 August. As part of the consultation process a day long meeting was held on 12 October 2007 between officials from the Department of Finance, other Departments and the OPW and representatives from the construction industry and the professional bodies. All the concerns and comments received from the industry and the professional bodies were discussed at the meeting following which, and after consulting with the GCCC, an amended version of the contract was issued on 28 November 2007.

#### **4.30 Implementation of the Short Form of Contract**

Following a period of eleven weeks during which no further comments were received, Department of Finance *Circular 4/08: Construction Procurement Reform – additional measures to the revised arrangements for the procurement of public works projects and for the engagement and payment of construction consultants* was issued on 13 February 2008. It informed users of the public works contracts that the revised arrangements were being put in place on 3 March 2008 for all works contracts with a value of €500,000 or less tendered after that date.

<p style="text-align: center;"><b>Implementation cost, effectiveness of process in implementation phase and conclusions</b></p>
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#### **4.31 Exchequer cost for the implementation period**

The external costs incurred by the Department of Finance for this stage of the CPRI are estimated at €1,364,000.

#### **4.32 How effective was the process in the implementation phase of the CPRI?**

- Employing a consortium of consultants to develop the training material meant that seasoned and experienced experts were used in the development of appropriate training material and also in delivering centralised training courses for a core number of key public sector officials.
- There was a wider public sector benefit with the development of standardised training material and contract guidance notes as they could be used by all public sector bodies to deal with their training needs.
- The training of 160 public sector officials was an important way of achieving a critical mass of trained personnel who could begin the implementation process in their own organisations and assist other frontline personnel in their sectors involved with live projects.
- The development of the framework agreement allowing individual public sector bodies to use pre-qualified consultants to train their own staff has resulted in efficiency gains, as public sector bodies did not have to draw up bespoke tender documents and tender on an individual basis for such training requirements. In addition, the rigorous selection process guaranteed the quality of the training providers. The repeat performances of the same seminar to different public sector audiences, and associated increased practical knowledge and pro-active engagement, also resulted in incremental improved delivery.
- The use of a specialist such as Redacteurs Limited to simplify technical guidance material in the CWMF and the contact guidance notes meant that a skill that was not available in the NPPPU or the GCCC was used to convert complex technical information into clear plain language that was easier to use and understand by the wider public sector.
- The introduction of the Short Public Works Contract helped to deal with very small projects that require less complex contracts.

### **4.33 Conclusions**

The chapter set out to identify and analyse the efficiency of the process of creating six construction contracts, nineteen model forms, arbitration rules, conditions of engagement, associated guidance notes and material, training material and a training programme. It is considered that the process of producing these documents and training was efficient.

#### *Exchequer expenditure*

The expenditure incurred on the process by the Department of Finance for the period from May 2004 to March 2008 was €4.35 million of which: €1.8m was related to external fees for legal work relating to the drafting and review of contracts; €0.4m arose from the drafting of a comprehensive set of guidance notes; €0.7m was incurred on the intensive training programme that supported the implementation of the Initiative; and €1.4m was for internal salary costs.

#### *NPPPU resources*

It is considered that the relevant individuals in the NPPPU demonstrated both leadership and management skills by driving and managing the implementation of the CPRI at all stages, including providing best practice technical and policy advice and assistance. They also provided significant administrative support so that the process operated smoothly and efficiently with the procedures used to manage the Initiative being suitably adapted to provide:

- the optimal method of monitoring and controlling financial expenditure;
- regular updating on progress; and
- a means of successfully managing interaction with a range of external stakeholders.

#### *Legal and technical resources*

The legal and technical advisors accounted for the balance of the Exchequer expenditure. It was necessary to acquire external legal and certain technical advice with up-to-date construction expertise as such legal or contract drafting skills or experience were not available in-house. The tendering processes for the contracts and

the conditions of engagement were carried out simultaneously, thereby ensuring effective use of resources. The tendering process also proved useful in determining innovative solutions for price variation clauses.

The initial civil engineering (traditional) contract was developed within a period of six months and the recognition that this could be the basis for the other contracts increased the speed of the contract drafting process. Indeed, the largest element of the external costs (34%) and the longest period of the process was the external consultation phase with the construction industry and professional bodies which was useful and in any case was a requirement of the social partnership process. The time involved and therefore the cost in developing the contracts and other material compares favourably with contract drafting work carried out by other bodies in the past.<sup>5</sup>

*Ensuring appropriate skilled individuals were made available*

It was essential that the best available skills were used in order to ensure that the construction contracts and conditions of engagement and supporting material represent best practice and are useful and effective. The NPPPU sourced appropriate practical construction skills to assist and improve the process. These were:

- A senior specialist from the Queensland public sector;
- External legal and construction contracting expertise;
- External validation expertise;
- External views from the construction industry and professional bodies; and
- External drafting expertise for the development of training, explanatory and guidance material.

The use of such expertise contributed considerably to the effective development of the contracts, model forms, arbitration rules, conditions of engagement and related guidance and training material.

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<sup>5</sup> The FCI spent approx 3 years, between 1996 and 1999, drafting one contract which was an adaptation of an existing standard form of works contract developed by Fédération Internationale des Ingénieurs-Conseils (FIDIC)

### *Use of the GCCC*

The GCCC was used extensively in the consultation process and it provided a professional public sector perspective at all stages of the development of the construction contracts, model forms, the conditions of engagement and supporting material. It is considered that it made an effective contribution in the way in which its expertise was used at each stage of the process.

### *Wider nature of the process and the benefits realised*

The development of the contracts has resulted in a set of standard construction contracts and conditions of engagement. It has also resulted in standard training material and guidance notes being developed as part of the CWMF. There are significant, but unquantified, Exchequer benefits from such standardisation which should be offset against the Exchequer cost of the CPRI. Standardised contracts reduce the need for legal advice which was previously used to either develop bespoke contracts or to amend the IEI and GDLA contracts. A standard set of training and guidance documents reduce the need for contracting authorities to develop their own internal guidance or set up training programmes.

## Chapter 5

### **The scope for an alternative policy or organisational approach and whether the further allocation of public funding is desirable**

#### **5.1 Introduction**

This chapter examines the scope for an alternative policy or organisational approach to achieving the CPRI objectives on a more efficient and/or effective basis. It outlines some of the key changes arising from the development of the construction contracts and the conditions of engagement and how these have helped to achieve the objectives of the CPRI better than alternative policy or organisational approaches. Finally this chapter evaluates the degree to which the CPRI continues to warrant the allocation of public funding on a current and ongoing basis.

#### **5.2 The scope for alternative policy or organisational approaches to achieving the CPRI objectives on a more efficient and/or effective basis**

To implement the objectives of the CPRI in relation to the works contracts, one approach might have been to issue policy and practical documents outlining the necessary contractual and practical changes that would be required to achieve the CPRI objectives and leave responsibility for action to the relevant contracting authorities.

Another approach might have been to:

- Amend the existing IEI or GDLA forms of contract; or
- Purchase new off-the shelf construction contracts.

In relation to the procurement of professional services an approach might have been to purchase off-the shelf conditions of engagement for construction consultants from this or other jurisdictions or to amend existing rules where possible e.g. Department of Finance circular 11/87.

#### *Making changes only in policy and procedures in relation to works contracts*

The first possible option was to develop and issue a detailed set of procedures and policies and leave implementation to the relevant contracting authorities. This could

have reduced the cost of the CPRI by limiting the need for legal advice and other technical assistance. However some technical and legal advice would have been required and this would have resulted in some Exchequer cost. The consequences of taking this approach would be a more fragmented result with little or no change being achieved, given the sharp focus of public bodies on project delivery rather than on introducing new strategic policies to underpin project delivery in their sectors. It was therefore considered that this approach would have been unlikely to be successful.

Furthermore, where contracting authorities did attempt to introduce change, the technical guidance issued by the Department of Finance would have to be interpreted by them resulting in potentially significant legal costs in changing contracts individually. The added disadvantage of this approach in the context of a capital works programme is that consultation with the industry and with the professional bodies would inevitably arise in relation to the bespoke changes in each contract. This would add significant overheads to a public body and could result in slowing down project delivery or even perhaps bringing it to a standstill. Furthermore, the benefits to be gained from standardisation and improved wording, which is the case with the new contracts, would not have accrued.

#### *Making changes to existing construction contractual provisions*

Before the NPPPU embarked on the introduction of new standard forms of contract and new conditions of engagement for construction-related consultants, the existing IEI and GDLA forms of contract and the approach to engaging consultants were examined. There are a number of reasons why amending the existing forms of construction contracts was not considered to be a more efficient or effective way of achieving the CPRI objectives than developing new contracts. These included:

- Both the IEI and GDLA forms had been used for over twenty-five years for public sector construction. They were out of date particularly in relation to health and safety, prompt payments legislation, collateral agreements etc. This meant that they had to be significantly amended for each project which usually entailed using solicitors and incurring cost for contracting authorities with each project.

- Both the IEI and GDLA forms of contracts had provisions which allowed for the contract sum to be increased. This was contrary to the CPRI's objective of introducing the concept of greater cost-certainty through a fixed price lump sum contract. Amending this aspect alone in the IEI and GDLA contracts would have required significant work and would not have removed a number of the other key difficult provisions in the contracts that did not comply with the CPRI objectives.
- The GDLA form of contract is only suitable for work which is designed by or on behalf of the employer. It does not cater for design and build projects and it has no design and build equivalent. The introduction of design and build forms of contract was an important element of the CPRI as it dealt with the transfer of design risk to the contractor and was another approach for contracting authorities to use in the procurement of capital works. If the GDLA form of contract had been retained and amended for building works, the development of separate design and build forms for building and civil engineering works would still have been necessary.
- In the GDLA form of contract, there was ambiguity regarding where the liability for nominated sub-contractors lay. The issue of split responsibility was always a concern as it gave the contractor an opportunity to step back when there was a problem with a nominated sub-contractor and to allow claims grow and materialise. While the use of nominated sub-contractors was discouraged in official guidance, over the years they were frequently used in situations where tender information was poor and lacked detail for specialist works. One of the central contractual changes of the CPRI was to abolish the use of nominated subcontractors and thereby remove the issue of split responsibility by replacing nominated sub-contractors with a more efficient arrangement of 'specialists' where the contractor is solely responsible for their actions and work, whilst still allowing a contracting authority some involvement in their selection.



In short, the GDLA and IEI forms of contract were old, full of archaic language and did not reflect current international best practice. Furthermore, they only catered for projects designed by the contracting authority and were not suitable for use on design and build projects. Indeed by 1997 the Strategic Review Committee (SRC) report recommended that new standard forms needed to be developed and written in plain language reflecting modern legal drafting techniques.

The possibility of acquiring new off-the-shelf contracts from other jurisdictions, such as FIDIC<sup>1</sup> or NEC<sup>2</sup>, was also considered. After due consideration, this was dismissed on the grounds that such contracts would not have all the required elements to give effect to the CPRI. To meet the CPRI objectives, they would have been so heavily amended that very little of the original text would have remained. Furthermore, issues in relation to copyright could arise regarding the extent and type of amendments necessary to meet the CPRI objectives and also the professional bodies' acceptance of such amendments in their document. Any amendments prior to their introduction would also have required a consultation process with the industry in accordance with social partnership.

*Making changes to policy, procedures and the rules governing the fees of consultants*  
Any changes in policy and procedures in relation to the procurement of construction consultants would probably have no impact on the existing arrangements. The percentage fees would still be quoted as the norm, as output requirements would continue to be poorly defined. The use of conditions of engagement developed by the professional institutes would continue to expose contracting authorities to unnecessary risks because these conditions of engagement are framed in such a way that they do not allow for optimal risk transfer to professionals, are more conducive to a percentage fee arrangement rather than a lump sum fixed fee, and also impose restrictions on other issues such as ownership of copyright. As there was no form of contract for engaging construction consultants, terms in letters of acceptance varied widely from commission to commission.

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<sup>1</sup> Fédération Internationale des Ingénieurs-Conseils (FIDIC)

<sup>2</sup> New Engineering Contract (NEC).

In the Department of Finance's Circular 11/87 an attempt was made to prevent windfall gains by the splitting of fees between the three stages of construction – preliminary report, design, and construction. It also outlined procedures in respect of the recruitment of consultants and travelling and subsistence expenses. This circular was amended by Department of Finance Circular 24/93 to allow for changes in EU thresholds. The Department of Finance's Circular 11/87 and changes to that circular through Circular 24/93 had limited impact on the issues outlined in the C&AG's reports, the main concern of which was the use of a percentage of the current project cost to calculate the value of fees due.

*Purchase off-the shelf conditions of engagement for construction consultants from this or other jurisdictions*

While it may have been possible to acquire conditions of engagement for consultants from this or other jurisdictions, any such conditions would have required amendments to reflect the public sector requirements and would also have been subject to the consultation process. It would also have been more difficult to amend existing conditions of engagement developed by professional bodies in this or other jurisdictions as such conditions do not allow for optimal risk transfer which is a necessary requirement in any public sector conditions. Furthermore, difficulties could arise similar to those identified for the works contracts in relation to the copyright issue. It was felt therefore that on balance it would be quicker, more cost effective and more client focused to develop a completely new document.

It is not thought that any of the options described above would have led to the objectives of the CPRI being achieved in a more efficient or effective manner because:

- Only developing policy and guidance material would not have achieved the outcomes necessary to satisfy the objectives in the Government Decision.
- The intention behind the process was to develop client focused public sector construction contracts rather than rely on contracts developed by the professional bodies.

- There was a need to have standard conditions of engagement and new procurement rules for the commissioning of professionals such as architects.
- If the GDLA or IEI forms of contract were amended to reflect the CPRI objectives, they would have been totally different to their current form because of the extent of amendments necessary to meet the required objectives.

The value of the new contracts is that:

- The legal concepts in the new standard forms of contracts are in many instances based on similar concepts in other contracts available both in this and in other jurisdictions.
- They allow for greater standardisation and a higher level of flexibility as the new contracts have been designed as a mutually similar, except for essential differences, suite of documents.

### **5.3 The new key concepts and changes**

This section outlines some of the key changes arising from the development of the construction contracts and the conditions of engagement and how these have better helped achieve the objectives of the CPRI than alternative policy or organisational approaches

#### **5.3.1 New Contracts**

The main changes in the new contracts are the introduction of:

- Optimal risk transfer through risk allocation (delay & compensation events);
- The procurement of specialists under a main works contract – the entities which replace nominated sub-contractors;
- The transfer of the risk of future price increases in the cost of labour and materials for a project to contractors for a maximum period of 36 months for projects of such duration or longer;

- New price variation clauses (PVC) that allow for a limited level of recovery of price increases for labour and material after the 36 month fixed price period;
- Provisions in the new contracts that encourage contractors to pay rates of pay and observe conditions of employment in the Registered Employment Agreements (REAs) with a sanction imposed if the contractor fails to comply with these standards;
- Sanctions if a contractor does not keep the construction programme up to date;
- Provision where a tendered daily rate for delay can be used in the calculation of delay costs;
- Provision for a programme contingency where no delay costs are paid whilst the programme contingency exists;
- Fitness for purpose provision for works designed by the contractor either in a traditional or a design and build contract;
- A limitation placed on the value and number of variations (change orders) that an Employers Representative can order under a contract without having them cleared by the client; and
- Better alignment with best practice in the area of project management processes.

*Optimal risk transfer through risk allocation (delay & compensation events)*

The new contracts deal with risk allocation in two distinct ways. Both result in the optimal level of risk transfer being achieved:

- i. By offering contracting authorities a choice of procurement strategy that allows for the transfer of different levels of risk; and
- ii. By offering the contracting authority a choice of whether to retain or transfer a particular risk. Risk should only be transferred if the information regarding the risk is sufficiently detailed to allow tenderers to price it at competitive commercial prices.

i. Choice of procurement strategy

The old contracts gave a choice between IEI and GDLA forms of contracts which were for employer designed projects commonly referred to as traditional contracts. More options are now available with the new contracts in the form of:

- (i) Traditional;
  - a. civil engineering contracts,
  - b. building works contracts.
- (ii) Design and build;
  - a. civil engineering contracts,
  - b. building works contracts.
- (iii) A public works contract for minor building and civil engineering works designed by the employer, and
- (iv) A short public works contract for building and civil engineering works designed by the employer.

In the selection of the procurement strategy for a project, i.e. deciding between traditional or design and build, building or civil engineering, large, medium or small, the contracting authority makes an important decision on the allocation of the risk as each contract type allows for different amounts of risk transfer to occur, with the most on contracts for large projects and the least on contracts for small projects. The traditional contracts require that design information be comprehensively developed as the contracting authority retains responsibility for the risk of the:

- Design of the works carried out by the employer;
- Completeness of the design of the works carried out by the employer; and
- Changes to the employer's designs of the works.

Under the design and build contracts the contractor carries responsibility for:

- Design of the works;
- Completeness of the design of the works; and
- Changes to the design of the works other than changes to the contracting authorities output requirements.

Irrespective of whether a contract is of the traditional or design and build form, if the contracting authority decides to make any changes to what has been included in the works requirements the contracting authority retains the risk associated with this and will be liable financially for such risk. The benefit of the new contracts compared with the old contracts is that there is now a full suite of contracts from which a contracting authority can choose. In addition, amendments are not permitted to be

made to these new contracts, except in exceptional and rare circumstances. In such cases consideration can be given to amendments to non core elements of the new contracts and this request has to be made to the GCCC for consideration and approval.

ii. Allocation of risk

In terms of the optimum distribution of risk within the contract, where comprehensive information (e.g. a thorough site investigation report giving details of the geology of the ground and the types of obstructions, either man made or natural, that might be encountered) has been supplied to the contractor, he carries most risks regarding time and money associated with providing the project. The exceptions to this are events that give rise to an entitlement to extensions of time which are termed delay events, and where permitted, those events that give rise to compensation are termed compensation events. Delay and compensation events are broadly defined as follows:

Delay events are events which, if they occur, are not at the contractor's risk, and subject to compliance with the contract, entitle the contractor to an extension to the date for substantial completion of the works (and any affected section) equal to the amount of delay, taking into account only site working days.

Compensation events are events which, if they occur, are not at the contractor's risk, and subject to compliance with the contract, entitle the contractor to be compensated for the effect the events have on the cost of the works.

The new contracts allow a contracting authority a well defined choice as to whether certain events are compensation events. There are 21 "events" listed in Section K of Schedule Part 1 of the contracts with those that are optional compensation events under the contracts so identified in the schedule. Where "Yes" is inserted in a box an event is a compensation event. The converse applies when "No" is inserted.

Example:

EVENT [See Section K of Schedule Part 1]	TRADITIONAL		DESIGN & BUILD		MINOR WORKS	
	Delay Event	Compensation Event	Delay Event	Compensation Event	Delay Event	Compensation Event
1. The Contractor encounters unforeseeable Utilities in the ground on the Site.	Yes	Yes	Not Used		Yes	Yes

*The procurement of specialists under a main works contract – the entities which replace nominated sub-contractors*

In relation to “Nominated Sub-Contractors”, the 1994 edition of the Public Procurement Guidelines stated that *“in general, the main contractor should be held accountable for the project as a whole. Using nominated sub-contractors can tend to blur responsibility for delays or increased costs, design failures, etc. Contracting authorities should always make clear, where nomination does take place, that overall accountability of the main contractor for the project is not diminished. Excessive use of nominated sub-contractors is therefore not favoured. Contracting authorities should make every effort to ensure that nominated work is kept at a minimum on any building contract”*.<sup>3</sup>

Despite this guidance, in practice and in the then contractual terms, a main contractor was not responsible for either the performance or the designs carried out by the nominated sub-contractor. This led to delays and increased costs for the contracting authority. To address this issue, nominated sub-contractors are not permitted under the new contracts. Such sub-contractors are replaced with an entity called a specialist.

<sup>3</sup> Public Procurement Guidelines, 1994 Edition (p.17)

Specialists can be procured in a number of ways:

- (i) Specialists are named by a main contractor at prequalification stage under a restricted procedure. They are separately assessed and if found suitable and the main contractor is also suitable the main contractor is invited to tender for the project. Tender submissions should confirm that those specialists that were used at the prequalification stage will be used on the project if the contract is awarded to one of the tenderers. Any change by a contractor from its initially suitable specialist to another specialist should be subjected to a further suitability assessment by the contracting authority;
- (ii) The contracting authority may create a panel of specialists for a particular specialist area of work and allow tendering contractors for the main contract choose from the panel and/or propose alternatives who will be assessed by reference to the criteria given to them by the contracting authority and against which the panel was chosen.
- (iii) Specialists could be novated<sup>4</sup> to the contractor. -

The introduction of specialists instead of nominated subcontractors in the new contracts ensures that there is now no ambiguity regarding the contractor's responsibility for the specialists' performance and designs. Furthermore, because of the suitability assessment which specialists have to go through, the contracting authority can be sure of the expertise and skills of those working on a project.

*The risk of future price increases in the cost of labour and materials for a project is transferred to contractors for a maximum period of 36 months for projects of such duration or longer*

The significant issues that arise with the introduction of the new contracts are:

- Projects are competitively tendered on a fixed price lump sum basis in regard to future price increases for labour and materials required for a project up to a maximum of 36 months;

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<sup>4</sup> Novation means where the Contractor takes over the role and responsibilities of the employer in relation to a contract that already exists with the Employer. This arises where an Employer enters into a contract with another party with the intention that at some future date the main Contractor will replace the Employer by means of a novation arrangement.



- Where bills of quantities are used particularly for civil engineering works, the tender figure is a lump sum offer and not the rates entered against the quantities in the bill of quantities as was the case under the old contracts;
- Daily rates for delay, all-in labour rates and percentage additions for materials and plant are to be tendered by tendering main contractors. These will be taken into account in the evaluation of tenders.

Accordingly, the evaluation criterion to be used is the "most economically advantageous tender" and not the "lowest tender". The introduction of the fixed price lump sum contract is central to achieving greater cost-certainty, better value for money and timelier and more efficient delivery of projects. The old contracts contained clauses which resulted in an often variable contract sum that normally resulted in cost over runs.

*New price variation clauses (PVC) that allow for a limited level of recovery of price increases for labour and material after the 36 month fixed price period*

In the old contracts, price increases in labour and materials arising during construction (price variation) were handled by:

- Negotiating a lump sum buy-out, post tender (but before the contract started). This buy-out, negotiated between the public sector client and contractor, was not conducted in a competitive environment and gave rise to the questioning of such a practice in the context of the procurement rules; or
- Payments for the price increases as they arose during the contract.

The Government Decision required that future price increases in labour and materials on a project be competitively tendered up to a period of 36 months with limited recovery for those projects that ran longer than 36 months. The new contracts provide for a fixed price lump sum over a 36 month period from the date of tender submission. After this 36 month period, for projects of longer duration, contractors can recover increases for labour and materials for the remainder of the contract. There are two approaches from which contracting authorities, at their own discretion, can choose. The first is the "proven cost method" (PV1) and the second is the "formula fluctuations method" (PV2).

This proven cost method (PV1) is a vouched based system involving invoices and detailed hourly records whereby the contractor establishes his entitlement after the fixed price period, based on invoices for purchase of materials after that date, and increases in the registered employment rate by the detailed hourly records also after that date. This data is then checked by the contracting authority.

The formula fluctuations method (PV2) is based on differences in the published CSO indices for different categories of construction materials over a particular period. The indices used are the wholesale price index for materials and fuels and the consumer price index (CPI) for non-reusable temporary works. Labour increases are calculated on the basis of a formula which links labour costs to national general round pay increases. The weightings for each of the material categories, fuel, labour, non-reusable temporary works and non recoverable overheads are established by the contracting authority and the proportions of different fuels and materials being used on a particular project are also defined for use with these indices. Tenderers are informed, through the invitation to tender document (ITT), of the relevant weightings and proportions.

All of the formulae used in PV2 have a common basic structure, i.e.

<i>The sum in question subject to indexation</i>	<i>X</i>	<i>Indexation factor</i>	<i>-</i>	<i>Element at Contractors Risk</i>	<i>=</i>	<i>Amount Payable</i>
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These new price variation clauses have the benefit of only allowing for the recovery of price increases in labour and materials after 36 months as opposed to 15 months under the old contracts.

*Provisions in the new contracts that encourage contractors to pay rates of pay and observe conditions of employment in the Registered Employment Agreements (REAs), with a sanction imposed if the contractor fails to comply with these standards*

The contractor must ensure that rates of pay and conditions of employment comply with law and with any registered employment agreements. If the contracting authority becomes suspicious at any stage that the contractor is not compliant with his

obligations in relation to payment and conditions of work persons, he may request the production of full wage records. If the information is not forthcoming, the contracting authority may estimate the amounts that should have been paid to the work persons in question and hold it until satisfied that the proper amounts have been paid.

*Sanctions introduced if a contractor does not keep the construction programme up to date*

Before a project start date, the contractor is required to submit a detailed construction programme to the contracting authority. The programme should be of sufficient quality to allow for effective monitoring. If progress on a project does not correspond with the programme, the contracting authority may request that the contractor submits a revised programme. If the contractor fails to submit such a revised programme within 15 working days of being requested to do so, the contracting authority may withhold 15% of any payment to be made to the contractor.

*Provision where a tendered daily rate for delay can be used in the calculation of delay costs*

The contractor's contractual financial entitlement for a compensation event is easy to ascertain since it can be requested to bid its delay cost per site working day at the time of tender. This approach removes the contentious element regarding the correct level of costs for delay, which were part of the old contracts, as they are set at the beginning of the new contracts.

*Provision for programme contingency*

Through a new mechanism of programme contingency, there are thresholds that apply before delay costs associated with compensation events become payable by the employer. The arrangement under the old contracts was that the safety buffer of a programme contingency was not there (there was no sharing of risk in relation to these events) and the contracting authority became liable for all legitimate delay costs that arose on a project.

*Fitness for purpose provision for works designed by the contractor either in a traditional or a design and build contract*

Any works or works items designed by the contractor are required to be fit for their purpose. The contractor is responsible for any design by specialists and again such design is required to be fit for purpose.

*A limitation placed on the value and number of variations (change orders) that an Employers Representative can order under a contract without having them cleared by the client*

Schedule A of the public works contract imposes limitations on the contracting authority's representative's authority to perform certain functions under the contract. The schedule requires that the maximum single variation or change order be specified along with the maximum cumulative change orders in any three month period.

*Better alignment with best practice in the area of project management*

The new public works contracts are aligned with established best practice in relation to project management processes. The following are some of the key modern features in the new public works contracts:

- The contracts are written in clear comprehensible language and are designed to be easily understood, applied and interpreted by contracting authorities, contractors and design teams;
- The contracts are arranged and organised in a consistent structure across all six contracts which helps the user gain familiarity with their contents and location;
- The roles of the parties to the contracts are more precisely defined so there should be fewer disputes about who is to do what and when;
- Change control processes are streamlined with reasonable certainty as to their outcome;
- Early warning procedures are built in for dealing with circumstances causing delay and additional cost;
- Accepted delays which confer entitlements to additional time and in particular circumstances time and money to the contractor are all captured in two

adjoining sections. This contrasts with the old forms of contract where such clauses were dispersed throughout the conditions; and

- Issues relating to assessment of delay and compensation events have to be resolved as projects proceed and not left until the end.

The new contracts promote best practice in project implementation by employers, design teams and contractors with:

- Better pre-construction planning of projects;
- Promotion of completeness of design prior to construction;
- Consideration at the outset of risk issues such as ground conditions or archaeology;
- Clear and decisive allocation of risk to drive accountability and motivate the parties carrying the risk to actively contribute to the project success by managing, controlling or mitigating it;
- More collaborative working between employers, design teams and contractors over the project lifecycle through specific cooperation provisions in the contracts and the conditions of engagement.

#### **5.4 Conditions of Engagement**

In relation to the new conditions of engagement, the key features of the new arrangement are:

- The terms in the conditions of engagement will be the same for all consultancy appointments for public works projects;
- The fees are expressed as a fixed price lump sum with a provision for exceptional circumstances where a percentage is initially used and at an early stage in the commission is converted to a fixed price lump sum;
- Contracting authorities are required to clearly define the scope of services required in Schedule B attached to the conditions of engagement;
- There is a greater emphasis on coordination, cooperation and communication between design team members;
- Restrictions are imposed on designers ordering variations during the construction stage;

- A fee correction mechanism is included which is to be applied at main contract tender stage if there is an unacceptable difference between the tender amount and the approved pre-tender budget figure for the main works;
- The total performance or duration period of the commission has to be stated;
- There are specific provisions to deal with a situation where a contracting authority suspends work under the conditions of engagement;
- Copyright is dealt with in the context of the contracting authority owning it or merely having a licence to use the designs;
- There are specific rules if a commission is abandoned and the design team's appointment is terminated;
- There is a management services section in Schedule B that deals with how all management issues are to be dealt with during the project lifecycle.

*Terms in the conditions of engagement will be the same for all consultancy appointments for public works projects*

Up until 1 January 2007, individual contracting authorities used their own conditions of engagement which in most cases consisted of a letter from the contracting authority to the consultant awarding the consultant the commission. The content of these letters varied widely from contracting authority to contracting authority from a simple expression that the consultant was appointed for the commission to a more formal detailed document which the consultant signed. The new arrangement allows for the adoption of a uniform standard set of conditions across the public sector, drafted in a way that better protects the contracting authorities' interests.

*Fees are expressed as a fixed price lump sum with a provision for exceptional circumstances where a percentage is initially used and at a very early stage in the commission converted to a fixed price lump sum*

Whilst the conditions of engagement cater for either a percentage based fee or a fixed price lump sum, the policy set out in CWMF Guidance Notes 16 & 17 is that only in very exceptional circumstances may the contracting authority award the contract using a percentage approach to fees. Even then, the policy is that it should be turned into a lump sum (i.e. capped) at the earliest opportunity (no later than planning permission stage).

*Contracting authorities are required to clearly define the scope of services required in Schedule B attached to the conditions of engagement*

There is an obligation on contracting authorities to define their requirements and clearly set out the scope of the services required when seeking tenders for consultancy services for public works projects. This is facilitated by utilising Schedule B to set out in detail the scope of services required. There is an obligation on the contracting authority to specify the scope of the project for which the service is required. This will subsequently be included as part of the final contract documents.

*There is a greater emphasis on coordination, cooperation and communication between design team members*

Under the new arrangements, a contracting authority needs to be alert to the benefits of interacting with the consultant in a timely and meaningful way which should ensure that few disputes arise and if they do, that they are resolved promptly.

*Restrictions are imposed on designers ordering variations during the construction stage*

The new conditions of engagement facilitate a contracting authority imposing limits on the authority of the consultant to order variations under a construction contract with orders above such limits requiring prior approval from the contracting authority. This ensures that the authority is in greater control of the finances on a project at construction stage and also keeps it informed as to the extent and value of variations being ordered. This is very important in terms of controlling cost and time issues.

*A fee correction mechanism is included which is to be applied at main contract tender stage if there is an unacceptable difference between the tender amount and the approved pre-tender budget figure for the main works*

There was no fee correction mechanism for poor budgetary control on public projects by consultants before now. There is now a fee correction mechanism which allows a contracting authority to reduce a consultant's fees if the approved contract sum is more than a specified percentage above or below the tender estimate without a justifiable explanation. This has been introduced to help obtain a more accurate budget figure at a time when a major investment decision is being made.

*The total performance or duration period of the commission has to be stated*

In order to be able to tender for a fixed price lump sum fee, in addition to having to know the scope of the project and the service required, the consultant needs to know how long the project is going to take. Therefore, the contracting authority has to state the total performance period in Schedule A of the conditions of engagement. The total performance period is made up of the design period, the main works tender period, the construction period and the handover period.

*There are specific provisions to deal with a situation where a contracting authority suspends work under the conditions of engagement*

There is flexibility for a contracting authority to suspend work under the conditions of engagement with certainty as to the implications for it in terms of fees for such a suspension.

*Copyright is dealt with in the context of the contracting authority owning the designs or merely having a licence to use them*

Traditionally copyright was retained by the design consultant who could negotiate its sale separately. Now if copyright is required by a contracting authority its price can be tendered for. Alternatively, if copyright is not required the provision of a licence is the default and is limited to the particular project unless other uses are specified in the tender documents. A licence allows the contracting authority a very limited use of the design provided. A copyright allows a contracting authority unlimited use.

*There are specific rules if a commission is abandoned and the design team's appointment is terminated*

Under the old arrangement, termination of the consultant's employment was difficult and could be very costly with no protection for the contracting authority. In the new conditions of engagement, the terms under which termination can be exercised are clearly set out. Termination can be exercised at will by the contracting authority with no compensation to the consultant where a project is abandoned. However, if the project is continuing and there is a 'termination at will', the scheduled payment in the conditions of engagement is paid to the consultant as compensation. Termination with cause does not attract compensation to the consultant as the consultant is at fault.



*There is a management services section in Schedule B attached to the conditions that deals with how all management issues are to be dealt with during the project life cycle*

The management services section in Schedule B is very important as it identifies specific actions that have to be taken at particular times during the commission and by whom. There are specific requirements regarding the lead consultant coordinating the work of other consultants in the team. However, the contracting authority has responsibility for the performance of other independently appointed consultants in the team. Management services also impose discipline on contracting authorities to provide information within a certain time or to ensure that actions are taken within a particular period.

#### **5.5 Evaluation of the degree to which the objectives continue to warrant the allocation of public funding on a current and ongoing basis**

At this stage, most of the contracts, conditions of engagement and training have been completed with work on the supporting guidance material being well advanced. The construction contracts and conditions of engagement are being used by contracting authorities.

Since March 2008, an investigation contract to deal with heritage works and a short public works contract to deal with specific areas of public sector construction have been developed. The need for these contracts became apparent as the construction contracts were being finalised. Some additional Exchequer expenditure has been expended in developing these contracts.

It is considered that this expenditure, additional to the amounts already indicated, on these forms of contracts, together with costs relating to the development of a term maintenance and refurbishment works contract and of innovative contracts<sup>5</sup>, is necessary in order to complete the process and ensure that there is a full suite of contracts and guidance material for contracting authorities. On completion of these contracts and the remaining relevant guidance material, there should be no additional

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<sup>5</sup> Innovative contracts are forms of contract for complex projects where the client has difficulty in defining his requirements without early contractor involvement.

Exchequer expenditure other than salary costs of the relevant individuals in the NPPPU.

## **5.6 Conclusion**

This chapter examines policy and practical alternatives to the development of the CPRI. It finds that these alternatives would not have achieved the expected objectives of the CPRI i.e. reductions in cost overruns, better value for money and more timely delivery of projects, more efficiently or more effectively than the introduction of the new public works contracts and conditions of engagement.

### *Public Works Contracts*

The key provisions of the new contracts are highlighted in this chapter with some of the concepts that contribute towards achieving the CPRI objectives being summarised below.

The introduction of fixed price lump sum contracts is seen to be central to delivery of all three objectives as it requires that the tender price reflect comprehensive design work and a realistic consideration of project risks.

The use of nominated subcontractors under the old contracts gave rise to split responsibility and had tended to blur responsibility for delays and/or increased costs. Their replacement by specialists, under the new contracts, focuses on single point responsibility, with clear lines of responsibility to the main contractor, thereby reducing the risk of delays and cost overruns.

The introduction of new price variation clauses, allowing for limited recovery of price increases after a 36 month period, is viewed as contributing towards reduced cost overruns as it replaces a system that was based on negotiated post tender buy-outs or payments for increases on a vouched basis<sup>6</sup> with such increases being recoverable after 15 months under the old contracts.

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<sup>6</sup> Based on records of labour hours worked on the project and quantities of material invoiced to the project.

The introduction of sanctions where the contractor does not keep the construction programme up to date is expected to allow for more effective monitoring of contracts by providing an early warning for contracting authorities who can then seek remedial action at an early stage, resulting in timelier delivery of projects. Timely delivery is also supported by the alignment between the contracts and best practice in relation to project management processes as detailed in the CWMF.

#### *Conditions of Engagement*

The conditions of engagement set out for the first time standard defined conditions for engaging consultants and the introduction of competitive fee bidding. The key concept of competitive fee bidding is that fees are to be expressed as a fixed price lump sum figure. This introduction of competitive tension is expected to result in better value for money outcomes. The greater emphasis in the conditions of engagement on coordination and communication between design team members, the inclusion of a management services section that identifies specific actions that have to be taken at particular times during the commission and the requirement that the total performance period is stated should also contribute towards timelier delivery of projects.

#### *Additional Expenditure*

Additional limited external expenditure was noted as being required to complete a number of innovative contracts and the remaining guidance notes that form part of the CWMF as it is important for the long term effectiveness of the CPRI that there is a full suite of such contracts and guidance available to contracting authorities. On an ongoing basis, there will be a requirement for the NPPPU to manage, monitor and provide technical support to the CPRI.

## **Chapter 6**

### **Framework for assessing the effectiveness and impacts of the CPRI and the establishment of performance indicators to measure long term performance**

#### **6.1 Introduction**

The ultimate success of the CPRI will be determined by the extent to which it has contributed towards ensuring that construction projects are delivered on time and within budget. Such an assessment regarding the delivery of expected benefits can only be made if there is a suitable framework in place for assessing the effectiveness and long term impact of the CPRI and when a sufficient number of projects are completed under the new contractual arrangements.

The new conditions of engagement and public works contracts were introduced with effect from 1 January and 19 February 2007 respectively. Transitional arrangements were put in place to allow a number of works projects in the pipeline, with advanced designs, to proceed on the basis of the old contracts so that there would be no undue delay in their delivery. A short extension to the transitional period from 13 February 2008 to 6 May 2008 allowed a number of critical projects in the sewage treatment and group water schemes and a small number of schools projects to proceed on the basis of the old contracts.

Therefore, due to the long term nature of the delivery lifecycle of construction projects it is not possible to make definitive comments regarding the effectiveness or impact of the CPRI at this stage. Consequently the focus of this chapter is on developing appropriate performance indicators to assess the effectiveness and long term performance of the reform measures and assigning responsibility for their ongoing measurement and reporting.

#### **6.2 Establishing performance indicators to measure the effectiveness, impact and long term performance of the CPRI.**

A Management Information Framework (MIF) report on performance indicators (April 2004) states that performance indicators should be SMART:

- Specific
- Measurable in quantity and quality

- Achievable (but also challenging)
- Relevant to objectives and
- Time bound (achievable within an agreed timeframe)

The purpose of establishing such performance indicators is to seek to measure the effectiveness, impact and long term performance of the CPRI.

The performance indicators set out here should facilitate an assessment of:

- The extent to which the objectives of the CPRI have been achieved and whether there is a performance gap between what was expected to be achieved and what was actually achieved (effectiveness);
- The wider effects of the CPRI, from a sectoral, national or socio-economic perspective, in the medium to long term and the long term impact of the implementation of the programme on the contracting authorities (impact); and
- The long term performance of the CPRI.

### **6.3 Measuring the effectiveness of the CPRI**

Effectiveness is defined as the *“the extent to which the objectives of a policy are achieved and the planned benefits delivered.”*<sup>1</sup> The examination of effectiveness is a study of the relationship between the outputs (contracts, conditions of engagement and related material) and the results of the programme. A measurement of the effectiveness of the CPRI is the extent to which its implementation contributes to reducing cost overruns and achieving better value for money on construction projects. A measure of the effectiveness of the conditions of engagement is the extent to which they result in better value for money outcomes.

When a cost evaluation is being conducted in regard to the use of the new public works contracts, it will be made possible by measuring the difference between the tender price and the final outturn cost of a project. With regard to an evaluation of timelier delivery, the measurement will be the difference between the initial period

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<sup>1</sup> Value for Money and Policy Review Initiative Guidance Manual (Central Expenditure Evaluation Unit, Department of Finance), March 2007. p.107

stated in the contract and the actual period it took to complete the contract. Each department/agency represented on the GCCC will, at the appropriate time, be asked by the NPPPU to identify a number of projects that will be banded within categories and values. Details concerning these projects will have to be provided such as:

- The fixed price lump sum figure entered in the contract;
- The final outturn costs;
- If a material difference exists between the fixed price lump sum figure and the final outturn costs, an explanation for such difference;
- The original period stated in the contract for delivery of the contract;
- The actual time it took to deliver the project;
- An explanation as regards the difference between the original period and the actual time taken to deliver the contract if a material difference exists.

The outturn of any project can be influenced by “compensation events” in the contracts and this may result in an adjustment to the tender price. The contracts specify what optional compensation events apply in the particular contract. If the contracting authority decides to retain the risk in relation to one of these optional compensation events, the contractor may be entitled to seek compensation in the event of one of these risks materialising. These compensation events, if they materialise in a contract, may increase the final outturn cost but for legitimate and acceptable reasons. In such circumstances, because the contracting authority has made a calculated assessment to retain the risk (for which it should have set aside a contingency provision outside the contract) the increases that can be recovered should be regarded as reasonable if they represent value for money. The cost over-run, if there is one, should only be measured as the difference between the contract cost and contingency provision combined and the actual cost.

The secretariat to the GCCC (NPPPU) will be responsible for ensuring the submission of the relevant details outlined above and will have a role with regard to tracking and analysing this information so that the data can be interpreted and conclusions drawn. Such analysis would include further questioning of the explanations behind any differences between the fixed price lump sum figure and the final outturn costs. This would facilitate an assessment as to whether the contracting authority has carried out

sufficient planning, preparation and design of the project before tenders were sought and a contract was awarded. It would also allow consideration to be given to the extent of investigation work carried out by a contracting authority to determine the risk associated with the geology of a site and the types of obstructions expected, before making a decision regarding optimal risk transfer in the contract.

The GCCC is tracking, and will continue to track, through the etenders website the number of public sector procurement opportunities that are awarded on the basis of the new contracts. An item is included on the agenda of GCCC meetings to allow members of the GCCC to raise specific practical issues that their sectors have experienced in relation to the use of the new contracts. As an additional measure, a subgroup of the GCCC has been set up to monitor a number of pilot projects, using the new public works contracts, and to report back to the GCCC at its monthly meetings.

In relation to the conditions of engagement, the following procedure could identify whether value for money is being achieved in consultancy fees by comparing the percentage fee levels pertaining before competitive tendering of fees under the new conditions of engagement were introduced with those being achieved under the new regime. The method that could be used is:

- The historical position (pre-1 January 2007) in relation to the negotiated percentage fees which each government department/agency considered typical for each consultancy service would be collected by the secretariat of the GCCC as benchmark data.
- Each department/agency, through the GCCC, would separately be asked to identify a number of commissions that were awarded on the basis of a competitively tendered fixed price lump sum figure using the new conditions of engagement.
- The lump sum fixed price fees competitively tendered for those services would also be supplied.

- The final adjusted fixed price lump sum fee for changes in service requirements which arose during project delivery (similar to compensation events under the public works contract) would be supplied.
- If a material difference exists between the fixed price lump sum figure and the final outturn costs, an explanation for such difference would be provided.
- A comparison could then be made between the old negotiated percentage fee reflected on an estimated outturn cost<sup>2</sup> and the adjusted lump sum fixed price fee, tendered on a competitive basis.

Any difference between the two figures should represent a saving providing the contracting authority has comprehensively defined its design and specification requirements prior to tenders being sought and that the subsequent management of the construction contract is competently executed.

The new contracts have been designed with the expectation that the contract which is signed with contractors is the outcome of a process where significant planning and design work has been carried out to ensure that the project is fully scoped and specified. Therefore, the use of the contracts themselves under such a process should result in better project development by contracting authorities pre-award, with more effective delivery of projects by contractors post-award. However, ultimate success is linked to the ability of contracting authorities to accept the culture change and introduce change management processes so as to correctly adapt to the new arrangements. To support the adoption of the new arrangements, the CWMF was developed. It is the framework within which the contracts sit along with detailed guidance material, templates and technical procedures. This when used in conjunction with the new contracts and conditions of engagement should result in a more systematic approach in areas such as project planning and design cost control, ultimately leading to the delivery of the Government objectives of greater cost certainty at tender stage, better value for money and more efficient delivery of projects. Therefore, in reviewing performance against the proposed indicators, and in order to get a realistic result, the GCCC will need to obtain qualitative evidence

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<sup>2</sup> The calculation would, in addition to the estimated cost, also need to take account of cost over-runs in the past being in the order of 25% to 30% [see Section 2.5 page 12]



regarding the extent to which the contracting authorities utilised the full suite of documents contained in the CWMF.

#### **6.4 Measuring the impact of the CPRI**

The definition of “impact” is “*the wider effects of the programme, from a sectoral or national perspective, in the medium to long term*”.<sup>3</sup> Impact is concerned with the wider effects of the programme for a larger group of persons (such as a sector or part of society) and the medium to long term effects on the targeted beneficiaries (in this case public contracting authorities) of the implementation of the CPRI. Measuring the impact of the CPRI examines the extent to which long term value for money has been achieved, since achieving value for money on public construction projects benefits the users of such projects, provides an economic benefit to society as whole and can improve the efficiency and competence of public contracting authorities.

The impact of the implementation of the CPRI is likely to be indirect. Consequently, it will not be possible to directly measure the extent to which the CPRI has resulted in a long term beneficial impact. Bringing capital projects in on time and on budget allows for the allocation of Exchequer resources towards other deserving capital projects that would otherwise not be on the programme, or other capital or social projects or changes in taxation which have the potential to be of wider economic benefit to all of society.

#### **6.5 Measuring the long term performance of the CPRI**

Assessing the long term performance of the CPRI entails examining the extent to which the expected benefits have been achieved. It is a combination of qualitative and quantitative measures of performance and will be informed by the assessments regarding the effectiveness of the CPRI made by the GCCC and may also draw on information from other sources.

Given the duration of many contracts, it is unlikely that there will be a sufficient number of contracts completed to allow for definitive comment with regard to the

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<sup>3</sup> Value for Money and Policy Review Initiative Guidance Manual (Central Expenditure Evaluation Unit, Department of Finance), March 2007. p.107

long term performance of the CPRI before the end of 2010. Indeed, with the larger contracts extending over a number of years, it may be appropriate to carry out such an appraisal in 2011. However, the feedback at GCCC meetings regarding members' general experience in practice on the use of the contracts and relevant data collected should provide some early indication of any patterns emerging with regard to the effectiveness of the CPRI and any consequent requirement for corrective action.

## **6.6 Use of and introduction of additional indicators**

The indicators suggested in this chapter should be formalised and introduced so that the performance of the CPRI can be measured and monitored. The level of monitoring required could be annual with information collected once a year or more or less frequently depending on the value and timeframe of the contracts.

The proposed indicators detailed in this chapter should be reviewed annually in order to see whether they can be improved, added to or deleted in the light of experience and of any external changes impacting on the CPRI. The GCCC should have a key role in developing and implementing such indicators as are required.

## **6.7 Conclusion**

This chapter highlights that the success of the CPRI will be determined by the extent to which it results in projects being completed within budget and within the required timeframe. Success is dependent on all three stakeholders involved (i.e. the contracting authority, the consultant and the contractor) properly playing their part in the project delivery process. It recognises that such success can only be determined if a framework is in place involving all three stakeholders for the assessment of the effectiveness of the CPRI. It outlines a number of performance indicators which could be used to determine the effectiveness of the CPRI. It recognises that these indicators may need to be replaced or supplemented as necessary and that this key work of developing and implementing such indicators should be a matter for the GCCC.

## **Chapter 7**

### **Conclusions and Recommendations**

#### **7.1 Introduction**

The aims of this Value for Money and Policy Review (VFM&PR) of the CPRI are, as set out in Chapter 1 to:

1. Identify the objectives of the Construction Procurement Reform Initiative.
2. Examine the current validity of those objectives and identify the link between the purpose of the Construction Procurement Reform Initiative, the policy objectives of the Government in construction procurement and the strategic aims of the Department of Finance.
3. Identify and analyse the level and trend of costs, staffing resources and outputs associated with the Initiative and comment on the efficiency with which it has achieved its objectives.
4. Examine the scope for alternative policy or organisational approaches to achieving these objectives on a more efficient and/or effective basis.
5. Design a framework for assessing the effectiveness and impacts of the Initiative and establish appropriate performance indicators to measure its long term performance.
6. Evaluate the degree to which the objectives continue to warrant the allocation of public funding on a current and ongoing basis.

#### **7.2 The background to the CPRI**

Chapter 2 sets out the context for the CPRI, by highlighting certain of the key problem areas within public sector construction procurement including cost overruns, the setting of fees for consultants involved in construction procurement and difficulties relating to cost estimation and project definition. The pre-existing contractual arrangements were examined and a number of issues pertaining to these contracts, that were relevant to the Government decision to proceed with the new construction contracts, were highlighted.

### **7.3 Objectives of the CPRI**

The objectives for the CPRI are identified in Chapter 3. The high level objectives; greater cost certainty at tender stage, better value for money outcomes, and contributing to the timelier and more effective delivery of projects, remain central to all procurement procedures. Furthermore, the ongoing validity of the objectives in terms of the Department of Finance and Government policy can be seen through such documents as: the Department of Finance Secretary General's letter of 25 January 2006; Department of Finance Circular 33/06: *Construction Procurement Reform – revision of arrangements for the procurement of public works projects and for the engagement and payment of construction consultants*; Circular 4/08: *Construction Procurement Reform – additional measures to the revised arrangements for the procurement of public works projects and for the engagement and payment of construction consultants*; and the National Development Plan (NDP) 2007-2013.

### **7.4 Efficiency with which objectives have been achieved**

Chapter 4 examines the efficiency of the process that created the construction contracts, conditions of engagement and supporting material. In carrying out this analysis, the process was split into four distinct but interrelated phases: initial contract drafting, public sector consultation, consultation with external stakeholders and implementation.

The initial contract drafting phase was the period during which the two civil engineering contracts, nineteen model forms to be used with the contracts, conditions of engagement and price variation clauses were drafted. The work on the relevant documents started in a timely manner which resulted in effective use of the resources of the NPPPU and the external advisors.

During public sector consultation, the expertise of the GCCC was brought to bear in refining the initial draft documents. Furthermore, the recognition early in this stage of the process that the initial civil engineering (traditional) contract could be the basis for other contracts increased the speed of the contract development process.

The longest period of the process was the consultation phase with the construction industry and professional bodies. This engagement, which was obligatory under social

partnership, was significant as the construction industry representatives and professional bodies had concerns regarding the proposed introduction of the CPRI. However, this involvement produced positive outcomes in terms of improved versions of the construction contracts, a new contract for works under €5 million, contract guidance notes, conditions of engagement, price variation clauses and guidance.

Department of Finance Circular 33/06: *Construction Procurement Reform – revision of arrangements for the procurement of public works projects and for the engagement and payment of construction consultants* informed the public sector that the new construction contracts and conditions of engagement were being put in place effective from 19 February 2007 and 1 January 2007, respectively. In advance of these dates, comprehensive training materials were drafted with intensive training programmes provided to 160 public sector officials. This training resulted in a critical mass of trained personnel who could begin the implementation process in their own organisations.

The GCCC was used extensively during the process and its involvement ensured high quality documents that reflected the professional public sector perspective of its members. The GCCC also advised on the development of a short form of contract for projects valued at €500,000 or less. This contract was introduced with the issue of Department of Finance Circular 4/08: *Construction Procurement Reform – additional measures to the revised arrangements for the procurement of public works projects and for the engagement and payment of construction consultants* and came into general use on 3 March 2008.

## **7.5 Scope for an alternative policy or approach and need for further allocation of public funds**

Chapter 5 examines alternative methods for the development of the CPRI. It examines the possibilities of amending the existing GDLA and IEI contracts and the option to buy in contracts from other jurisdictions. The analysis concludes that the best option was to draft new public sector standard forms of contract and to address all deficiencies in the system through these contracts. There was no public sector contract in existence for the engagement of consultants on capital projects and consequently the conditions of engagement set out for the first time defined

conditions for engaging such consultants and also the introduction of competitive fee bidding. Chapter 5 also identifies the relevant provisions of the new documents that specifically address the issues which helped contribute to cost overruns, poor value for money and often ineffective delivery of projects.

Chapter 5 notes the requirement to complete a number of guidance notes and innovative contracts to form part of the full suite of contracts and guidance notes available to assist the public sector from project initiation right through to project review stage. On an ongoing basis, the NPPPU will need to continue to provide the necessary technical, management and monitoring support in respect of the CPRI.

#### **7.6 Framework for assessing the effectiveness and impacts of the CPRI and the establishment of performance indicators to measure long term performance**

The focus of Chapter 6 is on the development of performance indicators that could be used to assess the effectiveness, impact and long term performance of the CPRI. This approach is necessitated by the fact that it is not possible to provide definitive material on the effectiveness and impact of the programme at this stage, given the long term nature of public works projects. The Chapter recognises that the proposed indicators will need to be reviewed and amended with the input of the GCCC being crucial to this process.

#### **7.7 Recommendations**

It is recommended that the GCCC should keep the construction contracts and conditions of engagement under review to ensure that they are functioning properly and are suitable to deal with all the diverse capital works projects which develop.

The Department of Finance was able to utilise the extensive knowledge, personal commitment and expertise present in the GCCC (architects, engineers, quantity surveyors). The committee members brought to the process extensive experience and expertise at no budgetary cost to the Department. This model, of involving relevant public sector expertise in an in-depth and pro-active way in the whole process, should be followed when undertaking such initiatives.

It is recommended that a number of guidance documents and contracts that form an integral part of the CWMF be completed.

It is important that appropriate support be provided by the NPPPU for the ongoing management of the CPRI.

As significant contracts are completed, performance measures, such as those outlined in Chapter 6, should be used to assess the effectiveness and long term performance of the CPRI.

The proposed performance indicators for measuring the effectiveness, impact and long term performance of the CPRI, may need to be reviewed and amended or supplemented with additional indicators. The GCCC should take a lead role in this review process.

The secretariat of the GCCC should take responsibility for collecting the data required for the performance indicators from contracting authorities. The Department of Finance should highlight the importance of this data collection to the relevant departments and agencies. The method for collection of the required data should be specified. The GCCC should play a pivotal role in assessing the information, and then spearheading any necessary actions which should be taken as a result of their assessment.





# Appendices



## Appendix I

### Capital Works Management Framework

Overview Docs	Guidance Notes	Standard Forms	Title
GN 1.0			Introduction to the Capital Works Management Framework
			<b>Section 1: Preliminary Planning</b>
	GN 1.1		Project Management
	GN 1.2		Project Management and the Definitive Project Brief
	GN 1.3		Budget Development
	GN 1.4		Procurement and Contract Strategy for Public Works Contracts
	GN 1.5		Public Works Contracts
		PW-CF 1	Public Works Contract for Building Works designed by the Employer
		PW-CF 2	Public Works Contract for Building Works designed by the Contractor
		PW-CF 3	Public Works Contract for Civil Engineering Works designed by the Employer
		PW-CF 4	Public Works Contract for Civil Engineering Works designed by the Contractor
		PW-CF 5	Contract for Minor Building & Civil Engineering Works designed by the Contractor
		PW-CF 6	Public Works Short Form of Contract
		PW-CF 7	Public Works Investigation Contract
		PW-CF 8	Public Works Short Form of Investigation Contract
		PW-CF 9	Public Works Framework Agreement
		AR1	Arbitration Rules
	GN 1.6		Procurement Process for Consultancy Services (Technical)
	GN 1.6.1		Suitability Assessment of Construction Service Providers, Restricted Procedure
		QC1	Questionnaire for Suitability Assessment of Service Providers, Restricted Procedure
		QC3	Questionnaire for Suitability Assessment of Service Providers, Independent PSDP
		QC4	Questionnaire for Suitability Assessment of Service Providers, Independent PSCS
	GN 1.6.2		Suitability Assessment of Construction Service Providers, Open Procedure
		QC2	Questionnaire for Suitability Assessment of Service Providers, Open Procedure
	GN 1.7		Standard Conditions of Engagement, Guidance Note and Sample Schedules
		COE 1	Standard Conditions of Engagement for Consultancy Services
		COE 2	Standard Conditions of Engagement for Archaeology Services
		FTS 9	Form of Tender and Schedule, Consultancy Services
		FTS 10	Form of Tender and Schedule, Archaeology Services
		ITTS 1a	Instruction to Tender for Services - Restricted Procedure Formula to calculate hourly rates
		ITTS 1b	Instruction to Tender for Services - Restricted Procedure Tendered Hourly Rates
		ITTS 2a	Instruction to Tender for Services - Open Procedure - Calculate Hourly Rates
		ITTS 2b	Instruction to Tender for Services - Open Procedure - Tendered Hourly Rates
		MF 2.1	Professional Indemnity Insurance Cert
		FTS 9	Form of Tender and Schedule, Consultancy Services
		FTS 10	Form of Tender and Schedule, Archaeology Services
			<b>Section 2: Detailed Planning</b>
	GN 2.1		Design Development Process
	GN 2.2		Planning and Control of Capital Costs
		CO 1	How to use the Costing Document (Building Works)
		CO 1.1	Costing Document (Building Works)
		CO 2	How to use the Costing Document (Civil Engineering Works)
		CO 2.1	Costing Document (Civil Engineering Works - Roads)
		CO 2.2	Costing Document (Civil Engineering Works - Water Services)
		CO 2.3	Costing Document (Civil Engineering Works - Marine)
	GN 2.3		Procurement Process for Works Contractors
	GN 2.3.1		Suitability Assessment of Works Contractors, Restricted Procedure
		QW 1	Questionnaire for Suitability Assessment of Works Contractors, Restricted Procedure
		QW 3	Questionnaire for Suitability Assessment of Works Specialist for Specialist Area of Work
	GN 2.3.2		Suitability Assessment of Works Contractors, Open Procedure
		QW 2	Questionnaire for Suitability Assessment of Works Contractors, Open Procedure
		FTS 1	Form of Tender Public Works Contract for Building Works designed by the Employer
		FTS 2	Form of Tender Public Works Contract for Building Works designed by the Contractor
		FTS 3	Form of Tender Public Works Contract for Civil Engineering Works designed by the Employer
		FTS 4	Form of Tender Public Works Contract for Civil Engineering Works designed by the Contractor
		FTS 5	Form of Tender Public Works Contract
		FTS 6	Form of Tender Public Works Short Form of Contract
		FTS 7	Form of Tender Public Works Investigation Contract
		FTS 8	Form of Tender Public Works Short Form of Investigation Contract
		ITTW 1	Instruction to Tender for Works, Restricted Procedure
		ITTW 2	Instruction to Tender for Works, Open Procedure
		ITTW 3	Instruction to Tender for Works, Investigation Works
		MF 1	Model Forms Compendium
		MF 1.1	Bid Bond
		MF 1.2	Letters to Apparently Unsuccessful Tenderer
		MF 1.3	Letter of Intent

## Appendix I (Continued)

### Capital Works Management Framework

Overview Docs	Guidance Notes	Standard Forms	Title
		MF 1.4 MF 1.5 MF 1.6 MF 1.7 MF 1.8 MF 1.9 MF 1.10 MF 1.11 MF 1.12 MF 1.13 MF 1.14 MF 1.15 MF 1.16 MF 1.17	Letter of Acceptance Letter to Tenderers Notifying Award Performance Bond Parent Company Guarantee Novation and Guarantee Agreement Novation Agreement Appointment of Project Supervisor Professional Indemnity Insurance Certificate Collateral Warranty Rates of Pay and Conditions of Employment Certificate Bond - Unfixed Works Items Retention Bond Appointment of Conciliator Bond - Conciliator's Recommendation
	GN 3.1		<b>Section 3: Implementation</b> Implementation Process
	CO 1 CO 2	CO 1.1 CO 2.1 CO 2.2 CO 2.3	How to use the Costing Document (Building Works) Costing Document (Building Works) How to use the Costing Document (Civil Engineering Works) Costing Document (Civil Engineering Works - Roads) Costing Document (Civil Engineering Works - Water Services) Costing Document (Civil Engineering Works - Marine)
	GN 4.1		<b>Section 4: Review</b> Project Review
	CO 1 CO 2	CO 1.1 CO 2.1 CO 2.2 CO 2.3	How to use the Costing Document (Building Works) Costing Document (Building Works) How to use the Costing Document (Civil Engineering Works) Costing Document (Civil Engineering Works - Roads) Costing Document (Civil Engineering Works - Water Services) Costing Document (Civil Engineering Works - Marine)
GL 1			Glossary

## Appendix II

### Costs Incurred by the Department of Finance on the CPRI to March 2008

	Initial Contract Drafting €'000	Public Sector Consultation €'000	Consultation with External Stakeholders €'000	Implementation €'000	Total €'000
Contracts	257	309	630	169	1,365
Contract Guidance			65	63	128
Conditions of Engagement	25	12	166	59	262
Price Variation Clauses	5	43	34	0	82
Guidance Notes				414	414
Training Costs				659	659
<b>Subtotal External Fees</b>	<b>287</b>	<b>364</b>	<b>895</b>	<b>1,364</b>	<b>2,910</b>
Salary and other costs					1,437
<b>Total</b>					<b>4,347</b>

	2004 €'000	2005 €'000	2006 €'000	2007 €'000	Jan to March 2008 €'000	Total €'000
Contracts	91	593	504	153	25	1,365
Contract Guidance	0	22	90	16	0	128
Conditions of Engagement	0	146	57	59	0	262
Price Variation Clauses	26	38	19	0	0	82
Guidance Notes	0	0	134	249	30	414
Training Costs	0	0	402	257	0	659
	<b>116</b>	<b>798</b>	<b>1,206</b>	<b>734</b>	<b>55</b>	<b>2,910</b>
Salary and other costs	265	396	355	343	79	1,437
<b>Total</b>	<b>382</b>	<b>1,194</b>	<b>1,561</b>	<b>1,077</b>	<b>134</b>	<b>4,347</b>

