N I A O
Northern Ireland Audit Office

Department of Culture, Arts and Leisure: Management of Major Capital Projects

REPORT BY THE COMPTROLLER AND AUDITOR GENERAL
22 MARCH 2013

Photography Acknowledgements: the MAC, Donal McCann Photography; Lyric Theatre, Dennis Gilbert; The Ulster Museum, Chris Hill, Scenic Ireland.

Northern Ireland Audit Office

Department of Culture, Arts and Leisure: Management of Major Capital Projects

Published 22 March 2013

This report has been prepared under Article 8 of the Audit (Northern Ireland) Order 1987 for presentation to the Northern Ireland Assembly in accordance with Article 11 of that Order.

K J Donnelly	Northern Ireland Audit Office
Comptroller and Auditor General	22 March 2013

The Comptroller and Auditor General is the head of the Northern Ireland Audit Office employing some 145 staff. He, and the Northern Ireland Audit Office are totally independent of Government. He certifies the accounts of all Government Departments and a wide range of other public sector bodies; and he has statutory authority to report to the Assembly on the economy, efficiency and effectiveness with which departments and other bodies have used their resources.

For further information about the Northern Ireland Audit Office please contact:

Northern Ireland Audit Office
106 University Street
BELFAST
BT7 1EU

Tel: 028 9025 1100
email: info@niauditoffice.gov.uk
website: **www.niauditoffice.gov.uk**

Contents

Contents

Abbreviations

CPD	Central Procurement Directorate
DFP	Department of Finance and Personnel
IDM	Investment Decision Maker
MAC	Metropolitan Arts Centre
NIGEAE	Northern Ireland Guide to Expenditure Appraisal and Evaluation
PAC	Public Accounts Committee
PPE	Post Project Evaluation
PRONI	Public Records Office of Northern Ireland
RICS	Royal Institution of Chartered Surveyors
SRO	Senior Responsible Owner

Executive Summary

"The Department of Culture, Arts and Leisure had a target to deliver £229 million capital investment in the Northern Ireland culture, arts and leisure infrastructure".

Executive Summary

1. As part of the 2008-11 Programme for Government, the Department of Culture Arts and Leisure (the Department) had a target to deliver £229[1] million capital investment in the Northern Ireland culture, arts and leisure infrastructure. This unprecedented level of investment by the Department resulted in delivery of a number of major capital projects including Ulster Museum, Crescent Arts Centre, Public Record Office of NI, Tollymore National Outdoor Centre, Lyric Theatre and the Metropolitan Arts Centre.

2. The Department formed a Capital Project Management Board in Spring 2006 to provide strategic oversight for all capital projects to manage and maximise the programme budget and ensure departmental objectives were delivered. A number of specific issues at that time resulted in increased costs and delays.

3. The Capital Project Management Board no longer exists and the Department is of the opinion that its current arrangements are appropriate to its circumstances. The Department now requires all projects to adhere to the best practice project management structure of Achieving Excellence in Construction[2]. This is a welcome improvement. A director is in place with specific responsibility for the delivery of the £110 million stadia programme. Delivery of all other capital projects is devolved to Arm's Length Bodies but with departmental oversight, finance support and Departmental Board review. The capital budget has fallen from £158 million in 2008-11 to £48 million[3] in 2011-15 excluding stadiums. This is a decrease of 70 per cent.

4. Our study examined how seven major capital projects performed against time and cost targets. We found that:

- The combined final cost of the seven projects was £103.4 million, £24.8 million more than the combined cost of £78.6 million estimated in the original business cases. Of this increase, £22 million was covered by addenda (the Department of Finance and Personnel confirmed that it approved £20.6 million of these cost increases[4]). Department of Finance and Personnel (DFP) guidance recognises that economic appraisal is an iterative process and it includes provision for business case addenda if required. Six of the seven projects had one or more business case addenda approved by DFP.

- When actual final completion times were compared with the estimates in the original business cases, six of the seven projects experienced delays ranging from seven months to two and a half years. The business case for the Lyric Theatre provided no indication of an estimated completion date.

1 This included £69 million allocated for Stadium Development.

2 Achieving Excellence in Construction, Office of Government and Commerce, 2007

3 £110 million has been allocated to the development of Stadia at Casement Park, Windsor Park and Ravenhill.

4 The Department of Finance and Personnel is required to give approval for cost increases which vary by more than 10 per cent from the business case estimates.

Executive Summary

5. A number of factors contributed to the cost and time overruns including:

   - Changes made to the scope and/or specification of the project outlined in the original business case;
   - Construction cost inflation exacerbated by delays in project delivery; and
   - Unclear project scope, objectives and benefits resulted in cost and time estimates that were not robust.

   The Department also indicated that the economic boom and subsequent recession contributed to the cost and time overruns.

6. During our review of the Lyric Theatre project we were unable to obtain satisfactory evidence to confirm that:

   - The contract for the rebuild of the Lyric Theatre was awarded in line with best practice; and
   - Perceived conflicts of interest around donations made to the Lyric Theatre capital project were managed correctly.

7. The Department's Accounting Officer commissioned a forensic audit on the basis of our findings which concluded that, while the Department is *"satisfied that the overall approach and methodology to be employed on the Lyric project was in line with best practice, in the absence of the original tender submissions and tender evaluation documentation, it could not provide assurance that the Lyric Theatre re-build contract was awarded in line with best practice."*

Summary of Recommendations

Recommendation 1 (page 20)

Achieving Excellence in construction advocates that by working together, a project team can reduce waste, improve quality, innovate and deliver a project far more effectively. **Team-working must be a core requirement for every element of every project** and putting this into practice requires real commitment from all parties involved but brings benefits that far outweigh any perceived disadvantages. As a first step to promoting team-working, **the Department must determine the extent of Central Procurement Directorate's role and authority and communicate this to all stakeholders within the project. This should be explicit as part of the conditions of funding/letter of offer to the client organisation. Also any justification for not following Central Procurement Directorate recommendations should be documented.**

Recommendation 2 (page 36)

The completion of post project evaluation following the implementation of a project provides the basis for an independent evaluation of the collective impact and success of a project's benefits and identifies lessons learned for application in future projects. **Post project evaluations should be completed within a reasonable timescale to determine whether projects have delivered the benefits intended.**

Recommendation 3 (page 36)

Post project evaluation should be included as a condition of funding. The timing of the post project evaluation needs to be explicit and responsibility for ensuring completion should be allocated to a named official likely to be the Senior Responsible Owner.

Recommendation 4 (page 36)

Realistic benchmarks must be identified in order to get an accurate picture of how performance has been affected.

Recommendation 5 (page 41)

Good record keeping should aim to keep full and accurate records of business undertaken to help ensure accountability. **The Department must ensure that all partners engaged in the delivery of capital projects retain contract documentation in line with public sector practice.** In order to clarify and strengthen document retention procedures, specific requirements should be included as part of the letter of offer/conditions of funding in all future capital projects.

Recommendation 6 (page 45)

The Department must ensure that all tender submissions for capital projects are treated in a fair and equitable manner. In accordance with this principle and best practice, adjustments to tendered prices should only be made in exceptional circumstances. Where it is necessary to make adjustments, all tenderers should be notified and a clear audit trail should be prepared and retained.

Recommendation 7 (page 45)

Central Procurement Directorate technical advisors provide important assurance to funders on the application of government procurement policy and, therefore, assist in ensuring that the value for money of construction projects is not compromised. It is vital that the Department fully exploits this expertise in its capital construction projects to ensure that the proper processes and protocols are being applied. **We recommend that key decisions on capital projects should only be made after explicit technical advice has been received in writing.** In this regard it is important that Investment Decision Makers ensure that Central Procurement Directorate receive the information they require on a timely basis so that they can inform decisions in the most effective way.

Recommendation 8 (page 46)

The absence of a representative of government at such a key milestone in a construction project is a major breakdown in the assurance process for the expenditure of public funds. **We strongly recommend that Central Procurement Directorate technical advisors attend tender evaluation meetings as independent observers to provide assurance to funders that decisions are being made in line with best practice.**

Recommendation 9 (page 47)

The Department must be alert to the possibility of both perceived and actual conflicts of interest. **Where a perceived or actual conflict of interest has been identified, the Department must make a full, open and transparent record of how that conflict has been managed.**

Part One:
Introduction






"Our study evaluates the effectiveness and adequacy of the Department's oversight of capital projects and includes a review of seven of the Department's high value capital projects".

Part One: Introduction

1.1 The Northern Ireland Executive (the Executive) produces the Programme for Government which sets the strategic context for both the Budget and the Investment Strategy for Northern Ireland. The Programme for Government highlights the key goals and actions the Executive will take to drive forward the priority areas. It includes a detailed Public Service Agreement Framework which sets out the actions and targets departments will implement in support of the Executive's priorities. As part of the 2008-2011 Programme for Government, the Department of Culture Arts and Leisure (the Department) had a target to deliver £229[5] million capital investment in the Northern Ireland culture, arts and leisure infrastructure. This investment was also intended to support the public service agreement to develop the tourism sector and promote Northern Ireland as a 'must visit' destination to facilitate growth in business and leisure visitors.

1.2 This unprecedented level of investment by the Department resulted in the funding of a number of major capital projects including Ulster Museum, Crescent Arts Centre, Public Record Office of NI, Tollymore National Outdoor Centre, Lyric Theatre and the Metropolitan Arts Centre[6]. The Department told us that the development of these projects coincided with an economic boom and exceptional contract cost inflation followed by the economic recession.

This report examines the extent to which the Department's project management has improved

1.3 The persistent under-estimation of capital costs and time overruns encountered on major public sector projects has generated public scrutiny of the capacity of the public sector to estimate and contain the costs of such projects and manage their completion within a planned timescale. Since 2007, the NI Assembly Public Accounts Committee has reported[7] on a number of projects where economic appraisals have significantly under-estimated costs with the result that the projects inevitably exceeded their budgets. Unduly optimistic and misleading appraisals of this nature do nothing to ensure the success of projects, but rather undermine their viability. The Public Accounts Committee noted that failures in economic appraisals are often mirrored in poor specification and scoping of projects with the result that significant changes are required during the life span of the project. This often gives the contractors a significant negotiating advantage with the client and undermines value for money principles of open competition.

1.4 This is not a problem confined to Northern Ireland; it has also been raised as a key concern by Edward Leigh, former chair of the Westminster Public Accounts Committee. He wrote to his successor in April 2010 stating *"project*

5 This included £69 million for Stadium Development.

6 Three of these projects (Ulster Museum, Tollymore National Outdoor Centre and Public Record Office) were funded directly by the Department of Culture, Arts and Leisure. The other projects received grant funding managed in accordance with the terms and conditions of the offer of grant.

7 Public Accounts Committee First Thematic Report, Session 2009/10, published 10 June 2010. Projects included in this thematic report were the Belfast to Bangor Railway Line; Springvale Educational Village; The transfer of surplus land in the PFI Education Pathfinder project; Use of consultants; Shared Services for efficiency; The PFI Laboratory and Pharmacy Centre at Altnagelvin and The PFI contract for Northern Ireland's new vehicle testing facilities.

management must be improved. In particular, public bodies must reduce optimism bias in their planning of projects and be more honest about what can reasonably be achieved and the risks to delivery".

1.5 At the start of our study there had been substantial capital investment in the area of culture arts and leisure and indications were that cost and time overruns were being experienced on these projects. In order to identify the extent of cost escalation and project slippage and to assess how well the Department and its Arm's Length Bodies have been responding to the challenges presented by major capital projects, we carried out a review of seven major capital projects funded by the Department, as outlined in figure 1.

Figure 1: Capital Projects Reviewed

Project	Project cost £millions	DCAL funding contribution £millions	Arts Council NI Lottery funding £millions	Other fundraising £millions	Percentage of funding provided by the Department (including Arts Council)
Grand Opera House	10.6	5.7	2.0	2.9	73%
Crescent Arts Centre	7.2	4.5	1.5	1.2	83%
Public Record Office of Northern Ireland *	29.1	29.1	–	–	100%
Tollymore National Outdoor Centre	5.4	5.4	–	–	100%
Ulster Museum	15.7**	11.2		4.5	71%
Lyric Theatre	17.8	9.8	2.4	5.6	68%
Metropolitan Arts Centre*	17.6	10.8	5.0	1.8	90%
TOTAL	**103.4**	**76.5**	**10.9**	**16.0**	**84%**

Note: *Final costs for Public Record Office of Northern Ireland and the Metropolitan Arts Centre have not yet been confirmed.

**The Ulster Museum final cost excludes £1.96m for 4 separate projects undertaken alongside the development. £1.5m of this was raised by other fundraisers and £0.46m was contributed by the Department.

Part One:
Introduction

1.6 Going forward, the Department has a capital budget allocation of £158 million for the period 2011-2015, with £110 million of this allocated for the development of stadia at Casement Park, Windsor Park and Ravenhill. In order to maximise value for money in the current challenging economic environment, it is vital that the Department's management of major capital projects reflects lessons learned from the Grand Opera House extension/refurbishment project which encountered cost overruns of over £2 million. The project costs escalated as a result of two significant events:

- higher than anticipated tender costs of £1,183,000; and
- client changes made to the project at a further cost of £1,035,000.

1.7 The Department informed us that, in line with best practise, a lessons learned report was issued for the Grand Opera House and disseminated across the Department and its Arm's Length Bodies. The Department did not wait for the issue of this report before putting in place arrangements to ensure the same problems were not encountered on future projects.

1.8 Our study evaluates the effectiveness and adequacy of the Department's oversight of capital projects and includes a review of seven of the Department's high value capital projects. The performance of each project is assessed against:

- Cost, time and quality objectives; and
- Good project management criteria.

1.9 Part 2 of the report examines the governance arrangements put in place by the Department to oversee its capital programme and how effective this has been. Part 3 of the report examines how major capital projects performed against time and cost budgets and identifies reasons for variances. Part 4 addresses specific concerns in relation to the Lyric Theatre development project.

Part Two:
Governance Arrangements

"What is needed to successfully deliver public sector capital programmes is effective project governance – a culture, strategy, and structure of accountability, authority, processes and controls aimed at delivering quality, controlling costs, meeting schedules and reducing waste".

Part Two: Governance Arrangements

Getting Governance Right

2.1 Addressing the need for construction in the culture, arts and leisure sectors, especially with today's intense economic pressures, requires the Department of Culture, Arts and Leisure (the Department) and its construction industry partners to find efficient and effective ways to deliver capital projects while controlling costs. For public sector project owners like the Department, this means finding the delicate balance between project delivery and project control. Ultimately, what is needed to successfully deliver public sector capital programmes is effective project governance – a culture, strategy, and structure of accountability, authority, processes and controls aimed at delivering quality, controlling costs, meeting schedules and reducing waste and abuse.

The Department formed a Capital Project Management Board to provide strategic oversight for all capital projects

2.2 At the outset, individual governance arrangements were established for each of the seven capital projects we reviewed through the relevant sponsor branch in the Department. Although branches reported to the Departmental Board there were no specific arrangements for the strategic oversight of capital projects prior to 2006.

2.3 During 2005-2006 there was concern within the Department that its capital projects were not progressing quickly enough in order to maximise the benefit of the £229 million funding (see paragraph 1.1) allocated to implement a capital construction programme. In response the Department formulated the Capital Project Management Board in spring 2006 to provide strategic oversight for all capital projects and to ensure the budget was maximised to deliver departmental priorities. The Capital Project Management Board comprised of Senior Management within the Department with technical input from the departmental in-house architect and included a representative from the Central Procurement Directorate[8] (CPD). At this time the Department recognised that maximum benefit could be added to a project with early engagement of the CPD adviser.

2.4 In August 2007 the Department drafted 'Guidelines for a New Approach' to Capital Profiling to ensure that, project scope, costs and their timing would be as realistic and accurate as possible so that well informed decisions could be made about priorities and allocation of resources by the Capital Project Management Board. This document reflected that *"the scope, objectives and benefits of many of the capital projects were not clearly defined and articulated. Costs were therefore not robust and a considerable amount of time and work had to go into addressing these shortcomings"*. The result was:

- *"Substantially increased costs arising from more accurate and realistic project definition.*
- *Delays, while projects were re-scoped and redefined and accurate costs calculated. These delays*

8 Central Procurement Directorate is part of the Department of Finance and Personnel. Its role is to develop and establish the policy framework and best practice public procurement for the wider public sector in Northern Ireland.

contributed to an escalation in costs due to construction inflation. So a viscous upward spiral of cost increases and delays developed.

- *Numerous addenda to business cases, which loses credibility for the project, the organisation/ Non-Departmental Body and the Sponsor Department, in this case the Department of Culture, Arts and Leisure".*

Case example: Crescent Arts Centre Refurbishment

The original business case for the refurbishment of the Crescent Arts Centre was approved by the Department of Finance and Personnel (DFP) in June 2005 with an estimated capital cost of £5.1 million. The Department's funding contribution was £2.5 million. DFP told us that the Central Procurement Directorate (CPD) was first invited to provide advice to the Department on the Crescent Arts Centre in the autumn of 2005. In October 2006 a detailed review completed by CPD resulted in an addendum which revised the expected cost upwards to £6.8 million. The Department informed us that increased costs included items such as additional stone works and building foundation costs due to deterioration and condition of structural timbers since previous estimates. There were also required cost increases due to changes in the building regulations and queries over the Stage D specification. As a result, the Department's investment was increased by £2 million with approval from the DFP in July 2007.

2.5 Despite the creation of the Capital Project Management Board, the Department's capital programme continued to face concerns over project governance. In particular, the Department's 2009-10 resource accounts[9] were qualified due to failings in its oversight of an extension project at the Grand Opera House:

"the Department was granted approval by the Department of Finance and Personnel for an extension/ refurbishment project at the Grand Opera House on the basis of project costs of £8,428,000. The project escalated due to two significant events: higher than anticipated tender costs of £1,183,000; and client changes were made to the project further increasing the costs by £1,035,000. The Department funded £1,736,000 of these costs but it failed to obtain retrospective approval from the Department of Finance and Personnel in accordance with the requirements of Managing Public Money Northern Ireland".

2.6 The Department failed to obtain the necessary approvals due to a breakdown in project management. A Post Project Review in June 2011, stated that the lack of recommended structures/ reporting arrangements and the lack of engagement of CPD in an advisory capacity were clearly detrimental to the successful delivery of the project within the original budget. The Department concluded that it was satisfied that the implementation of the Office of Government Commerce "Achieving

9 Department of Culture, Arts and Leisure Resource Accounts For the year ended 31 March 2010. Laid before the Northern Ireland Assembly by the Department of Finance and Personnel under section 10(4) of the Government Resources and Accounts Act (Northern Ireland) 2001 on 2 July 2010.

Part Two:
Governance Arrangements

Excellence in Construction"[10] guidance would ensure proper and robust project management arrangements were in place for all future capital projects. The Department also committed to engaging with CPD for technical advice throughout a project lifecycle to ensure that best practice in terms of all aspects of capital project management is adhered to.

2.7 As a result of lessons learned from the Grand Opera House project the Department now requires all projects to adhere to best practice project management structures of Achieving Excellence in Construction, illustrated in figure 2.

Figure 2: Best Practice in Project Management Structures

Investment Decision Maker	takes the decision for the use of resources based on justification of the business need, affordability and cost-effectiveness and whole-life value for money.
Senior Responsible Owner	this role should be undertaken by a senior individual in the organisation, who should have the status and authority to provide the necessary leadership and must have clear accountability for delivering the project outcome. This individual should also ensure that sufficient resources are made available to enable a successful outcome.
Project Sponsor	is responsible for ongoing day-to-day management of projects and will make decisions on behalf of the Senior Responsible Owner to ensure that the desired projects are delivered; the project sponsor must have adequate knowledge and information about the business and the project to make informed decisions.
Project Manager	will lead, manage, and co-ordinate the integrated project team on a day-to-day basis. The contracting authority must ensure that the project manager is appropriately qualified and experienced.
Integrated Supply Team	the team will include designers, cost consultants, engineers, constructors, specialist suppliers,etc. They should be an integrated team with collective responsibility for project delivery and management of risks. Its members should be brought together at the earliest opportunity to work with the contracting authority's project members as a single team, preferably during the planning stages of the projects.

Source: NIAO based on Achieving Excellence in Construction

10 Achieving Excellence in Construction, Office of Government and Commerce, 2007

2.8 On foot of the qualification of its 2009-10 financial accounts, the Department produced a lessons learned paper in September 2010 and identified a number of recommendations to be taken forward on current and future capital projects. Most of the lessons have already been implemented, including:

- All projects are managed under the structures recommended in Achieving Excellence in Construction;

- Future projects will implement Achieving Excellence in Construction best practice points from procurement to integrated design teams, risk and value management, sustainability and health and safety;

- A benefits realisation plan must be in place for each project;

- Each project has rigorous management structures in place at different levels. The Project Board meets at least bi-monthly and takes a strategic overview of the project as well as making key investment decisions;

- Each capital project also has a steering group which meets on a monthly basis to address technical and financial issues and to provide funders with an update on how potential risks will be managed. These meetings are chaired by the project sponsor. The project sponsor is usually an external appointment of someone with a professional qualification in engineering/construction and with technical knowledge of project management in the public sector;

- All meetings will follow a standard agenda to ensure that relevant issues are reported on regularly;

- A Senior Responsible Owner is also appointed for each project and is a senior representative from the contracting authority. The Senior Responsible Owner reports to the Investment Decision Maker and is accountable for the project delivery;

- The Department engages the services of CPD. The CPD client adviser provides procurement advice from the beginning of the project and ongoing technical and project management advice throughout the life of the project through to Post Project Evaluation; and

- All capital projects should undergo either a full Gateway Review[11] or a Gateway Healthcheck.

2.9 We welcome these improvements. Applying the principles in Achieving Excellence in Construction helps to ensure that projects are managed in line with best practice and costly overruns are avoided.

11 Gateway reviews are short focused reviews of programmes or projects that occur at key decision points in the project/programme lifecycle.

Part Two: Governance Arrangements

2.10 In August 2010, the Department's capital programme benefitted further from a Gateway Review 'strategic assessment'. The review made a number of recommendations to improve the strategic oversight of capital projects including;

- The inclusion of independent member(s) with experience in programme management and/or delivery of large capital projects;
- Accounting Officers of Arm's Length Bodies must provide assurances that the delivery of the capital programme is achievable;
- A capital programme benefits realisation plan is developed and linked to the prioritised projects; and
- Further development of the risk management strategy.

2.11 In June 2011, the Department undertook a review of its structure and it recommended that the Departmental Board should absorb the work of the Capital Project Management Board. This reflects the very different capital allocation in 2011-15 of £158 million of which £110 million is for stadium development which is being delivered directly by the Department with a dedicated Programme Director. Of the remaining £48 million:

- £11 million relates to a Libraries Northern Ireland infrastructure project with Department representatives on the project board;
- £23 million delivered by Sport Northern Ireland (of which £10.25 million is community sports overseen by the Department's Sport Director and £11.5 million relates to the 50 metre pool in Bangor);
- £3 million for completion of the Metropolitan Arts Centre project;
- £4.5 million for Libraries Northern Ireland;
- £4 million for National Museums Northern Ireland; and
- £2.5 million for Arts Council Northern Ireland.

CPD is involved in providing technical advice at project level and a Programme Director has been seconded from the Strategic Investment Board to manage the stadia programme.

The Department should ensure that there are robust arrangements in place for the oversight of Arm's Length Bodies

2.12 The Department is the major funder for all the capital projects examined as part of this study. However, for most of these projects the funding is routed through its Arm's Length Bodies. Delivery of these projects is devolved to the Arm's Length Bodies. However that devolvement does not negate the Department's overall responsibility. In order to maintain a strong influence over strategic decisions in each of the projects, a senior departmental official has been appointed as the Investment Decision Maker.

Case Example – Senior Responsible Owner

"The Senior Responsible Owner (SRO) is responsible for the success of the project. This named individual should be accessible to key stakeholders within the client organisation and in order to reinforce commitment to the project should also be visible to the top management of the organisations involved. The Investment Decision Maker should ensure that the SRO has the authority that matches the responsibilities of the role", Achieving Excellence in Construction.

The post of SRO is usually held by the chair of the client organisation. The Metropolitan Arts Centre (the MAC) project initially had its chair as the SRO. She was replaced by another Board member who attended only one of the Project Board meetings despite being in post for over a year. The position was subsequently offered to another member of the MAC Board who declined on the basis that he felt that some of the SRO responsibilities were unreasonable and he could not assume the role unless these were omitted or modified. The SRO role then became the responsibility of the incoming Chairman of the MAC who wanted to delegate the role to the MAC Chief Executive who already held the role of project director.

At this point the Investment Decision Makers took decisive action and intervened as there were concerns regarding project delivery. An SRO from the Strategic Investment Board was seconded to complete the project.

Seeking technical advice can improve the chances of achieving successful outcomes

2.13 Although the Investment Decision Maker role will be assumed by a senior civil servant, that person is unlikely to have technical skills relating to delivering capital projects. Employing technical advisers is essential to ensure that departments exercise robust project management and monitoring arrangements.

2.14 One way of achieving this is by employing the services of CPD. CPD can assist Departments by providing expert advice and professional services throughout the procurement lifecycle. CPD charges for providing these services and its charges are based on DFP's charging policy.

2.15 DFP told us that, *"Departments, their Agencies, Non-Departmental Public Bodies and public corporations should carry out their procurement activities by means of a documented Service Level Agreement with CPD or a relevant Centre of Procurement Expertise. However, CPD has no mandate to provide advice on the procurement of grant-funded projects or to review project costs and timescales. If CPD is to provide advice on a project, then the funder must request CPD's services and pay CPD's fees. In addition, the scope of services requested can vary significantly as can the stage at which CPD is initially involved. In some cases, project funders will seek CPD's services from the outset. This provides an opportunity for CPD to add the most*

Part Two:
Governance Arrangements

value as advice can be provided on a best practice approach to project delivery including project structures and governance. In other cases, CPD is not requested to offer advice until much later in the project lifecycle and, even then, the service may not be confined to particular elements of the project".

2.16 The project management and cost management services for the Lyric, Metropolitan Arts Centre, and Crescent Arts Centre were provided by consultants employed by the respective grant recipients. The project management and cost management services for Tollymore National Outdoor Centre and the Ulster Museum were provided by consultants employed by the respective Arm's Length Body. Only in the case of the Public Record Office of Northern Ireland (PRONI) were the project management services provided directly by CPD. Figure 3 quantifies the cost of CPD services provided on each of the seven projects reviewed.

2.17 Higher than anticipated tender costs and client changes contributed to the cost and time overruns on the Grand Opera

Figure 3: Cost of Central Procurement Directorate (CPD) Services

Project	CPD costs	Whole project costs millions	CPDs costs as a percentage of project cost
Grand Opera House	Nil#	£10.6	0%
Crescent Arts Centre	£105,292	£7.2	1.5%
Lyric Theatre	£59,352	£17.8	0.3%
Metropolitan Arts Centre	£135,529	£17.6	0.8%
Public Record Office of Northern Ireland	£1,213,607*	£29.1	4.2%
Ulster Museum	£246,229	£15.7	1.6%
Tollymore National Outdoor Centre	£89,147	£5.4	1.7%

the Department did not engage CPD services for the Grand Opera House Project

* CPD costs on the PRONI project are substantially greater than the other projects as CPD professionals were used as the project team rather than contracting this function out to external consultants.

House project (paragraph 2.5). DFP did not grant retrospective approval because neither it nor the Department had the opportunity to challenge the expenditure increases in the project. DFP was of the view that had those challenges materialised, much of the expenditure might not have occurred. In response, the Department has committed to employing the services of CPD on projects throughout their entire lifecycle. The CPD technical adviser will provide assurance to the Investment Decision Makers that the project is being delivered in accordance with public procurement policy and in line with best practice. This is particularly important as major capital projects are outside the normal day-to-day activities of the Department. This is welcome improvement in the delivery of capital projects. However, our review raised issues about the role of CPD in the Department's capital projects and what authority/weight the technical adviser has when dealing with the contracting authority. The Department indicated that it had issues with the quality of service provided by CPD.

2.18 DFP told us that *"CPD routinely issues customer satisfaction questionnaires to clients on all projects in order to obtain feedback on the quality of the service provided. While no feedback was received on the Tollymore National Outdoor Centre, positive responses were provided for all other projects where CPD provided advice".*

Case example – Metropolitan Arts Centre (the MAC) Procurement

The MAC ran an international competition to develop a design for a new arts centre. At procurement stage CPD recommended that best practice should be applied with the appointment of a contractor led design team as part of a design and build contract. However, the client wanted to retain the original design team appointed by the international design competition. The issue was escalated to the Investment Decision Makers for consideration who took the decision to retain the original design team against the expert advice given by CPD. CPD also recommended, in line with best practice, that an NEC3[12] contract should be applied to the MAC procurement as it offers the benefits of a partnering approach between the designer and contractor and offers cost certainty. Despite CPD's recommendation, a JCT[13] contract was used.

The Department told us that it gave CPD's advice due consideration, however, due to the risks associated with changing the design team and the compelling argument put forward by the MAC team and Senior Responsible Owner, the Investment Decision Makers approved the use of the JCT contract.

12 NEC is a family of contracts that facilitates the implementation of sound project management principles and practices as well as defining legal relationships. It is suitable for procuring a diverse range of works, services and supply, spanning major framework projects through to minor works and purchasing of supplies and goods. The implementation of NEC3 contracts has resulted in major benefits for projects both nationally and internationally in terms of time, cost savings and improved quality.

13 Since 1931 The Joint Contracts Tribunal (JCT) has produced standard forms of construction contract, guidance notes and other standard forms of documentation for use by the construction industry.

Part Two:
Governance Arrangements

2.19 DFP told us that the Procurement Board[14], at a meeting 23 November 2011, agreed that where any significant exceptions to public procurement policy and best practice guidance arise, they should be notified by the Head of Procurement of the relevant Centre of Procurement Expertise to the appropriate Accounting Officer(s) and Chief Executive/Director for onward reporting to the Procurement Board.

Recommendation 1

Achieving Excellence in Construction advocates that by working together, a project team can reduce waste, improve quality, innovate and deliver a project far more effectively. Team-working must be a core requirement for every element of every project and putting this into practice requires real commitment from all parties involved but brings benefits that far outweigh any perceived disadvantages. As a first step to promoting team-working, the Department must determine the extent of Central Procurement Directorate's role and authority and communicate this to all stakeholders within the project. This should be explicit as part of the conditions of funding/letter of offer to the client organisation. Also any justification for not following Central Procurement Directorate recommendations should be documented.

Lessons learned must be applied to all current and future capital expenditure

2.20 In terms of future capital development, the Department has a capital budget allocation of £158 million for the period 2011-2015. £110 million of that allocation is for the development of stadia at Casement Park, Windsor Park and Ravenhill. In September 2011 the Department commissioned a Strategic Assessment of the NI Regional Stadia Programme through Gateway Review. The Review concluded that the successful delivery of the NI Regional Stadia Programme was in doubt. It stated that the business cases were well documented and had been subject to external validation to ensure that they were sound. There was also strong support and enthusiasm in the governing bodies and their communities to see the projects implemented. However, there were major risks and issues in a number of key areas :

- because of unresolved issues in relation to the viability of the individual business plans letters of offers had not been issued;
- there was concern that the programme cannot be completed within the funding period;
- there was slippage against the individual project programmes in both the Windsor Park and Casement Park projects. This can be partly attributed to the lack of a detailed delivery plan and monitoring of progress through that detailed delivery plan; and
- there was a shortage of suitable and adequate resources to deliver this type of programme.

14 Procurement Board has responsibility for the development, dissemination and co-ordination of public procurement policy and practice for the Northern Ireland public sector. The Board is chaired by the Finance Minister and membership comprises the Permanent Secretaries of the 11 Northern Ireland Departments.

2.21 In response to the review, the Department has engaged a Programme Director with experience of delivering large capital projects with substantial public sector investment. In addition, the Programme Board will agree detailed project schedules for each of the projects to inform the production of a delivery strategy for the programme going forward.

2.22 A further Gateway Review on the Stadia Development Programme was completed in October 2012. It found that, *"the Stadia Programme has gone through a process of significant change since the last Gateway Review. This has resulted in a well resourced programme with identifiable and well supported objectives remaining in line with Government objectives"*.

2.23 The project governance framework which has operated in the Department has been subject to significant scrutiny in recent years: for example through the "strategic assessment" of its capital programme and, specifically, through the evaluation of project management on the Grand Opera House extension. Along with the stadia Gateway Review, these have usefully identified certain gaps in performance that have a negative impact on the success of projects and have provided guidance on necessary change. Such a body of work serves as a sound basis for focussing the outlook of the Department as a project owner on improving governance structures. In our view, paying closer attention to a number of key characteristics of successful capital project governance would be beneficial:

- Creating an efficient project organisation with clear lines of responsibility and defined roles;
- Developing policies and procedures to guide consistent performance across the organisation;
- Implementing systems for collecting project execution data and reporting key performance indicators; and
- Deploying mechanisms that identify and mitigate performance risk.

2.24 The Department told us that guidance in these areas has been developed and all project information is now recorded on the Investment Strategy NI Delivery Tracking System which records information such as budget, timelines and milestones. The Department has amended its oversight of capital projects in light of previous experience and lessons learned and to reflect the very different capital allocation in 2011-15. Of the £158 million, £110 million is for stadium development which is being delivered directly by the Department with a dedicated programme director. The Department believes that this significantly reduces the risk with only £48 million of projects being delivered directly by Arms Length Bodies.

Part Three:
Performance of projects against cost, time and quality targets






"In managing capital resources, it is essential that projects are delivered on time and within budget".

Part Three: Performance of projects against cost, time and quality targets

Managing Capital Resources

3.1 Public expenditure in Northern Ireland amounts to more than £10 billion annually. In order to demonstrate that value for money has been achieved it is vital that public bodies apply the principles of good financial management and accountability. In managing capital resources, it is essential that projects are delivered on time and within budget. There are two key decision points for any major capital project:

1. Approval to proceed based on a business case

It is widely recognised that the production of a business case helps to inform spending decisions and assists in the achievement of value for money. Experience shows that eventual success (or failure) depends more on the robustness of project definition than the quality of execution[15]. The Department of Finance and Personnel (DFP) has developed 'The Northern Ireland Guide to Expenditure Appraisal and Evaluation', and it reflects that the principles of appraisal apply to all decisions and proposals involving expenditure or resources. DFP requires the principles of economic appraisal to be applied, with appropriate and proportionate effort, to all decisions and proposals for spending or saving public money. At this stage there needs to be clarity about the overall value and purpose of the project, its contribution to business goals and the optimum balance of cost, benefit and risk for its effective delivery. DFP guidance recognises that economic appraisal is an iterative process and it includes provision for business case addenda if required. However, inaccurate cost and time estimates undermine effective appraisal and the achievement of value for money.

2. Decision to enter into contract with a preferred supplier

The estimates made immediately prior to awarding the contract are vital as they provide a basis for measuring value for money before the main financial commitment, the construction contract, is agreed. Once a contract price is agreed, significant changes to the project are likely to be costly, disruptive and impact value for money.

In completing our review of seven capital projects we compared the final cost of projects and the actual completion time with the estimates made at these two key stages, and with addenda produced.

All seven of the capital projects reviewed had a final cost which exceeded the cost estimated in the original business case, six of the seven projects had cost increases approved by the Department of Finance and Personnel

3.2 There is a demonstrated systematic tendency for project appraisers to be overly optimistic. This is a worldwide phenomenon that affects both the private and public sectors. Many project parameters are affected by optimism – appraisers tend to overstate benefits, and understate timings and costs, both capital and operational. To redress this tendency, appraisers should make

15 PricewaterhouseCoopers – What's wrong with Project Governance?

explicit adjustments for this bias. This will take the form of increasing estimates of the costs and decreasing, and delaying the receipt of, estimated benefits[16].

3.3 All of the capital projects reviewed had applied the optimism bias concept to calculate an estimated cost of construction. However as outlined in figure 4, despite making these adjustments, the total final cost of the seven capital projects reviewed exceeded the total cost estimated in the original business cases by £24.8 million (31.5 per cent). The cost increase on individual capital projects ranged from 3.2 per cent (Public Record Office of Northern Ireland) to as much as 91.3 per cent (Metropolitan Arts Centre).

3.4 As a condition of DFP approval, public bodies must notify them if time, costs or other assumptions in the original business case vary more than 10 per cent. Six of the seven capital projects we reviewed had additional funding totalling £22 million covered by business case addenda prior to contract award (DFP confirmed that it approved £20.6 million of these cost increases). Details of all business case addenda approved by DFP are provided in Appendix 1.

Figure 4: Final Cost Compared to Original Business Case and Addenda

	Original Business Cost £ million	Revised Cost in Pre Contract Addenda £ million	Contract Cost £ million	Final Cost £ million	Percentage difference between final cost estimated cost	Percentage difference between final cost and addendum cost
Grand Opera House	8.4	–	9.6	10.6	26.2%	–
Lyric Theatre	12.4	17.8	13.8#	17.8	42.4%	0%
Metropolitan Arts Centre	9.2	17.6	12.9	17.6	91.3%	0%
The Crescent Arts Centre	5.1	6.8	6.8	7.2	41.2%	5.9%
Tollymore National Outdoor Centre	3.7	5.2	5.2	5.4*	45.9%	0%
Public Record Office of NI	28.2	30.5	27.8	29.1	3.2%	–4.6%
Ulster Museum	11.5	14.7	14.7	15.7	36.5%	6.8%
TOTAL	**78.5**			**103.4**		

#£13.8 million reflects the contract cost of construction and not the full value of the project which was £17.8 million.

*£200,000 was approved by the Department after the contract award.

16 HM Treasury Green Book

Part Three:
Performance of projects against cost, time and quality targets

3.5 On one of the seven projects, the Grand Opera House, there was a delay in notifying DFP of the additional costs and as a result this project encountered cost overruns of more than 25 per cent.

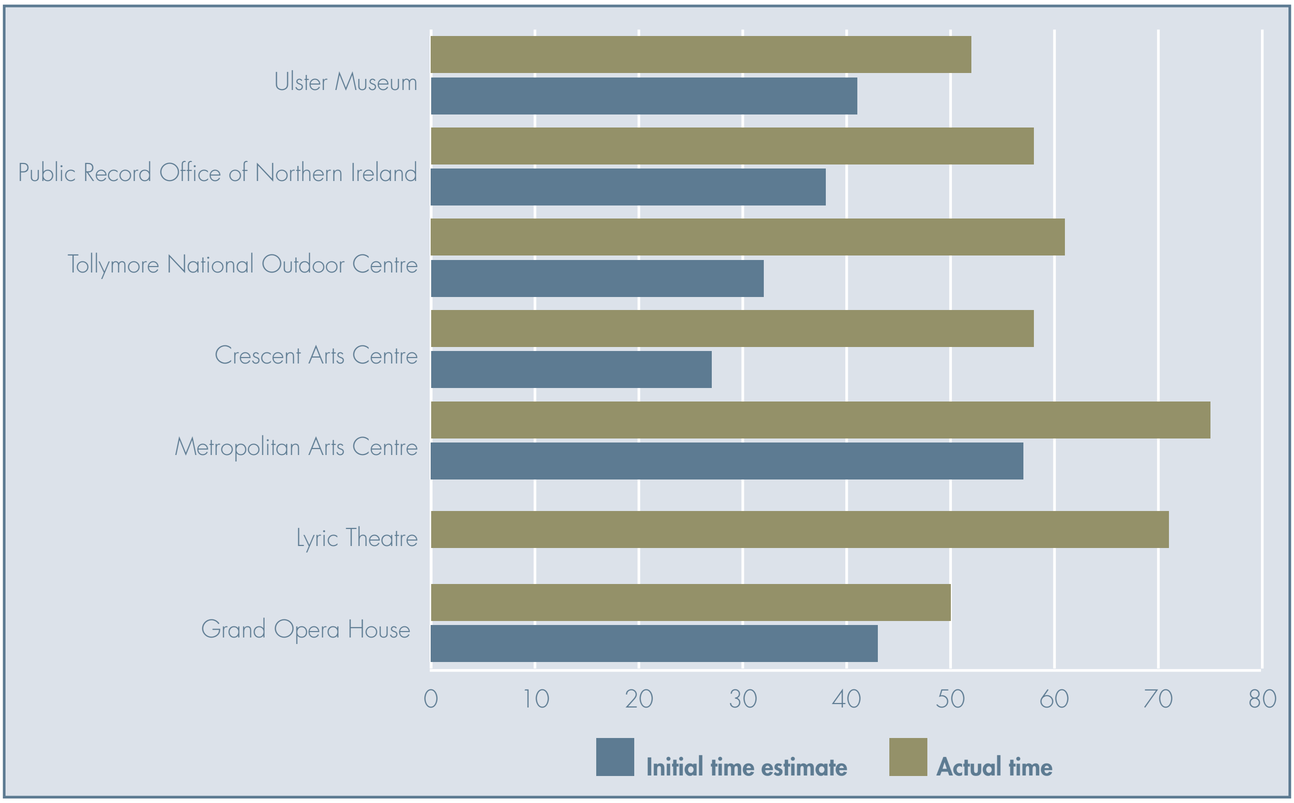
3.6 Initial cost estimates are inherently associated with uncertainty as they represent an estimate of what the realised future will be. They will be affected by the level of detail available, the identification of risks to the project and processes and controls. However, project cost estimates are critical reference points to objectively assess the performance of a project. Inaccurate cost estimates at this stage undermine effective appraisal and value for money. Late increases in costs can dilute the impact of the approval process as once a project has started it is harder to take the decision to withhold or cap support.

Most projects experienced delays when compared with initial forecasts

3.7 Delays in the delivery of capital projects can contribute significantly to increased costs and may impact on service delivery. It is essential, therefore, that projects are closely monitored on an ongoing basis to ensure that key milestones are met. We examined the actual completion time of projects compared to estimates made at the two key stages – initial approval and immediately prior to contract.

3.8 The construction of the projects we examined developed from 2002 onwards. Most projects took at least four years to progress from initial approval to completion. One of the projects, the Lyric Theatre did not provide an estimated completion date at the time of approval. We were unable, therefore, to assess whether this project had been delivered on time. Figure 5 summarises project completion times compared with business case estimates.

Figure 5: Initial Business Case Estimate vs Final Outcome (time shown as months taken)



NB: (time shown in months and measured from the original business case approval date)

Source: NIAO

Most projects experienced some slippage compared with the contract estimate.

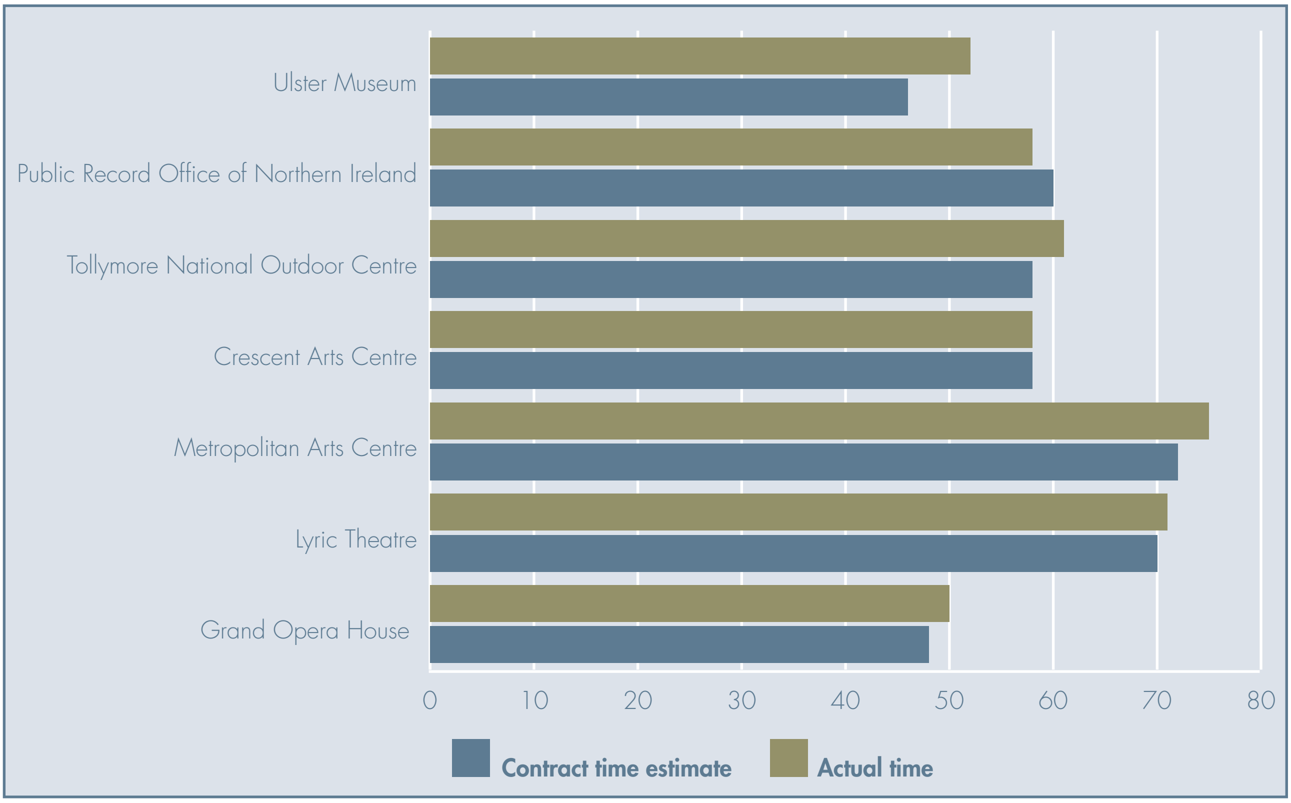
Figure 6 summarises project completion times compared to contract estimates. Of the seven projects:

- 1 was completed ahead of schedule;
- 1 was completed on time; and
- 4 completed with a ten per cent time overrun or less.

3.9 Contract time estimates are much more accurate than the initial estimates in the original business case. In the projects reviewed most delays have occurred between the funding approval stage and the completion of the procurement to select an approved contractor. Despite having received approval for funding by both the Department and DFP, the Department later found that the scope, objectives and benefits had not been clearly defined and articulated. These deficiencies resulted in substantial delays while projects were re-scoped and

Part Three: Performance of projects against cost, time and quality targets

Figure 6: Contract Estimate vs Final Outcome



NB: (time shown in months and measured from the original business case approval date)

Source: NIAO

redefined and accurate costs calculated. The delays contributed to an escalation in costs due to construction inflation and significant time overruns.

3.10 There are a number of factors which may impact on the delivery of capital projects and contribute to cost and time overruns. In our review, we identified a number of issues which impacted on the final cost variance with the initial cost estimate.

1. Changes to scope and specification

In all of the seven capital projects reviewed there were changes to the scope and/or specification of the project outlined in the original business case. These changes were generally made after DFP and the Department had evaluated the project and committed funding. There may be reasons for changing the scope of a project, for example as a result of changes in legal or environmental strategies however, regardless of the reason, changing the scope of a project can be costly and where this comes in the latter stages of a project there may be no option but to approve additional funding. It is important therefore that projects are scoped correctly to ensure that value for money is achieved.

Case Example – Lyric Theatre

The Department of Finance and Personnel (DFP) stated that it "reluctantly" gave approval for a final funding increase of £714,000 to the Lyric Theatre project in February 2009, despite funding having previously been capped. DFP considered that by not granting approval for this, *"very significant and strategic project could consign it to the annals of history"*. DFP's reticence was based on the project construction costs increasing from £7.36 million to £13.28 million[17] and, therefore, the average cost per square metre rising from £1,605 to £2,997 per square metre, an increase of 86.7 per cent. 30.4 per cent of this was due to construction inflation between April 2005 when the business case was completed and July 2008, the estimated start date on site.

Case Example – Ulster Museum

A number of enhancements were made to the Ulster Museum project during the construction phase including enhancement of income generating facilities including restaurant, shop and lecture theatre; learning support facilities; upgrading of the security system; and an Applied Art Gallery at a combined cost of approximately £2 million. These enhancements were not part of the original redevelopment scheme but from a practical point the Department considered the most appropriate way forward was to incorporate these aspects when the refurbishment scheme was underway in order to save money in the future. The Department of Finance and Personnel agreed with the Department's approach that each enhancement would be treated as a separate capital project. By adopting this approach, each enhancement was awarded to the contractor as a single tender action.

17 Costs stated are for construction only and do not represent the full cost of the project.

Part Three: Performance of projects against cost, time and quality targets

2. Construction cost inflation

Capital projects are highly dependent on the cost of resource inputs – i.e. labour, raw materials and equipment. Increases in the price of these key inputs can contribute to cost overruns. Estimates for construction work are produced at a specific point in time and the prices used are relevant at that date. However, prices for materials and labour will fluctuate as a result of market forces and because estimates are often prepared months or in some cases years before construction commences, price estimates are unlikely to accurately reflect these costs. Effective modelling or forecasting using construction cost inflation indices can help to factor in the movement of such costs. However, it is not possible to completely eliminate the risk of increased costs. CPD recommends the use of Building Cost Information Service indices to forecast the additional cost of delays in project completion.

Case Example – Lyric Theatre

The Lyric Theatre project made an application for a £2.73 million increase in funding in October 2006. It highlighted that the construction cost inflation applied from 2003 to October 2006 was 15.4 per cent and that the anticipated construction cost inflation from October 2006 to July 2008 (the estimated start date on site) was likely to be a further 15 per cent.

The impact of construction cost inflation is directly linked to the length of the project, the economy and demand for construction. Therefore, it is essential that projects are managed effectively to ensure that they are delivered on time. The projects reviewed encountered delays when compared with the initial time estimates and therefore, construction cost inflation was a contributory factor in cost increases.

3. Risk and value management

Failing to complete a proper risk identification process early in the project design stage can jeopardise project success in a number of ways, including impacting on budget, timelines and even quality.

Risk and value management should be carried out continually throughout a project lifecycle, with early involvement of the entire project team to minimise and manage risks. In line with best practice, risk and value management was a standard agenda item on the Project Board for each of the projects reviewed with the exception of the Grand Opera House.

4. Optimism Bias

Research undertaken for HM Treasury in 2002 provided evidence of systematic errors in estimating cost and time in the early stages of major public sector projects across the UK. The research concluded that project managers did not make sufficient allowance for the unforeseen problems that increase costs and time. HM Treasury issued guidance in 2003 to counteract this. The guidance requires project cost estimates to include an allowance for optimism bias. This allowance has to be based on empirical evidence of cost overruns experienced by similar or comparable projects. The allowance for optimism bias is over and above the allowances for specifically identifiable risks but may be expected to gradually reduce as the project progresses and knowledge of risks (and how to control them) improves. As well as improving the accuracy of cost estimates, allowing for optimism bias also reduces the risk of committing to more projects than can be afforded in the overall investment programme.

DFP advises that Northern Ireland Departments should follow the guidance in Annex 4 of HM Treasury's Green Book on how to deal with optimism bias in relation to capital works, works duration, operating costs, and under-delivery of benefits; and on how to prevent or minimise optimism bias. It is recommended that Departments apply the adjustment percentages for generic project categories based on a study by Mott MacDonald given in HM Treasury's 'supplementary guidance on the treatment of optimism bias'. This methodology involves assessing the project against a series of risk factors which contribute to optimism bias. The more it can be shown that these risk factors have been mitigated, the more the optimism bias adjustment on a project can be reduced. 51 per cent is the starting point and then this is decreased as it is shown how the risks have been mitigated throughout the life of the project.

Optimism bias was applied in each of the business cases reviewed with the exception of the Grand Opera House. Figure 7 provides a summary of the optimism bias calculations in each of the seven projects reviewed.

Figure 7: Optimism Bias

Project	Optimism bias standard before mitigation[18]	Calculated optimism bias applied
Grand Opera House	Not applied	
Crescent Arts Centre	51%	5.56%
Tollymore National Outdoor Centre	51%	14.69%
Metropolitan Arts Centre	51%	17%
Ulster Museum	24%	6%
Lyric Theatre	51%	6.53%
Public Record Office of Northern Ireland	35%*	25%

Source: NIAO based on project business cases

*The Public Record Office Northern Ireland business case was prepared by a private sector consultancy firm. It advised that optimism bias had been set at 35 per cent, a figure provided by the Department of Finance and Personnel's (DFP) Economics Unit based on empirical data gathered on capital cost overruns for a range of past capital build/ accommodation projects provided by DFP.

18 Calculation based on Mott McDonald guidance which recommends the application of 51 per cent for non-standard capital projects and 24 per cent for standard capital projects.

Part Three: Performance of projects against cost, time and quality targets

Completed projects have delivered the expected assets

3.11 A number of the projects we reviewed have been highly commended and have won prestigious awards. Whilst the architectural excellence of these projects is undisputed the ultimate success of a capital project is when tangible benefits are realised in a cost effective way.

Case Example – Crescent Arts Centre

The Crescent Arts Centre won three prestigious awards from the Royal Institution of Chartered Surveyors (RICS) at the RICS Awards Northern Ireland 2011.

The highly successful refurbishment and extension of this diverse community arts centre resulted in the centre winning the Community Benefit category, being "Highly Commended" in the category of Building Conservation as well as winning the impressive "Project of the Year 2011" award on 17 May 2011.

As one of the Northern Ireland category winners, the Crescent Arts Centre also competed against projects from across the UK and internationally at the RICS Awards in London in October 2011 where it was commended in the Community Benefits Awards category. Eleven projects were in the category with one winner and two commended projects.

Case Example – Public Record Office of Northern Ireland (PRONI)

PRONI won the Engineering Excellence Award 2011 from the Association of Consulting Engineers. The award recognises innovative and sustainable design and is for a project that demonstrates a high degree of achievement, value and engineering excellence. PRONI also won an award from the Royal Institute of British Architects.

Case Example – The Lyric Theatre

The Lyric Theatre won an award from the Royal Institute of British Architects and an award for the Best Cultural Building at the Irish Architecture Awards.

To date post implementation reviews have been completed for three of the seven projects reviewed, the remaining four are not yet due

3.12 The completion of a post project evaluation provides the basis for an independent evaluation of the collective impact and success of a project. It provides evidence of the value of return on the investment made – both for the project under review and, in the form of lessons learned, for future projects. Achieving Excellence in Construction divides post project evaluation into two discrete parts:

- **Post project review** is carried out after construction is completed and focuses on how well the project was managed. It must include the views of suppliers and specialists who are at the point of actual delivery. It considers how well the construction project performed against key performance indicators such as cost, time, safety, defects and client satisfaction. It also considers lessons learned for the team-working and partnering approach taken. These lessons should feed into a lessons learned report and the contracting authority's standards for managing projects.

- **Post implementation review** is carried out when the facility has been in use for long enough to determine whether the business benefits have been achieved (typically twelve months after completion and while the change is still recent enough for users to be aware of the change). This review establishes whether the expected benefits have been achieved from the project. It is good practice to set out specific benefits in the business case, with measures identified and responsibility assigned to track, monitor and measure the delivery of benefits. The finished project can then be assessed to ensure that it meets the business requirements and provides good-quality design and functionality.

The Northern Ireland Guide to Expenditure Appraisal and Evaluation (NIGEAE) published in June 2009 reflects that a post project evaluation should be planned before project closure. It should compare outturn against estimated costs and benefits and should generally review success in achieving objectives. The guidance states that it should be conducted six to twelve months after the project closure and should be led by an individual independent of the Project Board and Project Team. Prior to this guidance being issued post project evaluation completion dates were agreed with DFP.

3.13 The Department's evaluation guidance issued in June 2011 indicates that 'post project evaluation' is a composite term used to incorporate both post project review and post implementation review. It reflects that a post project review should be completed within six months of project closure and a post implementation review should be completed within 12-18 months of a project closing.

3.14 A post implementation review had been completed for three of the seven projects we reviewed, Tollymore National Outdoor Centre, Grand Opera House and the Ulster Museum. Post implementation reviews were still outstanding for the Lyric Theatre Project, Public Record Office of Northern Ireland, the Crescent Arts Centre and the Metropolitan Arts Centre at the time of

Part Three:
Performance of projects against cost, time and quality targets

our review. With the exception of the MAC, all of these projects had reached the 12-18 months closure date and had the NIGEAE or departmental guidance been applied we would have expected to find post implementation reviews for each of the projects. However post implementation review completion dates have been agreed with DFP as follows:

- The Lyric Theatre, March 2014 (3 years after completion);
- The Crescent Arts Centre, March 2013 (3 years after completion);
- The MAC, April 2015 (3 years after completion); and
- Public Record Office of Northern Ireland, December 2012 (2.5 years after completion).

The review of the Grand Opera House was only finalised in August 2010, nearly four years after the project's handover date, and was not agreed by the Department's Accounting Officer until July 2011.

Case Example – The Ulster Museum

The Ulster Museum post project evaluation illustrates substantial increases in access and participation. The Museum has had more than 1.3 million visitors since re-opening its doors in October 2009. Almost 60,000 people visited the Ulster Museum in the first ten days following its re-opening; the equivalent of visitor traffic previously achieved in a three and half month period prior to refurbishment. In June 2010, the new Museum won the highly coveted UK Art Fund Prize. In August 2010, the Museum also received a prestigious Sandford Award for Museum and Heritage education. This UK-wide accreditation scheme is awarded to museums which achieve excellence in the provision of heritage education programmes.

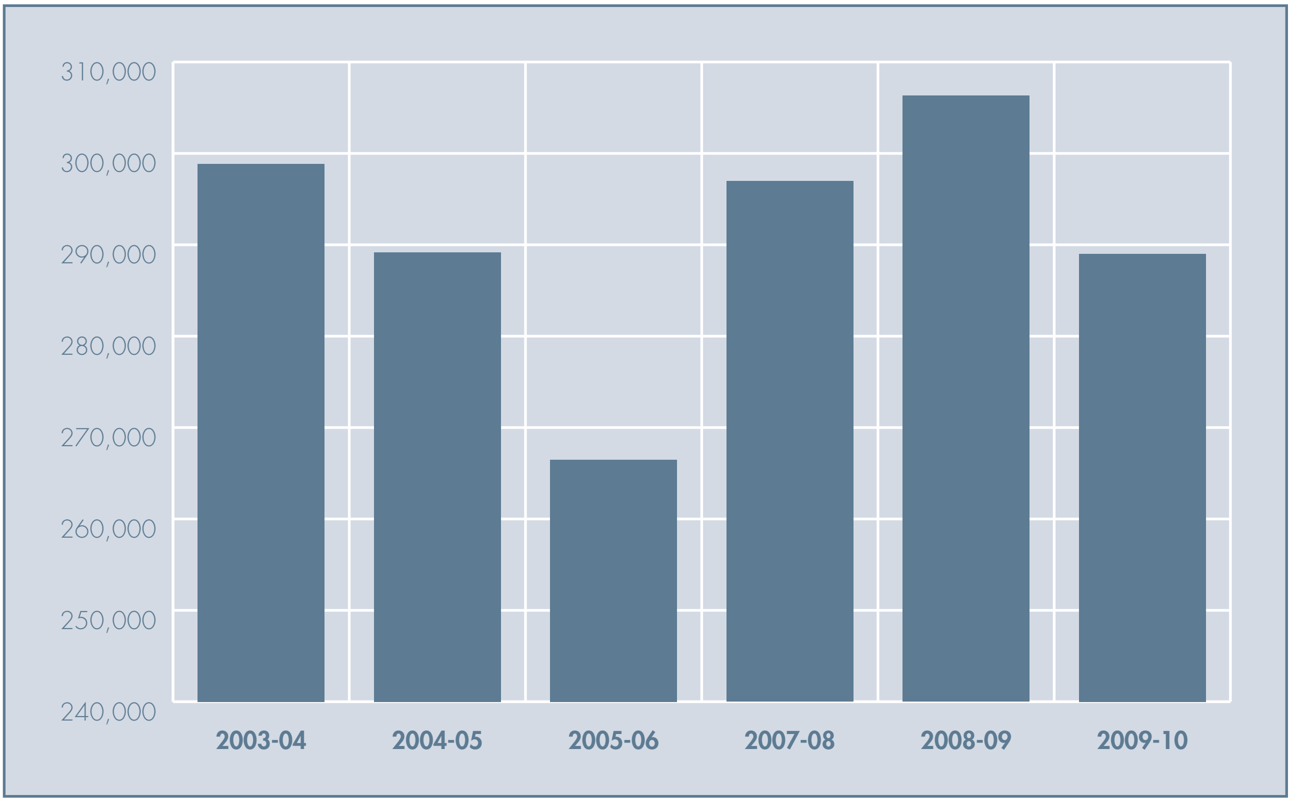
Case Example – Tollymore National Outdoor Centre

The Tollymore National Outdoor Centre business case identified six objectives to be achieved by the redevelopment of the Centre. One of those objectives was to achieve 9,840 user days in 2010-11. However, despite increasing user days by 29 per cent from 5,796 to 7,500, activity fell short of target by 24 per cent or 2,340 days. The business case also indicated that the Centre would be self financing by 2010-11. However the post project evaluation shows a deficit of £611,000 in 2011-12 which was funded by Sport NI. Early indications suggest that the planned benefits of this project were overly optimistic.

3.15 For post implementation reviews to provide a meaningful picture of the benefits gained by the implementation of a project, it is important that a sound baseline is established in order to measure performance/outcomes. One of the key objectives of the Grand Opera House refurbishment and extension was to prevent a decline in attendance levels. The 2005-06 attendance levels have been used as a baseline to measure increases in audience attendances. The post project review states:

"not only has the Grand Opera House been able to prevent the continued decline in audience numbers, the Grand Opera House has experienced double figure percentage increases in the number of patrons attending compared to 2005-06. In 2007-08 attendance levels were 15 per cent higher compared to 2005-06, in 2008-09 there were 18 per cent more patrons and while 2009-10 saw a slight decline compared 2008-09, the attendance level was still 10 per cent higher than 2005-06. This equates to an average 39,000 additional patrons compared to the 2005-06 benchmark".

Figure 8: Grand Opera House attendance levels



Source: Grand Opera House post project evaluation

Part Three:
Performance of projects against cost, time and quality targets

3.16 However, it should be noted that the 2005-06 figures are substantially reduced on previous years shown. With construction starting in May 2005 and completing in October 2006 – the Grand Opera House is unlikely to have been running a full programme and therefore the audience increases reported may not be a true reflection of improvement. If 2005-06 is discounted as a baseline figure then the increase in attendance levels is much less substantial.

3.17 It is important to determine a realistic benchmark to measure performance against. A benchmark needs to reflect the performance norm prior to any changes in delivery and therefore it is necessary to ensure that the benchmark set accurately reflects previous performance. It may be necessary to calculate a mean performance over a number of years or discount one year's results as other external factors outside the norm impacted on the figures reported.

Recommendation 2

The completion of post project evaluation following the implementation of a project provides the basis for an independent evaluation of the collective impact and success of a project's benefits and identifies lessons learned for application in future projects. Post project evaluations should be completed within a reasonable timescale to determine whether projects have delivered the benefits intended.

Recommendation 3

Post project evaluation should be included as a condition of funding. The timing of the post project evaluation needs to be explicit and responsibility for ensuring completion should be allocated to a named official, likely to be the Senior Responsible Owner.

Recommendation 4

Realistic benchmarks must be identified in order to get an accurate picture of how performance has been affected.

Part Four:
The Lyric Theatre

"In the absence of original tender submissions and tender evaluation documentation, the Department is unable to provide assurance that the Lyric Theatre re-build contract was awarded in line with best practice".

Part Four:
The Lyric Theatre

The Lyric Theatre

4.1 One of the major capital projects reviewed as part of our study was the Lyric Theatre re-build. The original Lyric Theatre was purpose built in 1968, however, by the 1990s it was unable to handle the expanding programme of activities. Furthermore, the building was in breach of Health and Safety legislation and the Disability Discrimination Act. In April 2005 the Department of Finance and Personnel (DFP) approved a grant funding limit of £6 million based on a total project cost of £12.4 million. At that time the remainder of cost was to be funded as follows: £2 million lottery grant from the Arts Council; and £4.4 million Lyric Fundraising, Trusts and Foundations funding. However, by September 2006 a detailed cost review had been completed and the estimated cost of the project was revised to £15.23 million establishing a funding gap of £3.23 million[19]. This cost increase was approved by DFP in March 2007 and the Department covered the funding gap in full raising its contribution to £9.23 million.

4.2 In December 2008, the Department again wrote to DFP seeking funding approval as costs had escalated by a further £2.624 million. Lyric agreed to contribute £2.06 million towards the cost increase but the Department was required to meet additional costs of £414,000 for ring-fenced contingency and £150,000 for installation of a geothermal pump. At this stage DFP expressed concerns in respect of the project cost increases. The original business case was costed at £1,605 per square metre but the latest application for additional funding increased costs to £2,997 per square metre.

4.3 During our review of this project we were unable to obtain any assurance that:

- The tender evaluation process had been applied in line with best practice; and

- Perceived conflicts of interest had been managed.

4.4 As a result of our findings the Accounting Officer commissioned a forensic audit to evaluate the system of risk management, control and governance operating to ensure that:

- The contract for the re-build of the Lyric Theatre was awarded in line with best practice; and

- Donations made to the Lyric Theatre capital project were transparent and did not influence the award of the design and build stage contract.

The tender evaluation process

4.5 The re-build of the Lyric Theatre was procured using a two stage design and build approach. The Department

19 The funding gap included a shortfall of £0.4 million on the original estimate and £2.83 million of additional costs.

requested that Central Procurement Directorate (CPD) provide advisory services on the Lyric Theatre project in 2005. As this was a grant funded project, CPD's role was to provide advice to the Department and the Arts Council in their role as joint investment decision maker. The Lyric Theatre appointed a number of consultants to provide project management services and to develop and manage the project through its various stages. Consultants were appointed to assist with the tender evaluation process and prepared the tender evaluation report. Five companies submitted first stage tenders for the design and build work – see figure 9.

Figure 9: First Stage Tender submission prices

Contractor	Original tender price
Contractor A	£10,887,000
Contractor B	£11,374,579
Contractor C	£10,826,000
Contractor D	£11,212,217
Gilbert Ash NI Limited	£11,639,351

4.6 An evaluation of the five tender submissions was completed in March 2008. During this process a number of adjustments were made to the tenders submitted. Despite submitting the highest tender price, the evaluation report concluded that Gilbert Ash NI Ltd was the most economically advantageous tender. In awarding a contract on the criterion of the most economically advantageous tender the aim is not necessarily to select the lowest cost quotation/tender, but to select a response that meets a set of pre-determined specific criteria and relative ratings and provides value for money in doing so.

4.7 In order to satisfy the requirements of probity and good administration, the evidence base for the decision to select Gilbert Ash NI Ltd relied upon the relevant information being evaluated. However, we were unable to test the recommendation made in the evaluation report to appoint Gilbert Ash NI Ltd or satisfy ourselves that the evaluation panel made its assessment on the basis of value for money because a full and complete record of the process was unavailable to us. The tender evaluation report was the only evidence available to suggest that the proper processes had been engaged. The CPD technical adviser was not present during the evaluation process. An invitation was extended to attend the initial meeting but because it was rescheduled, the CPD adviser was unable to attend. The CPD adviser told the joint Investment Decision Makers that he was unable to attend the meeting but that he had *"good confidence that Lyric would manage the event in a very professional manner"*. He also indicated *"You may wish as funders to attend in an observer capacity"*.

4.8 The CPD adviser was not given the opportunity to review the complete tender evaluation report prior to the appointment of the preferred bidder[20].

20 The CPD adviser received the tender evaluation report as presented to the Project Board meeting on 4 April 2008. This report was incomplete. At this stage the preferred bidder had been notified.

Part Four:
The Lyric Theatre

The Department told us that between the selection of the preferred contractor and the agreeing of the contract there was a delay of six months. During this period CPD did not raise any concerns regarding the tender evaluation and the Department informed us that it took assurance from this.

4.9 DFP told us that, *"despite numerous prompts by CPD, the Integrated Project Team did not provide CPD with the required information in a timely manner that would have allowed CPD to provide advice on the tender award decision. The information that was provided was inadequate and provided after the award decision was made. Therefore, CPD can provide no opinion on the tender assessment process. The procedure of 'silence means consent' ("Qui tacet consentire videtur") can be applied in certain circumstances, e.g. '14 day rule' procedure for clearance of Procurement Board papers. The circumstances of this case do not allow the Department to rely on this procedure in relation to CPD's advice, i.e., there were no papers issued, no time limit for consideration and CPD was not alerted that the 'silence means consent' procedure was being enacted".*

4.10 The Department told us that it's recollection and record of events is substantially different:

- *"It has no record of the numerous prompts referred to by CPD. While Project Steering Group minutes of 28 January 2008 refer to a request by CPD for sight of a report on the contract interview process, the minutes of 4 April 2008 refer to the Investment Decision Makers and CPD noting the significant milestone of preferred bidder stage being reached and congratulating the Lyric on its achievements.*

- *CPD informed the project funders that it could not attend the contractor interviews on 24 January 2008 but added that following discussions with the Project Sponsor on the conduct and format of these. "I (the CPD Official) have good confidence that the Lyric will manage this event in a very professional manner".*

- *CPD received a copy of the tender evaluation report at the Project Board meeting on 4 April 2008 and at subsequent Project Steering Group meetings did not highlight to the Investment Decision Makers any issues about inadequate information regarding the award or delay in its provision.*

- *Each Project Board meeting included a pre-session where the funders and CPD reviewed progress and CPD reported matters of concern. There is no record of CPD raising any concerns around the lack of information on the tender evaluation process given these formal opportunities to do so".*

4.11 Internal Audit stated in its forensic audit report that, *"while it is satisfied that the overall approach and methodology to be employed on the Lyric project was in line with best practice, in the absence of the original tender submissions and tender evaluation documentation, it could not provide assurance that the Lyric Theatre re-build contract was awarded in line with best practice."*

4.12 In our view there is insufficient evidence to conclude that the approach and methodology employed complied with best practice. On the basis of the limited information available we must conclude that there was no scrutiny of the tender evaluation process by the Department or its agents. Although the roles and responsibilities adopted by the Lyric project are in line with Achieving Excellence in Construction best practice there is no evidence to indicate that these were applied in a meaningful way.

4.13 CPD recommends that procurement documentation should be retained for a minimum of 10 years. However, the consultants who prepared the evaluation report advised the Department that it no longer held the relevant documentation. This was in line with its own document retention policy which is to retain documentation until the contract is awarded and there are no challenges. Neither the Department nor the Arts Council had advised the Lyric or its agents of the public sector requirement to retain tender documentation for a much longer time span. As a result, the Department has been unable to provide assurance that the procurement process was managed appropriately.

Recommendation 5

Good record keeping should aim to keep full and accurate records of business undertaken to help ensure accountability. The Department must ensure that all partners engaged in the delivery of capital projects retain contract documentation in line with public sector practice. In order to clarify and strengthen document retention procedures, specific requirements should be included as part of the letter of offer/conditions of funding in all future capital projects.

Adjustment to tender costs in relation to scaffolding

4.14 The tender evaluation report indicates that tender costs in the stage 1 assessment were adjusted in relation to scaffolding. It states that *"inclusions for scaffolding were significantly at variance due to the different interpretations put by all parties on the need for general scaffold and adaptations required for the project (tender inclusions ranged from £84,807 to £413,000). It was therefore considered that for comparative analysis the value of the scaffold should be excluded."* Figure 10 summarises the impact that the adjustment had

Part Four: The Lyric Theatre

Figure 10: Adjusted tender prices

	Contractor A	Contractor B	Contractor C	Contractor D	Gilbert Ash NI Ltd
Original tender price	£10,887,000	£11,374,579	£10,826,000	£11,212,217	£11,639,351
Ranking Price only	2	4	1	3	5
Adjustment for scaffolding costs	£186,032	£298,570	£84,807	£209,927	£413,000
Adjusted tender price	£10,700,968	£11,076,009	£10,741,193	£11,002,290	£10,878,436
Ranking Price only	1	5	2	4	3

Source: NIAO based on tender evaluation report

on tender prices. Gilbert Ash NI Ltd had the highest scaffolding costs and therefore benefitted most from the exclusion of these costs. Although the scaffolding costs were excluded from the stage 1 financial assessment of the tender evaluation, the scaffolding cost of £413,000 submitted by Gilbert Ash NI Ltd appears to have been accepted in full at stage 2 and included in the fixed price cost of the contract. As a result, there was no consideration given to whether the cost quoted represented value for money. This is concerning given that the cost quoted by Gilbert Ash NI Ltd for scaffolding was almost five times more than the lowest price quoted.

4.15 We noted that the original tender submissions also appeared to reflect a similar variance for staff costs yet the staff costs were not excluded for comparative analysis in the same way that the scaffolding costs were. The Department told us that staff costs when taken together with site management costs were more evenly aligned across the tenders and there was a lesser degree of interpretation required to determine the scope of requirements.

Further adjustments to costs

4.16 The Gilbert Ash NI Ltd tender submission was further adjusted by £347,915. There was no evidence provided to indicate that a similar analysis of the other tenders costs was completed. The absence of key documentation meant that we have no assurance that these omissions are accurate and equitable.

4.17 In line with best practice, tenderers should be notified if adjustments are made to cost figures. Although all tenderers were notified of the omission of scaffolding costs, Gilbert Ash NI

Ltd were not notified of the additional adjustments. The Department told us that the other tender submissions had not included design development, bonds or pre-construction costs within the tender sum and therefore no adjustment was required. In the absence of procurement documentation we are unable to confirm that this was the case and that the other tender submissions were subject to the same level of scrutiny as the Gilbert Ash NI Ltd tender.

4.18 As Figure 11 shows, following the initial evaluation, Gilbert Ash NI Ltd was placed second after the most economically advantageous tender. The tender evaluation report documents that a post-tender clarification meeting was held with Contractor C, the first placed contractor. Based on discussions at this meeting and follow-up correspondence, Contractor C's tender cost was adjusted further by £113,500. This adjustment, when factored into the financial evaluation resulted in Gilbert Ash NI Ltd becoming the most economically advantageous tender and the evaluation report proposed Gilbert Ash NI Ltd as the preferred bidder to the Project Board.

Part Four:
The Lyric Theatre

Figure 11: Summary of the Tender Evaluation Process

	Contractor A	Contractor B	Contractor C	Contractor D	Gilbert Ash NI Ltd
Original tender price (as per evaluation report)	£10,887,000	£11,374,579	£10,826,000	£11,212,217	£11,639,351
Rank Price only	2	4	1	3	5
Adjustment for scaffolding costs	£186,032	£298,570	£84,807	£209,927*	£413,000
Other adjustments	None applied	None applied	None applied	None applied	£347,915 was made for costs included incorrectly in the tender submission
Adjusted tender price	£10,700,968 (tender report incorrectly states the adjusted price as £10,709,149)	£11,076,009 (tender report incorrectly states adjusted price as £10,076,029)	£10,741,193 (tender report incorrectly states the adjusted price as £10,741,630)	£11,002,290 (tender report incorrectly states the adjusted price as £11,072,442)	£10,878,436
Rank Price only	1	5	2	4	3
Price weighted score	37.76	19.84	36.76	19.34	30.47
Quality weighted score	19.58	24.16	23.20	25.12	28.30
Combined scores	57.34	44.00	59.96	44.46	58.77
Ranking	3	5	1	4	2
Post tender adjustments	None applied	None applied	additional £113,500 new financial score 30.8 at 70% weighting	None applied	None applied
Combined score	57.34	44.00	54.00	44.46	58.77
Final ranking	2	5	3	4	1

Source: NIAO based on tender evaluation report.

* adjustment figure incorrect in tender report as Contractor D confirmed the adjustment figure as £209,927 but the tender was adjusted by £139,774. This discrepancy could not be explained however the error is not material as the properly adjusted figures would have had no impact on the outcome of the tender competition.

4.19 Our review raised a number of concerns regarding this stage of the tender evaluation process:

- The post evaluation adjustment of £113,500 includes £70,000 for additional supervision resources. The supervision cost in Contractor C's tender was already 150 per cent greater than the corresponding cost in the Gilbert Ash NI Ltd tender.
- Best practice states that if a tender cost is adjusted then this must be agreed in writing with the contractor. There is no documentation to show that Contractor C had been asked to agree the cost adjustment. Indeed, Contractor C challenged the decision to award the contract to Gilbert Ash NI Ltd stating they had submitted a fully compliant tender but understood that their tender figure had been amended, without their agreement, based on cost information provided subsequent to the post-tender clarification meeting.
- Contractor C was the only contractor to have a post-tender clarification meeting.

Recommendation 6

The Department must ensure that all tender submissions for capital projects are treated in a fair and equitable manner. In accordance with this principle and best practice, adjustments to tendered prices should only be made in exceptional circumstances. Where it is necessary to make adjustments, all tenderers should be notified and a clear audit trail should be prepared and retained.

4.20 As figure 11 shows, our review also uncovered a number of additional errors in the figures in the report. In the absence of the procurement documentation the Department was unable to provide any explanations for the discrepancies.

The role of Central Procurement Directorate

4.21 As part of its new approach to capital programme management, in September 2007 the Department gave an undertaking to engage with CPD for technical advice throughout a project lifecycle. However, the Internal Audit forensic report states that *"CPD did not attend the tender evaluation meeting, nor did a representative from the Department"*. CPD advised Internal Audit that a full and complete copy of the final evaluation report had not been provided despite requesting it several times. Therefore, the decision to appoint Gilbert Ash NI Ltd as the preferred bidder was endorsed by the Department without the benefit of CPD advice on the effective operation of the tender evaluation process.

Recommendation 7

CPD technical advisors provide important assurance to funders on the application of government procurement policy and, therefore, assist in ensuring that the value for money of construction projects is not compromised. It is vital that the Department fully exploits this expertise in its capital construction projects to ensure that the proper processes and protocols are being applied. We recommend that key decisions on capital projects should only be

Part Four:
The Lyric Theatre

made after explicit technical advice has been received in writing. In this regard it is important that Investment Decision Makers ensure that CPD receive the information they require on a timely basis so that they can inform decisions in the most effective way.

Recommendation 8

The absence of a representative of government at such a key milestone in a construction project is a major breakdown in the assurance process for the expenditure of public funds. We strongly recommend that CPD technical advisors attend tender evaluation meetings as independent observers to provide assurance to funders that decisions are being made in line with best practice.

Managing conflicts of interest

4.22 In a region as small as Northern Ireland it is reasonable to expect that consultants may tender for work in organisations with which they already have a working relationship. In these instances it is vital that any perceived conflicts of interest are recorded and managed in line with best practice.

4.23 The project manager of the Lyric Theatre re-build worked with Gilbert Ash NI Ltd as the contractor on the extension to the Grand Opera House in the period 2005-07. We asked the Department to confirm how it managed any potential conflicts of interest that this created. The Department was unable to provide assurance that potential conflicts of interest had been managed appropriately.

4.24 In March 2008 the Stage 1 contract was awarded to Gilbert Ash NI Ltd with negotiations beginning at that time to agree a fixed price for the contract. After extensive value engineering a target contract price was agreed in September 2008 and presented to the Project Board for formal approval at a meeting on 27 October 2008.

4.25 At that same meeting the minutes indicate that Lyric Theatre fundraising team had met with Gilbert Ash NI Ltd management and agreed that Gilbert Ash NI Ltd would become patrons of the Lyric Theatre rebuild project with a donation of £150,000.

4.26 It is not uncommon for private sector companies to offer sponsorship and donations in the culture, arts and leisure industry and this provides a valuable source of funding. The Lyric Theatre secured £5.6 million through Trusts and Foundations, corporate sponsorship, individuals, events and campaigns. This was significant and vital funding needed to secure the redevelopment project. We would not seek to discourage philanthropy in projects such as the Lyric Theatre, however, it is essential that public sector bodies identify and manage the potential for any perceived conflict of interest.

4.27 In the case of the Lyric Theatre project, the Investment Decision Maker did not identify the potential for conflict of interest and no action was taken to fully consider and record events and decisions regarding the Gilbert

Ash NI Ltd patronage in an open and transparent way.

Recommendation 9

The Department must be alert to the possibility of both perceived and actual conflicts of interest. Where a perceived or actual conflict of interest has been identified, the Department must make a full, open and transparent record of how that conflict has been managed.

Appendices:

Appendices:
Appendix 1

Appendix 1: History of Cost Estimates for each Capital Project

Project	Original business case estimated cost £million	Addenda included prior to contract	Contract estimated cost £million	Addenda post contract agreement	Final cost £ million	Notes
Grand Opera House	8.4	No addenda applied (see notes)	9.6	No addenda applied (see notes)	10.6	Grand Opera House agreed a contract cost of £9.611m without understanding that this increase on the Outline Business Case cost required the Department and DFP approval. At the end of the construction phase the contractor made a claim for £1m additional works. Neither of these project cost increases were covered in an addendum. Although the Department funded the cost increase DFP would not grant retrospective approval.
Lyric Theatre	12.4	**Addendum 1** £15.23m: key reasons for the cost increase were: construction costs inflation from 2003-06 of 15.4 per cent: construction cost inflation from October 2006 to July 2008 (start date on site) of 15 per cent: changes to building regulations costing 1 per cent.	17.8		17.8	

Project	Original business case estimated cost £million	Addenda included prior to contract	Contract estimated cost £million	Addenda post contract agreement	Final cost £ million	Notes
Lyric Theatre (continued)		**Addendum 2** £17.8m: there have been a number of changes in the cost schedule since 2006 to reflect developing thinking around the project. Key elements which comprise the cost increase include: • Additional 581 sq m - £1m • Installation of ground source heat pumps - £150k • Appointment of project director - £150k • Additional dept contingency allowance - £414k • Professional fees £278k • Delay in construction - £130k • Architects interpretation of brief - £150k and • £332k adjustment to optimism bias.				

Appendices:
Appendix 1

Project	Original business case estimated cost £million	Addenda included prior to contract	Contract estimated cost £million	Addenda post contract agreement	Final cost £ million	Notes
Metropolitan Arts Centre	9.2	Addendum increase cost to £17.6m Key elements include: • Additional 900sq metre of gallery space at £3.56m; • Additional floor requirements £1m; • Building cost inflation £1m; • Design development costs £700k; • Site restriction costs £600k; and • Adjustment to optimism bias £1.5m.	12.9	No further addenda	17.6	
Crescent Arts Centre	5.1	Addendum increase cost to £6.8m as result of a CPD detailed technical review which identified issues which had not been raised in the previous submission. Key items include: • Condition of building foundations £200k; • Changes to building regulations £200k; • Decant provision £200k; • Construction cost inflation £400k;and • Adjustment to optimism bias £700k.	6.8	No further addenda	7.2	

Project	Original business case estimated cost £million	Addenda included prior to contract	Contract estimated cost £million	Addenda post contract agreement	Final cost £ million	Notes
Tollymore National Outdoor Centre	3.7	£5.2m: increased costs are attributable primarily to the increased size of the proposed centre (+17.3%) coupled with an increase in build costs (+16.3% increase in cost sq metre). Key items include: • Construction and feasibility for a more innovative and functional design of building £952k; • Compliance with the NI sustainable development strategy £300k; and • Adjustment to optimism bias £176k.	5.2	£5.4m: Key elements include: • NIE installation £35k; • Climbing boulder £65k; • CPD costs £48k; and • Additional fixtures and fittings £60k.	5.4	
Public Record Office of NI	28.2	Addendum increased cost to £30.5m Changes in the cost of the project amounting to £2.010m were attributed to elements of expenditure not included in the original business case. The main areas omitted were: the CPD professional team fees and the PRONI New Accommodation Unit staff costs (£1.66m), 'art' in the new building (£0.16m); Legal Fees (£0.07m); and Stamp Duty (£0.12m); There was also an increase of £284,140 (1%) in cost of the elements in the original business case.	27.8	No further addenda	29.1	

Appendices:
Appendix 1

Project	Original business case estimated cost £million	Addenda included prior to contract	Contract estimated cost £million	Addenda post contract agreement	Final cost £ million	Notes
Ulster Museum	11.5	Addendum increased cost to £14.7m Costs increased after a comprehensive architectural and detailed cost review completed as part of the Heritage Lottery fund application. Additional costs included : • Replace air handling units £270k; • Replace floor coverings in galleries £335k; • Ceiling repairs in non-public areas £175k; • Upgrading internal doors and screens in non-public areas £185k; • Relocation of lecture theatre and adjacent spaces in support of new corporate event programmes £395k; • Allowance for risk inflation and fees £450k; • Professional fees on construction costs £350k; • Roof repairs £250k; • Replace chiller plant £130k; • Alterations to receiving bay £150k; • Relocation of staff accommodation and security entrance £190k; and • Fire alarms and emergency lighting £160k.	14.7	The Department wrote to DFP seeking retrospective approval for £557k to contribute to the funding shortfall for the Ulster Museum project. Shortfall made up as follows: • £308k for inescapable works – the Ulster Museum advised the Department that they needed to carry out various items of work that were identified late in the programme and in their opinion it made sense to complete work whilst main contractors were on site. The Ulster Museum committed to this expenditure without having the appropriate approvals in place.	15.7	The Department wrote to DFP outlining further proposals for additional capital spend on the Museum project. These proposals were not part of the original redevelopment scheme but from a practical point of view the Department considered the most appropriate way forward was to incorporate these aspects when the refurbishment scheme was underway. The proposals were as follows: • Upgrading the security system : estimated cost of £826k • Learning support facilities : estimated cost £460k • Enhancement of income generation facilities including restaurant, shop and lecture theatre: estimated cost £290k

Project	Original business case estimated cost £million	Addenda included prior to contract	Contract estimated cost £million	Addenda post contract agreement	Final cost £ million	Notes
Ulster Museum (continued)				(It should be noted that the Investment Decision Maker for this project was the CEO of NMNI rather than a Department official as is normal practice). • £250k for exhibition mounts – originally classified incorrectly as revenue. Reclassification agreed with NIAO at NMNI Audit meeting in August 2009.		• Applied art gallery: privately funded: estimated cost £426k. DCAL sought separate business cases for these separate elements for scrutiny by their economists to confirm need and value for money. Each business case was below the threshold for DFP approval; however, given the impact on the overall cost of the project, the department felt it appropriate to advise DFP of the additional projects. DFP was content with this approach.

Source: NIAO based on project business case addenda

NIAO Reports 2012-13

Title Date	Published
2012	
Continuous Improvement Arrangements in the Northern Ireland Policing Board	20 March 2012
Invest NI: A Performance Review	27 March 2012
The National Fraud Initiative: Northern Ireland	26 June 2012
NIHE Management of Reponse Maintenance Contracts	4 September 2012
Department of Finance and Personnel - Collaborative Procurement and Aggregated Demand	25 September 2012
The Police Service of Northern Ireland: Use of Agency Staff	3 October 2012
The Safety of Services Provided by Health and Social Care Trusts	23 October 2012
Financial Auditing & Reporting 2012	6 November 2012
Property Asset Management in Central Government	13 November 2012
Review of the Efficiency Delivery Programme	11 December 2012
The exercise by local government auditors of their functions in the year to 31 March 2012	19 December 2012
2013	
Department for Regional Development: Review of an Investigation of a Whistleblower Complaint	12 February 2013
Improving Literacy and Numeracy Achievement in Schools	19 February 2013
General Report on the Health and Social Care Sector by the Comptroller and Auditor General for Northern Ireland – 2012	5 March 2013
NI Water: Response to a Suspect Fraud	12 March 2013

www.cds.co.uk

Published by Corporate Document Services and available from:

CDS Belfast
4c Heron Wharf
Sydenham Business Park
Belfast
BT3 9LE

Telephone: 028 9045 7772
Email: cds-ni@cds.co.uk

CDS 95232

ISBN 978-1-909532-28-1

Printed by CDS