Dáil Éireann

An Coiste um Chuntais Phoiblí

Tuarascáil Eatramhach maidir le héisteachtaí an Choiste sa tréimhse Deireadh Fómhair 2003 go dtí Iúil 2004

Iompar

Bealtaine 2005

Dáil Éireann

Committee of Public Accounts

Interim Report on hearings of the Committee in the period October 2003 to July 2004

Transport

May 2005

Contents

Chairman's Preface

This report, on Transport, is one in a series of interim reports to be agreed by the Committee of Public Accounts which detail the Committee's consideration of the Report of the Comptroller and Auditor General, 2002.

The Committee, in addition to having published two stand alone reports on the Punchestown Exhibition Centre and the Residential Institutions Redress Board, will also consider sectoral reports on:

Revenue, Department of Finance and the NTMA.

Department of Justice and related matters.

Departments of Communications, Marine and Natural Resources; Enterprise, Trade and Employment; Environment, Heritage and Local Government; and E.P.A.

Departments of Education and Science; Health and Children; and Social and Family Affairs.

Department of Arts, Sport and Tourism; and Sport.

As Chairman, I want to thank the relevant Government Departments and agencies for their co-operation in making the compilation of these reports possible. I also want to compliment the members of the Committee for their diligent work throughout the year.

We recommend this report to the Houses of the Oireachtas.

Michael Noonan, T.D.,
Chairman

May, 2005

Members of the Committee of Public Accounts

FIANNA FÁIL

Seán Ardagh T.D.	Dublin South-Central
John Curran T.D.	Dublin Mid-West
John Dennehy T.D.	Cork South-Central
Seán Fleming T.D.	Laois-Offaly
John McGuinness T.D. ***(Vice-Chairman)***	Carlow-Kilkenny
Michael Smith T.D. [4]	Tipperary North

FINE GAEL

John Deasy T.D. [2]	Waterford
Tom Hayes T.D. [3]	Tipperary South
Michael Noonan T.D. [1] ***(Chairman)***	Limerick East

LABOUR

Pat Rabbitte T.D.	Dublin South-West

GREEN PARTY

Dan Boyle T.D.	Cork South-Central

SOCIALIST PARTY

Joe Higgins T.D.	Dublin West

1 Deputy Michael Noonan replaced Deputy Padraic McCormack by order of the House on 18th June, 2003.
2 Deputy John Deasy replaced Deputy Paul Connaughton by order of the House on 20th October, 2004.
3 Deputy Tom Hayes replaced Deputy John Perry by order of the House on 20th October, 2004
Deputy Michael Noonan elected as new Chairman on 21st October 2004
4 Deputy Michael Smith replaced Deputy Batt O'Keeffe by order of the House on 16th November, 2004.

Orders of Reference of the Committee of Public Accounts

156. (1) There shall stand established, following the reassembly of the Dáil subsequent to a General Election, a Standing Committee, to be known as the Committee of Public Accounts, to examine and report to the Dáil upon—

(*a*) the accounts showing the appropriation of the sums granted by the Dáil to meet the public expenditure and such other accounts as they see fit (not being accounts of persons included in the Second Schedule of the Comptroller and Auditor General (Amendment) Act, 1993) which are audited by the Comptroller and Auditor General and presented to the Dáil, together with any reports by the Comptroller and Auditor General thereon:

Provided that in relation to accounts other than Appropriation Accounts, only accounts for a financial year beginning not earlier than 1 January, 1994, shall be examined by the Committee;

(*b*) the Comptroller and Auditor General's reports on his or her examinations of economy, efficiency, effectiveness evaluation systems, procedures and practices; and

(*c*) other reports carried out by the Comptroller and Auditor General under the Act.

(2) The Committee may suggest alterations and improvements in the form of the Estimates submitted to the Dáil.

(3) The Committee may proceed with its examination of an account or a report of the Comptroller and Auditor General at any time after that account or report is presented to Dáil Éireann.

(4) The Committee shall have the following powers:

(*a*) power to send for persons, papers and records as defined in Standing Order 83;

(*b*) power to take oral and written evidence as defined in Standing Order 81(1);

(*c*) power to appoint sub-Committees as defined in Standing Order 81(3);

(*d*) power to engage consultants as defined in Standing Order 81(8); and

(*e*) power to travel as defined in Standing Order 81(9).

(5) Every report which the Committee proposes to make shall, on adoption by the Committee, be laid before the Dáil forthwith whereupon the Committee shall be empowered to print and publish such report together with such related documents as it thinks fit.

(6) The Committee shall present an annual progress report to Dáil Éireann on its activities and plans.

(7) The Committee shall refrain from—

(*a*) enquiring into in public session, or publishing, confidential information regarding the activities and plans of a Government Department or office, or of a body which is subject to audit, examination or inspection by the Comptroller and Auditor General, if so requested either by a member of the Government, or the body concerned; and

(*b*) enquiring into the merits of a policy or policies of the Government or a member of the Government or the merits of the objectives of such policies.

(8) The Committee may, without prejudice to the independence of the Comptroller and Auditor General in determining the work to be carried out by his or her Office or the manner in which it is carried out, in private communication, make such suggestions to the Comptroller and Auditor General regarding that work as it sees fit.

(9) The Committee shall consist of twelve members, none of whom shall be a member of the Government or a Minister of State, and four of whom shall constitute a quorum. The Committee and any sub-Committee which it may appoint shall be constituted so as to be impartially representative of the Dáil.

Déardaoin 12 Feabhra 2004
Thursday 12 February 2004

1. Chruinnigh an Coiste ar 11.10 a.m.

1. Chruinnigh an Coiste ar 11.10 a.m.

2. Comhaltaí i Láthair:- Seán Ó Poire (i gCeannas), Seán Ardachaigh, Donall Ó Baoil, Pól Ó Connachtáin, Seán Ó Curráin, Seán Ó Duinneacha, Seán Ó Pléamonn, Seosamh Ó hUiginn, Seán Mac Aonghusa, Micheál Ó Nuanáin, Pádraic Ó Coinín.

2. Members Present:- John Perry (in the Chair), Sean Ardagh, Dan Boyle, Paul Connaughton, John Curran, John Dennehy, Seán Fleming, Joe Higgins, John McGuinness, Michael Noonan, Pat Rabbitte.

3. Chuaigh an Coiste i suí príobháideach.

Rinne an Coiste breithniú.

Chuaigh an Coiste i suí poiblí.

3. The Committee went into private session.

The Committee deliberated.

The Committee went into public session.

4. Breithniú Chuntais Leithreasa 2003.

Thug an Coiste an Vóta seo a leanas dá aire:

Vóta 32 – An Roinn Iompair

Cuireadh an Chaibidil seo a leanas de láimh:

Caibidil 10.1 – Easnaimh i Rialú Airgeadais

4. Consideration of Appropriation Accounts 2003.

The following Vote was noted:

Vote 32 – Department of Transport

The following Chapter was disposed of:

Chapter 10.1 – Shortcomings in Financial Control

5. Finnéithe a ceistíodh:-

Síle Ní Néill, Uasal, (Ard-Rúnaí, An Roinn Iompair), Deirdre Ní Anluain, Uasal, (Príomh-Oifigeach, An Roinn Airgeadais), Dáithí Ó hUrthuile, Uasal, (Príomh-Oifigeach, An Roinn Airgeadais), Seán Puirséil (An tArd-Reachtaire Cuntas agus Ciste).

5. Witnesses Examined:-

Ms. Julie O'Neill (Secretary General, Department of Transport), Ms. Deirdre Hanlon (Principal Officer, Department of Finance), Mr. David Hurley (Principal Officer, Department of Finance), Mr. John Purcell (Comptroller and Auditor General).

6. Athlá.

Chuaigh an Coiste ar athló ar 3.15 p.m.

6. Adjournment.

The Committee adjourned at 3.15 p.m.

Déardaoin 15 Iúil 2004
Thursday 15 July 2004

1. Chruinnigh an Coiste ar 11.15 a.m.

1. Chruinnigh an Coiste ar 11.15 a.m.

2. Comhaltaí i Láthair:- Seán Ó Poire (i gCeannas), Donal Ó Baoil, Seán Ó Curráin, Seán Ó Duinneacha, Seán Ó Pléamonn, Seán Mac Aonghusa, Mícheál Ó Nuanáin.

2. Members Present:- John Perry (in the Chair), Dan Boyle, John Curran, John Dennehy, Seán Fleming, John McGuinness, Michael Noonan.

3. Chuaigh an Coiste i suí príobháideach.

3. The Committee went into private session.

Rinne an Coiste breithniú.

The Committee deliberated.

Chuaigh an Coiste i suí poiblí.

The Committee went into public session.

4. Breithniú ar Thuarascáil Speisialta

4. Consideration of Special Report

Rinne an Coiste breithniú agus chuir sé an Tuarascáil Speisialta seo a leanas de láimh:-

The Committee deliberated and disposed of the following Special Report:-

Tuarascáil Speisialta Uimh. 6 ón Ard-Reachtaire Cuntas agus Ciste - Clár an Údaráis um Bóithre Náisiúnta maidir le Príomh-Bhealaí a Fheabhsú.

Comptroller and Auditor General Special Report No. 6 – National Roads Authority Primary Routes Improvement Programme.

5. Finnéithe a Ceistíodh:-

5. Witnesses Examined:-

Mícheál Tóibín Uas. (Príomh-Fheidhmeannach, an tÚdarás um Bóithre Náisiúnta), Mícheál Mac Aogáin Uas. (Ceann Gnóthaí Corparáideacha, an tÚdarás um Bóithre Náisiúnta), Tadhg Ó hEachthairn Uas. (Bainisteoir Sinsearach Tionscadal, an tÚdarás um Bóithre Náisiúnta), Seán Ó Pléamonn Uas. (Bainisteoir Sinsearach Tionscadal, an tÚdarás um Bóithre Náisiúnta), Síle Ní Néill Uas. (Ard-Rúnaí, an Roinn Iompair), Seán Ó Murchú Uas. (Rúnaí Cúnta, Rannóg na mBóithre, an Roinn Iompair), Aodhán Ó Dúinín Rúnaí Cúnta, an Roinn Airgeadais), Seán Puirséil Uas. (An tArd-Reachtaire Cuntas agus Ciste).

Mr. Michael Tobin (Chief Executive, National Roads Authority), Mr. Michael Eagan (Head of Corporate Affairs, National Roads Authority), Mr. Tim Ahern (Senior Project Manager, National Roads Authority), Mr. John Fleming (Senior Project Manager, National Roads Authority), Ms. Julie O'Neill (Secretary General, Department of Transport), Mr. John Murphy (Assistant Secretary, Roads Division, Department of Transport), Mr. Aidan Dunning (Assistant Secretary, Department of Finance), Mr. Mr. John Purcell (Comptroller and Auditor General).

6. Athlá

6. Adjournment.

Chuaigh an Coiste ar athló ar 4.00 p.m.

The Committee adjourned at 4.00 p.m.

The Report

Abbreviations

BMW	Border, Midlands West Region
C&AG	The Comptroller and Auditor General
ESIOP	Economic and Social Infrastructure Operational Programme
GGB	General Government Balance
IFA	Irish Farmers Association
NDP	National Development Plan
NRA	National Roads Authority
NTMA	National Treasury Management Agency
PMG	Paymaster General
PPP	Public Private Partnerships
The Department	Department of Transport

Department of Transport – Financial Control Weaknesses – 12 February 2004

1 Proceedings of the Committee

1.1. The committee met with Ms J. O'Neill, Secretary General, Department of Transport and her officials and with officials from the Department of Finance on 12 February 2004.

2 The Facts

2.1. The Appropriation Accounts of the Department of Transport for 2002 reflect a significant restructuring of the Vote that took place in the course of the year. Expenditure for all the functions carried out by the former Department of Public Enterprise is included up to 18 June 2002 and expenditure by the newly formed Department of Transport in included for the balance of the year. This is the reason that expenditure on energy conservation for the first half of the year is recorded along with expenditure on national roads for the second half of the year.

2.2. The changes are evident in the programme subheads, which can be related to the particular functions, but are less obvious in the case of spending on administration. The process of reallocating amounts for a six months period between the three Departments involved in the restructuring had a distorting effect on the annual administration figures which are not readily comparable with preceding or subsequent years.

2.3. Against the backdrop of significant structural change and upheaval for all staff in 2002, difficulties arose in the preparation of the original Appropriation Accounts for that year. The pressure on the finance division arising from the formation of the new Department was compounded by the loss of experienced staff and incidences of prolonged sick leave. This contributed to a temporary skills deficit and a serious breakdown in accounting controls in the Department during the second half of 2002 and in the first months of 2003. The finance division was in the process of implementing a new accounting system as part of the roll-out of the management information framework when the change in Department structures occurred. The coincidence of this major systems change and associated difficulties in the interface between systems, with the restructuring of the Vote, stretched the resources of the division to the limit.

2.4. The problem came to light in June 2003, when work started on the audit of the 2002 Appropriation Accounts for the Vote. The main issues were that the appropriation account was out of line with the Paymaster General's records, the trial balance did not agree with the account and there were material errors in the signed account presented. Certain transactions were posted inaccurately to the Department's accounts and this required a new account to be prepared.

2.5. This outcome could be attributed to two main control deficiencies. There was a failure to carry out monthly reconciliations between the bank records held by the Paymaster General and the accounting records. There were also incorrect postings of certain receipts and payroll transactions to the accounting records. A new appropriation account was submitted for audit in July 2003, and after further verification work, the account was certified that it properly presented the receipts and expenditure for the year. No misuse or waste of public funds was involved.

2.6. The C&AG was concerned that such important financial controls were not in operation for the period in question and that senior management had been unaware of the position. The accounting officer outlined the combination of events that gave rise to the problem. Among these were the formation of the new Department, the loss of experienced staff and the changeover to a new computer accounting system. This all represents a cautionary message of what can happen if such difficult situations are not managed properly.

2.7. Once the control deficiencies were brought to the Department's attention, it moved quickly to revamp its procedures and restructure and strengthen the finance unit. Senior management in the finance division recognised that bank reconciliations were not being carried out on a regular and prompt basis and that this was the primary reason that the inaccurate postings had not been identified and remedied earlier.

2.8. In addition to rectifying the errors that had been identified in the account, management in the division undertook a comprehensive review of systems and procedures. This was monitored by the Secretary General and the management board has been kept informed of developments. The current position is that bank reconciliations are up to date. These are carried out on a monthly basis and signed off by a senior manager within two weeks of receiving returns from the Office of the Paymaster General. Responsibility within the finance division has been re-defined with clear reporting lines. A professional accountant is now heading the accounts payable and receivable functions. A second accountant has been engaged on a contract basis to further refine the processes and procedures in the division so as to ensure optimum control and efficiency. An additional member of staff with strong previous experience of the finance function has been assigned to the division. An analysis of training requirements has been carried out and a comprehensive training plan is being developed. Immediate training has been organised and undertaken by staff to ensure the financial systems and controls are fully understood and that financial transactions are properly recorded and documented. This is an ongoing process. Reporting to the management board has been improved.

2.9. The period of exceptional change contributed to the difficulties that arose and these difficulties have been fully addressed. The staff involved are committed to reaching the highest standards of financial management and control. The Department aims to ensure that systems work well and that resources are deployed efficiently and effectively to prevent error and waste. The implementation of the management information framework, when fully operational, is expected to provide enhanced financial and non-financial management information to support value for money analysis, input-output measurement, planning, decision-making and control.

3. The Accountability Issues

3.1. The accountability issues considered by the Committee were:

- Background to the Financial Control Weaknesses
- Internal Audit Arrangements
- New Corporate Governance Arrangements
- Paymaster General Perspective on changing systems
- Cost of Financial Control and Monitoring Systems

4. Examination of the Issues

Background to the financial control weaknesses

4.1. The Secretary General gave an explanation of the context in which the financial control weaknesses occurred. The former Department of Public Enterprise had started the rollout of the new financial management system before the Departments were restructured. It was felt that it would be inappropriate to stop that work at that stage. The restructuring meant that the new Department was both importing parts of its Vote from the Department of the Environment and Local Government and exporting to a number of other Departments. Some key staff changes had taken place and this added significantly to the problems. The old financial management system was weak and needed to be replaced. Staff were under personal pressure to meet the statutory deadline of completing the account, instead of bringing to the attention of the Secretary General at an earlier stage the fact that there were serious underlying problems that needed to be tackled and addressed.

4.2. A small number of large transactions account for the bulk of the changes that needed to be made. There was no misappropriation of public moneys, no waste, no loss of funds involved. It was a problem of accounting properly for the money that had been spent. The matter was in regard to a particular set of circumstances within the finance unit of the Department, combined with the illness of some of the key people involved. Management within the unit was aware that reconciliations had not been carried out but underestimated the scale of those difficulties. Arrangements are now in place throughout the year and managed on an ongoing basis through new, more sophisticated systems, which has resolved some of the previous issues.

4.3. When Departments are restructured, the biggest impact is felt on the central support units, in this case, the finance unit and human resources unit. Line divisions such as the roads division may move in block from one Department to another but central support units face difficulties. There may be a significant degree of staff turnover as a result of people moving in and out of the administrative support functions. The impact was particularly significant in the Department of Transport because of the extent of movements in three different directions in and out of the Department, which added to the difficulties.

4.4. There was a technical difficulty between the core salary system and the old accounting system, which resulted in an understatement of expenditure of €1.7 million. While salary payments were reflected in the PMG account, they were not posted to the accounting records. A reconciliation of the PMG account to the accounting records would have shown that immediately and the problem could have been addressed. Similarly, in regard to the appropriations-in-aid, a posting of a block of road traffic licence fee receipts resulted in an understatement of approximately €500,000. These fees had been properly received by the Department and were in the PMG account but were not picked up by the accounts system.

4.5. EU funding details are mentioned in a note to the account but are not material to the account. They capture for information purposes the funding received from the EU in a given year. As a result of the changes taking place, two divisions of the Department sent in notes referring to the same amount. The two amounts were added together and appeared as one amount in the account. Given more time and less pressure on staff, a review should have noticed the two amounts were identical.

4.6. The finance unit was aware that the reconciliations had not been completed and that there were issues to be resolved with the suspense accounts. The unit concentrated its efforts on verifying the significant volume of transactions between the new Department of Transport and the other Departments, and the significant movement of transactions from the old system to the new financial system during the year. The finance unit genuinely believed that any residual mistakes would not be material to the account or significant. They brought the account for signature and did not alert the Secretary General that some relatively minor changes might be required.

Internal Audit Arrangements

4.7. The Committee asked about the Audit Committee arrangements. The audit committee in the Department is chaired by an external person who is head of financial control in another Department. Two assistant secretaries serve on the Audit Committee. It oversees the internal audit programme of the Department which encompasses the whole range of expenditure, including under EU programmes and the national development plan. It has specifically reviewed the financial processes during 2004.

4.8. The Mullarkey report on the accountability of Secretaries General made certain recommendations about strengthening financial control and audit arrangements within Departments. One issue is to ensure that the audit programme of the internal audit unit of the Department is informed of the risks to which the Department is most exposed. With a budget of €2 billion, there must be clarity about where the financial exposure is greatest. There is a view in the Mullarkey report that audit committees should be stronger in terms of having an external presence on them from outside the public service.

4.9. In addressing the concerns that arose within the Department's finance unit, a professional accountant is now directly involved. This is important in terms of strengthening management. Some further external expertise is assisting with a systems review. The internal audit unit reports directly to the Secretary General and not to any other part of the Department. It helps to identify where the risks might be greatest and how to target the resources of our audit function to tackle those.

4.10. The Committee noted that the audit committee is more for the purpose of managing and directing the internal audit function rather than having an independent, external oversight on the overall financial function of the whole Department, which would include the functioning of the internal audit department. It would not in any way compensate for the type of independent external audit committee that would be normal within a major public company.

4.11. The Secretary General advised the Committee that on the public transport side, there has been a strengthening of the arrangements in terms of bringing in external expertise and involving others, such as the Department of Finance, in the oversight of major infrastructure projects. Different arrangements apply for the roads programme because of its different origins. There is a small cross-cutting team in the Department that looks at the arrangements in place for assessing and monitoring expenditure programmes, particularly capital expenditure programmes because that is such a large part of the Vote.

New Corporate Governance Arrangements

4.12. The Committee felt that an audit committee should be in place, where the senior person involved in the C&AG's audit would explain the weaknesses that have arisen, both in the internal control system and in the management systems in place. This would increase the emphasis on putting in place a system to remedy any defects noted. From 2004 onwards a new corporate governance regime is being put in place across the Civil Service involving strengthened audit committees, risk assessment and risk registers. More particularly, from an Appropriation Accounts point of view, the Accounting Officer will have to sign off on a statement of internal financial control on what has been done to assure herself that the controls are operating and so on. In the C&AG's audit certificate to the account, he will attest to that and whether he agrees with what has been asserted by the Accounting Officer. There are developments across the board involving corporate governance which take into account what the Committee would like to see.

4.13. The Committee felt that Secretaries General would have far greater comfort in signing off the accounts if they knew they had been scrutinised at a very high level by an external group independent of the Department. The new arrangements should concentrate the minds of Secretaries General and Accounting Officers and remind them of their responsibilities.

4.14. The Committee asked whether the professional accounting staff employed were sufficient for such a large Department. The different nature of accounting within the Civil Service context has led to a tradition where accounting expertise was built up over many years and professional accounting expertise was not brought into the system. Increasingly, with a move to accruals accounting and the adoption of good practices from the private sector in terms of the management of accounts, more professional expertise and skill is now needed within Departments. The expertise is built up within the overall constraints on the Department in terms of both budgets and numbers. There is flexibility within the arrangements with the Department of Finance, for managing administrative budgets, to develop and source the kind of professional expertise that is needed. The main role of the professional expertise in the area is to ensure that good systems and practices are in place.

Paymaster General Perspective on changing systems

4.15. The role of the Paymaster General (PMG) is separate from the Department of Finance. The Committee noted that neither the Department of Finance nor the PMG had a template or other practical guidance to pass to a new Secretary General to guide them on how to manage major structural change. It was acknowledged that some of the changes that occurred on this occasion would have been difficult to predict. The main advice from a PMG perspective is to sort out the PMG accounts at a particular time. If a Department was ceasing to function due to a change in the name of the Department, a new Paymaster General account would be opened. From that day, the Department will operate a completely new account and all the matters in transit, such as the payable orders outstanding on the original account can be settled over time. This would be the most significant action that could be taken to make it easier to reconcile with the PMG accounts.

4.16. The Committee asked what initiatives the PMG and the Department of Finance senior officials had taken to deal with this matter. The PMG's office responds to requests from a Department regarding its accounts and whether it needed to change accounts. It would generally advise that it is best for a Department to open a new account when there is a major change, as in this instance, because it makes it easier to piece matters together, but apart from that it would not have taken any specific initiative.

4.17. Departments come under a lot of pressure, at the time of structural change, to move existing staff between functions. Retaining staff in place for the period of a transition would help to preserve an effective control framework. Reconciliations should be up to date from the outset and keep up to date. At a management level this is an important part of managing the transition effectively.

Cost of Financial Control and Monitoring Systems

4.18. The Committee asked, in general, if an evaluation had ever been done of the cost of monitoring a budget in full and whether there was a percentage cost or a ballpark figure of the cost of financial monitoring within Departments. It felt that the cost of the system put in place in the Department and the cost of financial control must be significant and that this is a value for money issue. From the audit point of view, the establishment of a professional internal audit in a Department should enable a refinement of internal control arrangements. There is a risk of a staff overload if the same arrangements are in place regardless of the size or complexity of the Department.

4.19. The Committee considered that while financial controls should always be effective, they should also be proportionate. One cannot have the same control framework in small organisations as in large organisations. The cost of control should be proportionate to the size of the organisation and the perceived risk involved. This is a basis for the new corporate governance, assurance and risk agenda. One must establish the risks and then put in an appropriate control framework to address them in an appropriate way.

5. Adoption of Reports

5.1. The Committee noted Chapter 10 of the 2002 C&AG report.

Findings and recommendations

<u>The Committee of Public Accounts finds</u>

<u>Specifically that:</u>

1. Financial control weaknesses within the Department caused serious errors in the draft 2002 appropriation account. The weaknesses are attributed to a failure to reconcile the PMG accounts at a time when there was significant structural change compounded by the introduction of new more sophisticated financial information systems and the loss of key staff.
2. The fact that the bank reconciliations were not being carried out for the best part of a year left the Department in a vulnerable position, susceptible to fraud. In addition, certain types of fraud, might not have been detected.
3. The Secretary General of the Department was not properly informed of the situation.
4. The audit committee arrangements at the Department are not fully developed.

5. The modernisation of financial control systems should take account of developments in internal audit, audit committees and the introduction of risk management systems. The introduction of new compliance reporting arrangements should improve the overall financial control framework.
6. The Department of Finance did not have practical guidance in place to support the management of major structural change.
7. As the investment in new financial information systems is large, the cost of financial monitoring and controlling activity in any Department should be known.

<u>And recommends in general that</u>

1. Secretaries General should be kept aware of any lapses in basic control procedures, such as the reconciliation of PMG and all other bank accounts.
2. The Committee of Public Accounts supports the development of audit committees in all Government Departments.
3. The Department of Finance should produce guidance on the maintenance of financial control systems during periods of major structural change and during periods of transition in the implementation of new financial information systems. Staff retention in key financial control functions should be emphasised.
4. The Department of Finance should develop performance indicators for the cost of financial monitoring and control activities in departments and should monitor these indicators.

Vote 32: Department of Transport

1 Proceedings of the Committee

1.1. The committee met with Ms J. O'Neill, Secretary General, Department of Transport and her officials and with officials from the Department of Finance on 12 February 2004.

2 The Facts

2.1. The Department was established on 19 June 2002 arising from a commitment in the Agreed Programme for Government to establish an integrated Department of Transport with responsibility for the national roads programme, aviation and public transport. The new Department brought together staff, systems and resources from more than three Departments. The Secretary General took up her office on 29 June 2002. The new Department is responsible for the expenditure in the region of €2 billion in 2004.

2.2. The Agreed Programme for Government set out a programme of transformation of Ireland's infrastructure and services. The Department is charged with managing the largest expenditure on new transport infrastructure, and ensuring that value for money is achieved for that expenditure. The Department is also responsible for implementing major changes in the organisation and regulation of Ireland's transport services, including the restructuring and reform of State agencies and the opening up of markets to competition.

2.3. The establishment of the new Department was effected by changing the functions and revising the name of the former Department of Public Enterprise. The newly formed Department comprised the transport functions of the Department of Public Enterprise and the roads, traffic and road safety functions of the Department of the Environment and Local Government.

2.4. Since its establishment, the Department has embarked on a programme of change and modernisation, involving a total restructuring of the Department to better align resources to priorities and maximise the benefits of an integrated Department. It also involves reviewing and updating the internal systems including the introduction of a comprehensive management information framework.

3. The Accountability Issues

3.1. The accountability issues considered by the Committee were:

- Change in EU rules on State borrowing for major infrastructure projects
- Driver Testing
- Dublin Port Tunnel
- Luas – Red Cow Roundabout
- M50 Tolling
- Other Specific Roads Issues
- Funding of PPPs
- Regional Airports
- Balance of Regional Expenditure

- Decentralisation

4. Examination of the Issues

Change in EU rules on state borrowing for major infrastructure projects

4.1. The Committee asked for the Department's view on the change in EU rules (February 2004) on State borrowing for major infrastructure projects and the way in which it relates to projects which have been under public discussion. The rules give guidance on the appropriate accounting treatment of the financial aspects of PPP projects on the general government balance sheet.

4.2. One of the issues in making progress with major infrastructural projects is a concern about the way in which the large cost of these projects impact on the general government balance in any given year. At first glance, the new EU decision is helpful in setting out more clearly the ground rules for the treatment of PPP transactions. It clearly identifies three categories of risk — construction risk, availability risk, which is the ability of the contractor delivering on the project to deliver a particular quantity, quality and specification of service as set out in the contract, and demand risk, which arises from variability in demand. What has changed in this decision is that in order to qualify as a PPP one must have both the construction risk and either the availability or the demand risk. All three were required up to now. This is helpful as it must clearly state that the risk that is being borne by the private partner must include the construction risk and at least one of either demand or availability risks.

4.3. The EU decision also makes clear that penalties applied in response to a default by the private partner must be real and substantial. It must involve a real and substantial risk transfer to the private sector.

4.4. While it is not specifically stated, the consequence of this decision is that any construction related payments to the private sector by the public sector would be charged over the period of construction and not at the point at which the contract was entered into. For example, in the context of a metro project, there was a concern that the entire construction cost of the metro would hit the GGB the day the contract was signed as opposed to over the period of time construction occurred. Similarly, unitary payments related to ongoing operational costs of a project would be related to the period of the concession.

4.5. The EU decision clarifies the incidences in which PPPs might be better used in the context of financing major infrastructural projects. The starting point must be whether the project offers good value for money. Each project on its merit must satisfy a cost benefit analysis that it is a good project which will stand up objectively to scrutiny. Then the options for financing the project are considered, the best deal to the public purse in terms of the transfer of risk, the buying of expertise and its financial impact. It is only then that the impact on the GGB should be considered.

4.6. The Committee noted that for PPPs, private finance will not now be reckoned as Government spending for the purposes of the local stability pact. This allows greater flexibility and scope for public investment in infrastructure projects. Public investment is first considered in terms of the impact on the Exchequer borrowing requirement. The second matter is the way in which the total cost of the project, public and private contributions, will impact on the GGB. The EU decision clarifies, in specific circumstances, the transfer risk required for the private part of the investment not to impact on the GGB. The public part of the investment will continue to impact on it but in a somewhat different way. The decision potentially frees up Exchequer funds for other purposes that do not lend themselves to PPP-type projects.

Driver Testing

4.7. Driving test fees received in 2002 amounted to €3.9 million. There was a significant surge in the number of applications for driving tests in 2003. There were approximately 180,000 applications in 2001, 190,000 in 2002 and 234,000 in 2003. The increase at the end of 2002 and throughout 2003 is attributed to the introduction of penalty points, greater awareness of road safety issues generally, and the concerns that drivers with provisional licences had about changes that might be introduced relating to the holding of such licences. As a result, the number on the waiting list, as of 1 January 2004, was approximately 119,000. The period of delay has lengthened from an average of approximately ten weeks to 29 weeks.

4.8. The Committee inquired about the cost of the driver testing service in 2002. The cost of providing the driver testing service is part of the general administrative budget and is reflected in various subheads. It is not segregated in a specific way that would enable a statement of the full cost of the service. From 2004, the new management information framework will enable the cost information to be collated in order to show the cost of driver testing inputs. It is expected that the establishment of an independent driver testing agency, will also provide a clear identification of the costs associated with providing the service.

4.9. The Committee asked for the Department's assessment of the current driver testing service, in particular the long waiting times to sit the test. Learner drivers were waiting a full year to sit their test and there were about 120,000 provisional drivers on the waiting list, which is a source of huge frustration. The Committee asked for details of the actions being taken to address the problem.

4.10. There are a fixed number of testers for the driver testing service, and the normal controls apply to the number of staff employed. The service has the capacity to deliver about 200,000 tests annually. The Department has examined a number of measures to reduce the backlog. Eight retired testers have been reengaged. A bonus scheme was developed as an incentive to testers already working in a flexible manner to respond to the demands that had emerged. The scheme was not accepted by the Department of Finance initially and there was not a strong response to it from the testers themselves. The number applying for tests is no longer growing at the same rate. It has levelled off to the normal pattern.

4.11. The department considers the setting up of a new driver testing agency with a clear budget and source of funding in receipt of fees as a priority, The Agency can examine the way in which it organises and resources itself to respond more speedily and effectively to fluctuations in demand. It can also examine the implications that this may have for the location of test centres and other important issues. This matter is not one that can be tackled easily in the short run.

4.12. The Committee expressed its concern that more measures were not taken to provide for greater testing capacity. It is a disappointment for those waiting to do a driving test. The

Department had developed and were meeting a customer service target to turn around a test application within ten weeks, which seemed to be a reasonable length of time. As things stand, the fact that the staff of the driver testing service are under the auspices of the Department constrains the number of additional staff that can be taken on. There is an obligation to reduce rather than increase the numbers of staff in the Department.

4.13. The number of skilled testers available is limited and there is a lead time in expanding the number of positions. In order to recruit and train new testers, some of the existing testers must be diverted towards training. There is a limit, from a safety viewpoint, on the number of tests a tester may carry out on any one day. There are certain very practical constraints. The Department examined the possibility of getting resources from Northern Ireland but a scarcity of resources is also a problem there.

Dublin Port Tunnel

4.14. The Dublin Port tunnel is being constructed with a clearance height of 4.9 meters and an operational safety height limit of 4.65 metres within its diameter. That is higher than the clearance height in many tunnels across Europe. There are height restrictions in place in all European countries except Ireland, the United Kingdom and Spain. An issue has been raised about a small number (approximately 1.5%) of super-sized trucks that use the port. These trucks are unable to get through many other parts of the Irish network. In the light of the issues raised by hauliers and others about the over-height trucks, the Minister appointed consultants to conduct an independent review of the feasibility and cost of raising the height of the tunnel. According to the current schedule, the Dublin Port Tunnel is expected to be open to traffic in mid-2005 and is expected to take 10,000 HGVs off city streets.

4.15. The Committee expressed its concerns about the Dublin Port Tunnel project and asked for an update on the current position with this project in the context with the issue of the height of the port tunnel. The Committee felt that important issues were not foreseen at the initial planning phase which imposes an extra burden on the taxpayer. It sought explanations on why these difficulties had not been foreseen at the planning stage and the additional expenditure that would be needed to make the remedial changes.

4.16. The Department stated that the planning assessments made for the tunnel were in line with the best designs in Europe. There was no question of being short-sighted. The Dublin Port tunnel is being constructed with a clearance height of 4.9 meters and an operational safety height limit of 4.65 metres within its diameter. That is higher than the clearance height in many tunnels across Europe. There are height restrictions in place in all European countries except Ireland, the United Kingdom and Spain. That clearance height will be more than sufficient to cope with traffic from those countries. There is no perfect tunnel height. The height of the tunnel was set having regard to the height restrictions that applied elsewhere in Europe and in line with the design specifications there.

4.17. An issue has been raised about a small number (approximately 1.5%) of super-sized trucks that use the port. These trucks are unable to get through many other parts of the Irish network. The attitude throughout Europe tends to be that one goes with a particular height and restricts traffic to deal with it. A decision was made that the height specified was sensible. In the light of the issues raised by hauliers and others about the over-height trucks, the Minister appointed consultants to conduct an independent review of the feasibility and cost of raising the height of the tunnel. The Atkins report is to hand and extra information has been sought from both the NRA and the contractors to see precisely what is possible and the cost involved. The evidence available must be viewed in terms of the very small number of vehicles that would be affected by a change in the height of the tunnel and the costs involved.

4.18. The duration of the project is not being extended as a result of the review. The Minister will take account of the implications of any change to the height for both the cost and the time it would take to complete the project. The fact that the review has been undertaken has not in any sense delayed the project.

4.19. The Committee asked if the cost of changing the height of the tunnel at this late stage would impose an extra cost rather than if it had been factored in at the beginning. The Department stated that raising the height of the tunnel would always impose an extra cost because tunnels are extremely expensive infrastructure built to a certain specification. The extra cost would have arisen regardless of when one decided to do it. It is not as a result of the timing of the decision. The diameter of the tunnel is set. It is a question of where within the tunnel one locates the ceiling or the floor to give the extra few inches in height. It will not cost more because it is being done now but simply because it costs more to make the adjustment.

4.20. A separate policy issue for the Minister is the height restrictions imposed on trucks in Ireland. This is a policy decision with wide ramifications. There are safety implications in terms of over-height trucks for example, from the increasing incidence of bridge strikes on other parts of the road network. There are also environmental issues around the appropriate use of such trucks which are quite limited in their usefulness in terms of carrying certain light loads and because they are not suitable for many purposes. The department is looking at the circumstances in which it would be appropriate to have a restriction on the overall height of vehicles in the best interests of the country. The United Kingdom and Spain are the only countries apart from Ireland which do not have a limit on the height of trucks. The limit applied elsewhere in the European Union is such that the height of the Dublin Port tunnel is more than adequate.

Luas – Red Cow Roundabout

4.21. There is a plan to upgrade the Red Cow interchange. The planning application has been lodged (February 2004) and some of the works are under way. By proceeding immediately with design work and statutory procedures, the expectation is that work could start in spring 2005 and be completed by spring 2007. It is expected that it could be fast-tracked.

4.22. The Committee asked why the current traffic flow problems could not have been foreseen at the initial planning stage for the Luas intersection at the Red Cow Roundabout. It noted that engineers of Dublin County Council originally recommended a flyover but the then Department did not agree. The original point was that there should have been a flyover so that traffic travelling north or south should have been allowed to proceed unimpeded.

4.23. The Department looked critically at the problems and is now satisfied that the issues are not related to the Luas *per se* but to the capacity of the junction. Proposals are being developed on which the Minister expects to make announcements in regard to the upgrading of the roundabout which, apart from dealing with the much greater concerns about congestion, will also have an impact on the functioning of Luas. The new layout will cost in the order of approximately €37 million. The tender process has begun and the NRA hope that a contractor will be on site by spring of 2005. The project is complicated in terms of traffic management. It involves an upgrade at the Red Cow roundabout and the Lucan Road, with the intermediate section going into three lanes. The project duration is two years.

4.24. The Committee was concerned about the interim effect on traffic during the upgrade period. If the Red Cow works had been done at the same time as the Luas project, this would have ensured that both jobs were finished at the same time. The Department noted the effort to minimise the impact while the works are under way. There is a very clear set of beneficial impacts from the developments that will take place.

4.25. The Department advised that the issues were foreseen at the planning stage, modelled and thought through. One of the difficulties with planning and delivering on infrastructure is that decisions are taken a long time in advance. Experts must, therefore, try to model and predict future traffic volumes. When the M50 was first planned there was a view that it was not needed. The larger issue is the extensive build up of traffic on the roundabout which is the busiest interchange in the State. Approximately 70,000 vehicles per day go through the roundabout which is a massively important interchange in the overall transport system. The retrofitting of routes is always an expensive process, as is the making of changes.

4.26. Decisions to proceed with infrastructural projects are made on the basis of the cost benefit analysis available at the time. When a project is started, it is often perceived by many as being over-elaborate in responding to the needs of the time. Similar views have been expressed in respect of the decision to upgrade major inter-urban routes to motorway standard of service. There was a view that the M50 was being built to too high a specification at the time of its initial construction. The Department is considering how to retro-fit in these circumstances. Land for a wider M50 was not available at the time and this means there is a need to make certain adjustments. Similarly, realistic forecasts of the increases in traffic volumes would have made people think again about whether a signal-controlled environment was suitable for the M50. The current issue is to get as much traffic as possible out of a signal-controlled environment. Apart from the natural reluctance to spend money at a time when the infrastructure budget was tight and to build to too high a specification, the decision makers were taken unaware by the extraordinary pace of growth in Dublin's traffic, car ownership and expansion beyond its core to its new suburbs.

M50 Tolling

4.27. The Committee noted that in 2002, tolling income in respect of the M50 was approximately €9 million, an increase on original estimates due to the additional traffic flows. The Committee felt the Department should weigh up the toll revenue received in relation to the cost to productivity in workers trying to get to their places of employment, the major pollution caused by backlogs of cars at the toll booths and the general frustration felt by ordinary people.

4.28. The Department noted that the contract for the M50 tolls was entered into some considerable time ago when the traffic volumes now experienced on the motorway and at the Red Cow roundabout were not predicted. There has been a great deal of learning from this experience in terms of current contracts under PPP arrangements in respect of toll roads in order to ensure that the revenue share that the State receives is far greater where traffic volumes increase more speedily than originally predicted.

4.29. There are a couple of related issues regarding congestion on the M50. The first involves the fact that two junctions are quite close to where the toll bridge is situated. This adds to the pressures on it. Some of the congestion has nothing to do with the toll bridge; it is the layout of the road. The Department is anxious to move to a situation where there will be free-flow tolling. With this system, even though the toll will be in place, motorists will be able to move through the barriers as speedily as possible. New dedicated lanes for vehicles using electronic tolls are already in use. The Department is encouraging developments in this regard to the greatest degree possible.

Specific Projects

Groody Bridge Project

4.30. The Committee asked about the reasons for the delay in the Groody Bridge project in Limerick. The NRA, by way of an understanding with the local authority, made a contribution to the costs of the project. However, difficulties arose with the Groody bridge during the building of a new bridge. The NRA resisted increasing its involvement for some considerable time which had the effect of bringing the work to a halt, notwithstanding that the deal with the local authority was to make a limited contribution. Eventually it was agreed to increase the contribution which allowed matters to be finalised. The NRA contribution to the project was less than €6 million. This was not the total cost of the project. Limerick City Council met the balance.

Nenagh Bypass

4.31. The Committee asked why a single carriageway was built for the Nenagh bypass when the NRA is now suggesting a PPP for a dual carriageway. The bypass was designed and built at a time when a single carriageway was the perceived need. With the publication of the national development plan, the Government decided that the linkages between Dublin, Belfast, Galway, Cork and Limerick were to be either high quality dual carriageway or motorway. This post-dated the building of the bypass at Nenagh. However, a dual carriageway can be shoehorned into the land available there.

4.32. The Committee agreed with the idea of a five year envelope. However it recognised that there were situations where the design departments of consulting engineering firms had closed because budgets were not available. It can be virtually impossible to reassemble teams and expertise has been permanently lost. The Department does not make decisions on individual projects. These are made by the NRA board and executive within the overall policy context set out in the NDP and particular policy directions, which were to focus this year on the BMW region and give the major inter-urban roads attention. The stop-start nature of funding could be a contributory factor in some of the issues raised. The management by the NRA of the detail of the programme, which ranges from very large projects, like the Monasterevin by-pass, to relatively small ones, is a matter for them.

4.33. The Committee asked about the Department's responsibilities for overall monitoring. This extends to compliance issues, budgets and value for money. The statutory framework provides that the chief executive of the NRA is the Accounting Officer for the roads programme. He reports to his board on his stewardship of the programme within the parameters set by the Department. The Department has an overarching audit function, which is clearly delineated.

Funding of PPPs

4.34. The Committee inquired if the Department still envisaged projects which would finance, design, build and manage a road as was originally intended. It felt that if the cheapest funding is through the NTMA, there is little advantage in the private sector building the road.

4.35. The transfer of risk and the bringing in of expertise is key. The Department cited the Dundalk western by-pass as a good example of a current deal. This is an integral part of the M1 corridor. It will reduce travel times by up to 30 minutes. The contract provides that the NRA will make no payments whatsoever to the consortium. The consortium will pay 95% of the toll revenue collected in Drogheda during the construction period to the NRA, including a share of future toll revenue. In this context, the consortium is building the new 11 kilometre section of the motorway, which includes seven kilometres of link roads and 12 over and under bridges. It is also taking over the operation and maintenance of 43 kilometres of existing motorway from Hayestown to Gormanstown, including the Boyne bridge and the toll plaza, for a 30 year period. It will also take over the operation of the toll plazas adjacent to Drogheda within 30 months and upgrade the plazas with electronic toll collection, together with non-stop electronic lanes. It will be required to invest in the full 54 kilometres of the road, prior to being handed back to the State, in order to provide a satisfactory residual life after the end of the 30 year concession period. From the State's point of view, no money will be paid upfront while at the same time there is a very serious risk transfer to the private sector contractor.

4.36. It will finance, design and construct not just the new stretch but also maintain the existing stretch of road. The assessment of a proposal in terms of financing looks at what it would cost if the public sector were to do the work as normal public procurement. State tolling is then considered. The Department then considers what the contractor is offering to do and how it works out from their point of view.

4.37. The proposed toll is the only source of revenue to the construction company. The Department has control over the level at which the toll can be placed. The toll is not traffic dependent. It is set by the NRA and subject to normal variation in line with inflation. Certain standards are set down in the toll arrangement. What is dependent on traffic levels is the revenue share of the toll revenue received by the State. That is a significant improvement on the arrangements that were in place when the M50 was built. At this stage the consortium making a bid must make a judgment as to what it thinks traffic levels will be. The NRA must also make such a judgment. Independent assessments are carried out. If traffic levels rise beyond a certain level it increases the share of revenue the State receives from the toll revenue.

4.38. The Committee sought information of the kind of financial model being used. The models in the late 1990s indicated that a road construction company would finance 20% of the cost out of equity and about 80% through bank borrowing. The bank borrowings were approximately two points above the rate at which the NTMA or the State could borrow. A return of approximately 16% or 17% was expected on the equity side. The crux of the issue is whether or not the PPP mechanism will deliver better value for money in aggregate than more traditional mechanisms. That issue is taken into account in the assessment of the project and in coming to a decision as to whether it should be proceeded with.

4.39. The Department indicated that the internal rate of return is looked at closely and they are satisfied with the arrangements entered into by the NRA in regard to PPP projects. The favourable comparisons between them and the public service comparator used as the base case to test propositions, means there is a very significant transfer of risk to the private sector in this programme, and it is prepared to participate on that basis. The concern in the past that there was no real risk involved has been overtaken by the new form of PPP arrangements. If there is no transparency which convinces the normal intelligent observer that PPPs give better value for money than funding projects by the traditional manner, rumours will abound that private contractors are getting the better deal.

Regional Airports

4.40. The Committee asked about the importance of Government subsidies to regional airports. It noted the concern that exists *vis-à-vis* European Union competition law and the substantial grant aid given to regional airport managers. In 2002, €24 million was spent on regional airports, of which, €20.5 million was spent on the essential air services programme. There is no threat to this money because it is provided for under EU State aid laws which allow arrangements to fund essential air services.

4.41. The Ryanair decision has no implications for the PSO regime. The cost of the regime has increased quite significantly, the one-way trip subvention arising under the PSO regime can be substantial, ranging in 2003 terms to as high as €278 for Knock Airport, and down to €52 for a one-way trip from Galway. The Department is concerned that the cost of the PSO programme has increased quite dramatically and is examining the best way of obtaining value for money from the programme while at the same time providing for essential services between the regions. An expenditure review of the programme was made in 2003. As a result of that review the PSO arrangement is being considered so as to facilitate operators wanting to use a particular aircraft more intensively. One issue being considered is whether there is any real benefit to be obtained from having to meet certain "red eye" requirements for early morning flights or to inter-line with flights out of the country. The PSO is not used to any great extent by people wishing to get from Knock to Dublin to catch a connecting flight to London. It is used more for regional travel.

4.42. Apart from the PSO arrangements, there are two smaller support programmes for the regional airports. One is a capital grants programme under the NDP, the spend on which was €2.2 million in 2002. That covers essential developments at regional airports like runways and safety. €1.9 million was also given in marketing grants in 2002. That figure increased to €2.2 in 2003. The recent Charleroi decision does not have implications for Government grants to regional airports. The issue for regional airports concerns the way in which they use those grants to attract business.

Balance of Regional Expenditure

4.43. The Committee noted that an evaluation of expenditure under the NDP 2000-2006 shows spending in the greater Dublin area was approximately 150% of what should have been spent at that stage. In the BMW area it was as low as 57%. The Department pointed out that it is working closely with the Department of the Environment, Heritage and Local Government on the implementation of the national spatial strategy. It is true that the spend was lower than desired on roads in the BMW region in the period up to 2002 and greater in the southern and eastern areas. A similar pattern can be seen in public transport. Part of the issue is that a number of large projects in the southern and eastern areas impact on the spend in the national roads programme. These include the Dublin Port tunnel, the south-eastern motorway and the Glen of the Downs motorway. These large projects absorbed a significant part of the total spend. The situation is similar regarding the public transport spend where a large development is taking place at Heuston Station. It is important to note that the kind of developments in infrastructure happening in the south and eastern region and in Heuston Station may have a significant impact, in terms of quality of service, on the BMW region. They will facilitate faster turn around times and more frequent train services.

4.44. Following a request from the Minister the NRA examined spending in the BMW region. A 62% increase in spend on the roads programme in the BMW region was expected in 2004 as compared to 2003. Between the projects already under way and those begun in 2004 there are approximately €750 million worth of projects on roads in the BMW region underway.

Decentralisation

4.45. The Committee asked how the Department's decentralisation programme was progressing. Although the Department is not being fully decentralised from Dublin, the overall programme will have some effects. Approximately 50 staff in the road haulage section are being moved to Loughrea while a small number with the Railway Safety Commission will be moved to Ballinasloe. In addition, the decentralisation programme will impact a number of agencies, including the National Roads Authority, Bus Éireann, the Irish Aviation Authority and the National Safety Council.

4.46. The Committee asked if decentralisation would help the process of integration of the management of transport issues. The Department felt that integration has less to do with where people are located and much more to do with the mindset and the coherent framework policy in place in the Department. It is not a matter of concern that staff are located at different locations as having the right framework and management structure in place. The process of decentralisation offers valuable opportunities to look at the systems in place and streamlining systems and work practices. There are certain opportunities that can be exploited.

5. Adoption of Reports

The Committee noted Vote 32.

Findings and recommendations

The Committee of Public Accounts

Find Specifically that:

1. The change in EU rules on State borrowing has improved the flexibility of the use of public investment in infrastructure projects and has clarified the issue of the transfer of risk between the public and private partners in PPP arrangements.

2. The Department has been unable to adequately respond to fluctuating demands for driving tests leading to an unacceptable waiting time for driving tests. Additional flexibility in the management of capacity to respond to changes in demand for driving tests and a greater commitment to the reduction of waiting lists are required.

3. The roof height design for the Dublin Port Tunnel will not facilitate a small number of super-sized trucks which make up about 1.5% of the total volume of trucks on Irish roads.

4. Remedial upgrade work at the Red Cow roundabout is urgently needed.

5. The revenue from tolling on the M50 may now be outweighed by the economic disadvantages caused by congestion and journey time delays.

6. The introduction of a five year envelope should facilitate smoother project management through an elimination of delays caused by uncertainties over future funding of projects.

And recommends in general that

1. The Department, as a matter of urgency, should bring forward proposals to improve the management of the driver testing service so that the target waiting times for a driving test can be met.

2. The Department and the NRA should report specifically on the value for money obtained from the new PPP arrangements.

3. More transparency on the funding rate of return implicit in the new PPP arrangements is needed to confirm value for money to the taxpayer.

4. The full economic cost should be taken into account before the sponsoring Department finalises the specifications of projects.

Special Report No. 6 - Department of Transport - National Roads Authority Primary Routes Improvement Scheme (15 July 2004)

1 Proceedings of the Committee

1.1. The committee met with Ms J. O'Neill, Secretary General, Department of Transport and Mr M Tobin, Chief Executive, National Roads Authority, together with their respective officials on 15 July 2004.

2 The Facts

The C&AG's special report

2.1. Billions have been spent and committed in recent years on developing the country's infrastructure. This is nowhere more evident than in the development of road networks with particular emphasis on the strategic road corridors linking the main cities. The NRA, was established in 1994 to oversee this programme of road building commencing with a major investment injection of €1.5 billion in the period 1994 to 1999. Towards the end of that programme, the C&AG undertook a value for money examination which focused on establishing if the systems, procedures and practices in place in the NRA were adequate to ensure the national roads development programme was carried out economically, efficiently and effectively. The results of that examination were recorded in a report published in 1999 which was considered by the then Committee of Public Accounts.

2.2. The end of the investment programme coincided with the drawing up of the national development plan which proposed investment of €5.6 billion on national roads improvement works in the period 2000 to 2006. The programme which formed the original proposal by the NRA for inclusion in the plan was based on improving stretches of road identified in the national roads needs study published in 1998. The programme was adjusted following a request from the relevant Minister to accelerate progress and improve the quality of the proposed upgrades. The NRA costed the revamp programme at €7 billion. In mid-2002 the reported estimated cost of completing the national roads improvement programme had jumped to €15.8 billion. Concern was expressed at the apparent startling escalation in costs which is the reason for the report.

2.3. The special report identifies the causes of the reported escalation in the costs of the planned works from €7 billion to €15.8 billion in a two and a half year period. In percentage terms, inflation accounted for 40% of the increase, a quarter of which was due to under-estimation of prices at the beginning of the programme. Some 16% was due to a systematic failure to cost certain elements of the schemes at the planning stage; 20% was due to changes in the scope of projects and new works, with the balance accounted for by large increases in the estimated cost of high profile projects such as the Dublin Port tunnel and the south-eastern section of the M50. The lack of realistic estimates was the main problem and can be put down to the fact that at the time of adoption of the national development plan, cost estimation was not well developed in the NRA. A cost estimation function has been operating in the NRA since 2000. Gradually more meaningful estimates are being compiled, which should contribute to better financial management of the programme from now on.

2.4. The report examines how contractual arrangements can contribute to major cost movements between tender amounts and the ultimate cost of the project. Traditionally, the main instrument for delivery of road improvement works has been the re-measurement contract under which certain key items in the tender are priced in line with notional specified quantities which are later adjusted by reference to materials used and work undertaken. This gives rise to cost uncertainty and, when coupled with the effect of scope changes, price variation clauses and claims, inevitably leads to cost escalation.

2.5. The audit established that, overall, the final cost in these cases averaged out at 42% more than the amount on which tender acceptance was based. This is not just an Irish phenomenon. There was a similar experience in the United Kingdom and they have moved to a different type of contractual arrangement to improve matters. In June 2004, the Minister for Finance announced wide-ranging changes to public sector construction contracting designed to help reduce the scale and scope of cost overruns on projects. It involves achieving greater cost certainty by getting the tenderers to include a fixed price for the identified risks they intend to manage and control. This may result in higher upfront tender prices. However, the idea is that the final cost should be less than under the current contract arrangements. This initiative reflects some of the characteristics of the design and build contracts used by the NRA for some projects where greater cost cuts have certainly been achieved. The report reflects the importance of route selection and the associated cost repercussions arising from archaeological excavations and land acquisition.

2.6. The report also briefly examines the overall management of the roads programme and touches on the relationship between the NRA and the local authorities in delivering the programme, including the changing role of the regional design offices. It also refers to design initiatives geared towards achieving economies and the scope for getting better value for money from professional services provided by engineering consultants on major infrastructural projects. In a recent announcement, the Minister for Finance proposed changes in the current method of procuring these services but the universal experience is that cost escalation on major road projects is a fact of life because of inflation and scope changes.

Departmental Perspective

2.7. The Department welcomed the report from the C&AG and emphasised the need to distinguish between the concerns the C&AG raised about inaccurate or incomplete estimation of the costs of the programme (which raise issues for the forward planning, prioritisation and management of infrastructural programmes of this scale), and the wider but critically important issue of whether the significant amount of money now being spent on the roads improvement programme gives good value for money. The Department considers that these issues are slightly distinct.

2.8. The Department explained the distinction between its role with regard to the national roads programme and the role of the NRA. The Department's role relates to the oversight, management and monitoring of the programme. It has to set the overall policy framework for the programme, ensure the funding is delivered and be satisfied as to the arrangements the NRA has in place for the delivery of the programme. The Department is also responsible for review and ongoing reform. It engages in a number of independent programme evaluations over time to satisfy itself as to how the programme is being managed.

2.9. Investment in the national roads programme is a key priority. Roads account for 96% of passenger traffic and 93% of freight transport. Although only 6% of the total road network is comprised of national primary and secondary roads, these roads carry 46% of total traffic. Investment in the roads programme is at its highest level ever at €1.28 billion in 2004. The impact of this investment is increasingly evident throughout the country.

2.10. A series of strategic policies laid out in the national development plan, the national spatial strategy, by the national competitiveness council and more recently in the enterprise strategy report make clear the importance that is attached to investment in the national roads programme. The question is whether good value for money is obtained from the programme. It is worth noting that significant scope changes were made in the programme from the time of the NDP. A number of additional projects were added and significant inflation in the construction industry took place over that period. The C&AG's findings are broadly in line with the results of other reviews of the programme carried out by or on behalf of the Department.

2.11. With regard to value for money issues, the C&AG's report provides a useful analysis of the factors which resulted in cost increases. The detailed appraisal procedures followed by the NRA indicate that while roads projects cost more than initially anticipated, they represent good value for money, in view of the significant economic and social benefits derived from addressing the deficiencies in our network. Cost-benefit analysis is carried out at various stages as each project progresses through planning so that the impact of cost increases arising from changes to project scope or design can be re-evaluated before irrevocable commitments are made.

2.12. The majority of projects under construction, particularly those being constructed under design and build contracts, are on budget and many are ahead of schedule. Where scheme characteristics are suitable PPP arrangements can be undertaken. These effect risk transfer to the private partners and provide certainty regarding Exchequer funding exposure while also attracting a high level of foreign contractor interest. This is helpful and beneficial to the programme. The Kilcock-Kinnegad PPP project has been recognised as the PPP deal of the year by Project Finance International, and the standard set in that project is being applied throughout the roads PPP programme. More recently, the programme benefits from expert financial advice provided by the National Development Finance Agency, NDFA, which is now consulted by the NRA in respect of all major projects.

2.13. The Fitzpatrick report reviewed the programme in 2002, examined the cost of construction of a two-lane dual carriageway. The cost for that ranged from €1.1 million per kilometre to €7.4 million per kilometre in Finland while the average cost in the United Kingdom was €5.7 million per kilometre. By comparison, the Irish cost per kilometre at that time was approximately €4.5 million. These comparisons suggest that Ireland's cost base is not dramatically out of line with experience in other EU countries. Other local factors, such as the cost of land and labour and construction costs, must be taken into account.

2.14. The Department is strengthening programme management in those areas which are not under the direct control of the NRA. The Minister and the Minister for Finance agreed to establish a multi-annual funding framework for national road investment for the period 2004 to 2008. This provides greater certainty about resources and facilitates more cost-effective planning and implementation of the programme. It provides for total national road development investment of more than €8 billion, of which €6.9 billion is Exchequer funding and €1.1 billion will be invested by the private sector in PPPs, over the period. The NRA was asked to submit a five-year plan to ensure that the resources being made available under the capital envelope are utilised to best effect. The envelope will be underpinned by an agreement between the Department of Transport and the Department of Finance which will incorporate provisions relating, *inter alia*, to the annual funding levels, contractual commitments and reporting and monitoring arrangements. In turn, these provisions will be set out in an agreement between the Department and the NRA. The aim of multi-annual funding is to establish with as much certainty as is possible, given the nature of the complex area, the outputs that can be achieved for a given level of investment. As part of the continuing efforts to support the NRA to improve management of the programme, a major review of arrangements for the implementation of the programme, including cost estimation and control, was completed in 2004.

2.15. The Department has established a cross-cutting team on managing capital expenditure whose role is to develop a common framework for the appraisal, monitoring and evaluation of transport infrastructure and services investment. This is done in full consultation with the NRA and the other transport agencies. In that context, there is a clear definition of the respective roles of the Department and its implementing agencies to strengthen management and accountability arrangements.

2.16. In recent years progress has been made on shortening the timescale for progressing projects through planning stage and as regards the allocation and management of risk on major roads projects. The NRA has developed new forms of procurement and project management. It pioneered a move in the direction of design and build contracts as an alternative method of procurement, which provides for improved efficiency and greater certainty of outturn by passing more risk to contractor. This also lessons the possibility of disharmony between the different bodies involved..

2.17. In the context of a significantly enlarged programme and seeking to enhance value for money, the NRA has concluded that larger contracts are beneficial both in terms of economies of scale and in encouraging stiffer competition through attracting the interest of foreign contractors. The roads PPP programme is delivering deals that are internationally recognised as providing very good value. Some of the factors outside the direct control of the NRA, such as the legislation governing treatment of archaeology on major infrastructure projects, are being addressed. The Department is examining in detail any further changes in the management of the programme needed to strengthen further the capacity of the NRA to deliver agreed outputs on time and within budget with a view to submitting detailed proposals to Government shortly.

NRA Perspective

2.18. To a significant degree, the C&AG's report represents a look back in time, with particular reference to the lead-up to the publication of the NDP in November 1999. The report indicates that developments in the immediate aftermath of the publication of the plan have affected programme costs. It readily acknowledges that steps have been taken by the NRA in the interim, in a range of areas, that have strengthened the cost estimation function.

Such measures aim to ensure a much greater degree of convergence between tender prices and scheme construction outturn costs.

2.19. The days of planning a road on the basis of the shortest route between A and B, if they ever existed, are certainly gone. The challenging nature of the process means that accurate information on even the most basic element of road planning, such as the length of the road to be constructed, cannot be determined and costed until planning is well advanced or even finally determined by An Bord Pleanála. The M3 Clonee-Kells motorway scheme illustrates the point. The road to be replaced is 47 km. long, but the corresponding length of the new route will be 59 km. The situation partly reflects the additional length of road necessitated by bringing the new road further to the east of the Hill of Tara than the existing N3 so as to minimise impacts on cultural heritage. In addition, the new scheme will include the provision of a further 51 km. of associated link roads and side roads at the various interchanges and tie-in points as well as 34 km. of access roads serving individual houses and other property.

2.20. When estimating road scheme costs, it might well be contended that no single figure is the correct estimate. Since its establishment, the NRA has never received the same quotation from two contractors for any road scheme. There can be substantial variations between the highest and lowest amounts tendered by contractors for individual schemes. An internal review of schemes where those bidding are involved in spending between €500,000 and €1 million in putting forward a bid showed that variations have been up to and slightly more than 100% between the lowest and the highest bid with an average variation of 50%. It was an average of 16% when both the highest and lowest bids were excluded. The under-estimation of the NRA programme in 1999 was approximately 15% to 20%.

2.21. The NRA has availed of the expertise of a cost estimation specialist since 2000. When Fitzpatrick Associates produced a report comparing the cost of the tender awards during 2001 and 2002 with the NRA's cost estimates at that time, it found that the gap was 0.15%. NRA officials examined 16 major construction projects which are under way and found the estimated cost of the projects when they were tendered was €2.712 billion against an estimated outturn cost of €2.936 billion.

2.22. The NRA is closely following developments in the UK regarding earlier contractor involvement. In conjunction with the Northern Ireland roads service, it will pilot a target price contract for the N1 between Dundalk and Newry. It is also using this format on a number of other major schemes, such as the N8 projects between Cullahill and Cashel, as well as Cashel and Mitchelstown. The contracts will be awarded on the basis of a target price with a mechanism whereby the client and contractor share in any savings if the project is delivered for a lower sum. If the target price is exceeded, however, penalties will apply to a point where the scheme can cost a predetermined maximum price. The NRA has adopted fixed price contracts for its public private partnership programme schemes, resulting in absolute certainty about the costs to be borne by the Exchequer when contracts are signed.

2.23. The arrangements pursued by the NRA for fees paid to consultants are a modified version of those outlined in circular BC 5/87, issued by the Department of the Environment in 1987. The C&AG recognises that the arrangements do not give unfettered scope for over-elaborate design and provide some scope for negotiation to reduce consultants' costs. The NRA’s multiple framework contract includes significant elements of lump sum payments, rather than being based on a percentage of outturn costs. It is awarding consultancy contracts on a quality and price basis under procedures whereby consultants must bid competitively, quoting lump sums, for each phase of the scheme.

3. The Accountability Issues

3.1. The accountability issues considered by the Committee were:

- Roles of the Department and the NRA
- Management and reporting structures within the NRA
- Consultancy Charges
- Reasons for the Increase in Costs
- Use of PPPs
- Purchase of Land
- Incentives for early completion
- Tendering Procedures
- Acceptance of lowest priced tenders
- Road Signage and Reflectors

4. Examination of the Issues

Roles of the Department and the NRA

4.1. The Committee sought clarification of how the Department's functions mesh with those of the NRA in ensuring value for money and the receipt of tenders for the national roads programme. The Department is responsible for policy in respect of the national roads programme. It sets the policy framework and provides the NRA with funding. It expects the NRA, within the broad parameters of the policy laid out by the Minister, to ensure it delivers a programme which provides good value for money and that it monitors expenditure and accounts directly to the C&AG and the Department in respect of it. An assistant secretary is a member of the board of the authority, which gives a direct link to its operations. The NRA is directly responsible for obtaining value for money in respect of the national roads programme.

4.2. Most of the national roads programme is funded through an EU Operating Programme called the ESIOP and the steering committee is chaired by the Department which also has an oversight role through the programme of the audits of expenditure that take place. There is a reform programme in place for the NRA which recently received a consultancy report which advised it on the way in which it might strengthen the arrangements in place for the delivery of the programme and strengthen its role in that context. When the Department was formed, an additional allocation, by way of Supplementary Estimate, of €125 million was made to the NRA. This was done in the context of expenditure on the programme increasing speedily over a period and a concern at the significant escalation over that period in construction cost inflation which at that stage was running at 12% per annum.

4.3. The Committee asked how the relationship between the Department and the NRA differed from the relationship between the Department and semi state bodies like CIE. The Department is examining the different relationships it has with State agencies to determine the most appropriate common framework to have in place with those agencies, allowing that there are differences in their structures. For instance, CIE is a commercial State agency while the NRA is established as an authority. There are a variety of ways in which the relationship with the NRA is managed. The Department is the managing authority for the ESIOP. In that context it receives twice-yearly reports from the monitoring committee and has an annual review process. It is represented on its board and on a number of its sub-committees.

4.4. Because of the strong desire to significantly improve the road infrastructure, the mandate of the NRA during this period was to begin spending and get projects started. It quickly became apparent, just before the Department was established, that the cost was significantly greater than had been anticipated (€10 billion). It is reasonable to ask how this has happened. Around 16 projects were added to the programme as published in the NDP - and there was a significant level of upgrading. As projects progressed there were significant changes in their scope. Inflation was considerably higher and there was an issue, with which the NRA has since dealt, about the limitations in its ability to cost certain elements of the programme.

4.5. From the Department's point of view, it is important to have an indicative cost early on and some clarity about what to allocate to the programme. If a certain amount of money is set aside, the likely return on that investment should be known. Around the period of the 1999 value for money report and the early part of the NDP, there was a significant lack of expertise to scope projects. At preliminary design stage it was extremely difficult. It is vital to obtain as much clarity as possible about the price of a project at pre-tender and tender stage. The real test of whether there is value for money or efficiency in project delivery is the comparison between the out-turn price and the agreed tender price. In that context, unless one has handed over the management of the risk of price to the contractor, one will always need to allow for price variation in line with construction inflation.

4.6. The Department's first concern is to satisfy itself that the NRA is managing both the tender process and the outturn process effectively. There is a greater level of satisfaction that the new arrangements, including the arrangements for benchmarking the costs at various stages, are giving more clarity and certainty. Monitoring arrangements are put in place on the costs of all major projects. This will show in respect of the NRA an improvement in terms of the comparison between outturn and tender prices.

The Department's Control Function

4.7. Since the formation of the Department, tight control has been applied to the NRA budgets and overruns have ceased. The Department is more satisfied at the extent to which the NRA gets value for money in its spend. There has been a move away from the traditional form of public procurement contract in the civil engineering sector, because of the strengthening of the contractual arrangements put in place, to a scenario where much greater use is made of design build contracts. The Department is particularly satisfied with the way in which the PPP programme is developing. There has been a great deal of learning. The NRA has changed from being quite a small agency with a relatively small budget to managing a much larger budget, tightly, to obtain value for money.

4.8. The Committee queried the control arrangements, apart from the Department's general position, regarding the roads programme. Oversight arrangements is achieved through the stewardship of the ESIOP which is chaired by the assistant secretary of the Department, and includes a structured programme of audit of the roads programme. It is a series of cascading audits from transaction level up to programme audit which maintains tight oversight of what is happening.

4.9. The Committee sought the Department's view of a reasonable cost for 1 kilometre of carriageway. The cost per kilometre of carriageway or motorway will vary depending on the circumstances. For instance, on the Dundalk western bypass more bridges are involved which can make a difference to the cost. The benchmark cost per kilometre of motorway is €10.7 million. The cost per kilometre of dual carriageway is €8 million but these amounts can vary. In the early days, there was a large gap between what it was originally thought the roads programme might cost and what it actually cost. The Committee asked about the trend in costs for road building since 2001. The original estimated cost of the programme under the NDP was €6 billion, at 1999 prices. The figure is €15.8 billion at 2002 prices. While that sounds dramatic, 31% of the increase resulted from exceptional items or add-ons to the programme. The programme delivered is not the same as that originally set out in the NDP. Almost 49% of the increase was price related, comprising a combination of inflation in construction costs or underestimation initially. The balance was made up of refinements to the schemes. Construction cost inflation was running at an average of 12% and there was a rapid increase in land costs due, in part, to a deal done with the IFA. Construction cost inflation has moderated to approximately 5% per annum. The inflator is now broadly in line with general inflation.

4.10. The Department has learned from the experience of the roll-out of the national roads programme that there is an upper limit on the amount of money that can be pumped into the roads construction sector at one time. If too much is put in at any one time, it will become inflated. There needs to be a steady flow of money. The move to a five year financial envelope is extremely important in this context. As the NRA was trying to manage the roads programme with no certainty about the following year's budget, there was a stop-start effect, whereby it would start a project going and not have enough money to progress to the next phase. A bid would then come in which would put it over the limit. The advantage of the financial envelope is that we can give the authority a clear idea of the amount that it will be allocated for the next five years and also allow for some movement between years. If there is a slight overrun one year and an underspend the next, it can be managed within the envelope. This lends itself to much tighter planning.

4.11. The other significant change has been in the approach to contracts. The State bore the risk in the traditional contract. As soon as site conditions changed, a developer would seek an adjustment to the contract. Moving towards a design build contract is extremely important as it requires the developer to take more of the risk in completing the project on time. There is evidence of much tighter controls. For historical reasons, there were different arrangements for monitoring the public transport and roads sections of the Department. Now there is a team looking at putting a cross-Department system in place to look at the choices made in spending money between these areas and a consistent framework for evaluation.

4.12. The Committee noted that there was a tradition of breaking up road contracts into phases, the net effect of which was that big European players did not tender and asked if this practice had changed. One of the big attractions of the PPP programme is that the scale of projects based is sufficient to introduce a wide range of national and international interests, which results in bids being very competitive.

4.13. There is an issue of balance as the arrangements are complex involving procedures involving compulsory purchase, environmental factors and other issues which have to be addressed. One needs the projects to be big enough to be attractive to a wide range of construction interests but not so big as to be unmanageable. In addition to the work done on managing costs, other policy matters for the Department are mechanisms to lessen the time lag between taking a decision to construct and getting started.

Management and reporting structures within the NRA

4.14. The Committee considered the management structure within the NRA. The NRA has had three external consultants review its operation and the management structure. The structure was recommended following a severe review by Andersen in 1998. More recently, there is a report from PricewaterhouseCoopers. This involved the corporate management structure, namely, project and local authority engineers, roads design office and consultant engineers. The NRA informed the Committee that on the project management side, the NRA is run mainly by people with engineering qualifications. The Committee was of the opinion that the senior financial people in the organisation are not visible and that more financial expertise was needed as part of the executive team. It also was critical of the coverage of financial and governance issues in the NRA's annual report, although a separate set of financial statements is produced. The Committee noted that the NRA has responded well to environment and heritage issues and felt it should take the same proactive approach to financial management.

Consultancy Charges

4.15. The Committee noted that under the old arrangements, consultancy fees for road projects were 4% of the final cost of the project. In the roads plan, the consultants would get €635 million from the overall development of the plan. The NRA is generally required to comply with the requirements of departmental circulars. It has long since stopped paying a percentage based on outturn. Before the most recent move, it had fixed lump sum payments which were not affected by subsequent changes in the value of the work. Some 35% of the total payment was paid for the consultants' initial report. The next 35% phase brought the scheme to the point of tender. That 70% was calculated on the basis of a tender price and did not change regardless of the outturn. It is a long-standing arrangement that the only element of the 4% fee was the remaining 30%, which was incurred during the supervision phase. A great deal of work is associated with supervision. If the scope of the scheme changed, there were additional duties for the consultants. Less than one third of the fee was moveable by reference to outturn cost. The Committee asked about the effect of the C&AG's report on bringing forward new arrangements for consultants' fees. The NRA acknowledges the value of the C&AG's report. The NRA has been subject to a variety of reports in the context of the various operational programmes including the earlier value for money report by the C&AG in 1999. External consultants examined the way in which it operates its management structures on three occasions. All of these reports have been acted on in developing its business processes.

4.16. The Committee asked if the increase in cost from €7 billion to €16 billion within two years reflected a lack of expertise within the NRA. The NRA noted that cost estimation is not an exact science. The type of contract used by public sector bodies, a re-measureable contract, was prescribed by the Department of Finance. The C&AG made the point that the contract, of its nature, will lead to the final cost of the project exceeding the bid price. A review has found that over a range of schemes the excess was approximately 42%, which is not unduly different to the experience of NRA counterparts in the United Kingdom where the figure was approximately 40%. The Department of Finance took the view that there was some validity in

State or public sector bodies retaining some of the risks inherent in contracting on the basis that if risks are realised they are paid for and if they are not no cost is incurred. With a design and build scheme or even a fixed-price contract, a contractor must account for perceived risks when pricing a project. Allowance is made whether or not a risk emerges. A contractor may make over-provision for risk in which case the State as client ends up paying more or a contractor may under-provide for risk with the result that on the next occasion that a project is put to tender there is one less bidder and less competition. While design and build and fixed-price contracts have a major advantage in terms of minimising the drift between tender price and outturn price, allowance is being made in the tender mechanism for risks. The State as client pays for risks whether or not they are realised. It is still unproven whether there is a net gain over the life of a programme to the State although there is a major gain in having certainty of outturn costs.

4.17. The Committee asked if the Department of Finance was satisfied with the level of expenditure in view of the fact that it is responsible for delivering the national development plan and taking account of the massive inflation in road building costs. The Department of Finance expressed concern about what has emerged given that the roads programme is a pivotal part of the national development plan. Its cost will be considerably in excess of what was initially estimated for the reasons set out in the C&AG's report and the Fitzpatrick report which the Department of Finance commissioned. The Fitzpatrick report, published in August 2002, was commissioned on foot of indications that this level of overrun was arising in the roads programme. The report was compiled with the co-operation of the Department of Transport and the National Roads Authority. On the basis of the report, there have been improvements such as the multi-annual capital envelopes that the Minister put in place which provide relative certainty of financial resources going forward. This certainty is very important to the management of roads and other capital programmes. The intention was to move towards circumstances in which there is greater certainty as to outturn costs of projects as opposed to the circumstances which have emerged on the basis of the conventional form of procurement.

Reasons for the Increase in Costs

4.18. The Committee noted that the increases in costs were significantly greater than could be explained by inflation and that they were attributed to a combination of inaccurate original estimates and the introduction of major changes in scope of quality at the design stage of road programmes. When the NRA was consulted during the preparation of the NDP and asked for proposals for inclusion of a roads programme, they consulted the national roads needs study which had been published in 1998. The elements that the needs study suggested ought to be completed in the period to 2004 were priced by them and put forward. A different plan emerged which reflected almost certainly the other influences which came to bear on the Government as well as its strategic concerns. Mainly, this involved the Government's decision to opt for a higher standard of road on five major routes. The Government decision radically changed the scope of the programme that had been put forward and also had a major influence on its cost.

4.19. At that time there was a deficiency in the NRA’s ability to estimate. That resulted in a 16% increase over the €7 billion value of the programme in 1999. In most instances there was only a vague notion of wanting a road from A to B. When the contracting industry set about pricing those same projects, knowing exactly where they were going and the lengths of road to be built, they varied by over 100%. In the national roads needs study there were certain health warnings on the estimates, which the NRA failed to put into the NDP.

4.20. The Committee noted that the deficiency in an ability to estimate had been noted in the 1999 value for money report, before the NDP was published. It outlines the same problems that were addressed in the Fitzpatrick report commissioned in 2002 and is repeated in the special report, which gives rise to questions as to whether lessons have been learned and corrective action taken. The NRA replied that it took on board a cost estimation specialist in 2000 partly in response to the 1999 value for money report. Fitzpatrick Associates examined all of the contract awards for the years 2001 and 2002 and compared them with the in-house estimates and the variance was 0.15%. A recent review of 16 major projects currently running indicated the estimates are out by 2%, in a range of schemes valued in total at €2.7 billion.

4.21. The Committee asked who should take responsibility for the increase in costs from €5.6 billion and €16.4 billion. There is a considerable variance between what was originally envisaged, on which decisions were made and State money was allocated, and what it will eventually cost the Irish taxpayer. The special report referred to the construction inflation costs which are significantly higher than average inflation being responsible for 40% of the overrun. The Committee noted that there is an additional cost in terms of what the Government asked the NRA to do in the NDP but felt that some 45% must be due to internal factors in terms of how the NRA managed its budget and how it constantly looked for more in terms of State expenditure. The NRA disputed this analysis. It argued that since it had under-costed by €1.4 billion and since that attracted inflation, the value for the end of 1999 would amount to €9.3 billion. The Waterford motorway and additional project increased the programme value to €10.478 billion at the end of 1999.

Use of PPPs

4.22. The Committee asked the criteria that were applied in deciding whether the NRA will fund a project directly from the public capital programme or through a PPP. The NRA believes there is limited scope to fund projects through the PPP mechanism, as generally there are not very high traffic volumes on Irish roads, which is a prerequisite for any private sector investment. Therefore the tendency is high volume routes and high priority locations. It would be a serious mistake to undertake projects simply because they are capable of being delivered through a PPP scheme, unless they are of high priority. The system will most likely rule out low-priority projects done on the PPPs.

4.23. It is NRA's policy that all roads, tunnels and bridges built through the PPPs will have a hard toll levied. Private sector investment will be remunerated in that way. The toll is not negotiated at the same time as the PPP. The NRA has sought to spread the tolls geographically and keep them at an affordable level. This reduces the extent of private sector contribution. It contributes on the basis of cashflow generated by the toll. It is not a case that the PPPs can build a road and the NRA does not mind if they charge a high toll. The rate for a motor car on the Drogheda bypass is €1.60. The Fermoy bypass has an equivalent toll. The NRA are trying to keep it at a reasonable level so as not to discourage usage.

4.24. The Committee noted that the only way to spread tolls geographically is if the PPPs are spread geographically. The NRA has attempted to identify potential toll schemes and to include various geographical areas throughout the country. The Committee asked how toll negotiations were structured, ie whether a base amount is paid to the company per annum or whether it is based, in all cases, on volume. The deals negotiated involved making construction subsidy payments. The successful consortium bids on a set and known schedule of toll rates which are subject to variation by reference to the consumer price index, CPI, among other matters. The consortium knows the value of the charges. It makes certain estimates of traffic flow and resulting cashflow. The NRA requests it to bid on the basis of having that toll income for its use. It asks for its requirements, if any, by way of subsidies from the State. These can be given during constructional or operational phases or a combination of both. The subsidies are not offset against the tolls. The consortium makes a judgment that the toll income will sustain its investment. It has an idea of the total bill it must pay. In so far as there will be a gap, there is the option to fill it with construction subsidy payments, annual subsidy payments or a combination of both.

4.25. The Committee sought further information about the point at which the private company has financed, designed and constructed the project and is now managing it. A private company will receive annual subventions from the NRA in addition to the income from the toll for a limited number of years. It is within the NRA's framework of policy to pay annual tranches of money to PPP companies for the ongoing management of the roads, tunnels or bridges in addition to them levying tolls. Where the private sector does not view the toll income to be sufficient to allow it fully meet the costs of construction and ongoing maintenance and have a residual life of ten years at the end of its 30-year concession, the NRA asks the consortium what it requires to carry out the work. The options are subsidies during construction or during operation or a mixture of both. The NRA uses economic advisers to evaluate bids in terms of what they will cost the public purse and which of the bids is best.

4.26. The Committee asked about the NRA's current policy on the parameters of tolls. Tolls have been pre-set. The toll scheme was put in the public domain and views were obtained from the public. It is not negotiated as part of the bid. In cases where traffic volume is less, the balance is not made up by annual subsidies. Any payments the public sector must make are determined as part of the bid process. The negotiation points are on the amount of money. If the private sector consortium does not believe it can leverage sufficient capital or annual current spend to maintain it from the toll income, the NRA asks it, as part of the bidding process, to date its subsidy for construction, operation, or a mix of both that it requires. When the deal is done, it receives the payments, builds the road, operates it for 30 years and hands it back with a ten year residual life. It is a final deal.

Purchase of Land

4.27. The Committee asked if the NRA had a rule of thumb for paying for agricultural land or land with development potential. There is mechanism in law for determining the face value of land. However, there are also issues such as injurious affection, disturbance and severance. Arising from the arrangement between the NRA and the IFA, there is a premium payment for where non-developmental land supplements the assessed value of the land.

4.28. The Committee inquired if the figures that the NRA allows for land purchases coming out in accordance with the estimate. In its input to the NDP, land would have constituted 9% to 10% of project costs. Now, that figure runs at approximately 14%. The result is that, in the meantime, the cost of payments for properties and land has gone up by approximately 65%. The impact of the IFA deal is hard to gauge because the NRA has not finalised any deals through the arbitration reconciliation mechanism under that system. The level of increase is beyond anything that could be attributed to the straightforward IFA deal.

4.29. The Committee noted that, with dual carriageways and motorways, the landbank required for the cross-section has been reduced from 36 metres to 26 metres and asked about the potential saving to the Exchequer through this reduction. While it might be argued that it is a reduction of a quarter of the land used, it is not that simple. The base land cost element of the compensation package is reduced. In terms of compensation and agricultural holdings, the landowner is compensated for being left with less land. Other issues then arise, such as, the building of smaller bridges. The base land value is only a small portion of the overall compensation package. Additional items regarding severance, for example, will depend very much on whether the road happens to be right along the edge of someone's property or right through the middle of it. When a different set of values come into play, in terms of construction cost, it can take 20% off the build cost of a road, including allowing for bridges.

4.30. Traditionally, when dual carriageways were built a central median of eight or nine metres was left. When that median width was determined, it was considered to be an alternative to a safety barrier. The expectation was that a motorist could stop within that width of median and come through reasonably safely without striking anything. With the passage of time, and considering international practice, the median deemed necessary is now about 15 metres, if one is not installing safety barriers.

4.31. There are mixed views on the matter of whether land use is cutting off long-term options for further expansion of the network. At present, if the NRA or local authorities approach An Bord Pleanála with a compulsory purchase order on a motorway scheme or a road project, unless they can defend the need for the land take in the context of something like a 20-year horizon, it will not be successful. The current belief is that the road types being delivered will cater for saturation traffic.

4.32. The Committee noted that the inflation rates between 1999 and 2001 were 9%, 10% and 12% and asked how the inflation rate had dropped to 5% so quickly. The construction sector had not had the opportunity to gear itself up fast enough to absorb the increased capacity and before many foreign contractors started to become interested in the available contracts. In this context prices began to rise quickly. Inflation in the economy, generally, was high at that time and particularly in the construction sector. The spend on the programme was observed to be way ahead of what had originally been forecasted and the Department did not have the money available for the coming year. They had no certainty because it was before the time of multiannual forecasts. Therefore, they could not forecast, with any certainty, to the NRA the projects that could start the following year. This was not ideal from the NRA's point of view because it meant that there was a stop-start approach to development.

4.33. The NRA had to slow down the programme that it had ramped up a year or two earlier. The consequence was that suddenly there was not as much construction business available, with the result that prices began to fall as contractors competed for the business that was available. The decision was taken by the Government in light of the serious shortfall being experienced in our transport infrastructure, to get spend under way quickly and play catch-up with the problems we had. It was certainly in the interests of all to slow down and get a steady level of spend. One of the major advantages of the multiannual approach is that it allows the Department to give the NRA a degree of certainty about the level of spend it can expect in the future. It allows it to plan on that basis and enables the construction industry to have some sense of what is coming down the tracks in terms of spend.

Incentives for early completion

4.34. The Committee noted that a lot of current projects are either on or ahead of schedule and inquired if it bore any relation to the sudden change of Departments in 2002. The new multiannual budget framework has been of significant benefit to the NRA. Under the old regime, bodies like the NRA would not know until perhaps November their budget for the following year. That was no way to operate a major infrastructural programme and the NRA can now see forward for five years.

4.35. The Committee asked if the NRA was operating a system of incentive for early or below-cost completion. The NRA is considering such incentives and an immediate example is the road between Dundalk and Newry. That project involves a target price contract whereby the value of the work is calculated and a bonus is paid to the contractor if the work can be completed at a cheaper price. The bonus absorbs part of the gap between the estimated and actual prices. Conversely, if the project cost exceeds the estimate, the payment scales reduce progressively until the point at which no more is paid.

Tendering Procedures

4.36. The Committee noted that while the NRA has delivered a good product in recent years there is a serious and continuing concern about the cost of putting its projects in place. When problems arise at local level, the local authorities are quick to blame the NRA. It is quite difficult to obtain information and there is no routine flow of information from the NRA to the Houses in the manner of such information flow from Departments. As an agency, the NRA is not subject to the scrutiny of parliamentary questions to which Departments must subscribe so that information route is not available. The Committee felt that the NRA should improve its routine dispersal of information. There should be a liaison officer to communicate with Deputies and Senators, for example, from whom an instant response can be obtained. That would solve many of the perception problems with which the NRA suffers.

4.37. The Committee sought an explanation of the circumstances in which the lowest tender would not secure a contract and the considerations of the NRA in awarding contracts. The lowest bidder would not secure a contract if it were adjudicated that the relevant contractor did not possess the requisite expertise and so on to do the work. As a general principle, a competent contractor who submits the lowest bid will secure the contract.

4.38. The Committee asked how the Department of Finance guidelines on considerations of overall economic advantage were taken into account. The NRA sets out the basic ground rules for the bid process, one element of which is that contractors must demonstrate their ability to do the work. Once that ability is demonstrated, EU legislation stipulates that the lowest bidder must get the work. A grey area is the matter of the assessment that is made regarding a bidder's ability to undertake a contract. In a situation where all bidders have been established as competent, the lowest bid will secure the contract.

Acceptance of lowest priced tenders

4.39. Complaints were made some years ago that contracts were not being awarded in an open and transparent manner. The NRA agreed rules with the European Commission, one of which was an absolute prohibition on zero rating of any item in the bill. The instructions to tenderers that a zero rate inserted against any item, no matter how trivial, will result in elimination from the competition. Zero rating refers to the price per unit. In the case of the Knock by-pass contract, the instructions to tenderers stated explicitly that a zero includes a blank, "nil" or stroke but, the lowest priced contractor did not put any cost for two items and was therefore eliminated and the contract was awarded to the second lowest bidder in 2000. The disgruntled tenderer objected and the NRA reviewed the decision and found it to be correct. The bidder then initiated court proceedings. One of the tenderer's arguments was that the zero rated items were of so little consequence that they should have been ignored - the *de minimis* argument - but this was rejected by the judge. The contractor's second argument was that Mayo County Council had taken other factors into account when deciding who would get the job. The judge also dismissed that argument. However, he found that there had been some adjustments to the method of measurement and the specification which would have made it difficult for the contractor to price the job. No other contractor had this difficulty. The judge agreed there was ambiguity in the background documents sufficient to forgive the zero rating, and it should have been forgiven.

4.40. The Committee asked, whether against the background of these events, it was becoming increasingly difficult to accept any tender other than the lowest. It is subject to compliance with rules. The projects with which the NRA deals are funded by taxpayers' money. Subject to having a competent contractor, it seeks the best possible price. In the past there were disagreements about the manner of dealing with issues where certain items were not priced and it was felt the contractor was pricing for elsewhere. The European Commission agrees with this process, the courts deem it acceptable. One might wonder why minor items in a contract might affect an award. However, the certainty these terms bring is worthwhile and the courts have accepted it as the proper manner in which to proceed. In this instance, the courts made a circuitous judgment that even though a price was not submitted perhaps it was not caught by the normal route.

4.41. If a tender is deemed abnormally low, the NRA is obliged by European directives not to dismiss it immediately but to seek explanations. They have indicated to contractors that if their prices are a certain percentage below the mean figure an inquiry will be triggered automatically. The Committee noted that the NRA gets a huge range of prices. For example, there was a wide spread of tenders (between €119 million and €173 million) for the Ennis bypass project finally awarded to a Turkish company. In a recent group of design build contracts, the spread was 100%.

Road Signage and Reflectors

4.42. The Committee noted that good work is being done providing pedestrian islands and nibs on roads approaching villages but it is not compulsory to have reflectors on such safety measures. Spending billions of euros without addressing these concerns attracts criticism. Almost all 32 pedestrian fatalities three years ago happened at the edge of villages and towns because the areas where drivers were meant to slow down were badly-lit.

4.43. The Committee also asked why forward warning signs are badly positioned and are regularly demolished. It felt that the suppliers should be able to make signs more durable and the NRA should situate them in better places. The NRA noted that two contractors are being appointed to maintain traffic calming sites which will include, among other things, regularly painting the surrounds.

5. Adoption of Reports

The Committee adopted Special Report 6.

Findings and recommendations

The Committee of Public Accounts

finds Specifically that:

1. There was a significant increase from €7 billion to €16 billion in the cost of the Roads Programme in the early years of the NDP. This increase can be attributed to a considerable expansion in the scope and the number of the projects involved, a high rate of construction inflation and some earlier deficiency in cost estimation prior to 2000.

2. Construction price inflation has reduced to normal levels.

3. The use of new types of contracts is providing greater price certainty between the tender and outturn stages. There is greater alignment between funding and physical output.

4. The NRA has advanced significantly on its situation four or five years ago and has made improvements incrementally. The establishment of the cost estimation function, and the expertise that has come with it are showing results. Contracting procedures have improved since the Minister for Finance announced different ways of contracting.

5. Many road construction contracts are being completed on or ahead of schedule and within budget.

and recommends in general that

1. There is a need for a better capacity to produce more accurate cost forecasts for the Roads Programme. The Departments of Finance and Transport and the NRA should bring forward specific proposals to improve their estimating capabilities for the next national development plan. The Committee would like to be kept informed of the actions taken on this recommendation.

2. The Department of Finance should keep the impact of the move to different contracting arrangements for both contractors and consultants under review and should commission an evaluation of the effect of the new arrangements on the overall costs of major road developments.

3. The Department of Transport should develop suitable performance indicators similar to those used in other countries so as to enable the evaluation indicators to take account of all the costs and benefits involved in the Road Programme.

4. In the context of the new multi-annual budgeting arrangements, the Department of Transport should increase its ex-ante evaluation activities of the Roads Programme, including active measures to control cost inflation, and consider greater use of the expenditure review initiative to inform its policy formulation in this area.

5. The NRA should improve its reporting on governance issues in its annual report. The NRA should improve its dissemination of performance information to members of the Oireachtas and appoint a senior manager as a liaison officer for this purpose.

6. The NRA should take a more proactive approach to financial management by having more people with financial expertise as part of their management team.

7. The Committee supports the attempts to spread tolling geographically so that no region is disadvantaged by a high number of tolls. PPP contracts should include a buy-out clause, where it is appropriate, to protect the interests of the tax-payer.

8. The Department of Finance should consider how effective parliamentary oversight of PPPs can best be secured and report on this to the Committee of Public Accounts.

Appendix

Completed schemes

(i) Conventional contracts

(ii) Design and build contracts

National Roads Authority - Some Completed Schemes 2000 to 2003[a]

Year	Scheme	Construction Tender Price	Construction Tender Outturn	Land and Other Costs	Total Scheme Cost	Original Scheme Estimate
		€	€	€	€	€
Conventional Contracts						
2000	Dunleer/Dundalk and Ardee Link	75,341,223	97,248,541	36,990,259	134,238,800	100,330,000
	Cavan Bypass	15,068,110	23,934,218	8,738,288	32,672,506	17,039,884
2001	Patrickswell/Limerick	44,565,102	59,794,188	25,504,051	85,298,239	49,500,000
	Nenagh Bypass	18,127,556	31,793,001	11,117,257	42,910,258	21,590,000
	Castleisland/Ballycarty	13,502,930	21,156,012	10,358,709	31,514,721	21,590,000
	Beary's Cross (Limerick)	4,222,000	4,301,000	1,652,915	5,953,915	6,477,000
	Mullingar/McNeads	9,113,273	12,287,250	2,398,396	14,685,646	22,225,000
	N15 Clar-Barnesmore	14,928,353	20,341,911	7,901,955	28,243,866	14,110,000
	Croom Bypass	10,991,000	20,074,250	6,116,000	26,190,250	10,370,000
2002	Camaross	15,153,325	21,138,684	5,046,427	26,185,111	14,224,000
	Piltown/Fiddown	16,608,791	25,037,791	6,817,997	31,855,788	16,002,000
	Newmarket-on-Fergus 1	20,888,000	28,460,000	34,082,300	143,555,000	85,725,000
	Hurlers Cross 2	60,845,700	81,012,700			
	N22 Bealagrellagh/Gortalea	4,891,000	6,700,000	1,725,000	8,425,000	6,800,000
2003	Drogheda Bypass	150,367,867	199,813,793	44,207,800	244,021,593	112,500,000
Totals		**474,614,230**	**653,093,339**	**202,657,354**	**855,750,693**	**498,482,884**

Source: *National Roads Authority.*

Notes: [a] *The original scheme estimates were all compiled at different times. All were prior to the appointment of the Cost Estimation Manager in 2000.*

Analysis by the Comptroller and Auditor General (National Roads Improvement Programme paras. 3.6 and 3.7) indicated that the average uplift on final outturn for construction on conventional contracts was 42% of the tender price. The average cost increases were

Scope changes/variations	*21%*
Price variation	*14%*
Claims	*7%*

National Roads Authority - Some Completed Schemes 2000 to 2003[a]

Year	Scheme	Construction Tender Price	Construction Tender Outturn	Land and Other Costs	Total Scheme Cost	Original Scheme Estimate
		€	€	€	€	€
Design and Build Contracts						
2000	Moone/Timolin	13,482,485	13,995,938	6,496,825	20,492,763	14,033,000
2001	Kilmacthomas	19,769,175	21,838,178	6,800,000	28,638,178	19,431,000
2002	Youghal	25,298,048	30,463,934	13,036,066	43,500,000	10,668,000
	Knock/Claremorris 2	24,069,902	27,869,902	8,174,479	36,044,381	19,553,667
Totals		**82,619,610**	**94,167,952**	**34,507,370**	**128,675,322**	**63,685,667**

Source: *National Roads Authority.*

Notes: [a] *The original scheme estimates were all compiled at different times. All were prior to the appointment of the Cost Estimation Manager in 2000.*

Summary.

The totals, for both conventional and design and build contracts shown above is:

Total Scheme Cost	Original Scheme Estimate
€ 984,426,015	**€ 562,168,551**