

Chapter 8 Department of the Environment, Heritage and Local Government

8.1 Electronic Voting and Vote Counting

Background

The Department of the Environment, Heritage and Local Government is responsible for the various legislative codes dealing with the registration of electors and the conduct of elections and referendums. This involves an ongoing review of electoral law, the provision of information and advice to registration authorities, returning officers and the general public together with the publication of election results.

In the exercise of its responsibilities in this regard, the Department took the lead role in the planning, procurement, testing and deployment phases of implementing Government policy on electronic voting.

The scope of the electronic voting and vote counting project as postulated by the Department was to replace the existing manual voting and counting processes with a solution which met the following objectives at an acceptable cost

- Simple for public to use
- Easy for electoral staff to use
- Maintains integrity in the electoral process
- Count software which applies the count rules more accurately
- Improves efficiency of electoral administration
- Reliable and robust technology suitable for Irish electoral conditions
- Minimum maintenance pre-election, at election and post-election
- Provides early results after polling has concluded
- Supports a positive image of the country in the use of information technology.

The electoral system in Ireland, Proportional Representation by means of the single transferable vote (PR/STV), is in use in three other jurisdictions worldwide – Malta for national elections and limited use in Northern Ireland and Tasmania. None of these used electronic voting when it was first considered here in 1998.

Research undertaken by the Department indicates that electronic voting is in use in a number of countries – some to a limited extent – viz. Belgium, Brazil, Canada, Germany, India, the Netherlands, the USA and Venezuela.

Audit Objective

The audit objective was to examine

- The administrative planning for the introduction of electronic voting and vote counting, including adherence to capital appraisal guidelines and the robustness of the cost benefit analysis
- The scope and nature of the testing/piloting undertaken
- Management of the procurement of the hardware and software
- Costs associated with the introduction of electronic voting.

Schedule of Key Events

November 1998 – the Department of the Environment, Heritage and Local Government invited companies with products which would facilitate electronic voting and vote counting in PR/STV electoral systems to furnish details of these products

May 1999 – the Local Elections (Disclosure of Donations and Expenditure) Act 1999, included a provision that ballot papers from the 1999 local election could be used for research into the use of electronic methods of vote recording and counting

February 2000 – the Government approved, in principle the introduction of direct vote recording and the drafting of enabling legislation, with a view to introducing electronic voting and vote counting at the 2004 European and Local Elections

June 2000 – tender notice issued for procurement of suitable hardware and software system

December 2000 – the Government noted the proposal to begin testing the chosen system proposed by Nedap/Powervote

August 2001 – Six voting machines were purchased for testing purposes

November 2001 – The Electoral (Amendment) Act 2001 provided the statutory authority for the introduction of electronic voting and vote counting at a Dáil Election

November 2001 – 600 voting machines were ordered for use in three constituencies at the 2002 General Election

April 2002 – Statutory instruments approving the use of electronic voting at a Dáil Election in three constituencies – Dublin North, Dublin West and Meath were signed

June 2002 – a further 400 voting machines were ordered for use in four more constituencies at the Second Nice Treaty Referendum in October 2002

March 2003 – 6,000 more voting machines were ordered for use countrywide at Local and European Elections in 2004

1 March 2004 – Commission on Electronic Voting established to report on the secrecy and accuracy of the chosen system for use in the June 2004 Elections

29 April 2004 – Interim report of Commission could not recommend proceeding with the introduction of electronic voting for the June 2004 elections

Administrative Planning

Research

The Department of the Environment, Heritage and Local Government in November 1998 invited companies who had suitable products which would facilitate electronic voting and vote counting at elections, using the PR/STV electoral system, to furnish details of their products to the Department on or before 31 December 1998.

Five companies responded with products which were capable of facilitating direct vote recording and vote counting. One such product was viewed in operation at elections in Cologne (Germany) and in the Netherlands.

Departmental officials visited the UK, the Netherlands, Germany and the USA during their consideration of the project.

The Department indicated that it had taken steps to test historical data on a number of machines supplied for preliminary testing, demonstrate them in operation to the key players in the process including the main political parties and pilot use by 165 electors at a bye-election in 1999.

The Local Government Computer Services Board (LGCSB) and returning officers were involved with the Department at the testing and the tender preparation and evaluation stages of the project.

Business Planning

Department of Finance Guidelines

The Department of Finance produced in 1994 Guidelines for the Appraisal and Management of Capital Expenditure Proposals in the Public Sector to assist public sector managers dealing with capital projects. While it is not a detailed planning and cost control handbook, it sets out the main steps which should be followed in evaluating and managing capital expenditure projects, considers the major issues of principle involved, and describes the principal methods of appraisal. It reiterates the principle that the systematic appraisal and professional management of all capital projects helps to ensure that the best choices are made and that the best value for money is obtained.

It contends that it is not enough to be satisfied that investment is justified but that it is also necessary to ensure that it produces its planned benefits at minimum costs. Cost includes the ongoing current costs generated by the use of a capital asset, as well as the initial capital cost.

The Business Case

The business case for the project, which was set out in a Departmental report in December 1999, pointed to the desirability of providing a higher level of service for voters and the public in the conduct of polls and counts. Other positive considerations were the possibility of long-term savings and flexibility if alternatives to voting at polling stations were introduced in the future. In relation to costs and savings, the report gave broad indications only at that stage, as no actual tenders were available at that time.

The report indicated that the cost of holding an election was increasing – about €2.9 million (excluding free postage and returning officer postage) based on costs incurred at the 1997 general election. It was

estimated that the cost of counting was approximately €1.4 million. More specifically the cost of the count in the Dublin area was €500,000 approximately and the cost of purchasing equipment for this area would be about €2.5 million. Payback on the expenditure would require 8 polls and perhaps 10 polls in areas outside Dublin, as there would still be expenditure on the count process.

It suggested that the cost of election counts would increase faster than inflation due to the tendency to hold elections on Fridays (and maybe on Saturdays and Sundays) and a demand for higher fees – some returning officers had indicated a resistance of some staff to do election work due to level of fees.

The report pointed to other savings expected to arise on equipment used at polling day e.g. polling booths, ballot boxes, stamping instruments, ballot papers and other stationery as well as the hidden cost of storage of equipment between elections, preparation, dispatch and return of equipment to the Government Supplies Agency before and after elections. In the context of costs, it concluded that, essentially, the main reason for introducing direct vote recording and electronic vote counting was not only long-term savings but the accuracy and speed of the vote counting process and perhaps flexibility if alternatives to voting at polling stations were introduced in the future.

In January 2000, the Department of Finance stated that the proposals did not adequately address a number of issues. It requested that more details should be supplied regarding the security and reliability of the system and the contingency arrangements necessary in the case of system or equipment failure. It also asked that more details should be provided on the costing of the system. The total cost of the system as a whole must be stated and maintenance costs included. The cost of contingency arrangements must be built into the overall costings.

Regarding costs, the Department undertook to provide detailed costings after tenders had been received and evaluated. In December 2001, following the tender competition, it advised the sanctioning authority that the system recommended for testing would cost approximately €31.7 million, excluding VAT.

Later costings were provided at stages when large scale purchasing of voting machines were being undertaken.

Savings

In February 2000, Departmental papers put the estimated cost in six Dublin Constituencies at approximately €1.3 million, while it estimated savings of about €160,000 per poll. Unquantified publicity and training costs would also be needed. Overall, it was anticipated that there would be staff and equipment savings of about €1.4 million per poll nationally at traditional count centres.

A Departmental submission prepared in November 2000 estimated that savings of €13.8 million would accrue over a twenty-year period (i.e. the projected life span of the voting machines) based on an assumption of the minimum of possible elections occurring in that period. More elections would result in greater savings. The figures assume that staff savings would be approximately 40% of costs arising on vote preparation and counting which in turn were estimated at one third of total election costs and were informed by data provided by returning officers. The submission proceeded to estimate a more realistic scenario for the incidence of elections and referendums over the period, and concluded that cost recovery would be achieved in twenty years on the basis that there would be about 25 polls over that period. The Department is of the view that this cost recovery projection was conservative on the basis of staffing costs increasing at 4% a year and points out that actual costs have in fact been rising at a significantly faster rate.

In its submissions of November 2001, June 2002 and October 2002, the Department simply indicated that savings on the conduct of each poll would arise due to reduced vote counting costs and other administrative efficiencies. No financial data on savings was offered.

The Department has, however, pointed out that the overall objectives of the project did not as a pre-requisite require it to be self-financing.

While it is acknowledged that the decision to move to electronic voting and counting was primarily influenced by factors other than cost, the project should have been subject to more rigorous cost/benefit analysis in view of the scale of the financial commitments involved.

Scope and Nature of testing/piloting

Equipment testing

The Department informed me that the system had been tested by returning officers, the Department and the LGCSB during the two years prior to its use in the May 2002 General Election. In addition, the voting machine had been tested by three international testing institutes, while the election management and count software had been tested by two independent bodies.

Details provided by the Department indicate that testing was carried out on its behalf between 2001 and 2004 in the following areas

- consultancy for general examination and assessment
- functionality testing (including the embedded software)
- testing and certification of Nedap voting machine for compliance with international safety standards
- architectural evaluation of election management software
- report on security of the voting machines in polling stations
- testing of Integrated Election Software (IES) count-rule software
- validation and source code review, including reviews of code amendments

All the testing and reports concerning the voting machine and software were positive. The Department considered that the system, albeit with different vote counting rules, had a proven track record of use in the Netherlands for over ten years and for a number of years in some German cities.

Prior to the pilots, the voting machine had been used – with sample ballot papers only – by voters at two Dáil bye-elections in order to gauge the ease of use of the machine by the public. The voting machine had also been demonstrated to political parties, returning officers and featured in radio and television programmes.

Pilot Implementation

The Department has informed me that given the Government's decision of 8 February 2000 to commence the use of electronic voting at the 2004 European and Local Elections, it was considered appropriate to pilot the system in three constituencies with different electorate profiles and sizes (a three-, four- and five-seat constituency). It was not an option to select part of a constituency as a pilot and retain the manual voting system in the rest, because of the statutory requirement to mix the ballot papers on a constituency-wide basis.

Against this background it was decided that there should be "live" use of the system at the May 2002 general election.

Evaluation of General Election Pilot May 2002

The Department provided me with a copy of its "Review of the Pilot Project - General Election 2002" prepared on 2 July 2002.

The review's summary indicates that the pilot project to test electronic voting and counting in 3 constituencies at the general election was successful. The voting and counting were completed correctly, results were available, at the latest, within 4 hours of the close of poll and the public reaction was very favourable. Approximately 470 voting machines, including spare machines, were used in the 3 constituencies. Few technical difficulties were reported on polling day.

It also made the following suggestions for improvement

- Modifications to the screen of the voting machine to facilitate voters
- Some modifications to the IES software to facilitate use by election staff
- A more co-ordinated approach to procedures at the count centres, particularly in relation to presentation of the count information and results to candidates and media
- Improved technical specifications for printing ballot papers including candidate photographs and political party logos.

Market researchers interviewed 1,207 people as they exited polling stations and 96% of those surveyed found the voting machine very easy to use or quite easy to use. Only 1% of the 1,207 voters surveyed mentioned a delay or queue. This percentage rose slightly among those voting during the evening time, but never higher than 5%.

Questions Posed in the Review

The Department's review of the General Election Pilot noted that the following matters needed consideration

- (a) Is the Powervote system the most suitable having regard to cost, life span of the equipment, and changes in technology?*
- (b) If the answers at (a) are positive, is such a system preferable to paper ballots and manual counting of votes?*

- (c) *Should the system be extended countrywide in 2 or more phases having regard to the time and staff resources available in Franchise Section?*
- (d) *Study of changes in STV count rules to omit the arbitrary and random features of the present count rules.*

The Department concluded that it had satisfactorily answered these questions.

The review went on to state that it would appear from reaction to the recounts at the election, that candidates, subject to changes in presentation of results, would also favour the use of electronic counting. Election staff in the 3 constituencies at the general election all expressed a preference for the use of the system in place of manual systems.

Extended Pilot - Nice Referendum October 2002

The decision to extend the pilot to four more constituencies (with a further purchase of 400 voting machines) was taken on 5 June 2002 some three weeks after the 3 constituency pilot. I asked the Accounting Officer the extent to which the Department's assessment of the pilot was used to inform the business case for full implementation.

The Accounting Officer informed me that while the formal review document of the pilot became available in July, its substance was known within the Department when the submission to Government to extend the pilot was made. In light of this, it was decided that, given the objective to promote the use of the electronic system at the European and Local Elections in June 2004, it was appropriate to extend the use of the system to a further four constituencies at the October 2002 referendum.

He stated that the use of the system at a referendum is a less complicated process (voter preference choice is limited and counting is much simpler) and the extended use of the system in this context was intended to provide more information on the public use of the system for a different type of poll before confirming its use for the country as a whole. The use of the system in the extra four constituencies also provided for more efficient and cost-effective conduct of the referendum for the Returning Officer for County Dublin as he did not have to cope with both the manual system in four constituencies and the new electronic system in two constituencies for which he is the Returning Officer, as occurred at the 2002 general election.

The dominant consideration was that a further pilot for a different type of poll over a larger population base would better inform any decision on the countrywide use of the system.

Following the October pilot, the Government's objective to promote use of the electronic voting system on a nationwide basis for the June 2004 European and local elections was confirmed.

Commission on Electronic Voting

The Commission on Electronic Voting (CEV) was established in March 2004 and mandated to report by 1 May 2004 in relation to the application or non-application of the Nedap Powervote system to the June 2004 elections. The Commission's Interim Report was not able to endorse the use of the Nedap-Powervote system at the June polls. However, the Report made it clear that this conclusion was based not on any findings that the chosen electronic and counting system would not work but rather on the desirability of allowing more time for further testing and quality assurance by, or under the supervision of, the Commission.

The main reservations of the CEV Interim Report related not to the system hardware (i.e. the voting machines), which accounts for the great bulk of the public expenditure involved in the project, but to the late stage (relative to June 2004) at which software modifications were being carried out. In a set of recommendations for action, the Commission set out a programme of action which it required to be in position to satisfy itself as to the secrecy and accuracy of the system. The Department will cooperate fully with the Commission in relation to this work programme.

While the CEV's report concluded that it could not recommend the use of Electronic Voting and Counting for the June 2004 elections it was not unreasonable for the Department to proceed as it did on the basis of the results of its testing and pilot projects.

Management of the Hardware and Software Procurement

The Tender Process

The Department published a Pre-Information Notice (PIN) (a requirement for public contracts in excess of €6.34million) for the purchase of an electronic voting and counting system for use at statutory elections and referendums in the EU Journal on 1 April 2000. Request for tender documentation was prepared and the full notice for tenders was dispatched to the EU Journal on 23 June 2000.

The Tender document proposed the phased introduction of an electronic voting and counting system

Phase 1 - 6 voting machines, including all necessary hardware and software for counting of votes on the machines and ongoing support for hardware and software during testing which was expected to take 6 to 9 months (October 2000 to June 2001)

Phase 2 - subject to satisfactory testing of the voting machines and count software and Government approval to the use of the equipment at an actual election, assume the purchase of 300 machines including software for vote counting, for pilot use at a Dáil Election in 2002 or at a referendum (if any in 2002 onwards). In the event that a general election is held prior to 2002, the pilot of the scheme will be held with the European and Local Elections in 2004 – in which case assume the purchase of 1,200 voting units in addition to the 300 units.

Phase 3 - if there is a poll at the presidential election in October 2004, assume the purchase of a further 300 voting units.

Phase 4 - the position was to be reviewed at the end of 2004 for the post 2004 period. If it was decided to extend the system to the whole country, the total requirements for the State would be approximately 8,000 voting units (including phases 1 to 3), including necessary count software. This also provided that the counting rules might be simplified as part of the extension of electronic voting and counting to the whole country.

In phase 1, the six test units would be purchased by the Department. The contract to be entered into with the successful tenderer would stipulate, provided it was decided to proceed with the project, that the units required in phases 2 to 4 would be purchased by returning officers.

Tender documentation was sought by 30 companies and 7 tenders were received by the 14 August 2000 deadline.

A project board consisting of Departmental staff, staff from the Local Government Computer Services Board and representatives from the Returning Officers carried out evaluations on the various tenders received.

Two tenders were excluded from the process at this stage, as they did not meet all the requirements. Product presentations were made by the 5 remaining firms in October 2000. Tendered prices ranged from €25.4 million to €60.9 million.

The Department recommended acceptance of the second lowest tender from Nedap/ Powervote at a cost of €33.4 million (after inclusion of €1.9 million for battery backup). The results from the tender process were submitted to the Government Contracts Committee who gave approval in December 2000. Tender prices were to remain unaltered until the end of 2004.

Description of the recommended system

The Nedap/Powervote voting system consists of the following:

Voting Machine - this replaces the ballot box, ballot paper and polling booth.

Ballot Module – this is a bespoke cartridge which is programmed with the election and candidate details. The set-up of the election, including candidate details, is programmed on to the ballot module and it is loaded into the voting machine prior to the election. It stores the votes and when the polling station closes the ballot module is sent to the count centre and its votes are collated with the other votes in that constituency for counting purposes using the election PC.

Programming Reading Unit (PRU) links the ballot module with the election PC and enables the ballot module to be programmed before the election, and then reads back in the data from the Ballot module once the polls have been closed.

Election PCs specifically provided for use in the elections and have been security hardened and programmed with the election software and supporting applications to ensure secure use and access.

Integrated Election Software (IES) is the election management software which enables the returning officers to set up the poll, take in candidate nominations and prepare the ballots for the election. The election data is then formatted onto the ballot modules using the PRU and the software counts the votes for each electoral area once all the votes have been read in and reconciled.

Purchase for testing system

Delivery of the six test machines was not made until August 2001, some twelve months later than was originally intended in the initial project timetable.

Purchase for Pilot for General Election May 2002

In November 2001 the Department, proposed the purchase of 600 voting machines for use in the General Election pilot in 2002 – no date had been set but the supplier had indicated a need for a 23-week delivery period. The proposal was made notwithstanding the fact that testing on the original six test machines had

yet to be completed. The Department had expressed itself confident that the testing would be satisfactory.

The order was placed with Nedap/Powervote on 16 November 2001. The Department indicated that protracted negotiations were required before the contract for the purchase of the equipment could be signed on 19 December 2003.

Departmental documents indicated that, in February 2002, functional and reliability tests on the machines had been concluded satisfactorily, but that functional testing of the software was ongoing and was expected to be satisfactorily completed by mid-February and fully completed by March 2002.

The Department of Finance again raised the issues of the security and reliability of the system and the details of the contingency arrangements in case of system / equipment failure and voter confidentiality.

The pilot at the General Election indicated that a number of physical modifications were desirable to make the voting machines more user-friendly.

Purchase for Second Pilot - Nice Referendum

On 5 June 2002, approval was given to purchase an additional 400 voting machines and ancillary equipment for use in 4 further constituencies for the then anticipated second Nice Referendum. The recommendation to order this equipment was made notwithstanding the fact that the review of the General Election Pilot, then known to the Department suggested the need to make modifications to the voting machine. Departmental papers indicate that the cost of these modifications, if carried out to machines before their delivery would be in the order of €615 each, while returning already delivered machines to the factory for modification would cost about €2,300 each.

I asked the Accounting Officer why the modifications were not sought before the order for these machines was confirmed to avoid the extra charge of returning them for modification at a total cost of approximately €680,000 (400 machines at about €1,685 each).

He stated that the proposed modifications to the voting machine panel involved the reduction in the number of rows per column to allow for better legibility of candidate details, and the use of brighter displays to make preference numbers clearer. The Referendum was scheduled for October 2002 and it was necessary to order the machines so that they would be available in sufficient time for the poll. While there was not sufficient time available to retro-fit the voting machines already purchased (and to re-test the equipment following the referendum), the nature of a referendum (where a simple “Yes/No” choice is required) did not necessitate that these improvements be made at that time.

Purchase for the 2004 European and Local Elections

After the Nice Referendum in October 2002, the Department recommended the extension of electronic voting and vote counting countrywide for the forthcoming 2004 Local and European Elections. This would involve the purchase of about 6,000 more voting machines and ancillary equipment. The recommendation also outlined the need for three modifications identified after the pilot use at the General Election in May 2002

- Reduce the maximum number of candidates per column on the voting machine from 28 to 20 or 18
- The size and lighting of the preference number were to be reviewed
- An investigation would be made on the provision of a facility for visually impaired voters to vote independently.

These modifications would also have to be made to the existing 1,006 machines. The replacement of the voting screen with the improved preference number was described as a highly technical procedure which must be carried out under production conditions and the modified machines have to be thoroughly tested by the manufacturer and retested by the independent test institutes. This would require that the machines be returned to Holland. The modifications to the existing 1,006 machines would cost approximately €2.3 million.

Contract for purchase of 6,315 machines

The Department issued a letter of intent to purchase 6,000 machines to Powervote on 28 January 2003 subject to 18 conditions. On 4 March 2003, the Department wrote to the Department of Finance informing them that it was placing this order and pointed out that a condition of the order was a deposit of 20% of the cost on placing of the order. Two returning officers had been requested to apply for an advance of the funding for their constituencies for voting machines (rather than 28 small requests) to meet the advance payment requirements. The Department endorsed the requests for funding from the Returning Officers for Dublin (€5 million) and Mayo (€3 million). 6,315 machines were actually purchased.

While the procurement of hardware and software was carried out in line with proper procedures the decision to purchase the additional 400 voting machines for the Nice Referendum without the identified modifications ultimately resulted in avoidable costs of €680,000 being incurred.

Costs Associated with the Introduction of Electronic Voting

In response to my enquiries, the Accounting Officer provided the following details of the costs incurred. In a number of instances detailed costs could not be provided because the information relating to the items concerned were held by Returning Officers and would be accounted for by them in their statutory returns to the Department of Finance.

Department of the Environment, Heritage and Local Government

Table 30 Hardware and Software Costs

		<i>Comment</i>	€
2001 Test Purchases	6 voting machines and ancillary equipment		39,708
	Election management software and equipment		488,490
2002 General Election Pilot	600 voting machines	Precise costing not available (payments by returning officers)	Estimated €3.4m.
	Election management software and equipment		
2002 Referendum	Purchase of 400 voting machines for 2002 Referendum on Treaty of Nice	Precise costing not available (payments by returning officers)	Estimated €2.3m.
	Election management software and equipment		
	Modifications carried out to 1,006 voting machines	Cost for each machine €2,393 excl. VAT+ carriage. Precise costing not available (payments by returning officers)	Estimated €2.9m.
2004 Local/European Elections	Purchase of 6,315 voting machines	6,315 voting machines purchased @ €4,508 plus VAT. Precise costing not available (payments by returning officers)	Estimated €34.5m.
	Electoral management software and equipment	Dependent on size of electorate, subject to negotiation with developer	
General	PCs for Departmental use		28,623
	Returning Officers' PCs	Costs not available	
Total			€43,657,000 (est.)

Consultancy and Testing Costs

The Department engaged consultants and experts to assist in implementing the project as well as test the chosen systems and software. Costs incurred included tests for compliance with international safety standards, architectural evaluation of election management software, security of voting machines, IES count rule software, source code modification, compliance with EU emission and immunity standards, ergonomics and international certification. These costs are itemised under each of the purchase phases as follows

Table 31

	€
2001 System Testing Phase	129,877
2002 General Election Pilot	46,827
2002 Treaty of Nice Referendum	37,746
2004 Local/European Elections (2003 Expenditure)	135,941
2004 Local/European Elections (2004 Expenditure)	187,788
Total	€538,179

Advertising and Promotional Costs

The Department carried out extensive promotional campaigns to inform and educate the electorate in advance of the use of electronic voting and vote counting in the 2002 General Election and 2002 Referendum in selected constituencies and in anticipation of its use nationwide for the 2004 Local and European Elections. The costs incurred were

Table 32

		€ (incl. VAT)	€(incl. VAT)
2002 General Election Pilot	Advertising/promotional		263,047
2002 Referendum	Advertising/promotional		270,485
2004 Local and European Elections*	Advertising (Media)	1,307,874	
	Advertising (Production)	636,628	
	Print	245,046	
	Video	10,523	
	Website	40,257	
	Roadshow/Events	270,342	
	Call Centre	15,093	
	Research	55,055	
	PR costs	733,669	3,314,487
Total			€3,848,019

* With the decision not to proceed with the use of the systems in June 2004 savings under this heading of approximately €1,130,000 arose on the original tender costs.

Training Costs

The Accounting Officer has informed me that the cost of training personnel for polling and count duties for the 2004 Elections is not available as these costs are the responsibility of Returning Officers and will be included in their returns to the Department of Finance.

Other Costs and Liabilities

I asked the Accounting Officer for details of any contingent liabilities arising out of the decision not to proceed with the deployment of electronic voting and vote counting for the elections in 2004. He provided the following information

- Batteries for voting machines – probable liability €75,000
- Voting machines ordered but not delivered (185) – maximum liability of €1 million if it is not possible to cancel the order
- 6,000 extra ballot modules were ordered for use at the Presidential Election as the existing modules had they been used in the Local / European Elections would not be available for legal reasons – Maximum liability of the order of €690,000

The Accounting Officer also informed me that there are no annual maintenance costs required for the equipment involved. Annual storage and insurance costs are not yet available. He has sought details from the individual Returning Officers.

He also pointed out that although the Department is not directly responsible for the acquisition, maintenance or storage of ballot boxes, he understood that Returning Officers had purchased between 1,500 and 2,000 at an estimated unit cost of €50.

The cost to date of Electronic Voting and Counting is in the range €47.5m - €50m. The degree of value obtained for the vast bulk of this expenditure depends on future decisions on the use of Electronic Voting and Counting.