



**nathean**  
T E C H N O L O G I E S

**CODE REVIEW**

**OF**

**IES BUILD 0111**

**FOR**

**THE DEPARTMENT OF THE ENVIRONMENT,  
HERITAGE AND LOCAL GOVERNMENT**



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## **1.0 INTRODUCTION**

This document contains the code review sheets as updated during this evaluation of the source code units supplied relating to build 0111 (2003). These units relate specifically to the modifications made for the multi-election processing. By agreement, Powervote did not supply any units which were not modified or specifically written for the Irish edition of the IES.

## **2.0 SOURCE CODE UNITS EXAMINED**

The following table list the units supplied for examination during this review. 125 units were reviewed in total of which 50 were evaluated for the first time.

<b>Unit Name</b>	<b>First Review</b>
Calc_Count_Confirmation.pas	✓
Calc_Count_Constanten.pas	
Calc_Count_Drawing_Lots.pas	
Calc_Count_Main.pas	
Calc_Count_Misc.pas	
Calc_Count_Referendum.pas	
Calc_Count_Section_3.pas	
Calc_Count_Section_4.pas	
Calc_Count_Section_5.pas	
Calc_Count_Section_6.pas	
Calc_Count_Section_7.pas	
Calc_Count_Section_8.pas	
Calc_Count_Section_9.pas	
Calc_Count_Section_10.pas	
Calc_Count_Section_11.pas	
Calc_Count_Section_19.pas	
Calc_Count_Section_22.pas	
Calc_Count_Section_23.pas	
Calc_Count_Section_25.pas	
Calc_Count_Section_26.pas	
Calc_Order_Election_Main.pas	
Calc_Order_Election_Section_13.pas	
Candidates_2.pas	
Candidates_Edit_3.pas	
Designation_1.pas	✓
dmElec.pas	



<b>Unit Name</b>	<b>First Review</b>
dmGen.pas	
ES_Messages.pas	
Export_Count_Result_Screens.pas	✓
Export_Preparation_1.pas	✓
Export_Preparation_2.pas	✓
Export_Result_Ireland_1.pas	✓
Export_Result_Ireland_2.pas	✓
Export_Result_Ireland_Referendum_1.pas	✓
Export_Result_Ireland_Referendum_2.pas	✓
Export_TopGrids.pas	✓
Generate_PDF.pas	✓
Import_Preparation_1.pas	✓
Import_Preparation_2.pas	✓
Import_Result_Central_1.pas	✓
Import_Result_Local_1.pas	✓
Import_Result_Local_2.pas	✓
Import_Result_Local_Referendum_2.pas	✓
Memory_Prog.pas	
Memory_Read.pas	
Mixed_Numbered_1.pas	
Mixed_Numbered_Check.pas	
Mixed_Numbered_Check_Print.pas	✓
Mixed_Numbered_Export.pas	✓
Mixed_Numbered_Print.pas	
Mixed_Numbered_Query.pas	
Mixed_Numbered_Search.pas	
Mixing_Numbering_1.pas	
Participants_Print_7.pas	
Participants_Print_Ireland_1.pas	
Participants_Print_Ireland_2.pas	
Petition_Check.pas	✓
Petitions_1.pas	
Petitions_Edit_1.pas	



Unit Name	First Review
Petitions_Implement_1.pas	
Pre_Count_Report_Postal_Voting_1.pas	
Pre_Count_Report_Postal_Voting_Print_1.pas	✓
Presentation_Count_1.pas	
Presentation_Count_2.pas	
Presentation_Count_3.pas	
Presentation_Count_Export_Screen_1.pas	✓
Presentation_Count_Export_Screen_2.pas	✓
Presentation_Count_Export_Screen_3.pas	✓
Presentation_Count_Export_Screen_130.pas	
Presentation_Count_Export_Screen_210.pas	✓
Presentation_Count_Preferences.pas	✓
Presentation_Count_Preferences_Export.pas	✓
Presentation_Count_Preferences_Print.pas	✓
Presentation_Count_Print_Screen.pas	
Presentation_Count_Print_Screen_1.pas	
Presentation_Count_Print_Screen_2.pas	
Presentation_Count_Print_Screen_3.pas	
Presentation_Count_Print_Screen_130.pas	
Presentation_Count_Print_Screen_210.pas	
Presentation_Count_Print_Screen_520.pas	
Presentation_Count_Print_Screen_530.pas	
Presentation_Count_Result_Sheet.pas	
Presentation_Count_Result_Sheet_Print.pas	
Presentation_Count_Result_Sheet_Print_2.pas	✓
Presentation_Count_Result_Sheet_Referendum.pas	✓
Presentation_Count_Result_Sheet_Referendum_Export.pas	✓
Presentation_Count_Result_Sheet_Referendum_Print.pas	✓
Presentation_Count_Summary_1.pas	✓
Presentation_Count_Summary_2.pas	✓
Presentation_Count_Summary_Export_Screen_1.pas	✓
Presentation_Count_Summary_Print_Screen_1.pas	✓
Presentation_Order_Election_1.pas	



Unit Name	First Review
Presentation_Order_Election_2.pas	
Print_Ballot_Papers.pas	
Print_Ballot_Papers_1.pas	
Print_Ballot_Papers_2.pas	
Print_Ballot_Papers_Referendum.pas	✓
Print_Ballot_Papers_Referendum_1.pas	✓
Print_Ballot_Papers_Referendum_2.pas	✓
Print_Count_Individual_Votes.pas	
Print_Count_Individual_Votes_2.pas	
Print_Count_Location_Votes.pas	
Print_Count_Location_Votes_Referendum.pas	✓
Print_Count_Result_Screens.pas	
Print_Count_Transfered_Votes.pas	
Reconciliation_Vote_Accounts_1.pas	
Reconciliation_Vote_Accounts_2.pas	
Reconciliation_Vote_Accounts_3.pas	✓
Reconciliation_Vote_Accounts_Export_1.pas	✓
Reconciliation_Vote_Accounts_Export_1a.pas	✓
Reconciliation_Vote_Accounts_Print_1.pas	
Reconciliation_Vote_Accounts_Print_1a.pas	✓
Reconciliation_Vote_Accounts_Print_2.pas	✓
Seats_Ireland_1.pas	✓
Secure_Database_1.pas	✓
Select_Elections_3.pas	
Select_Voting_Ireland.pas	✓
Sub_Participants_1.pas	✓
Sub_Participants_2.pas	
Voting_Sheets_1.pas	
Voting_Sheets_Ireland.pas	
Votings_Ireland_1.pas	
Votings_Ireland_2.pas	
Votings_Ireland_Edit_1.pas	
Votings_Ireland_Edit_2.pas	✓



## **2.1 Outstanding Units**

While all units have been supplied as requested, some units containing modifications as a result of this or previous reviews were supplied subsequent to the current review. These units are noted in the summary and detailed issue lists and should be evaluated in the next review.

## **3.0 SUMMARY OF ISSUES**

No new significant issues have been raised during this examination. There were a number of new units in the review (approx 50). The vast majority of these new units relate to user interface forms, to updating election setup, and to the multi-election processing extensions.

There were few changes to units relating to the processing of the count rules. In January 2004 we will request an up-to-date list of election rule modifications from Gabriel O'Byrne for cross-reference purposes.

The current review gives the coding standards a clean bill of health. All previous recommended coding standards have been observed.



## 4.0 CODE REVIEW SHEETS

<b>Unit Name</b>	<b>Calc_Count_Confirmation.pas</b>
<b>Reviewed By</b>	John Pugh
<b>Review Label</b>	Multi-Election July 2003
<b>Unit Functionality</b>	This unit is used to provide a confirmation dialog box on the issue of drawing lots.
<b>Issue #</b>	<b>No Issues</b>
<b>Reviewer Comments</b>	

<b>Unit Name</b>	<b>Calc_Count_Constanten.pas</b>
<b>Reviewed By</b>	John Pugh
<b>Review Label</b>	Multi-Election July 2003
<b>Unit Functionality</b>	This unit contains the declarations of all of the constants used in count process.
<b>Issue #</b>	<b>No Issues</b>
<b>Reviewer Comments</b>	

<b>Unit Name</b>	<b>Calc_Count_Drawing_Lots.pas</b>
<b>Reviewed By</b>	John Pugh
<b>Review Label</b>	Multi-Election July 2003
<b>Unit Functionality</b>	<p>This is the unit which controls the functionality of the "Drawing Lots" form. The "Drawing Lots" form allows the user to record the result of the drawing lots procedure, which is a manual task, which may be required in the following circumstances:</p> <ul style="list-style-type: none"><li>• Equal surpluses arising in the same count</li><li>• Equal remainders in a surplus distribution calculation</li><li>• Lowest candidates with equal votes</li><li>• Order of election of candidates with equal/no surpluses arising on the same count or of candidates elected without reaching the quota but with equal votes.</li></ul>
<b>Issue #</b>	<b>No Issues</b>



<b>Reviewer Comments</b>	Modifications made in February '03 relating to ensuring that the drawings are clear when calculating all counts or actual count.
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<b>Unit Name</b>	<b>Calc_Count_Main.pas</b>
<b>Reviewed By</b>	John Pugh
<b>Review Label</b>	Multi-Election July 2003
<b>Unit Functionality</b>	This unit contains a single procedure Calculate_Count, which controls the whole election count process.
<b>Issue #</b>	<b>No Issues</b>
<b>Reviewer Comments</b>	<ul style="list-style-type: none"><li>• Calculation of turnout removed.</li><li>• Gauge added for process progress</li><li>• Pauses removed which happened when not calculating all counts or actual count.</li><li>• Calculation of sum of surpluses removed.</li></ul>

<b>Unit Name</b>	<b>Calc_Count_Misc.pas</b>
<b>Reviewed By</b>	John Pugh
<b>Review Label</b>	Multi-Election July 2003
<b>Unit Functionality</b>	This unit contains shared functions/procedures, which are called as part of the count process by other units in the source
<b>Issue #</b>	<b>No Issues</b>
<b>Reviewer Comments</b>	<ul style="list-style-type: none"><li>• New function Count_Words added for converting numerics to English representations.</li><li>• Sort_Array_HCC_Surplus algorithm modified. Changed order from sub-participant number (ascending), count_elected (ascending), votes (descending) to just the number of votes (descending).</li></ul>



<b>Unit Name</b>	<b>Calc_Count_Referendum.pas</b>
<b>Reviewed By</b>	John Pugh
<b>Review Label</b>	Multi-Election July 2003
<b>Unit Functionality</b>	This unit contains a single procedure Calculate_Count_Referendum, which controls the referendum count process.
<b>Issue #</b>	<b>No Issues</b>
<b>Reviewer Comments</b>	<ul style="list-style-type: none"><li>• Calculation of turnout removed.</li></ul>

<b>Unit Name</b>	<b>Calc_Count_Section_3.pas</b>
<b>Reviewed By</b>	John Pugh
<b>Review Label</b>	Multi-Election July 2003
<b>Unit Functionality</b>	<p>This unit contains functions/procedures, which are called as part of the count process:</p> <ol style="list-style-type: none"><li>1. Initialize_Data –initialises datasets used in count process.</li><li>2. Fill_First_Preferences – fills an array with candidate first preference information.</li><li>3. Calc_Electorate – calculates total electorate.</li><li>4. Calc_Quota – calculates election quota.</li><li>5. Calc_Threshold – calculate the number of votes required by each candidate in order to retain deposit</li><li>6. Write_Count_Result_Screen – writes a count’s outcome to results table</li><li>7. Write_CC_SR – writes continuing candidates and seats remaining to results table</li><li>8. Check_Saving_Deposit – determines if each candidate has retained his/her deposit either by being elected or by reaching the deposit threshold</li><li>9. Write_Resulting_Votes – writes each candidates position at the end of a count to the database</li></ol>
<b>Issue #</b>	<b>No Issues</b>



<b>Reviewer Comments</b>	<ul style="list-style-type: none"> <li>Function for Calculation of turnout removed.</li> <li>Function for Writing poll data removed</li> <li>Filling first preference algorithm modified as a result of GoD comments in March regarding petitions. The algorithm now locates the next record where the petition value is not 1 or 3.</li> </ul>
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<b>Unit Name</b>	<b>Calc_Count_Section_4.pas</b>
<b>Reviewed By</b>	John Pugh
<b>Review Label</b>	Multi-Election July 2003
<b>Unit Functionality</b>	This unit contains functions/procedures, which are called as part of the count process:
<b>Issue #</b>	<b>No Issues</b>
<b>Reviewer Comments</b>	<ul style="list-style-type: none"> <li>Writing sequence votes algorithm modified as a result of GoD comments in March regarding petitions. The algorithm now locates the next record where the petition value is not 1 or 3.</li> <li>Check Distribution Surpluses Applies function modified as a result of               <ul style="list-style-type: none"> <li>No refund expenses flag set</li> <li>No surpluses</li> <li>Continuing candidates is equal to the number of unfilled seats.</li> </ul> </li> </ul>

<b>Unit Name</b>	<b>Calc_Count_Section_5.pas</b>
<b>Reviewed By</b>	John Pugh
<b>Review Label</b>	Multi-Election July 2003
<b>Unit Functionality</b>	This unit only contains 1 function, Check_Distribution_Surplus, the purpose of this function is to determine if the distribution of the only or largest available surplus is mandatory. There are 3 possible conditions, which make the distribution of the surplus mandatory, all of them are checked by this function.
<b>Issue #</b>	<b>No Issues</b>
<b>Reviewer Comments</b>	<ul style="list-style-type: none"> <li>The function is modified to allow for the no refund expenses flag set.</li> </ul>



<b>Unit Name</b>	<b>Calc_Count_Section_6.pas</b>
<b>Reviewed By</b>	John Pugh
<b>Review Label</b>	Multi-Election July 2003
<b>Unit Functionality</b>	<p>This unit only contains functions, which are called during the Election Count process.</p> <ul style="list-style-type: none"> <li>• <b>Distribute_Which_Surplus</b> – determines which surplus to distribute using the following logic:           <pre style="margin-left: 20px;">           If iNumSurpluses = 1 then             Distribute Surplus           Else iNumSurpluses = 1 then             Begin               If LargestSurplus &lt;&gt; SecondLargestSurplus then                 Distribute LargestSurplus               Else if LargestSurplusCount &lt; SecondLargestSurplusCount then                 Distribute LargestSurplus               Else if LargestSurplusCount = SecondLargestSurplusCount then                 Begin                   Distribute Surplus of Candidate with Largest No. Votes                   At Earliest Count Where Surplus Candidates do not have                   Matching No. Votes                 End               If No Such Count Exists then                 Draw Lots             End           End           </pre> </li> <li>• <b>Look_At_Earlier_Counts</b> – Attempts to find the earliest count at which candidates with matching surpluses in current count did not have matching number of votes. If such a count exists, the surplus of the candidate with the largest number of votes at the count will be distributed.</li> <li>• <b>Drawing_Lots</b> –Creates the “Drawing Lots” screen and records it’s result.</li> </ul>
<b>Issue #</b>	<b>No Issues</b>
<b>Reviewer Comments</b>	<ul style="list-style-type: none"> <li>• No change to the non-comment code made. It is functionally equal to the previously tested source code unit.</li> <li>• The comment {Used for Country: Ireland} has been removed from a number of units. Any reason why?</li> </ul>



<b>Unit Name</b>	<b>Calc_Count_Section_7.pas</b>
<b>Reviewed By</b>	John Pugh
<b>Review Label</b>	Multi-Election July 2003
<b>Unit Functionality</b>	<p>This unit contains functions/procedures, which are called as part of the count process:</p> <ul style="list-style-type: none"> <li>• <b>Distribution_Of_Surplus</b> – This function controls the distribution of a mandatory surplus.</li> <li>• <b>Fill_Next_Preferences_HCC</b> – this function sorts the last set of votes received by the candidate, whose surplus is to be distributed, into sub-sets of next available preferences for each continuing candidate and into a sub-set of non-transferable votes.</li> <li>• <b>Write_Surplus_Header</b> – This function writes header information about the surplus distribution to the database results table.</li> <li>• <b>Write_Surplus_Distribution</b> – This function loops through all of the candidates, who are not elected or excluded, and determines how many votes they should receive from the current count's mandatory surplus. When the surplus is less than the number of transferrable votes, the function will divide them proportionately among the eligible candidates. Any votes remaining once the division is completed will be allocated to those candidates with the highest division remainder from the original allocation. If the number of votes remaining is less than the number of candidates with equal remainders, the function determines, using the count rules, which candidates should receive the additional votes. If the number of transferrable votes is less than the surplus the function makes up the difference using the set of non-transferrable votes, this is in accordance with the count rules. This function writes all of the steps it takes and decisions it makes to the results table as it progresses.</li> <li>• <b>Transfer_Surplus_Votes</b> – This function distributes the surplus to the candidates. It then loops through all of the votes used in the current count, determines what the next preference is for each vote, and if a next preference exists it writes a new record to the results sequence table in the database.</li> <li>• <b>Write_Surplus_Individual_Votes</b> – Writes surplus details to results table.</li> <li>• <b>Write_Surplus_Transferred_Votes</b> – Writes surplus distribution details to results table.</li> </ul>
<b>Issue #</b>	<b>No Issues</b>
<b>Reviewer Comments</b>	<ul style="list-style-type: none"> <li>• Changed number of decimal remainders</li> <li>• Function Fill Next Preferences HCC modified to removed the code</li> </ul>



	<p>for looking for the count number first and locating the next record where the petition value is not 1 or 3.</p> <ul style="list-style-type: none"> <li>Removed the code in Write surplus distribution for calculation of the remainders if the surplus is less than the transferable votes.</li> <li>Modified the function Transfer Surplus Votes to include locating the next record where the petition value is not 1 or 3.</li> </ul>
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<b>Unit Name</b>	<b>Calc_Count_Section_8.pas</b>
<b>Reviewed By</b>	John Pugh
<b>Review Label</b>	Multi-Election July 2003
<b>Unit Functionality</b>	<p>This unit contains functions/procedures, which are called as part of the count process:</p> <ul style="list-style-type: none"> <li><b>Check_LCC_For_Equal_Votes</b> – This function first determines if any of the Lowest Continuing Candidates have equal votes. If so, it then calculates how many candidates have equal votes. It then attempts to determine which candidate to exclude by looking at previous counts. Next it checks if it is ok to exclude the LCC and finish the count without distributing the LCC's votes. If this is not the case and the function has not determined the LCC to exclude, the function then calls the draweing lots procedure to finally determine which candidate to remove.</li> <li><b>Look_At_Earlier_Counts</b> – This function determines which Lowest Continuing Candidate should be excluded in the event that several LCCs have the same number of votes in the current count.</li> <li><b>Drawing_Lots</b> – This function calls the "Drawing Lots" form, which allows the user to record the result of a manula "Drawing Lots" process.</li> <li><b>Check_If_Test_Case_12_Applies</b> – This function checks if the exclusion of the LCC equates the number of continuing candidates to the number of unfilled seats. If so, the functions result is set to True, however the function then checks if any of the LCCs to be excluded have saved their deposit, if so it returns false. It then checks if the total votes of the lowest continuing candidate plus the sum of surpluses is greater than the number of votes of the next LCC, if so function returns false.</li> </ul>
<b>Issue #</b>	<b>No Issues</b>
<b>Reviewer Comments</b>	<ul style="list-style-type: none"> <li>Deleted previously added code relating to Test Case 12.</li> </ul>



<b>Unit Name</b>	<b>Calc_Count_Section_9.pas</b>
<b>Reviewed By</b>	John Pugh
<b>Review Label</b>	Multi-Election July 2003
<b>Unit Functionality</b>	<p>This unit contains functions/procedures, which are called as part of the count process:</p> <ul style="list-style-type: none"> <li>• <b>Exclude_Which_LCC</b></li> <li>• <b>CHANNEL_2_3</b></li> </ul> <p>These functions attempt to determine which Lowest Continuing Candidates to exclude based on the count rules.</p>
<b>Issue #</b>	<b>No Issues</b>
<b>Reviewer Comments</b>	<ul style="list-style-type: none"> <li>• Exclude which LCC modified to allow for no refund expenses flag.</li> <li>• Exclusion of x lowest candidates as the sum of their votes is less than those of the next lowest candidate.</li> </ul>

<b>Unit Name</b>	<b>Calc_Count_Section_10.pas</b>
<b>Reviewed By</b>	John Pugh
<b>Review Label</b>	Multi-Election July 2003
<b>Unit Functionality</b>	<p>This unit contains functions/procedures, which are called as part of the count process:</p> <ul style="list-style-type: none"> <li>• <b>Distribution_Of_LCC</b></li> <li>• <b>Fill_Next_Preferences_LCC</b> – This function move through each nexly excluded candidate’s votes and records their next preference. It then increments the number of votes allocated to the next preferred candidate.</li> <li>• <b>Write_Exclusion_Header</b> – This function writes details of all of the candidates being excluded and their number of votes to the results table.</li> <li>• <b>Write_Exclusion_Distribution</b> – This function writes details of the votes received by each continuing candidate from each excluded candidate as a result of the exclusion distribution.</li> <li>• <b>Transfer_Exclusion_Votes</b> – This function performs the transfer of votes on the database by adding records to the results sequence table.</li> <li>• <b>Write_Exclusion_Transfered_Votes</b> – This function summarises the transfer of votes by writing to the results table.</li> </ul>
<b>Issue #</b>	<b>No Issues</b>
<b>Reviewer Comments</b>	<ul style="list-style-type: none"> <li>• Fill next preferences lcc and transfer exclusion votes modified as a result of GoD comments in March regarding petitions. The algorithm now locates the next record where the petition value is not 1 or 3.</li> <li>• Exclusion of x lowest candidates as the sum of their votes is less than those of the next lowest candidate.</li> </ul>



<b>Unit Name</b>	<b>Calc_Count_Section_11.pas</b>
<b>Reviewed By</b>	John Pugh
<b>Review Label</b>	Multi-Election July 2003
<b>Unit Functionality</b>	<p>This unit contains one function, which is called as part of the count process:</p> <ul style="list-style-type: none"><li>• <b>FillingOfLastSeats</b> – This function marks the candidates, who have filled the remaining seats, as elected on the candidate’s progress table in the database.</li></ul>
<b>Issue #</b>	<b>No Issues</b>
<b>Reviewer Comments</b>	<ul style="list-style-type: none"><li>• Just the Ireland comment removed?</li></ul>

<b>Unit Name</b>	<b>Calc_Count_Section_19.pas</b>
<b>Reviewed By</b>	John Pugh
<b>Review Label</b>	Multi-Election July 2003
<b>Unit Functionality</b>	<p>This unit contains functions, which are called during the Election Count process.</p> <ul style="list-style-type: none"><li>• <b>Determine_Which_Remainder_Gets_Extra_Vote</b> – This function is called when distributing a surplus:<ul style="list-style-type: none"><li>○ If the surplus is less than the number of transferrable votes, and</li><li>○ After the surplus votes have been distributed there are a number of remaining votes, with the number being less than the number of candidates, and</li><li>○ The number of candidates with equal votes and with equal remainders is greater than the number of remaining votes.</li></ul>The function looks at earlier counts to attempt to discover which candidate(s) should get the remaining votes. If the earlier counts do not identify the recipients, then the function will call the drawing lots procedure.</li><li>• <b>Look_At_Earlier_Counts</b> – This function goes back through previous counts to determine which of the candidates with matching votes and remainders should receive the extra surplus votes. It looks at their votes in previous counts and rules out those candidates with fewer votes than the candidate with most votes in the count in question.</li><li>• <b>Drawing_Lots</b> – This function calls the “Drawing Lots” window, which allows the user to record the results of the manual “Drawing Lots” process.</li></ul>
<b>Issue #</b>	<b>No Issues</b>
<b>Reviewer Comments</b>	<ul style="list-style-type: none"><li>• The display of the remainder was originally limited to 10 decimal places. This restriction has been removed.</li></ul>



<b>Unit Name</b>	<b>Calc_Count_Section_22.pas</b>
<b>Reviewed By</b>	John Pugh
<b>Review Label</b>	Multi-Election July 2003
<b>Unit Functionality</b>	<p>This unit contains functions/procedures, which are called as part of the count process:</p> <ul style="list-style-type: none"> <li>• <b>Statement_Current_Count</b> – Writes all of the details of the current count to the results table when the count has been completed. This procedure makes calls to the <b>Statement_Action</b>, <b>Statement_Elected</b>, and <b>Statement_Surplus</b> procedures.</li> <li>• <b>Statement_Action</b> – This function writes the purpose of each count to the results table, i.e. First Preference Count, Surplus Distribution Count, etc.</li> <li>• <b>Statement_Elected</b> – This function writes details of any candidates elected on the current count plus the number of continuing candidates and seats remaining to the results table.</li> <li>• <b>Statement_Surplus</b> – Writes details of any surpluses arising from the current count to the results table.</li> <li>• <b>Statement_Next_Step</b> – Writes the next step in the election process to the results table.</li> </ul>
<b>Issue #</b>	<b>No Issues</b>
<b>Reviewer Comments</b>	<ul style="list-style-type: none"> <li>• There are display modifications made to Statement_Action as a result of the no refund expenses flag.</li> </ul>

<b>Unit Name</b>	<b>Calc_Count_Section_23.pas</b>
<b>Reviewed By</b>	John Pugh
<b>Review Label</b>	Multi-Election July 2003
<b>Unit Functionality</b>	<p>This unit contains one function, which is called as part of the count process:</p> <ul style="list-style-type: none"> <li>• <b>Statement_Distribution_Surplus</b> – This function writes the result of the decision of which surplus to distribute to the results table.</li> </ul>
<b>Issue #</b>	<b>No Issues</b>
<b>Reviewer Comments</b>	<ul style="list-style-type: none"> <li>• There are display modifications made to function as a result of the no refund expenses flag.</li> <li>• Previous report lines are deleted as a result of item U testcase 9.</li> </ul>



<b>Unit Name</b>	<b>Calc_Count_Section_25.pas</b>
<b>Reviewed By</b>	John Pugh
<b>Review Label</b>	Multi-Election July 2003
<b>Unit Functionality</b>	<p>This unit contains functions/procedures, which are called as part of the count process:</p> <ul style="list-style-type: none"><li>• <b>Statement_FillingOfLastSeats</b> – This function checks which condition for the filling of last seat(s) applies and writes a record to the results table to explain why the last seat(s) have been filled. The function then writes to the results table, to inform the system that all seats have been filled and that the formal result declaration can be made.</li><li>• <b>Statement_All_Seats_Are_Filled</b> – This function writes to the results table, to inform the system that all seats have been filled and that the formal result declaration can be made.</li></ul>
<b>Issue #</b>	<b>No Issues</b>
<b>Reviewer Comments</b>	<ul style="list-style-type: none"><li>• As a result of item AA testcase de-1994,the text "with x votes" is added to the report line.</li><li>• Calls to Write Poll data made in these functions for the first time.</li></ul>

<b>Unit Name</b>	<b>Calc_Count_Section_26.pas</b>
<b>Reviewed By</b>	John Pugh
<b>Review Label</b>	Multi-Election July 2003
<b>Unit Functionality</b>	<p>This unit contains functions, which are called as part of the count process:</p> <ul style="list-style-type: none"><li>• <b>Statement_Distribution_Remaining_Surpluses</b> – This function writes records to the results table to record why the distribution of remaining surpluses is taking place.</li><li>• <b>Statement_Before_Distribution_Remaining_Surpluses</b> – This function writes records to the results table to record which surplus has been distributed and why.</li><li>• <b>Statement_After_Distribution_Remaining_Surpluses</b> – This function determines the outcome of a surplus distribution. The function then checks if any further surplus distributions are required.</li></ul>
<b>Issue #</b>	<b>No Issues</b>
<b>Reviewer Comments</b>	<ul style="list-style-type: none"><li>• Statement_Before_Distribution_Remaining_Surpluses modified as a result of GoD comments in Feb relating to the "All seats have been filled comment"</li><li>•</li></ul>



<b>Unit Name</b>	<b>Calc_Order_Election_Main.pas</b>
<b>Reviewed By</b>	John Pugh
<b>Review Label</b>	Multi-Election July 2003
<b>Unit Functionality</b>	This unit contains a single procedure, <b>Calculate_Order_Of_Election</b> , which is called to calculate the order of a election in a local election.
<b>Issue #</b>	<b>No Issues</b>
<b>Reviewer Comments</b>	<ul style="list-style-type: none"><li>• Error handling call added to the function.</li></ul>

<b>Unit Name</b>	<b>Calc_Order_Election_Section_13.pas</b>
<b>Reviewed By</b>	John Pugh
<b>Review Label</b>	Multi-Election July 2003
<b>Unit Functionality</b>	<p>This unit contains 3 functions which are called during the order of election calculation for local elections, they are:</p> <ul style="list-style-type: none"><li>• <b>Determine_Order_Of_Election</b> – When 2 or more candidates are deemed to be elected –<ul style="list-style-type: none"><li>○ With equal surpluses on the same count; or</li><li>○ With no surpluses on the same count; or</li><li>○ Without reaching the quota and with equal votes;</li></ul>The candidate with the largest number of votes at the earliest count at which 2 or more of such candidates had unequal votes is deemed to be elected first. In cases where 2 or more candidates have equal/no surpluses arising from the same count or where 2 or more candidates with equal votes were elected without reaching the quota and had, in either case, equal votes at all counts, the system should call upon the user to draw lots to decide the order of election. This function applies these rules to the order of election process.</li><li>• <b>Look_At_Earlier_Counts</b> – This function attempts to decide upon the order of election between candidates who match the above criteria by looking at their votes from previous counts.</li></ul> <p><b>Drawing_Lots</b> – This function calls the “Drawing Lots” unit so as to allow the user to separate the contending candidates.</p>
<b>Issue #</b>	<b>No Issues</b>
<b>Reviewer Comments</b>	<ul style="list-style-type: none"><li>• Try exception handling added to the functions</li></ul>

<b>Unit Name</b>	<b>Candidates_2.pas</b>
<b>Reviewed By</b>	John Pugh
<b>Review Label</b>	Multi-Election July 2003
<b>Unit Functionality</b>	Used for selecting a candidate and for editing or importing the candidate list. Edit function links to unit frmCandidates_Edit_3.
<b>Issue #</b>	<b>No Issues</b>
<b>Reviewer Comments</b>	<ul style="list-style-type: none"><li>• No significant modifications</li></ul>



<b>Unit Name</b>	<b>Candidates_Edit_3.pas</b>
<b>Reviewed By</b>	John Pugh
<b>Review Label</b>	Multi-Election July 2003
<b>Unit Functionality</b>	This unit is used for editing the data relating to a candidate.
<b>Issue #</b>	<b>No Issues</b>
<b>Reviewer Comments</b>	<ul style="list-style-type: none"><li>• Added proposer and replacement list fields</li><li>• Checks for same party and candidate colours</li><li>• Added code for renumbering the candidate when the party is changed</li><li>• First mention of EUROPEAN ELECTION thus far.</li></ul>

<b>Unit Name</b>	<b>Designation_1.pas</b>
<b>Reviewed By</b>	John Pugh
<b>Review Label</b>	Multi-Election July 2003
<b>Unit Functionality</b>	This unit is used for editing polling station designations.
<b>Issue #</b>	<b>No Issues</b>
<b>Reviewer Comments</b>	<ul style="list-style-type: none"><li>• First review of this unit.</li><li>• No issues identified</li></ul>

<b>Unit Name</b>	<b>dmElec.pas</b>
<b>Reviewed By</b>	John Pugh
<b>Review Label</b>	Multi-Election July 2003
<b>Unit Functionality</b>	This unit is the data module for the election system. It contains all of the components used to retrieve data from and to send updates to the database
<b>Issue #</b>	<b>No Issues</b>
<b>Reviewer Comments</b>	<ul style="list-style-type: none"><li>• Try exception handling added</li><li>• State text (calculated field) added on tbISVote on calculate event. Indicates different conditional compilation for central level version as opposed to local level version. This is a good way of ensuring that functionality cannot "seep" into each version.</li></ul>



<b>Unit Name</b>	<b>dmGen.pas</b>
<b>Reviewed By</b>	John Pugh
<b>Review Label</b>	Multi-Election July 2003
<b>Unit Functionality</b>	This unit is a second data module for the election system. It contains components used to retrieve data from and to send updates to the database
<b>Issue #</b>	<b>No Issues</b>
<b>Reviewer Comments</b>	<ul style="list-style-type: none"><li>• No Issues</li></ul>

<b>Unit Name</b>	<b>ES_messages.pas</b>
<b>Reviewed By</b>	John Pugh
<b>Review Label</b>	Multi-Election July 2003
<b>Unit Functionality</b>	This unit contains convert an Error Code into it's corresponding Error String
<b>Issue #</b>	<b>No Issues</b>
<b>Reviewer Comments</b>	<ul style="list-style-type: none"><li>• No source code changes to this unit.</li></ul>

<b>Unit Name</b>	<b>Export_Count_Result_Screens.pas</b>
<b>Reviewed By</b>	John Pugh
<b>Review Label</b>	Multi-Election July 2003
<b>Unit Functionality</b>	This unit controls exporting the results using the Presentation_Count_1 form
<b>Issue #</b>	<b>No Issues</b>
<b>Reviewer Comments</b>	<ul style="list-style-type: none"><li>• First review</li><li>• No Issues</li></ul>

<b>Unit Name</b>	<b>Export_Preparation_1.pas</b>
<b>Reviewed By</b>	John Pugh
<b>Review Label</b>	Multi-Election July 2003
<b>Unit Functionality</b>	This form unit controls the user interaction regarding exporting election preparation data.
<b>Issue #</b>	<b>No Issues</b>
<b>Reviewer Comments</b>	<ul style="list-style-type: none"><li>• First review</li><li>• No Issues</li></ul>



<b>Unit Name</b>	<b>Export_Preparation_2.pas</b>
<b>Reviewed By</b>	John Pugh
<b>Review Label</b>	Multi-Election July 2003
<b>Unit Functionality</b>	This unit exports election preparation data to various formats.
<b>Issue #</b>	<b>No Issues</b>
<b>Reviewer Comments</b>	<ul style="list-style-type: none"><li>• First review</li><li>• Uses a new component set xml_generator.pas. This should be reviewed.</li></ul>

<b>Unit Name</b>	<b>Export_Result_Ireland_1.pas</b>
<b>Reviewed By</b>	John Pugh
<b>Review Label</b>	Multi-Election July 2003
<b>Unit Functionality</b>	This form unit controls the user interaction regarding exporting election results data.
<b>Issue #</b>	<b>No Issues</b>
<b>Reviewer Comments</b>	<ul style="list-style-type: none"><li>• First review</li><li>• No Issues</li></ul>

<b>Unit Name</b>	<b>Export_Result_Ireland_2.pas</b>
<b>Reviewed By</b>	John Pugh
<b>Review Label</b>	Multi-Election July 2003
<b>Unit Functionality</b>	This unit exports election result data to various formats.
<b>Issue #</b>	<b>No Issues</b>
<b>Reviewer Comments</b>	<ul style="list-style-type: none"><li>• First review</li><li>• No Issues</li></ul>

<b>Unit Name</b>	<b>Export_Result_Ireland_Referendum_1.pas</b>
<b>Reviewed By</b>	John Pugh
<b>Review Label</b>	Multi-Election July 2003
<b>Unit Functionality</b>	This form unit controls the user interaction regarding exporting election results data.
<b>Issue #</b>	<b>No Issues</b>
<b>Reviewer Comments</b>	<ul style="list-style-type: none"><li>• First review</li><li>• No Issues</li></ul>



<b>Unit Name</b>	<b>Export_Result_Ireland_Referendum_2.pas</b>
<b>Reviewed By</b>	John Pugh
<b>Review Label</b>	Multi-Election July 2003
<b>Unit Functionality</b>	This unit exports election result data to various formats.
<b>Issue #</b>	<b>No Issues</b>
<b>Reviewer Comments</b>	<ul style="list-style-type: none"><li>• First review</li><li>• No Issues</li></ul>

<b>Unit Name</b>	<b>Export_TopGrids.pas</b>
<b>Reviewed By</b>	John Pugh
<b>Review Label</b>	Multi-Election July 2003
<b>Unit Functionality</b>	This unit contains functions for exporting data contained in TopGrid grid controls to various formats. It is currently only called from the Presentation_Count_Result_Sheet form.
<b>Issue #</b>	<b>No Issues</b>
<b>Reviewer Comments</b>	<ul style="list-style-type: none"><li>• First review</li><li>• No Issues</li></ul>

<b>Unit Name</b>	<b>Generate_PDF.pas</b>
<b>Reviewed By</b>	John Pugh
<b>Review Label</b>	Multi-Election July 2003
<b>Unit Functionality</b>	This unit contains functions for exporting the ballot papers to PDF format.
<b>Issue #</b>	<b>No Issues</b>
<b>Reviewer Comments</b>	<ul style="list-style-type: none"><li>• First review</li><li>• No Issues</li></ul>

<b>Unit Name</b>	<b>Import_Preparation_1.pas</b>
<b>Reviewed By</b>	John Pugh
<b>Review Label</b>	Multi-Election July 2003
<b>Unit Functionality</b>	This form unit controls the user interaction regarding importing election preparation data.
<b>Issue #</b>	<b>No Issues</b>
<b>Reviewer Comments</b>	<ul style="list-style-type: none"><li>• First review</li><li>• No Issues</li></ul>



<b>Unit Name</b>	<b>Import_Preparation_2.pas</b>
<b>Reviewed By</b>	John Pugh
<b>Review Label</b>	Multi-Election July 2003
<b>Unit Functionality</b>	This unit imports election preparation data to various formats.
<b>Issue #</b>	<b>No Issues</b>
<b>Reviewer Comments</b>	<ul style="list-style-type: none"><li>• First review</li><li>• No Issues</li></ul>

<b>Unit Name</b>	<b>Import_Result_Central_1.pas</b>
<b>Reviewed By</b>	John Pugh
<b>Review Label</b>	Multi-Election July 2003
<b>Unit Functionality</b>	This form unit controls the user interaction regarding importing result data from the local to central editions of the system.
<b>Issue #</b>	<b>No Issues</b>
<b>Reviewer Comments</b>	<ul style="list-style-type: none"><li>• First review</li><li>• No Issues</li></ul>

<b>Unit Name</b>	<b>Import_Result_local_1.pas</b>
<b>Reviewed By</b>	John Pugh
<b>Review Label</b>	Multi-Election July 2003
<b>Unit Functionality</b>	This unit imports result data from the local to central editions of the system.
<b>Issue #</b>	<b>No Issues</b>
<b>Reviewer Comments</b>	<ul style="list-style-type: none"><li>• First review</li><li>• Unsure if use of the StrToIntDef function call is advisable given that the default is set to zero. Surely the system should fail on error exceptions begin generated as a result of a conversion error (of the XML node data)</li></ul>

<b>Unit Name</b>	<b>Import_Result_Local_2.pas</b>
<b>Reviewed By</b>	John Pugh
<b>Review Label</b>	Multi-Election July 2003
<b>Unit Functionality</b>	This unit imports result data from the local to central editions of the system.
<b>Issue #</b>	<b>No Issues</b>
<b>Reviewer Comments</b>	<ul style="list-style-type: none"><li>• First review</li><li>• Unsure if use of the StrToIntDef function call is advisable given that the default is set to zero. Surely the system should fail on error exceptions begin generated as a result of a conversion error (of the XML node data)</li></ul>



<b>Unit Name</b>	<b>Import_Result_Local_Referendum.pas</b>
<b>Reviewed By</b>	John Pugh
<b>Review Label</b>	Multi-Election July 2003
<b>Unit Functionality</b>	This unit imports result referendum data from the local to central editions of the system.
<b>Issue #</b>	<b>No Issues</b>
<b>Reviewer Comments</b>	<ul style="list-style-type: none"><li>• First review</li><li>• No XML import implemented as yet. Obviously will be required before new referendum.</li></ul>

<b>Unit Name</b>	<b>Memory_Prog.pas</b>
<b>Reviewed By</b>	John Pugh
<b>Review Label</b>	Multi-Election July 2003
<b>Unit Functionality</b>	This unit contains the code for transferring election details from the IES application to a memory module for use in a voting machine
<b>Issue #</b>	<b>No Issues</b>
<b>Reviewer Comments</b>	<ul style="list-style-type: none"><li>• Try exception clauses implemented as requested</li><li>• Most of the code and comments are still mostly Dutch making it difficult to understand the processes.</li></ul>

<b>Unit Name</b>	<b>Memory_Read.pas</b>
<b>Reviewed By</b>	John Pugh
<b>Review Label</b>	Multi-Election July 2003
<b>Unit Functionality</b>	This unit contains the code for transferring election details from a memory module to the IES application once an election has closed
<b>Issue #</b>	<b>No Issues</b>
<b>Reviewer Comments</b>	<ul style="list-style-type: none"><li>• Try exception clauses implemented as requested</li><li>• UK conditional code has been removed reinforcing the belief that a separate source code for the Irish system is not in place..</li></ul>



<b>Unit Name</b>	<b>Mixed_Numbered_1.pas</b>
<b>Reviewed By</b>	John Pugh
<b>Review Label</b>	Multi-Election July 2003
<b>Unit Functionality</b>	<p>This unit/form allows the user to view the votes cast after they have been mixed and numbered. The form contains a grid, with each candidates name in ballot paper order across the top and the mixed vote number down the left hand side. The grid displays the preference number for each candidate for each vote.</p> <p>The form also allows the user to do the following:</p> <ul style="list-style-type: none"><li>• Search for a particular mixed vote number.</li><li>• Query the number of votes cast for a selected candidate, with next preference for another selected candidate.</li><li>• Print the grid.</li></ul>
<b>Issue #</b>	<b>No Issues</b>
<b>Reviewer Comments</b>	<ul style="list-style-type: none"><li>• Printing of ballot paper added.</li><li>• Try exception clauses implemented as requested</li></ul>

<b>Unit Name</b>	<b>Mixed_Numbered_Check.pas</b>
<b>Reviewed By</b>	John Pugh
<b>Review Label</b>	Multi-Election July 2003
<b>Unit Functionality</b>	<p>This unit/form is used for checking the validity of the votes. The checks the form does are</p> <ul style="list-style-type: none"><li>• Check no vote has more preferences than there are candidates at the election.</li><li>• Check for break in the sequence of preferences.</li><li>• Check for duplication of preferences within any vote.</li></ul>
<b>Issue #</b>	<b>No Issues</b>
<b>Reviewer Comments</b>	<ul style="list-style-type: none"><li>• First Review</li><li>• No Issues.</li></ul>

<b>Unit Name</b>	<b>Mixed_Numbered_Export.pas</b>
<b>Reviewed By</b>	John Pugh
<b>Review Label</b>	Multi-Election July 2003
<b>Unit Functionality</b>	This unit exports votes as mixed and number to a variety of different formats.
<b>Issue #</b>	<b>No Issues</b>
<b>Reviewer Comments</b>	<ul style="list-style-type: none"><li>• First review</li><li>• No Issues</li></ul>



<b>Unit Name</b>	<b>Mixed_Numbered_Print.pas</b>
<b>Reviewed By</b>	John Pugh
<b>Review Label</b>	Multi-Election July 2003
<b>Unit Functionality</b>	This unit/form is used printing the votes as mixed and numbered
<b>Issue #</b>	<b>No Issues</b>
<b>Reviewer Comments</b>	<ul style="list-style-type: none"><li>No Issues.</li></ul>

<b>Unit Name</b>	<b>Mixed_Numbered_Query.pas</b>
<b>Reviewed By</b>	John Pugh
<b>Review Label</b>	Multi-Election July 2003
<b>Unit Functionality</b>	This unit allows the user to query the ballot results in order to determine how many preferences a candidate received, how many preferences they received after another selected candidate was given a preference, etc. The system performs a count based on parameters supplied by the user, returns the result and lists all of the vote numbers, which match the criteria. The user can select any of the matching vote numbers from a list and the system will then position the user on the relevant record
<b>Issue #</b>	<b>No Issues</b>
<b>Reviewer Comments</b>	<ul style="list-style-type: none"><li>No Issues.</li></ul>

<b>Unit Name</b>	<b>Mixed_Numbered_Search.pas</b>
<b>Reviewed By</b>	John Pugh
<b>Review Label</b>	Multi-Election July 2003
<b>Unit Functionality</b>	This unit allows the user to search for a particular Mixed Vote No. in the grid, which is displayed in the Mixed_Numbered_1 form. The user simply enters the required number, clicks Ok and the unit moves them to the correct record if it exists
<b>Issue #</b>	<b>No Issues</b>
<b>Reviewer Comments</b>	<ul style="list-style-type: none"><li>Printing of ballot papers added to the form.</li></ul>



<b>Unit Name</b>	<b>Mixing_Numbering_1.pas</b>
<b>Reviewed By</b>	John Pugh
<b>Review Label</b>	Multi-Election July 2003
<b>Unit Functionality</b>	<p>This unit contains one procedure, <b>Mix_And_Number</b>.</p> <p>This procedure ensures that before the votes at an election in a constituency are counted by first preferences in the first count, they are randomised and then re-numbered "as they stand".</p> <p>The randomisation is achieved using the Delphi randomisation functions</p>
<b>Issue #</b>	<b>No Issues</b>
<b>Reviewer Comments</b>	<ul style="list-style-type: none"><li>• No significant changes since last review</li></ul>

<b>Unit Name</b>	<b>Participants_PDF_Ireland_2</b>
<b>Reviewed By</b>	John Pugh
<b>Review Label</b>	Multi-Election July 2003
<b>Unit Functionality</b>	<p>This form contains a quickreport of for an example print of the referendum ballot paper. This unit includes PDF components so that the report can be exported to PDF format for exact printing reproduction.</p>
<b>Issue #</b>	<b>No Issues</b>
<b>Reviewer Comments</b>	Source files not sent by the developer. Is this unit still in use.

<b>Unit Name</b>	<b>Participants_Print_7</b>
<b>Reviewed By</b>	John Pugh
<b>Review Label</b>	Multi-Election July 2003
<b>Unit Functionality</b>	<p>This function prints a basic sample of the ballot paper.</p>
<b>Issue #</b>	<b>No Issues</b>
<b>Reviewer Comments</b>	<ul style="list-style-type: none"><li>• Added JPEG logo printing.</li><li>• Removed Irish conditional compilation directives</li><li>• Added headers for the different election types</li></ul>



<b>Unit Name</b>	<b>Participants_Print_Ireland_1</b>
<b>Reviewed By</b>	John Pugh
<b>Review Label</b>	Multi-Election July 2003
<b>Unit Functionality</b>	This form contains a quickreport of for an example print of a general election ballot paper.
<b>Issue #</b>	<b>No Issues</b>
<b>Reviewer Comments</b>	<ul style="list-style-type: none"><li>• Removed Irish conditional compilation directives</li><li>• Added headers for the different election types</li></ul>

<b>Unit Name</b>	<b>Participants_Print_Ireland_2</b>
<b>Reviewed By</b>	John Pugh
<b>Review Label</b>	Multi-Election July 2003
<b>Unit Functionality</b>	Based upon Participants_Print_Ireland_1, it has been modified for printing of referendum ballot paper printing.
<b>Issue #</b>	<b>No Issues</b>
<b>Reviewer Comments</b>	<ul style="list-style-type: none"><li>• Minor formatting modifications</li></ul>

<b>Unit Name</b>	<b>Petition_Check</b>
<b>Reviewed By</b>	John Pugh
<b>Review Label</b>	Multi-Election July 2003
<b>Unit Functionality</b>	First Review of this unit. The unit is used for checking activated petitions.
<b>Issue #</b>	<b>No Issues</b>
<b>Reviewer Comments</b>	<ul style="list-style-type: none"><li>• No Issues</li></ul>



<b>Unit Name</b>	<b>Petitions_1</b>
<b>Reviewed By</b>	John Pugh
<b>Review Label</b>	Multi-Election July 2003
<b>Unit Functionality</b>	<p>This unit controls a form, which displays all of the petitions of a certain type for the selected election. There are 3 types of petition:</p> <ul style="list-style-type: none"> <li>• <b>Deletion of Invalid Votes</b></li> <li>• <b>Insertion of Valid Votes</b></li> <li>• <b>Deletion of Ineligible Candidates</b></li> </ul> <p>From this screen the user can add new petitions and edit existing petitions using the screen controlled by "Petitions_Edit_.pas", and implement petitions using the screen defined in "Petitions_Implement_1.pas".</p>
<b>Issue #</b>	<b>No Issues</b>
<b>Reviewer Comments</b>	<ul style="list-style-type: none"> <li>• Try exception handling implemented as requested</li> </ul>

<b>Unit Name</b>	<b>Petitions_Edit_1</b>
<b>Reviewed By</b>	John Pugh
<b>Review Label</b>	Multi-Election July 2003
<b>Unit Functionality</b>	<p>This unit controls a form, which allows the user to enter details when they are adding new petition descriptions or editing existing petition descriptions</p>
<b>Issue #</b>	<b>No Issues</b>
<b>Reviewer Comments</b>	<ul style="list-style-type: none"> <li>• Try exception handling implemented as requested</li> </ul>

<b>Unit Name</b>	<b>Petitions_Implement_1</b>
<b>Reviewed By</b>	John Pugh
<b>Review Label</b>	Multi-Election July 2003
<b>Unit Functionality</b>	<p>There are 3 types of petition available in the system:</p> <ul style="list-style-type: none"> <li>• <b>Deletion of Invalid Votes</b></li> <li>• <b>Insertion of Valid Votes</b></li> <li>• <b>Deletion of Ineligible Candidates</b></li> </ul> <p>All three of these petition types are implemented using this unit and the form which it controls.</p>
<b>Issue #</b>	<b>No Issues</b>
<b>Reviewer Comments</b>	<ul style="list-style-type: none"> <li>• Activate and deactivate ballot functions added</li> <li>• Try exception handling implemented as requested</li> </ul>



<b>Unit Name</b>	<b>Pre_Count_Report_Postal_Voting_1</b>
<b>Reviewed By</b>	John Pugh
<b>Review Label</b>	Multi-Election July 2003
<b>Unit Functionality</b>	This unit is used for recording data required in relation to postal and special ballot papers.
<b>Issue #</b>	<b>No Issues</b>
<b>Reviewer Comments</b>	<ul style="list-style-type: none"><li>• Button added for declaring when the report on postal and special voting is complete.</li></ul>

<b>Unit Name</b>	<b>Pre_Count_Report_Postal_Voting_Print_1</b>
<b>Reviewed By</b>	John Pugh
<b>Review Label</b>	Multi-Election July 2003
<b>Unit Functionality</b>	This unit is used for printing data in relation to postal and special ballot papers.
<b>Issue #</b>	<b>No Issues</b>
<b>Reviewer Comments</b>	

<b>Unit Name</b>	<b>Prepare_Referendum_Ireland</b>
<b>Reviewed By</b>	John Pugh
<b>Review Label</b>	Multi-Election July 2003
<b>Unit Functionality</b>	This unit initialising the following tables – Votings, Sub_Votings, Participants, Candidates, Sub_Participants – for receipt of referendum data.
<b>Issue #</b>	<b>No Issues</b>
<b>Reviewer Comments</b>	



<b>Unit Name</b>	<b>Presentation_Count_1.pas</b>
<b>Reviewed By</b>	John Pugh
<b>Review Label</b>	Multi-Election July 2003
<b>Unit Functionality</b>	<p>This unit controls the form, which displays all of the "Individual Count Screens". The form is called from the Count menu on the main screen, using the "Individual Count Screens" menu option.</p> <p>The form can be called in several modes depending on the type of information that is to be displayed.</p>
<b>Issue #</b>	<b>No new issues</b>
<b>Reviewer Comments</b>	

<b>Unit Name</b>	<b>Presentation_Count_2.pas</b>
<b>Reviewed By</b>	John Pugh
<b>Review Label</b>	Multi-Election July 2003
<b>Unit Functionality</b>	<p>This unit controls the creation of the "Individual Count Screens". Depending on the screen required, it hides/shows controls, sets captions, etc.</p>
<b>Issue #</b>	<b>No new issues</b>
<b>Reviewer Comments</b>	<ul style="list-style-type: none"><li>• Column only visible code when the election expenses is possible</li></ul>

<b>Unit Name</b>	<b>Presentation_Count_3.pas</b>
<b>Reviewed By</b>	John Pugh
<b>Review Label</b>	Multi-Election July 2003
<b>Unit Functionality</b>	This unit does not contain any code.
<b>Issue #</b>	<b>No new issues</b>
<b>Reviewer Comments</b>	

<b>Unit Name</b>	<b>Presentation_Count_Export_Screen_1</b>
<b>Reviewed By</b>	John Pugh
<b>Review Label</b>	Multi-Election July 2003
<b>Unit Functionality</b>	<p>First review. This unit is used for exporting the contents of the Presentation_Count_1 form to a number of data formats including, ASCII, CSV, HTML, WORD, EXCEL and WML.</p>
<b>Issue #</b>	<b>No Issues</b>



<b>Reviewer Comments</b>	
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<b>Unit Name</b>	<b>Presentation_Count_Export_Screen_2</b>
<b>Reviewed By</b>	John Pugh
<b>Review Label</b>	Multi-Election July 2003
<b>Unit Functionality</b>	First review. This unit is used for exporting the contents of the Presentation_Count_1 form to a number of data formats including, ASCII, CSV, HTML, WORD, EXCEL and WML.
<b>Issue #</b>	<b>No Issues</b>
<b>Reviewer Comments</b>	

<b>Unit Name</b>	<b>Presentation_Count_Export_Screen_3</b>
<b>Reviewed By</b>	John Pugh
<b>Review Label</b>	Multi-Election July 2003
<b>Unit Functionality</b>	First review. This unit is used for exporting the contents of the Presentation_Count_1 form to a number of data formats including, ASCII, CSV, HTML, WORD, EXCEL and WML.
<b>Issue #</b>	<b>No Issues</b>
<b>Reviewer Comments</b>	

<b>Unit Name</b>	<b>Presentation_Count_Export_Screen_130</b>
<b>Reviewed By</b>	John Pugh
<b>Review Label</b>	Multi-Election July 2003
<b>Unit Functionality</b>	This unit is used for exporting the contents of the result and total grids on the Count Reports form to a number of data formats including, ASCII, CSV, HTML, WORD, EXCEL and WML.
<b>Issue #</b>	<b>No Issues</b>
<b>Reviewer Comments</b>	<ul style="list-style-type: none"><li>• Removed the Ireland compiler directives</li><li>• Use of \export directory</li></ul>



<b>Unit Name</b>	<b>Presentation_Count_Export_Screen_210</b>
<b>Reviewed By</b>	John Pugh
<b>Review Label</b>	Multi-Election July 2003
<b>Unit Functionality</b>	First Review. This unit is used for exporting the contents of the result and total grids on the Count Reports form (type 210) to a number of data formats including, ASCII, CSV, HTML, WORD, EXCEL and WML.
<b>Issue #</b>	<b>No Issues</b>
<b>Reviewer Comments</b>	

<b>Unit Name</b>	<b>Presentation_Count_Preferences</b>
<b>Reviewed By</b>	John Pugh
<b>Review Label</b>	Multi-Election July 2003
<b>Unit Functionality</b>	First Review. This unit is used for displaying preferences for each candidate.
<b>Issue #</b>	<b>No Issues</b>
<b>Reviewer Comments</b>	

<b>Unit Name</b>	<b>Presentation_Count_Preferences_Export</b>
<b>Reviewed By</b>	John Pugh
<b>Review Label</b>	Multi-Election July 2003
<b>Unit Functionality</b>	First Review. This quickreport unit is used for printing preferences for each candidate.
<b>Issue #</b>	<b>No Issues</b>
<b>Reviewer Comments</b>	

<b>Unit Name</b>	<b>Presentation_Count_Print_Screen.pas</b>
<b>Reviewed By</b>	John Pugh
<b>Review Label</b>	Multi-Election July 2003
<b>Unit Functionality</b>	This unit contains a quick report component, which is used to generate the following reports: <ul style="list-style-type: none"><li>• Surplus Distribution</li><li>• Transfer of Votes of Excluded Candidate</li><li>• Count Result</li><li>• State of the Poll</li></ul>
<b>Issue #</b>	<b>No Issues</b>
<b>Reviewer Comments</b>	<ul style="list-style-type: none"><li>• Ireland compiler directive removed</li></ul>



<b>Unit Name</b>	<b>Presentation_Count_Print_Screen_1.pas</b>
<b>Reviewed By</b>	John Pugh
<b>Review Label</b>	Multi-Election July 2003
<b>Unit Functionality</b>	This unit contains a quick report component, which, when not conducting a Referendum, is used to generate the following reports: <ul style="list-style-type: none"><li>• Count Result</li><li>• State of the Poll</li><li>• Post-Shortcut Count Result</li><li>• Post-Shortcut State of the Poll</li></ul>
<b>Issue #</b>	<b>No New Issues</b>
<b>Reviewer Comments</b>	

<b>Unit Name</b>	<b>Presentation_Count_Print_Screen_2.pas</b>
<b>Reviewed By</b>	John Pugh
<b>Review Label</b>	Multi-Election July 2003
<b>Unit Functionality</b>	This unit contains a quick report component, which is used to generate the Surplus Distribution report.
<b>Issue #</b>	<b>No New Issues</b>
<b>Reviewer Comments</b>	

<b>Unit Name</b>	<b>Presentation_Count_Print_Screen_130.pas</b>
<b>Reviewed By</b>	John Pugh
<b>Review Label</b>	Multi-Election July 2003
<b>Unit Functionality</b>	This unit contains a quick report component, which, when conducting a Referendum, is used to generate the following reports: <ol style="list-style-type: none"><li>1. Count Result</li><li>2. State of the Poll</li><li>3. Post-Shortcut Count Result</li><li>4. Post-Shortcut State of the Poll</li></ol>
<b>Issue #</b>	<b>No New Issues</b>
<b>Reviewer Comments</b>	



<b>Unit Name</b>	<b>Presentation_Count_Print_Screen_210.pas</b>
<b>Reviewed By</b>	John Pugh
<b>Review Label</b>	Multi-Election July 2003
<b>Unit Functionality</b>	This unit contains a quick report component, which is used to generate the Statement report.
<b>Issue #</b>	<b>No New Issues</b>
<b>Reviewer Comments</b>	<ul style="list-style-type: none"><li>Removed Ireland compiler directive</li></ul>

<b>Unit Name</b>	<b>Presentation_Count_Print_Screen_210.pas</b>
<b>Reviewed By</b>	John Pugh
<b>Review Label</b>	Multi-Election July 2003
<b>Unit Functionality</b>	This unit contains a quick report component, which is used to generate the Statement report.
<b>Issue #</b>	<b>No New Issues</b>
<b>Reviewer Comments</b>	<ul style="list-style-type: none"><li>Removed Ireland compiler directive</li></ul>

<b>Unit Name</b>	<b>Presentation_Count_Print_Screen_520.pas</b>
<b>Reviewed By</b>	John Pugh
<b>Review Label</b>	Multi-Election July 2003
<b>Unit Functionality</b>	This unit contains a quick report component, which is used to generate the Order of Election report.
<b>Issue #</b>	<b>No New Issues</b>
<b>Reviewer Comments</b>	<ul style="list-style-type: none"><li>Removed Ireland compiler directive</li></ul>

<b>Unit Name</b>	<b>Presentation_Count_Print_Screen_530.pas</b>
<b>Reviewed By</b>	John Pugh
<b>Review Label</b>	Multi-Election July 2003
<b>Unit Functionality</b>	This unit contains a quick report component, which is used to generate the Order of Election report.
<b>Issue #</b>	<b>No New Issues</b>
<b>Reviewer Comments</b>	<ul style="list-style-type: none"><li>Removed Ireland compiler directive</li></ul>



<b>Unit Name</b>	<b>Presentation_Count_Result_Sheet</b>
<b>Reviewed By</b>	John Pugh
<b>Review Label</b>	Multi-Election July 2003
<b>Unit Functionality</b>	This unit creates a form, which displays a result sheet summarising all candidate's progress on a count-by-count basis.
<b>Issue #</b>	<b>No Issues</b>
<b>Reviewer Comments</b>	<ul style="list-style-type: none"><li>• Removed Ireland compiler directive</li><li>• No source unit modifications</li></ul>

<b>Unit Name</b>	<b>Presentation_Count_Result_Sheet_Referendum</b>
<b>Reviewed By</b>	John Pugh
<b>Review Label</b>	Multi-Election July 2003
<b>Unit Functionality</b>	Used for displaying the results of the Referendum count.
<b>Issue #</b>	<b>No new issues</b>
<b>Reviewer Comments</b>	

<b>Unit Name</b>	<b>Presentation_Count_Result_Sheet_Referendum_Export</b>
<b>Reviewed By</b>	John Pugh
<b>Review Label</b>	Multi-Election July 2003
<b>Unit Functionality</b>	This unit is used for exporting the contents of the result and total grids on the Count Reports form to a number of data formats including, ASCII, CSV, HTML, WORD, EXCEL and WML.
<b>Issue #</b>	<b>No new issues</b>
<b>Reviewer Comments</b>	

<b>Unit Name</b>	<b>Presentation_Count_Result_Sheet_Referendum_Print</b>
<b>Reviewed By</b>	John Pugh
<b>Review Label</b>	Multi-Election July 2003
<b>Unit Functionality</b>	This unit is used for printing the contents of the result and total grids on the Count Reports form to hard copy format.
<b>Issue #</b>	<b>No new issues</b>
<b>Reviewer Comments</b>	It is functionally equivalent to Presentation_Count_Export_Screen_130.



<b>Unit Name</b>	<b>Presentation_Count_Summary_1</b>
<b>Reviewed By</b>	John Pugh
<b>Review Label</b>	Multi-Election July 2003
<b>Unit Functionality</b>	First review. This unit is used for display the count summary to the screen and for enabling printing of declaration and result sheets.
<b>Issue #</b>	<b>No issues</b>
<b>Reviewer Comments</b>	

<b>Unit Name</b>	<b>Presentation_Count_Summary_2</b>
<b>Reviewed By</b>	John Pugh
<b>Review Label</b>	Multi-Election July 2003
<b>Unit Functionality</b>	First review. This unit implements builds the dataset containing the display data for Presentation_Count_Summary_1.
<b>Issue #</b>	<b>No issues</b>
<b>Reviewer Comments</b>	

<b>Unit Name</b>	<b>Presentation_Count_Summary_Export_Screen_1</b>
<b>Reviewed By</b>	John Pugh
<b>Review Label</b>	Multi-Election July 2003
<b>Unit Functionality</b>	First review. This unit implements builds the export of the display data for Presentation_Count_Summary_1.
<b>Issue #</b>	<b>No issues</b>
<b>Reviewer Comments</b>	

<b>Unit Name</b>	<b>Presentation_Count_Summary_Print_Screen_1.pas</b>
<b>Reviewed By</b>	John Pugh
<b>Review Label</b>	Multi-Election July 2003
<b>Unit Functionality</b>	First review. This quick report is the report layout used in Presentation_Count_Summary_1.
<b>Issue #</b>	<b>No issues</b>
<b>Reviewer Comments</b>	



<b>Unit Name</b>	<b>Presentation_Order_Election_1</b>
<b>Reviewed By</b>	John Pugh
<b>Review Label</b>	Multi-Election July 2003
<b>Unit Functionality</b>	This unit/form displays the Order of Election at a Local Election. The form has 2 modes: Order of Election and Statement, which the user can toggle between. Th user can also print the contents of the screen.
<b>Issue #</b>	<b>No new issues</b>
<b>Reviewer Comments</b>	<ul style="list-style-type: none"><li>• Try exception handling is implemented as requested</li></ul>

<b>Unit Name</b>	<b>Presentation_Order_Election_2</b>
<b>Reviewed By</b>	John Pugh
<b>Review Label</b>	Multi-Election July 2003
<b>Unit Functionality</b>	This unit contains procedures which are used by the Order of Election presentation screen (Presentation_Order_Election_1.pas / Presentation_Order_Election_2.dfm) to switch between Order of Election and Statement modes.
<b>Issue #</b>	<b>No new issues</b>
<b>Reviewer Comments</b>	<ul style="list-style-type: none"><li>• Try exception handling is implemented as requested</li></ul>

<b>Unit Name</b>	<b>Print_Ballot_Papers</b>
<b>Reviewed By</b>	John Pugh
<b>Review Label</b>	Multi-Election July 2003
<b>Unit Functionality</b>	This unit controls the printing of all ballot papers in a particular count. The unit checks the number of candidates in the election. If there are less than 24 candidates it will generate the report defined in, "Print_Ballot_Papers_1.pas", while if there are 24 or more candidates it generates the report defined in, "Print_Ballot_Papers_1.pas".
<b>Issue #</b>	<b>No Issues</b>
<b>Reviewer Comments</b>	<ul style="list-style-type: none"><li>• Try exception handling is implemented as requested</li><li>• New functions created for printing ballot papers as Mixed and Mixed Individual.</li></ul>



<b>Unit Name</b>	<b>Print_Ballot_Papers_1</b>
<b>Reviewed By</b>	John Pugh
<b>Review Label</b>	Multi-Election July 2003
<b>Unit Functionality</b>	This unit contains a QuickReport component, which generates a ballot paper report for elections with less than 24 candidates.
<b>Issue #</b>	<b>No Issues</b>
<b>Reviewer Comments</b>	<ul style="list-style-type: none"><li>• Substantial formatting implemented</li></ul>

<b>Unit Name</b>	<b>Print_Ballot_Papers_2</b>
<b>Reviewed By</b>	John Pugh
<b>Review Label</b>	Multi-Election July 2003
<b>Unit Functionality</b>	This unit contains a QuickReport component, which generates a ballot paper report for elections with 24 or more candidates.
<b>Issue #</b>	<b>No Issues</b>
<b>Reviewer Comments</b>	<ul style="list-style-type: none"><li>• No significant modifications made</li><li>• Ireland compiler directive removed</li></ul>

<b>Unit Name</b>	<b>Print_Ballot_Papers_Referendum</b>
<b>Reviewed By</b>	John Pugh
<b>Review Label</b>	Multi-Election July 2003
<b>Unit Functionality</b>	This unit is used for controlling the printing of the ballot papers for a referendum.
<b>Issue #</b>	<b>No new issues</b>
<b>Reviewer Comments</b>	

<b>Unit Name</b>	<b>Print_Ballot_Papers_Referendum_1</b>
<b>Reviewed By</b>	John Pugh
<b>Review Label</b>	Multi-Election July 2003
<b>Unit Functionality</b>	This unit is used for the printing of the ballot papers for a referendum.
<b>Issue #</b>	<b>No Issues</b>
<b>Reviewer Comments</b>	



<b>Unit Name</b>	<b>Print_Ballot_Papers_Referendum_2</b>
<b>Reviewed By</b>	John Pugh
<b>Review Label</b>	Multi-Election July 2003
<b>Unit Functionality</b>	First review. This quick report unit is used for the printing of the ballot papers for a referendum.
<b>Issue #</b>	<b>No Issues</b>
<b>Reviewer Comments</b>	<ul style="list-style-type: none"><li>• Is not called by any other current unit on hand. This is unit still in use?</li></ul>

<b>Unit Name</b>	<b>Print_Count_Individual_Votes</b>
<b>Reviewed By</b>	John Pugh
<b>Review Label</b>	Multi-Election July 2003
<b>Unit Functionality</b>	This unit contains a QuickReport component which produces a report of the vote numbers received by each candidate in a count.
<b>Issue #</b>	<b>No Issues</b>
<b>Reviewer Comments</b>	<ul style="list-style-type: none"><li>• Try exception handling implemented.</li><li>• No refund expenses flag handled.</li><li>• Comments 62 (April 2003) implemented.</li></ul>

<b>Unit Name</b>	<b>Print_Count_Individual_Votes_2</b>
<b>Reviewed By</b>	John Pugh
<b>Review Label</b>	Multi-Election July 2003
<b>Unit Functionality</b>	This unit appears to have been superseded by, "Print_Count_Individual_Votes.pas" but the source is still being maintained.
<b>Issue #</b>	<b>No Issues</b>
<b>Reviewer Comments</b>	<ul style="list-style-type: none"><li>• Ireland compiler directive removed</li><li>• No other source code changes</li></ul>



<b>Unit Name</b>	<b>Print_Count_Location_Votes</b>
<b>Reviewed By</b>	John Pugh
<b>Review Label</b>	Multi-Election July 2003
<b>Unit Functionality</b>	This unit contains a QuickReport component, which generates a report detailing the vote numbers belonging to each candidate after a count
<b>Issue #</b>	<b>No new issues</b>
<b>Reviewer Comments</b>	<ul style="list-style-type: none"><li>• Ireland compiler directive removed</li><li>• Try exception handling implemented</li></ul>

<b>Unit Name</b>	<b>Print_Count_Location_Votes_Referendum</b>
<b>Reviewed By</b>	John Pugh
<b>Review Label</b>	Multi-Election July 2003
<b>Unit Functionality</b>	First Review. This unit contains a QuickReport component, which generates a report detailing the numbers of votes belonging to each candidate after a count
<b>Issue #</b>	<b>No Issues</b>
<b>Reviewer Comments</b>	

<b>Unit Name</b>	<b>Print_Count_Result_Screens</b>
<b>Reviewed By</b>	John Pugh
<b>Review Label</b>	Multi-Election July 2003
<b>Unit Functionality</b>	This unit prints all of the count result screens. It does this by making a call to the Presentation function in "Presentation_Count_2.pas" for each required report
<b>Issue #</b>	<b>No new issues</b>
<b>Reviewer Comments</b>	<ul style="list-style-type: none"><li>• Ireland compiler directive removed</li></ul>

<b>Unit Name</b>	<b>Print_Count_Transfered_Votes</b>
<b>Reviewed By</b>	John Pugh
<b>Review Label</b>	Multi-Election July 2003
<b>Unit Functionality</b>	This unit contains a QuickReport component, which generates a report detailing the vote numbers transferred to each candidate during a count.
<b>Issue #</b>	<b>No new issues</b>
<b>Reviewer Comments</b>	<ul style="list-style-type: none"><li>• Ireland compiler directive removed</li></ul>



<b>Unit Name</b>	<b>Reconciliation_Vote_Accounts_1.pas</b>
<b>Reviewed By</b>	John Pugh
<b>Review Label</b>	Multi-Election July 2003
<b>Unit Functionality</b>	This form displays the Reconciliation of Voter Accounts information for verification.
<b>Issue #</b>	<b>No new issues</b>
<b>Reviewer Comments</b>	<ul style="list-style-type: none"><li>• Export function added.</li><li>• Central Level compiler directive added</li></ul>

<b>Unit Name</b>	<b>Reconciliation_Vote_Accounts_2.pas</b>
<b>Reviewed By</b>	John Pugh
<b>Review Label</b>	Multi-Election July 2003
<b>Unit Functionality</b>	This unit creates a form which is substantially different from that described in Update 3, therefore it has been assumed that the form has been superseded for Irish purposes by, "Reconciliation_Vote_Accounts_2.pas".
<b>Issue #</b>	<b>No new issues</b>
<b>Reviewer Comments</b>	<ul style="list-style-type: none"><li>• Ireland compiler directive removed</li><li>• Export function added.</li><li>• Central Level compiler directive added</li></ul>

<b>Unit Name</b>	<b>Reconciliation_Vote_Accounts_3.pas</b>
<b>Reviewed By</b>	John Pugh
<b>Review Label</b>	Multi-Election July 2003
<b>Unit Functionality</b>	First Review. This form unit display a reconciliation of voter accounts for elections held with one or more other elections.
<b>Issue #</b>	<b>No issues</b>
<b>Reviewer Comments</b>	<ul style="list-style-type: none"><li>• No issues</li></ul>



<b>Unit Name</b>	<b>Reconciliation_Vote_Accounts_Export_1</b>
<b>Reviewed By</b>	<b>John Pugh</b>
<b>Review Label</b>	Multi-Election July 2003
<b>Unit Functionality</b>	First Review. This unit is used for exporting the reconciliation of voter accounts for elections held with one or more other elections and is called from Reconciliation_Vote_Accounts_1
<b>Issue #</b>	<b>No issues</b>
<b>Reviewer Comments</b>	<ul style="list-style-type: none"><li>• No issues</li></ul>

<b>Unit Name</b>	<b>Reconciliation_Vote_Accounts_Export_1a</b>
<b>Reviewed By</b>	<b>John Pugh</b>
<b>Review Label</b>	Multi-Election July 2003
<b>Unit Functionality</b>	First Review. This unit is used for exporting the reconciliation of voter accounts for elections held with one or more other elections and is not called by any other unit so is probably superseded by Reconciliation_Vote_Accounts_1_Export or is a backup of it.
<b>Issue #</b>	<b>No issues</b>
<b>Reviewer Comments</b>	<ul style="list-style-type: none"><li>• No issues</li></ul>

<b>Unit Name</b>	<b>Reconciliation_Vote_Accounts_Print_1.pas</b>
<b>Reviewed By</b>	John Pugh
<b>Review Label</b>	Multi-Election July 2003
<b>Unit Functionality</b>	Used for printing the Reconciliation of Voter Accounts form using a quickreport.
<b>Issue #</b>	<b>No Issues</b>
<b>Reviewer Comments</b>	<ul style="list-style-type: none"><li>• Ireland compiler directive removed</li><li>• Central Level compiler directive added</li></ul>



<b>Unit Name</b>	<b>Reconciliation_Vote_Accounts_Print_1a.pas</b>
<b>Reviewed By</b>	John Pugh
<b>Review Label</b>	Multi-Election July 2003
<b>Unit Functionality</b>	First Review. Used for printing the Reconciliation of Voter Accounts form using a quickreport. It is called from Reconciliation_Vote_Accounts_2.
<b>Issue #</b>	<b>No Issues</b>
<b>Reviewer Comments</b>	

<b>Unit Name</b>	<b>Reconciliation_Vote_Accounts_Print_2</b>
<b>Reviewed By</b>	John Pugh
<b>Review Label</b>	Multi-Election July 2003
<b>Unit Functionality</b>	This unit creates a form which is substantially different from that described in Update 3, therefore it has been assumed that the form has been superseded for Irish purposes by, "Reconciliation_Vote_Accounts_2.pas".
<b>Issue #</b>	<b>No new issues</b>
<b>Reviewer Comments</b>	

<b>Unit Name</b>	<b>Seats_Ireland_1</b>
<b>Reviewed By</b>	John Pugh
<b>Review Label</b>	Multi-Election July 2003
<b>Unit Functionality</b>	First Review. This form unit is used for editing the seats to be filled table.
<b>Issue #</b>	<b>No Issues</b>
<b>Reviewer Comments</b>	<ul style="list-style-type: none"> <li>• No issues</li> </ul>

<b>Unit Name</b>	<b>Secure_Database_1</b>
<b>Reviewed By</b>	John Pugh
<b>Review Label</b>	Multi-Election July 2003
<b>Unit Functionality</b>	First Review. This unit contains a single function Secure_Database which creates a copy of the election database.
<b>Issue #</b>	<b>No Issues</b>
<b>Reviewer Comments</b>	<ul style="list-style-type: none"> <li>• The function calls the JJCpyFile function which seems to be in the unit Jansen.pas. This will need to be evaluated.</li> </ul>



<b>Unit Name</b>	<b>Select_Elections_3</b>
<b>Reviewed By</b>	John Pugh
<b>Review Label</b>	Multi-Election July 2003
<b>Unit Functionality</b>	Display a list of designated ballot papers/polling stations for selection from other units
<b>Issue #</b>	<b>No new issues</b>
<b>Reviewer Comments</b>	<ul style="list-style-type: none"><li>Added conditional compilation for LOCAL_LEVEL compiler directive.</li></ul>

<b>Unit Name</b>	<b>Select_Voting_Ireland</b>
<b>Reviewed By</b>	John Pugh
<b>Review Label</b>	Multi-Election July 2003
<b>Unit Functionality</b>	First Review. This is a new form for activating the mixing and number of election data. It allows the user to select the election for processing. It implements additional logic for the multi-election edition of the system.
<b>Issue #</b>	<b>No Issues</b>
<b>Reviewer Comments</b>	<ul style="list-style-type: none"><li>This supercedes the unit Select_Elections_3</li></ul>

<b>Unit Name</b>	<b>Sub_Participants_1</b>
<b>Reviewed By</b>	John Pugh
<b>Review Label</b>	Multi-Election July 2003
<b>Unit Functionality</b>	First Review. Displays a list of the candidates and their position on the ballot paper. Allows the user to rearrange the positions, as they will appear. This is similar to Sub_participants_2 but is called by the form Voting_Ireland_1 when the election is not a referendum.
<b>Issue #</b>	<b>No Issues</b>
<b>Reviewer Comments</b>	<ul style="list-style-type: none"><li>The system utilises a new unit Clipper. This unit will have to be evaluated.</li></ul>



<b>Unit Name</b>	<b>Sub_Participants_2</b>
<b>Reviewed By</b>	John Pugh
<b>Review Label</b>	Multi-Election July 2003
<b>Unit Functionality</b>	Displays a list of the candidates and their position on the ballot paper. Allows the user to rearrange the positions, as they will appear. This is similar to Sub_participants_1 but is called by the form Voting_Ireland_1 when the election is a referendum.
<b>Issue #</b>	<b>No new issues</b>
<b>Reviewer Comments</b>	

<b>Unit Name</b>	<b>Voting_Sheets_1</b>
<b>Reviewed By</b>	John Pugh
<b>Review Label</b>	Multi-Election July 2003
<b>Unit Functionality</b>	Used for presenting the user with a list of ballot sheets and the districts to which they relate. Calls Voting_Sheets_Ireland to print the ballot paper.
<b>Issue #</b>	<b>No new issues</b>
<b>Reviewer Comments</b>	<ul style="list-style-type: none"><li>• Ireland compiler directive removed</li></ul>

<b>Unit Name</b>	<b>Voting_Sheets_Ireland</b>
<b>Review Label</b>	Multi-Election July 2003
<b>Unit Functionality</b>	Display the ballot sheet and allows printing of same.
<b>Issue #</b>	<b>No new issues</b>
<b>Reviewer Comments</b>	<ul style="list-style-type: none"><li>• Presentation modifications made.</li></ul>

<b>Unit Name</b>	<b>Votings_Ireland_1</b>
<b>Reviewed By</b>	John Pugh
<b>Review Label</b>	Multi-Election July 2003
<b>Unit Functionality</b>	Used for selecting an election then provides a button to view/select the candidates
<b>Issue #</b>	<b>No new issues</b>
<b>Reviewer Comments</b>	<ul style="list-style-type: none"><li>• Not used by any of the other units so has probably been superseded by Voting_Sheets_Ireland</li></ul>



<b>Unit Name</b>	<b>Votings_Ireland_2</b>
<b>Reviewed By</b>	John Pugh
<b>Review Label</b>	Multi-Election July 2003
<b>Unit Functionality</b>	Used for selecting an election then provides a button to view/select ballot papers. Button allows edit of election details on frmVotings_Ireland_Edit_1
<b>Issue #</b>	<b>No new issues</b>
<b>Reviewer Comments</b>	<ul style="list-style-type: none"><li>• Not used by any of the other units so has probably been superseded by Voting_Sheets_Ireland</li></ul>

<b>Unit Name</b>	<b>Votings_Ireland_Edit_1.pas</b>
<b>Reviewed By</b>	John Pugh
<b>Review Label</b>	Multi-Election July 2003
<b>Unit Functionality</b>	Allows editing of election details.
<b>Issue #</b>	<b>No new issues</b>
<b>Reviewer Comments</b>	<ul style="list-style-type: none"><li>• Removed Ireland compiler directive</li></ul>

<b>Unit Name</b>	<b>Votings_Ireland_Edit_2.pas</b>
<b>Reviewed By</b>	John Pugh
<b>Review Label</b>	Multi-Election July 2003
<b>Unit Functionality</b>	Allows editing of referendum details.
<b>Issue #</b>	<b>No new issues</b>
<b>Reviewer Comments</b>	<ul style="list-style-type: none"><li>• Removed Ireland compiler directive</li><li>• Previously Voting_Ireland_Edit_1 implemented editing for all election types.</li></ul>