



# **CODE REVIEW**

**OF**

**IES BUILD 0132**

**Irish Election Processing**

**FOR**

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



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## **1.0 INTRODUCTION**

This document details the results of our review carried out on source code units supplied for IES build 0132 (April 2004).

## **2.0 SOURCE CODE UNITS EXAMINED**

The following table list the units supplied for examination during this review.

<b>Unit Name</b>
Calc_Count_Confirmation.dfm
Calc_Count_Confirmation.pas
Calc_Count_Constanten.pas
Calc_Count_Drawing_Lots.dfm
Calc_Count_Drawing_Lots.pas
Calc_Count_Main.pas
Calc_Count_Misc.pas
Calc_Count_Referendum.pas
Calc_Count_Section_10.pas
Calc_Count_Section_11.pas
Calc_Count_Section_19.pas
Calc_Count_Section_22.pas
Calc_Count_Section_22_Referendum.pas
Calc_Count_Section_23.pas
Calc_Count_Section_25.pas
Calc_Count_Section_26.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_Order_Election_Main.pas
Calc_Order_Election_Section_13.pas
Candidates_2.dfm
Candidates_2.pas
Candidates_Edit_3.dfm
Candidates_Edit_3.pas
Designation_1.dfm
Designation_1.pas
dmElec.dfm
dmElec.pas
dmGen.dfm
dmGen.pas
ES_Messages.pas
Export_Count_Result_Screens.pas
Export_Preparation_1.dfm
Export_Preparation_1.pas
Export_Preparation_2.pas
Export_Result_Ireland_1.dfm
Export_Result_Ireland_1.pas
Export_Result_Ireland_2.pas
Export_Result_Ireland_Referendum_2.pas
Export_Result_Ireland_Referendum_1.pas
Export_Result_Ireland_Referendum_1.dfm
Export_TopGrids.pas
Generate_PDF.pas
Import_Preparation_1.dfm
Import_Preparation_1.pas
Import_Preparation_2.pas
Import_Result_Central_1.dfm
Import_Result_Central_1.pas



Unit Name
Import_Result_Local_1.dfm
Import_Result_Local_1.pas
Import_Result_Local_2.pas
Import_Result_Local_Referendum_2.pas
Memory_Prog.dfm
Memory_Prog.pas
Memory_Read.dfm
Memory_Read.pas
Mixed_Numbered_1.dfm
Mixed_Numbered_1.pas
Mixed_Numbered_Check.dfm
Mixed_Numbered_Check.pas
Mixed_Numbered_Check_Print.dfm
Mixed_Numbered_Check_Print.pas
Mixed_Numbered_Export.pas
Mixed_Numbered_Print.dfm
Mixed_Numbered_Print.pas
Mixed_Numbered_Query.dfm
Mixed_Numbered_Query.pas
Mixed_Numbered_Search.dfm
Mixed_Numbered_Search.pas
Mixing_Numbering_1.pas
Participants_Print_7.dfm
Participants_Print_7.pas
Participants_Print_Ireland_1.dfm
Participants_Print_Ireland_1.pas
Participants_Print_Ireland_2.dfm
Participants_Print_Ireland_2.pas
Petition_Check.dfm
Petition_Check.pas
Petitions_1.dfm
Petitions_1.pas
Petitions_Edit_1.dfm
Petitions_Edit_1.pas
Petitions_Implement_1.dfm
Petitions_Implement_1.pas
Pre_Count_Report_Postal_Voting_1.pas
Pre_Count_Report_Postal_Voting_1.dfm
Pre_Count_Report_Postal_Voting_Print_1.pas
Pre_Count_Report_Postal_Voting_Print_1.dfm
Presentation_Count_1.dfm
Presentation_Count_1.pas
Presentation_Count_2.pas
Presentation_Count_3.dfm
Presentation_Count_3.pas
Presentation_Count_Export_Screen_3.pas
Presentation_Count_Export_Screen_210.pas
Presentation_Count_Export_Screen_2.pas
Presentation_Count_Export_Screen_130.pas
Presentation_Count_Export_Screen_1.pas
Presentation_Count_Preferences.dfm
Presentation_Count_Preferences.pas
Presentation_Count_Preferences_Export.pas
Presentation_Count_Preferences_Print.pas
Presentation_Count_Preferences_Print.dfm
Presentation_Count_Print_Screen.dfm
Presentation_Count_Print_Screen.pas
Presentation_Count_Print_Screen_130.pas
Presentation_Count_Print_Screen_130.dfm
Presentation_Count_Print_Screen_1.pas
Presentation_Count_Print_Screen_1.dfm
Presentation_Count_Print_Screen_210_Table.pas
Presentation_Count_Print_Screen_210_Table.dfm



<b>Unit Name</b>
Presentation_Count_Print_Screen_210.pas
Presentation_Count_Print_Screen_210.dfm
Presentation_Count_Print_Screen_2.pas
Presentation_Count_Print_Screen_2.dfm
Presentation_Count_Print_Screen_3.pas
Presentation_Count_Print_Screen_3.dfm
Presentation_Count_Print_Screen_530.pas
Presentation_Count_Print_Screen_530.dfm
Presentation_Count_Print_Screen_520.pas
Presentation_Count_Print_Screen_520.dfm
Presentation_Count_Result_Sheet.dfm
Presentation_Count_Result_Sheet.pas
Presentation_Count_Result_Sheet_Print_2.pas
Presentation_Count_Result_Sheet_Print_2.dfm
Presentation_Count_Result_Sheet_Print.pas
Presentation_Count_Result_Sheet_Print.dfm
Presentation_Count_Result_Sheet_Referendum_Print.pas
Presentation_Count_Result_Sheet_Referendum_Print.dfm
Presentation_Count_Result_Sheet_Referendum_Export.pas
Presentation_Count_Result_Sheet_Referendum.pas
Presentation_Count_Result_Sheet_Referendum.dfm
Presentation_Count_Summary_1.dfm
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_Count_Summary_Print_Screen_1.dfm
Presentation_Order_Election_1.dfm
Presentation_Order_Election_1.pas
Presentation_Order_Election_2.pas
Print_Ballot_Papers.pas
Print_Ballot_Papers_1.dfm
Print_Ballot_Papers_1.pas
Print_Ballot_Papers_Referendum.pas
Print_Ballot_Papers_Referendum_1.pas
Print_Ballot_Papers_Referendum_1.dfm
Print_Count_Individual_Votes.dfm
Print_Count_Individual_Votes.pas
Print_Count_Location_Votes.dfm
Print_Count_Location_Votes.pas
Print_Count_Location_Votes_Referendum.pas
Print_Count_Location_Votes_Referendum.dfm
Print_Count_Result_Screens.pas
Print_Count_Transfered_Votes.dfm
Print_Count_Transfered_Votes.pas
Reconciliation_Vote_Accounts_1.dfm
Reconciliation_Vote_Accounts_1.pas
Reconciliation_Vote_Accounts_Export_1.pas
Reconciliation_Vote_Accounts_Print_2.pas
Reconciliation_Vote_Accounts_Print_2.dfm
Reconciliation_Vote_Accounts_Print_1.pas
Reconciliation_Vote_Accounts_Print_1.dfm
Seats_Ireland_1.dfm
Seats_Ireland_1.pas
Secure_Database_1.pas
Select_Elections_3.dfm
Select_Elections_3.pas
Select_Voting_Ireland.dfm
Select_Voting_Ireland.pas
Sub_Participants_1.dfm
Sub_Participants_1.pas
Sub_Participants_2.dfm
Sub_Participants_2.pas



<b>Unit Name</b>
Voting_Sheets_1.dfm
Voting_Sheets_1.pas
Voting_Sheets_Ireland.dfm
Voting_Sheets_Ireland.pas
Votings_Ireland_1.dfm
Votings_Ireland_1.pas
Votings_Ireland_2.dfm
Votings_Ireland_2.pas
Votings_Ireland_Edit_1.dfm
Votings_Ireland_Edit_1.pas
Votings_Ireland_Edit_2.dfm
Votings_Ireland_Edit_2.pas

## **2.1 Outstanding Units**

There are no outstanding units required to complete the review.



### **3.0 SUMMARY OF ISSUES**

The following points were noted on completion of the review.

#### **3.1 Standard of Coding Practice**

The source code demonstrated adherence to the best practice requirements set out by previous reviews.

#### **3.2 Issues Raised During Previous Reviews**

All issues raised during previous reviews and agreed for action by the developers have been addressed to our satisfaction in build 0132.

The following issues were outstanding from previous reviews.

#127A-13	Import data validation	A zero default on exceptions is not acceptable in this instance.
#127A-14	Import data validation	A zero default on exceptions is not acceptable in this instance.
#127A-15	Locate not checked	Given the developer's postponement of implementing referential integrity in the database, the locate cannot remain unchecked.
#127A-18	Petition functionality	Given the developer's postponement of implementing referential integrity in the database, the locate cannot remain unchecked.

The above issues were addressed to our satisfaction in build 0132 and are closed.

#### **3.3 Issues Found During This Review**

No new issues were found during this review.