

# **COUNT REQUIREMENTS AND COMMENTARY ON COUNT RULES**

## **UPDATE NO. 1 DATED 23 FEBRUARY 2001**

### **Section 2: Pre-Count Menu**

#### **1. Postal and special voting**

The report “Pre-count report on postal and special voting” on page 5 (section 2) of the Count Tender Specification should be revised as set out on page 5 of this Update. Similar amendments should be made to the related table on pages 161 and 162 (Section 37) of the Count Tender Specification, as set out in page 6 of this Update. The notes on the postal and special voting section of the Election Report on page 162 should be revised as follows:

- ❑ Data in rows A to I are copied from the corresponding rows in the “Pre-count report on postal and special voting” in section 2 entitled “**PRE-COUNT MENU**”.
- ❑ User should enter data at Row J in this screen. To ensure that this is done, the system should check – each time the “Election Report” button is clicked – whether data have been entered in this row and, if not, present the following dialog box: “Data should NOW be entered at Row J for the number of covering envelopes received from postal voters after close of poll. OK”.

#### **2. Reconciliation of Voter Accounts**

Subject to further refinements that may be made when finalising the machine software, the Reconciliation of Vote Accounts table on page 7 (Section 2) of the of the Count Tender Specification should be amended as shown on page 7 of this Update. The Reconciliation of Vote Accounts table should be re-titled Reconciliation of Voter Accounts table.

The **Notes on “Reconciliation of vote accounts” Table**, set out on pages 7 to 9 of the Count Tender Specification, should be revised as follows:

- ❑ The entries in the first column (“Polling Station No.”) should display, in ascending order, the numbers of all polling stations set up for the poll. The last entry in the column should be “TOTAL” (i.e. a description of the entries in the row).
- ❑ The entries in the second column (“Polling Station Description”) should display the name of each polling station opposite its number. The entry in the “TOTAL” row should read [(Total no. of polling stations at the election) No.].
- ❑ The entries in the third column (“Ballot Module No.”) should display the unique number of the ballot module(s) assigned to the polling station concerned. The table shows the treatment of cases where there is more than one ballot module (i.e. voting machine) assigned to a polling station. . The entry in the “TOTAL” row should read [(Total no. of ballot modules at the election) No.].
- ❑ There should be a label over the next three columns entitled “Recorded by Presiding Officer: ”
- ❑ The user should be able to enter data into the fourth column (“Voters permitted to use a voting machine”) from the individual “Voters Account” prepared by each presiding officer. The entry in the “TOTAL” row should be updated automatically. It should be possible for the user to amend the data entered in this column and related entries in the table should be amended accordingly.
- ❑ The user should be able to enter data into the fifth column (“Voters who did not press “Cast Vote” button”) from the individual “Voters Account” prepared by each presiding officer. The entry in the “TOTAL” row should be updated according as data is entered in the column. It should be possible for the user to amend the data entered in this column and related entries in the table should be amended accordingly.
- ❑ The sixth column (“Voters who voted on machine”) should be populated automatically with the product of column (4) minus column (5) when a figures is entered in either column (4) or (5) and a figure is already entered in the same row in the other column. Zero (0) should be shown where the product is zero. No entry

should be made in this column until a figure is entered in the same row for both column (4) and (5). The entry in the “TOTAL” row should be updated automatically according as this column is populated.

- ❑ There should be a label over the next three columns entitled “Recorded on Ballot Module: ”
- ❑ The seventh column (“Votes cast”) should be populated according as the programming unit reads the data on each ballot module. The entry in the “TOTAL” row should be updated automatically according as this column is populated.
- ❑ The eighth column (“Null votes” recorded”) should be populated according as the programming unit reads the data on each ballot module. The entry in the “TOTAL” row should be updated automatically according as this column is populated.
- ❑ The ninth column (“Voters who voted on machine”) should be populated automatically with the sum of columns (7) plus (8) when a figures is entered in either column (7) or (8) and a figure is already entered in the same row in the other column. Zero (0) should be shown where the product is zero. No entry should be made in this column until a figure is entered in the same row for both column (7) and (8). The entry in the “TOTAL” row should be updated automatically according as this column is populated.
- ❑ The tenth column entitled “Discrepancy” should be populated automatically by the system with the product of column (6) minus column (9) when a figure is entered in either column (6) or (9) and a figure is already entered in the same row in the other column. Zero (0) should be shown where the product is zero. No entry should be made in this column until a figure is entered in the same row for both column (6) and (9). Where the number of voters who voted on machine as per the presiding officer’s records (column (6)) exceeds the number of voters who voted on machine as recorded by the voting machine (column (9)), “+[No.]” should be entered in the “Discrepancy” column. Where the number of voters who voted on machine as per the presiding officer’s records (column (6)) is less than the number of voters who voted on machine as recorded by the voting machine (column (9)), “-[No.]” should be entered. The entry in the “TOTAL” row should be updated automatically according as this column is populated.

### 3. Summary Reconciliation of Voter Accounts

Arising from the changes at 1. and 2. above, the Summary reconciliation of voter accounts table on page 11 of the Count Tender Specification should be amended as shown on page 8 of this Update.

The **Notes on “Summary reconciliation of vote accounts” table**, set out on pages 10 and 11 of the Count Tender Specification, should be revised as follows:

- ❑ The data at row A should be displayed automatically by the system as the figure at the TOTALS row of column (6) of the revised “Reconciliation of voter accounts” report set out on page 7 of this Update.
- ❑ The data at row B should be displayed automatically by the system as the figure at the TOTALS row of column (9) of the revised “Reconciliation of voter accounts” report.
- ❑ The data at row C should be displayed automatically by the system as the figure at the TOTALS row of column (10) of the revised “Reconciliation of voter accounts” report.
  
- ❑ Identical changes should be made to the Table (page 162, Section 37) and Notes (page 163, section 37) of the Count Tender Specification relating to the Summary reconciliation of voter accounts.

## Pre-count report on postal and special voting

[Type of election] held on [Date of Poll]

**[Name of Constituency]**

- |          |   |
|----------|---|
| <b>A</b> | Number of ballot papers issued to <b>postal</b> voters :  |
| <b>B</b> | Number of ballot papers issued to <b>special</b> voters :   |
| <b>C</b> | Number of covering envelopes received from <b>postal</b> voters before close of poll :  |
| <b>D</b> | Number of covering envelopes received from <b>special</b> voters before close of poll :   |
| <b>E</b> | Total [D + E] :   |
| <b>F</b> | Number of <b>postal and special</b> ballot papers rejected at opening of ballot box<br>(including receipts not accompanied by a vote) : |
| <b>G</b> | Number of <b>postal and special</b> ballot papers placed in ballot box for subsequent<br>casting on voting machine :                    |
| <b>H</b> | Number of <b>postal and special</b> ballot papers rejected as invalid at casting of such<br>votes on voting machine                     |
| <b>I</b> | Number of valid <b>postal and special</b> votes cast on voting machine  |


## **1. Postal and special voting**

- |          |   |
|----------|---|
| <b>A</b> | Number of ballot papers issued to <b>postal</b> voters :  |
| <b>B</b> | Number of ballot papers issued to <b>special</b> voters :   |
| <b>C</b> | Number of covering envelopes received from <b>postal</b> voters before close of poll :  |
| <b>D</b> | Number of covering envelopes received from <b>special</b> voters before close of poll :   |
| <b>E</b> | Total [D + E] :   |
| <b>F</b> | Number of <b>postal and special</b> ballot papers rejected at opening of ballot box<br>(including receipts not accompanied by a vote) : |
| <b>G</b> | Number of <b>postal and special</b> ballot papers placed in ballot box for subsequent<br>casting on voting machine :                    |
| <b>H</b> | Number of <b>postal and special</b> ballot papers rejected as invalid at casting of such<br>votes on voting machine                     |
| <b>I</b> | Number of valid <b>postal and special</b> votes cast on voting machine  |
| <b>J</b> | Number of covering envelopes received from postal voters after close of poll  |


**Reconciliation of voter accounts****[Type of election] held on [Date of Poll]****[Name of Constituency]****Election held with one or more other elections: Yes/No**

Polling Station No.	Polling Station Description	Ballot Module No.	Recorded by Presiding Officer :			Recorded on Ballot Module :			Discrepancy between numbers of voters who voted on machine <sup>1</sup> [column (6) minus column (9)] (10)
			Voters permitted to use a voting machine (4)	Voters who did not press “Cast Vote” button (5)	Voters who voted on machine [column (4) minus column (5)] (6)	Votes Cast (7)	“Null votes” recorded (8)	Voters who voted on machine [columns (7) plus (8)] (9)	
1	Postal and special voters	A4	8	1	7	6	1	7	0
2	St. Kieran’s NS	A1	62	1	61	59	3	62	-1
3	St. Colman’s NS	A2 A3	40	0	40	16 23	0 1	16 24	0
Total	3 No.	4 No.	110	2	108	104	5	109	-1

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<sup>1</sup> Where two or more elections are held together, the Discrepancy may be wholly or partly due to column (5) voters not being eligible to vote at this election.

## 2. Summary reconciliation of voter accounts

- A** Total number of votes cast on voting machines , as recorded by **presiding officers**  
(viz. number of postal and special votes cast on machines, plus number of voters  
who voted on voting machines at polling stations)
- B** Total number of votes cast on voting machines (including postal and special votes  
and “null votes”), as recorded on **ballot modules**
- C** Discrepancy between figures at **A** and **B**.


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**Returning Officer**

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**Date**



**Section 19 : Screen/print : Surplus distribution**

The material on pages 71 to 75 of the Count Tender specification sets out and explains the table entitled “Surplus distribution calculations.” It specifies that the data in the table must be presented in ballot paper order of candidates. Users should also have the option, only in cases where the number of transferable papers in the last set of papers received by the candidate whose surplus is being transferred exceeds the surplus, of viewing/printing the data in order of ranking of the remainders (i.e. entries in column (4)), starting with the remainder ranked “1”. Where the remainders are zero, the candidates should be listed at the bottom of the table in order of magnitude of the number of transferable votes in the “last set of papers” (i.e. the entries in column (2)), starting with the largest and, where these numbers are equal, the candidates should be displayed in ballot paper order.

This alternative form of presentation will enable users to focus on how the last votes for inclusion in a surplus distribution are selected and enable them to see at a glance which candidates got the last votes in the surplus distribution (all votes transferred by remainder are listed in order at the top of the table).

**Section 27 : Print : Result sheet (during count)**

1. The reference in lines 10/11 of the first paragraph on page 132 of the Count Tender specification to the “candidate first listed on the vote” should read “candidate first listed on the ballot paper”.

**The following comments also apply to the Post-Count Result Sheet dealt with in Section 31.**

2. The reference to “invalid ballot papers” in the middle top header box in the Result Sheet (page 133) should be deleted.
3. In the case of multiple exclusions, the Result Sheet should, in the description of the action below the count number (e.g. Transfer of Gibney, L. and Doyle B.’s Votes and Result), list the excluded candidates in order of the magnitude of their votes, beginning with the smallest. Where two or more such candidates have equal votes, they should be listed in ballot paper order.

**Section 30 : Screen/print: Order of election (local elections only)**

Pages 144 to 147 of the Count Tender Specification sets out the procedure for drawing lots in the case of equalities relevant to order of election at local elections. The following qualification applies to the order of election of candidates elected with equal surpluses on the same count.

“In cases where lots were drawn during a count to determine the order of distribution of surpluses of candidates elected with equal surpluses on the same count and equal votes at all counts, the resulting order of distribution of surpluses shall be used for the order of election of the candidates concerned, i.e. a second drawing of lots is not required. Thus, it is necessary to draw lots to determine the order of election of candidates elected with equal surpluses on the same count and equal votes at all counts only in cases where lots were not drawn during the count to determine the order of distribution of the surpluses of such candidates.

## **Section 28 : Prints : Lists of individual votes**

1. The first sentence in the first paragraph of the “Notes on “Location of all votes after count [N]” table” material set out on page 139 of the Count Tender Specification should be revised as follows:

“The list sets out - for each elected or continuing candidate or excluded candidate whose votes have not been transferred (such candidates being listed in ballot paper order) - the numbers of all the votes held after the current count.”
2. The following material should be added after the first paragraph of the same material:

“The list of votes of a candidate elected with a surplus which was transferred should include a statement of the number of the count in which the surplus was transferred, the total number of votes transferred from the candidate in that count and a record, in ascending order of magnitude, of the vote number of each vote transferred.

The table should also include a list of “non-transferable votes not effective” grouped and displayed in the same way as the list of votes for each elected and continuing candidate and each candidate excluded but whose votes have not been transferred.”

## **NEW Petitions Menu**

### **1. Introduction**

The count software must allow for measures which electoral legislation permits a court to order at the hearing of an election petition. One such measure is outlined in Section 40 of the Count Tender Specification, viz. the facility to print votes cast on voting machines at an election as individual ballot papers. Certain other measures that must also be covered by the count software are set out below.

Looking at the overall set-up of the count software as set out in section 1 of the Count Tender Specification, perhaps the best approach is to set up a fourth menu entitled Petitions which could be accessed only on entering a password (DoELG should be able to change the password).. This would obviate the necessity (set out in Section 40) for a password to access the “Print votes as ballot papers” facility.

### **2. Deletion of invalid vote**

The system should have a facility to remove from the “Votes as mixed and numbered” table a vote (notably one cast on a voting machine from a postal or special ballot paper) which the court rules is invalid and should not be included in the count. To do this, there should be a button in the Petitions menu entitled “Deletion of invalid vote” which when pressed presents a table with the same column headings as in the “Votes as mixed and numbered” table and one blank row beneath it. The user enters in that row the preferences recorded on the vote to be removed from the table (he/she she is not permitted to enter anything in the Mixed Votes No. column). The user then presses a “Find invalid vote” button and the system searches the “Votes as mixed and numbered” table, finds the vote in question and enters its Mixed Vote No. in the Mixed Votes No. column of the table where the user entered the characteristics of the invalid vote. There should also be a “Remove invalid vote” button which when pressed by the user would, where there is only one vote in the “Votes as mixed and numbered” table with the characteristics of the invalid vote, remove that vote from the table and decrease by one the mixed vote numbers of all votes which succeeded it in the original table.

Where there is more than one vote in the “Votes as mixed and numbered” table with the characteristics of the invalid vote, the system cannot identify which one is the invalid vote. Instead, the system should, when it finds the votes with identical characteristics in the table after the “Find invalid vote” button is pressed, list the Mixed Vote No. of each one in ascending order in the Mixed Votes No. column of the table where the user entered the characteristics of the invalid vote. For completeness, the characteristics of each vote should be displayed in the table opposite the Mixed Vote No. concerned. When the user presses the “Remove invalid vote” button, the system should select one of the identical votes at random, remove that vote from the table and decrease by one the mixed vote numbers of all votes which succeeded it in the original table.

In all cases, the new “Votes as mixed and numbered” table should be labelled “PETITION”. Also, if feasible, the system should leave a blank row in the PETITION “Votes as mixed and numbered” table to denote where the deleted vote was in the original table. Could this row have an entry “Invalid vote deleted”?

The count should be capable of being run again on the basis of the PETITION “Votes as mixed and numbered” table, by pressing the “Counting of votes” button in the Count Menu (see Section 15 of the Tender specification). Each screen /print generated in the fresh count should be labelled “PETITION”.

In programming this facility, the possibility should be borne in mind that, as a count may rule more than one vote invalid, it may be necessary to repeat the “Deletion of invalid vote” one or more times at the same election.

### **3. Insertion of valid vote**

The system should have a facility to add to the “Votes as mixed and numbered” table a vote (notably one ruled as invalid when the votes recorded postal and special ballot papers were cast on a voting machine) which the court subsequently rules is valid. To do this, there should be a button in the Petitions menu entitled “Insertion of valid vote” which when pressed presents a table with the same column headings as in the “Votes as mixed and numbered” table and one blank row beneath it. The user enters in that row the preferences recorded on the vote to be added to the table (he/she is not permitted to enter anything in the Mixed Votes No. column). The user then presses an “Add valid

vote” button and the system inserts a vote with identical preferences at random in the “Votes as mixed and numbered” table, assigns the added vote the next Mixed Vote No. greater than the Mixed Vote No. of the vote preceding it in the table, increases by one the Mixed Vote No. of all votes succeeding the added vote in the table and enters the Mixed Vote No. of the added vote in the Mixed Votes No. column of the table where the user entered the characteristics of that vote.

The new “Votes as mixed and numbered” table should be labelled “PETITION”. Also , if feasible, the system should leave a blank row in the PETITION “Votes as mixed and numbered” table to denote where the extra vote was inserted in the table. Could this row have an entry “Extra vote inserted”?

The count should be capable of being run again on the basis of the PETITION “Votes as mixed and numbered” table, by pressing the “Counting of votes” button in the Count Menu (see Section 15 of the Tender specification). Each screen /print generated in the fresh count should be labelled “PETITION”.

In programming this facility, the possibility should be borne in mind that, as a count may rule that more than one extra vote should be added to the count, it may be necessary to repeat the “Insertion of invalid vote” one or more times at the same election.

#### **4. Ineligible candidate**

The system should have a facility to ignore preferences recorded in the “Votes as mixed and numbered” table for a candidate whom the court subsequently rules is ineligible for election and should be excluded from the count. To do this, there should be a button in the Petitions menu entitled “Deletion of ineligible candidate” which, when pressed, displays a box for the user to enter the name of the ineligible candidate to be excluded from the count (provision should be made for the possibility that more than one candidate may be ruled ineligible by the court). The box should have an “OK” button for the user to confirm the data entered . [Alternatively the system could present a list of all candidates at the election with a facility for the user to identify those which have been ruled ineligible]. When the ineligible candidates have been confirmed, the system should :

- ❑ Search the “Votes as mixed and numbered” table for votes which solely comprise a first preference for the ineligible candidate (i.e. no second or lower preferences are recorded on them for eligible candidates), delete such votes from the table and, in each case, decrease by one the Mixed Vote No. of all votes succeeding the deleted vote in the table. Where there is more than one ineligible candidate, a vote with more than one preference recorded on it should be deleted where all such preferences are for ineligible candidates and the Mixed Vote No. of all subsequent votes in the table decreased by one.
- ❑ Identify all other votes in the table which include a preference for the ineligible candidate and mark each such vote with an asterisk (\*) at the end of the row. This approach involves retaining the name and column for the ineligible candidate in the table and all the other preferences recorded for him/her, save those recorded in the deleted votes.

The new “Votes as mixed and numbered” table should be labelled “PETITION”. Also, if feasible, the system should leave a blank row in the PETITION “Votes as mixed and numbered” table to denote the location in the original table of each vote deleted because it was related solely to the ineligible candidate(s). Could such rows have an entry “Vote cast solely for ineligible candidate(s) deleted”?

The count should be capable of being run again on the basis of the PETITION “Votes as mixed and numbered” table, by pressing the “Counting of votes” button in the Count Menu (see Section 15 of the Tender specification). Each screen /print generated in the fresh count should be labelled “PETITION”. In counting the votes afresh, the system should disregard any preferences for the ineligible candidate(s) shown in the PETITION “Votes as mixed and numbered” table. Thus, if a vote credited to its second preference candidate is being transferred and its third preference is for the ineligible candidate, the vote transfers to any next available preference. If there is no next available preference for an eligible candidate beyond the third preference, the vote becomes non-transferable. Also there should be no reference to the ineligible candidate in any screen/print, i.e. the count should proceed as if the ineligible candidate did not appear on the ballot paper.

Following from the above, where there are equalities in the fresh count involving, say, eligible candidates A and B, which must be distinguished by the numbers of original votes (i.e. first preference votes) credited to them, a vote which had a first preference for an ineligible candidate and a second preference for candidate B would be treated as a first preference for candidate B.



The approach outlined in the box above is the preferred option for dealing with ineligible candidates. However, if the following alternative is significantly easier to programme, it could be considered for implementation instead.

- ❑ Search the “Votes as mixed and numbered” table for votes which solely comprise a first preference for the ineligible candidate (i.e. no second or lower preferences are recorded on them for other candidates), delete such votes from the table and, in each case, decrease by one the Mixed Vote No. of all votes succeeding the deleted vote in the table. Where there is more than one ineligible candidate, a vote with more than one preference recorded on it should be deleted where all such preferences are for ineligible candidates and the Mixed Vote No. of all subsequent votes in the table decreased by one.
- ❑ Identify each vote in the table which includes a second or lower preference for the ineligible candidate, delete that preference and, where there are lower preferences recorded in the vote, increase by one the number of all lower preferences in that vote (i.e. in that row). This approach involves deleting from the table the name and column for the ineligible candidate and all preferences recorded for that candidate

The new “Votes as mixed and numbered” table should be labelled “PETITION”. Also, if feasible, the system should leave a blank row in the PETITION “Votes as mixed and numbered” table to denote the location in the original table of each vote deleted because it was related solely to the ineligible candidate(s). Could such rows have an entry “Vote cast solely for ineligible candidate(s) deleted”?

The count should be capable of being run again on the basis of the PETITION “Votes as mixed and numbered” table, by pressing the “Counting of votes” button in the Count Menu (see Section 15 of the Count Tender specification). Each screen /print generated in the fresh count should be labelled “PETITION”.

This approach does not require the system to disregard or skip any preferences in the PETITION “Votes as mixed and numbered” table because all preferences recorded for ineligible candidates have been removed from the table.