Guide to Ireland's PR-STV Electoral System

1. **Overview**

   Voting at Presidential, Dáil, Seanad, European and local elections is by secret ballot on the principle of proportional representation in multi-seat constituencies (Ireland is a single constituency at a Presidential election), each elector having a single transferable vote.

2. **Voting is straightforward**

   - You vote for candidates in order of preference. You mark the ballot paper by putting 1 opposite the name of your first choice candidate and, <u>if you wish</u>, 2 opposite the name of your second choice and so on.

   - What you are saying is: "I want to vote for candidate A. If the situation arises where A does not need my vote because he/she has been elected or excluded from the count, I want my vote to go to candidate B." And so on.

   - This system gives you a wide degree of choice. You can choose between candidates of different parties or non-party candidates and you can order your preferences, as you wish.

   - Only one of the preferences in your vote is active at a time. The vote stays with your first preference candidate unless and until he/she does not need it any more (either because he/she has been elected or excluded from the count). If your vote is transferred, it passes to your next highest preference for a candidate still in the running. Your vote could transfer a number of times at the same election to your lower preference candidates.

3. **The count is more complex. It is divided into a number of stages.**

   I. <u>Opening the ballot boxes</u>

      Each ballot box is opened separately and the ballot papers in each box are counted and compared with the total number of ballot papers issued for that box - this is done to check that ballot papers have not been put into or taken out of the box since the poll closed. The number of ballot papers in each box are added together to determine the total poll.

Individual ballot papers are not examined at this stage but the "tallymen" note the first preference on each ballot paper as it is counted.

II.   <u>First Count</u>

All the ballot papers are mixed and then sorted according to first preferences, setting aside the invalid papers. The <u>quota</u> is then calculated. This is the minimum number of valid votes each successful candidate must get to be elected. The quota is calculated as the minimum number of votes, which will fill the seats available and no more. For example, in a three-seat constituency, the quota is a quarter of the valid votes, plus one - only three candidates can get this number of votes. In a four-seater, the quota is a fifth of the valid votes, plus one, and so on.

The formula for calculating the quota is: divide the valid votes by the number of seats plus one, ignore any fraction and add one. As an example, if there are 1,000 valid votes and 4 seats, the quota is calculated as follows:

$$\frac{1,000}{4+1} + 1 = 201$$

This is the lowest number of votes which four candidates can obtain (804) but five cannot (1,005).

Any candidate whose first preferences equal or exceed the quota is deemed elected. The first count is generally the only time the votes of <u>all</u> candidates are examined and sorted.

The second and subsequent counts at a PR-STV election involve either the distribution of the surplus of an elected candidate or exclusion of the lowest candidate(s) and distribution of his/her/their votes.

III. Surplus distributions

A candidate's surplus is the number of votes he/she has over the quota. Generally surpluses are distributed before candidates are excluded. The rule is that a surplus must be distributed in the next count if it meets one or more of the following conditions:

- Can elect the highest continuing candidate,

- Can bring the lowest candidate level with or above the second lowest candidate

- Can qualify a candidate for the recoupment of their election expenses or deposit (if applicable)

If there is more than one surplus and the largest surplus on its own does not meet any of the above conditions, the largest surplus must be distributed on its own in the next count if the sum of the surpluses meets one or more of the conditions.

The question of whether a surplus must be distributed is considered afresh after each count on the basis of the surplus(es) then available. After a surplus has been transferred, any candidate who reaches or exceeds the quota as a result is deemed elected.

Following the distribution of the surplus, the elected candidate is left with an exact quota of votes that he/she retains for the duration of the count.

See section VIII for further elaboration of the rules for distributing a surplus.

IV. Overview of the surplus distribution procedure

An elected candidate's surplus is distributed based on the next available preferences for continuing candidates (i.e. candidates not elected or excluded) contained in the last parcel of votes that brought the elected candidate over the quota. In the case of a surplus arising on the first count, this parcel is made up of all the elected candidate's first preferences. In any other case, only the last parcel of votes received by the elected candidate is involved.

Where all the next preferences in the last parcel of votes received by the elected candidate cannot be distributed because they exceed the surplus, the surplus votes are distributed to candidates still in the running in proportion to each one's share of next

preferences in that parcel of votes. The votes for inclusion in the surplus are taken from the top of each candidate's sub-parcel of next preferences made up from the last parcel of votes received by the elected candidate.

V.   Detailed surplus calculations

All the votes in the last parcel of votes received by the elected candidate are sorted into sub-parcels according to the next available preferences, setting aside those that do not transfer to any candidate. The total number of transferable papers is calculated. The manner in which the surplus is then distributed depends on whether –

- the number of transferable papers is greater than the surplus (this is usually the case in the early stages of a count);

- the number of transferable papers is equal to the surplus (this happens infrequently), and

- the number of transferable papers is less than the surplus (this is usually the case in the later stages of a count).

Where the number of transferable papers is greater than the surplus, only a proportion of them can be included in the surplus distribution. This proportion is calculated by working out the ratio of the surplus to the total number of transferable papers and applying that ratio consecutively to the total number of next preferences for each candidate still in the running. This calculation gives the number of next preferences for each candidate that should be included in the surplus distribution. The resultant number of next preferences for each continuing candidate to be transferred as part of the surplus distribution is taken from the top of his/her sub-parcel of next preferences made up from the last parcel of votes received by the elected candidate.

As an example, if candidate A was 6 votes short of the quota and then got 10 votes in a particular count, he/she would have a surplus of 4 votes. The 10 votes that got him/her elected are examined and 8 are found to be transferable, viz. 6 to candidate C and 2 to candidate D. The ratio of the surplus of 4 votes to the 8 transferable papers in A's last parcel of votes is 0.5. This ratio is applied to the sub-parcels of next preferences for candidates C and D. Thus, the votes transferred in the distribution of A's surplus of 4 votes are the top 3 votes in the sub-parcel of next preferences for candidate C, together with the top vote in the sub-parcel of next preferences for candidate D.

In this situation, the quota of votes retained by the elected candidate following the surplus distribution comprises all the papers credited to him/her up to the count immediately before he/she was elected, and - from the last parcel of votes that brought him/her over the quota – all the non-transferable papers and the transferable papers that were not actually transferred in the surplus distribution. The non-transferable papers retained by the elected candidate are regarded as "effective" because they form part of the quota of votes held by him/her.

Where the total number of transferable papers is <u>equal to</u> the surplus, all the transferable papers are included in the surplus distribution. In this situation, the quota of votes retained by the elected candidate whose surplus is being distributed is made up entirely of non-transferable votes.

Where the total number of transferable papers is <u>less than</u> the surplus, all the transferable papers are included in the surplus distribution. As the transfer of these papers leaves the elected candidate with more than a quota of votes, that number of non-transferable votes equal to the difference between the number of transferable papers and the surplus is removed from him/her. The papers concerned are designated as "non-transferable papers not effective" because they are no longer credited to any candidate. The quota of votes retained by the elected candidate for the duration of the count is made up entirely of "effective" non-transferable votes.

VI.   <u>Exclusion of lowest candidate(s)</u>
If there is no surplus available or the distribution of a surplus is prohibited, the lowest candidate(s) is/are excluded and his/her/their votes distributed.

The two or more lowest candidates must be excluded together where it is clear that they will be excluded in turn in any event or where it is clear that they will not qualify to recoup their election expenses or deposit (if applicable) i.e. where the sum of their votes, plus any available surplus(es), is less than the number of votes credited to the next lowest candidate. Where this rule does not apply, the lowest candidate only is excluded. All transferable votes of the excluded candidate(s) are distributed to candidates still in the running in accordance with the next available preferences shown on them. All non-transferable papers of the excluded candidate(s) are set aside and designated as "non-transferable papers not effective" because they are no longer

credited to any candidate. Any candidate reaching or exceeding the quota following this distribution of votes is deemed elected.

See section VIII for further elaboration of the rules for excluding the two or more lowest candidates together.

VII.   Filling of last seat(s)

The process of distributing surpluses or excluding the lowest candidate(s) and distributing his/her/their votes is continued until all seats in the election are filled.

The count can be finished without distributing either an available surplus or the votes of excluded candidates where it is clear which candidate(s) is/are eventually going to fill the remaining seat(s) and which candidate(s) has/have no chance of being elected or where it is clear that the candidate(s) will not qualify to recoup their election expenses or deposit (if applicable). When this happens, candidates are deemed elected without reaching the quota. A common example of this is where there are three continuing candidates, two unfilled seats and no available surplus. The lowest continuing candidate is excluded and the remaining two candidates are deemed elected to fill the last seats. Alternatively, if there was an available surplus in this situation that could not bring the lowest candidate level with or above the second lowest candidate, the two highest continuing candidates would be deemed elected to fill the last seats.

VIII   Recoupment of election expenses/deposit

Candidates at most elections qualify for recoupment of their election expenses or deposit (if applicable) provided the number of votes they receive at the count exceeds one-quarter of the quota. There are count rules designed to give candidates every chance of reaching this vote threshold. Thus, a surplus must be distributed if it could qualify the lowest candidate for recoupment of election expenses (see section III) and the lowest candidates must be excluded separately if this could possibly qualify any of them for recoupment of election expenses (see section IV). Also, any surplus(es) available after all seats have been filled must be distributed if it/they could possibly give any continuing candidate enough votes to qualify for recoupment of election expenses (see section VII).

The election expenses threshold is calculated differently at a bye-election to ensure that it is broadly comparable to the threshold that applied at the general election in that constituency.

IX.   Recounts

The returning officer can decide at any time to re-examine and recount all or any of the ballot papers and change results already announced.

Candidates can request a re-examination and recount of any particular count after it is completed. A recount of this nature involves examining all papers relevant to that count and moving papers to correct any errors.

Candidates can also, before the result is formally declared, request a total recount of all votes. This involves re-examining and recounting all parcels of ballot papers as they stand when the recount is called for. If a significant error is found (i.e. one which is likely to change who is elected), then all the ballot papers must be counted afresh from the point at which the error occurred.

X.   Declaring result

When all seats have been filled and any recounts are concluded, the returning officer formally declares who has been elected. Once this is done, the only way a person can question the election result is by presenting an election petition to the High Court within 28 days of the result being declared.

4.   **Legislation**

The law relating to voting and vote counting is set out in the legislation governing the elections concerned viz.

Presidential elections:	Presidential Elections Act 1993 (No. 28 of 1993).
	Electoral (Amendment) Act 2006 (No. 33 of 2006)
Dáil elections:	Electoral Act 1992 (No. 23 of 1992).
	Electoral Act 1997 (No. 25 of 1997)
	Electoral (Amendment) Act 2001 (No. 38 of 2001).
	Electoral (Amendment) Act 2002 (No. 4 of 2002)

Seanad elections:	Seanad Electoral (University Members) Act, 1937 (No. 30 of 1937). The counting rules here differ on points of procedure and detail from those outlined above. Seanad Electoral (Panel Members) Acts, 1947 (No. 42 of 1947) and 1954 (No. 1 of 1954). The counting rules here are adapted from those outlined above to take account of the relatively small electorate.
European elections:	European Parliament Elections Act 1997 (No. 2 of 1997). Electoral (Amendment) Act 2001 (No. 38 of 2001).
Local elections:	Local Elections Regulations 1995 (S.I. No. 297 of 1995) made under the Local Government Act 1994 (No. 8 of 1994). Electoral (Amendment) Act 2001 (No. 38 of 2001). Electoral (Amendment) Act 2009 (No. 4 of 2009)

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