## A Guide to Ireland's PR-STV Voting System



Prepared by the Department of Housing, Planning \& Local Government

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1. Overview ..... 3
2. Voting is straightforward ..... 3
3. The count is more complex. It is divided into a number of stages ..... 4
4. Legislation ..... 11
5. Overview

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

## 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, if you wish, 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.
- $\quad$ 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 the candidate has been elected and your vote has become one of his or her surplus votes -see section 3.3or the candidate has been 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.

### 3.1. Opening the ballot boxes

Each ballot box is opened separately, the ballot papers in each box are counted and the total number is 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 numbers of ballot papers for 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.

### 3.2. First Count

All the ballot papers are mixed together and then sorted and counted according to first preferences, the invalid papers being set aside and not counted. The quota is then calculated. The quota is a threshold number of votes which, if reached, secures the election of a candidate. It is calculated by dividing the total number of valid ballot papers by the number of seats to be filled plus one and, ignoring any fractional remainder, adding one to the result. For example, if there are 1,000 valid ballot papers and 4 seats, the quota is calculated as follows:

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

If 4 candidates each have 201 votes only 196 votes remain. This is short of the quota and therefore a fifth candidate cannot be elected.

Any candidate whose first preferences equal or exceed the quota is deemed elected. The first count is generally the only time all the votes of all of the 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 the exclusion of the lowest candidate(s) and the distribution of his/her/their votes.

### 3.3. 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 continuing candidate level with or above the second lowest continuing candidate.
- Can qualify the lowest continuing candidate for 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.

### 3.4. 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. Where the ballot papers of the elected candidate whose surplus is to be transferred consist ONLY of ballot papers with first preferences for that candidate, all of that candidate's ballot papers are examined to ascertain the next available preferences. This is always the case where a surplus is being transferred at the second count.

Where, however, the ballot papers of the elected candidate whose surplus is to be transferred consist of ballot papers with first preferences votes AND transferred votes (second of subsequent preferences) for that candidate, OR they consist of transferred votes only, it is ONLY the ballot papers in the last parcel received by that candidate that are examined to ascertain the next available preferences.

### 3.5. 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 -

- $\quad$ 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 equal to 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 nontransferable votes.
## Where the total number of transferable papers is less than 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 and transferable votes
### 3.6 Exclusion of lowest candidate(s)

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.

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 the ballot papers. All non-transferable papers of the excluded candidate(s) are set aside and designated as "nontransferable 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.

The two or more lowest candidates must be excluded together where it is clear that they will be excluded in turn in any event and 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.

### 3.7. 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. However, 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 and where it is clear that the transfer of an available surplus could not qualify a candidate to recoup their election expenses or deposit.

The last seats can be filled in this way when-

- the number of remaining candidates is the same as the number of remaining vacancies to be filled,
- the number of remaining candidates exceeds by one the number of remaining vacancies and the votes credited to the lowest continuing candidate, together with any available surpluses, is less than the votes credited to the next highest continuing candidate, or
- only one vacancy remains unfilled and the votes credited to one of the remaining candidates exceeds the total of the votes credited to the other continuing candidates, together with any available surpluses

When this happens, candidates are deemed elected without reaching the quota.

When the last vacancies can be filled in this way, no further transfer of votes is made unless any of the continuing candidates at that stage could qualify to recoup their election expenses or deposit (if applicable) through the distribution of an available surplus.

### 3.8 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. The count rules are designed to give candidates every chance of reaching this vote threshold. Thus, a surplus must be distributed if it could qualify the lowest
continuing candidate for recoupment of election expenses or deposit (if applicable) (see section 3.3) and the lowest candidates must be excluded separately if this could possibly qualify any of them for recoupment of election expenses or deposit (if applicable) (see section 3.6). Also, when the last seat(s) is/are being filled by candidates deemed elected without reaching the quota, as outlined in section 3.7, 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 or deposit (if applicable).

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

### 3.9. 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.
3.10. 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 in accordance with the
provisions of section 132 of the Electoral Act 1992.

## 4. Legislation

The law relating to vote counting is set out in the legislation governing the elections concerned, listed below. All have been amended by subsequent legislation over the years. The titles are presented as hyperlinks to the relevant legislation on www.irishstatutebook.ie. You can see the amendments to the legislation by clicking on the link to 'amendments, commencements, SIs' link for each Act.

| Presidential <br> elections | Presidential Elections Act 1993 |
| :--- | :--- |
| Dáil elections | Electoral Act 1992 <br> Electoral Act 1997 |
| Seanad elections | Seanad Electoral (University Members) Act 1937 <br> The counting rules here differ on points of procedure <br> and detail from those outlined in this leaflet. <br> Seanad Electoral (Panel Members) Act 1947 |
| The counting rules here are adapted to take account <br> of the relatively small electorate. |  |
| European elections | European Parliament Elections Act 1997 |
| Local elections | $\underline{\text { Local Elections Regulations 1995 S.I. No. 297/1995 }}$ |

Note: This guide is intended as a general information guide to inform interested parties on the operation of the Proportional Representation - Single Transferrable Vote (PR-STV) system used at elections in Ireland. It does not purport to give a definitive interpretation of the law on any point; for this, reference should be made to the relevant statutory provisions.

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