Proportional representation (PR) systems
Proportional representation systems vary widely but all are designed to ensure that the range of opinion in the legislature reflects the range of opinion in the electorate. These systems distribute seats in proportion to the share of the vote received by each party or candidate.

Any PR system has three key elements – and it is in the details of these elements that PR systems vary so widely.

- Ballot structure
- District magnitude
- Electoral formula

There are two major types of proportional representation systems:

- PR-List systems
- PR by the single transferable vote (PR-STV)

Proportional representation list systems (PR-List)

**Ballot structure**
In PR-List systems, each party offers voters a list of candidates for election and voters select between party lists.

There are two types of lists – closed or open.

**Closed lists** – Voters cast their ballot for the party of their choice and candidates are elected in the order they appear on the list – which is determined by the party. So candidates listed at the bottom of the list are less likely to be elected than those at the top. Closed lists allow party officials control over who gets elected and their subsequent political careers.

**Open lists** – Voters are able to indicate on the ballot which candidate(s) they prefer on the list. The variations of open lists include:

- Voters may vote for either the party or a candidate – and can thus potentially influence which individuals on a list are elected (as is the case in Belgium)
- By voting for a candidate, voters signal their choice of parties and also which candidate from the party list they wish to elect (as in Finland)
- Voters are given more than one vote and can, thus, spread support among parties and candidates (as in Switzerland)

**District magnitude**
District magnitude refers to the number of representatives – or seats – in a district. In PR systems, the DM can vary from two seats to the total seats in the Legislative Assembly. In the Netherlands, for example, the entire nation is one district. When there is more than one district, the DM – or number of seats in any given district – can vary from district to district. Higher DMs lead to more proportional outcomes.
Electoral formula
Various mathematical formulas are used for allocating seats in proportion to votes – with decidedly different results. Many PR systems establish a **threshold**, or minimum percentage of the vote that a party needs before it is entitled to any share of the seats. Typically, *thresholds* are in the 2-5% range. Occasionally, different formulas are used at different levels – or *tiers* – in determining seat allocation.

- **Largest remainder formula** – These formulas involve establishing a *quota* to determine how many votes it takes to win a seat. The votes a party wins is then divided by the *quota* to get the number of seats it is entitled to. If there is a seat left over, then the party with the largest number of remainder (unused) votes gets the seat.
- **Highest average formula** – These formulas involve dividing the votes won by each party by some number and giving the party with the largest average number of votes the seat. These calculations do not involve *quotas*.

Designing a PR system involves making a series of choices, including:

- **Ballot structure** – Should party lists be open or closed?
- **District magnitude** – How many districts? What size? How many seats in each?
- **Formula** – What formula should be used? Should there be a threshold?

Depending on the answers to the district magnitude and formula questions, the proportionality of the electoral system will vary. The nature of the candidate lists on the ballot will determine who has control over which candidates are elected, the parties or the voters.

Additional Resources
This list of readings could be of interest to anyone wanting to know more about electoral reform. The Citizens' Assembly does not endorse the following books and articles or their projections. However, they are useful to illustrate some of the issues being considered by the Citizens' Assembly. A more extensive list is available on the Assembly's website.


- Animated "How your vote counts" explanation of various voting systems
- Other useful resources

**NOTE:** More detailed information, including lecture notes, presentations and video recordings, is available on the Citizens’ Assembly website.

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