



Proportional representation by single transferable vote system

Proportional representation by single transferable vote (PR-STV)

Proportional representation by single transferable vote (PR-STV) is a distinctive variant of proportional representation systems. Like PR-List systems – the larger family of PR systems – the PR-STV system is designed to create a representative assembly which mirrors voter support. In contrast to PR-List systems which reflect support for political parties, PR-STV is based on voters indicating their preferences for individual candidates.

PR-STV systems ask voters to rank candidates on the ballot – which is called a *preferential ballot*. Voters' choice is based on ranking candidates rather than on choosing a party, so voters can choose between candidates from the same party or vote for candidates from different parties.

While the mechanics of vote counting under PR-STV can look complicated, the principle is simple – candidates are elected from multi-member districts in proportion to the electoral support for the candidates expressed in the voters' preferences.

Candidates may see their major rival as a member of their own party rather than a member of an opposing party. As a consequence, the ability of parties to discipline their candidates is weakened. This limitation on party control of candidates goes a long way to explain why PR-STV has not been popular with governing parties.

Like all PR electoral systems, there are three key elements of the PR-STV system:

- Ballot structure
- District magnitude
- Electoral formula

Ballot structure

Voters are presented with a list – or lists – of candidates, which they rank by numbering the candidates in order of preference using a preferential ballot. Some systems require the voter to make only one choice (Ireland) while others require the ranking of as many candidates as there are seats (Tasmania).

The design of a PR-STV ballot paper is important. The order of candidates and parties on the ballot paper can be contentious. There are wide variations in the way candidates are listed and grouped on the ballot paper. Some jurisdictions use a system of rotating names on the ballot paper to ensure no candidate gets preferential treatment.

District magnitude (DM)

In PR systems, DM – or the number of representatives in a district – can vary from two seats to the total seats in the Legislative Assembly; DM can also vary from electoral district to electoral district. The biggest source of variation with PR-STV is in the district magnitude. Once the number of seats per district drops below five, substantial reductions in proportionality occur if there are a large number of parties.

Electoral formula

In a PR-STV system, candidates are elected as they gain a *QUOTA* of votes. A quota can be calculated in various ways, but is essentially the minimum number of votes needed to be elected to a seat.

In successive rounds of counting ballots, candidates are declared elected when they reach a quota of votes, least popular candidates are eliminated and votes are redistributed based on voters' subsequent preferences. The votes which are redistributed are:

- The surplus votes – those over and above the quota of votes needed to elect a candidate
- Votes from eliminated candidates

This process of redistribution of surplus votes from elected candidates, followed by the exclusion of the least successful candidates and the redistribution of his/her votes, continues until the required number of members is elected.

“Above the line”

In some PR-STV jurisdictions, voters are able to vote “above the line” – that is, instead of numbering candidates in order of preference, voters have the option of voting for a single party. This gives the party control over the completion of the whole ballot in a party-preferred order and turns the PR-STV system into something very similar to a PR-List system.

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.

Blais, André, and Louis Massicotte. 'Electoral Systems,' in Lawrence LeDuc, Richard G. Niemi and Pippa Norris (eds.). *Comparing Democracies: Elections and Voting in Global Perspective*. Thousand Oaks: Sage Publications. 1996.

Farrell, D. *Electoral Systems: a Comparative Introduction*. New York: St. Martin's Press, 2001. [This is the book provided to Assembly members as a reference book.]

Lijphart, Arend. *Patterns of Democracy: Government Forms and Performance in Thirty-six Countries*. New Haven and London: Yale University Press, 1999.

State Electoral Office of South Australia Website <http://www.seo.sa.gov.au/>

- 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.

Citizens' Assembly on Electoral Reform

604-660-1232 or 1-866-667-1232

Fax 604-660-1236

info@citizensassembly.bc.ca

2288 – 555 West Hastings Street

PO Box 12118

Vancouver, BC Canada V6B 4N6

www.citizensassembly.bc.ca