



Special Committee on Electoral Reform (ERRE)

Brief on Electoral Reform in Canada

***Regional Adaptation of a Preferential, Proportional and
Non-constituency Voting System (SPPA)***

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Executive Summary

A number of political scientists have proposed suitable alternatives to the current voting system. Without criticizing these systems, which are improvements, it is possible to develop a new voting system that meets all the desirable criteria: the regional adaptation of a Preferential, Proportional and Non-constituency Voting System (SPPA).

Essentially, the purpose of elections has historically evolved to become an exercise in representation. This brief describes a voting system that preserves the relative strengths of various views while addressing the principles set out by the House of Commons:

- Efficiency and legitimacy: The proposed voting system accurately reflects the will expressed by Canadians while reducing the distortions introduced when representatives are elected. Furthermore, the “crutch” option described below generalizes a chamber stabilization approach used in Greece to guarantee a stable minority government under the worst case scenario.
- Engagement: The proposed voting system encourages voting and participation in the democratic process. The rallying process used in leadership races ensures a minimum of respect and collaboration among candidates advocating similar opinions, in order to win over the support of an opponent eliminated in a previous round. The proportional aspect of the voting system ensures that small parties are represented and encourages the participation of their supporters. The possibility of influencing the outcome by simply voting “None” allows voters to indicate that none of the candidates is suitable. This feature has already been used in presidential elections in South America and in Eastern Europe. Each voter’s ballot has equal weight.
- Accessibility and inclusiveness: The proposed voting system is accessible to all eligible voters, regardless of their physical or social condition. The proposed ballot is compatible with the existing mechanism of presenting only one candidate per party and allowing people to vote with a single “X”.
- Integrity: The proposed voting system is compatible with public and electronic release of all ballots and all stages of vote counting. An equally likely and reproducible tie-break makes it possible to obtain the same result at each count. Vote counting would take about the same time it does now.
- Local representation: The proposed voting system ensures regional representation. The agglomeration of regional seats maintains territorial representation. The geographical coverage of this regional representation is different from municipal representation, and thus does not duplicate it.

Here is a description of the five features of the suggested voting system.

1 It uses preferential or ranked ballots. Traditional voting (“X”) is supported.

Preferential ballots allow voters to vote in several rounds at once. Example of a ballot:

Riding No. 4

Candidate A
Candidate B 3
Candidate C 1
Candidate D
Candidate E 2
None

In the above example, the voter has a say in the representation of Riding No. 4 by first separating the acceptable candidates (B, C and E) from the undesirable candidates (A and D). The voter then ranks their preferences for the acceptable candidates in order, and indicates that they would agree to support Candidate E if C is no longer available, then Candidate B if neither C nor E is available. A “None” box allows the voter who finds all the candidates undesirable to clearly express their opinion. This distinguishes voters who wish to vote “None” from those unable to vote. A simple “X” will be considered a first choice. Voting is simple, easy and the intent is clearly interpreted.

2- Vote counting is based on the system used for leadership races.

This system is also called alternative vote or Instant Runoff Vote (IRV). In each round, votes are allocated to the first candidate still in the running on the voter’s ballot of preferences: the candidate receiving the lowest number of votes is then eliminated. In the next round, the votes in favour of this candidate are redistributed until only one candidate remains in the race. Each voter only votes once for the final representation. When the votes are tallied, his or her vote is allocated to the last candidate whom the voter agrees to support. Example for Riding No. 4:

1st Round

Candidate A 32%
Candidate B 29%
Candidate C 17%
Candidate D 14%
Candidate E 2% =====> Candidate E is eliminated
None 6% =====> 6% of votes for “None” in the final tally

2nd Round

Candidate A 32%
Candidate B 30%
Candidate C 17%
Candidate D 14% =====> Candidate D is eliminated
None 7% =====> 7% - 6% = 1% for Candidate E in the final tally

3rd Round

Candidate A 33%
Candidate B 34%
Candidate C 17% =====> Candidate C is eliminated

None 16% =====> 16%-7% = 9% for Candidate D in the final tally

4th Round

Candidate A 42%
 Candidate B 39% =====> Candidate B is eliminated
 None 19% =====> 19% - 16% = 3% for Candidate C in the final tally

5th Round

Candidate A 54% =====> 54% for Candidate A in the final tally
 None 46% =====> 46% - 19% = 27% for Candidate B in the final tally

Final tally:
 Candidate A 54%
 Candidate B 27%
 Candidate C 3%
 Candidate D 9%
 Candidate E 1%
 None 6%

The voter described in Point 1 votes for Candidate C in the first three rounds. In the fourth round, since Candidate C (the voter’s first choice) has been eliminated, and Candidate E (the voter’s second choice) had already been eliminated in a previous round, our voter is among the 5% (39% - 34%) who support Candidate B (our voter’s third choice). In the final round, our voter refuses to support Candidate A, and in the final tally thus votes for Candidate B along with 27% of the voters.

In the event of a tie for last place in a round, each scenario is carried out and the average of the results is accepted in the final tally. We simply generalize the IRV method to produce, in each riding, approval rates as results.

3- Proportional representation is optimal.

At this stage, no candidates are declared elected yet. Let’s look at an example of tallies for all the ridings in a region (assuming that there are 10 ridings in all). In this example there are 5 parties and 4 independent candidates. The last column indicates, for each party, the average of the votes over all ridings:

Party \ Riding	No. 1	No. 2	No. 3	No. 4	No. 5	No. 6	No. 7	No. 8	No. 9	No. 10	Average
Party A	52	6	85	54	6	12	34	39	33	24	34.5
Party B	13	32	6	27	19	12	17	32	31	0	18.9
Party C	9	51	0	3	9	20	19	7	1	22	14.1
Party D	4	0	2	9	11	22	3	10	23	14	9.8
Party E	1	0	0	1	4	4	3	2	4	6	2.5
Independent	0	0	0	0	46	21	10	0	0	23	10
None	21	11	7	6	5	9	14	10	8	11	10.2

A) We first calculate the number of seats of each party.

10 seats must be distributed on a proportional basis. The percentage of votes equivalent to one seat in this region is calculated by subtracting the “None” votes: $100\% - 10.2\% = 89.8\%$ for 10 seats, or 8.98% per seat. The 4 independent candidates are treated individually. Seats are allocated per party, thus minimizing the representation error, which is the difference between the number of seats equivalent to the number of votes x_i and the number of allocated seats s_i .

In our case:	x_i	vs	s_i
Party A	: 34.5% / 8.98% = 3.84	vs	4 elected representatives
Party B	: 18.9% / 8.98% = 2.1	vs	2 elected representatives
Party C	: 14.1% / 8.98% = 1.57	vs	2 elected representatives
Party D	: 9.8% / 8.98% = 1.09	vs	1 elected representatives
Ind S.5	: 4.6% / 8.98% = 0.51	vs	1 elected representatives
Party E	: 2.5% / 8.98% = 0.28	vs	0 elected representatives
Ind S.10	: 2.3% / 8.98% = 0.26	vs	0 elected representatives
Ind S.6	: 2.1% / 8.98% = 0.23	vs	0 elected representatives
Ind S.7	: 1% / 8.98% = 0.11	vs	0 elected representatives

We obtain 4 elected representatives for Party A, 2 elected representatives for Party B, 2 elected representatives for Party C, 1 elected representative for Party D, and one independent (S.5). The representation error is minimal, and is on the order to one seat.

B) The seats of a party are allocated to the candidates with the best final results.

Presented in decreasing order of votes cast, in the preceding example:

The elected representatives of Party A are its candidates for seats No. 3 (85%), No. 4 (54%), No.°1 (52%) and No. 8 (39%).
 The elected representatives of Party B are its candidates for seats No.°2 (32%) and No.°8 (32%).
 The elected representatives of Party C are its candidates for seats No.°2 (51%) and No.°10 (22%).
 The elected representative of Party D is its candidate for seat No. 9 (23%).
 The independent of seat No.°5 (46%) is elected as a representative.

Composition of the regional representation:

- Party A: Candidates No. 1, No.°3, No.°4 and No.°8.
- Party B: Candidates No.°2 and No.°8.
- Party C: Candidates No.°2 and No.°10.
- Party D: Candidate No.°9.
- Independent: Candidate No.°5.

Ridings No.°2 and No.°8 produce two elected representatives each, and Ridings No.°6 and No.°7 produce none. Although this is an exception, there may be no elected representatives or several elected representatives for the same riding. The example shows how the model can address the worst distortions. Ridings without an elected representative are often those where the voters refuse to agree on a candidate or vote “None”.

4- A “crutch” is used to protect against unstable governments.

Rather than requiring short-term tripartite coalitions, something that proportional models are sometimes criticized for doing, a “crutch” is proposed as an option to avoid minority governments. By considering a result as invariable (number of MPs x duration of the government), the winning party can recover the minimum number of defeated candidates necessary to obtain a quasi-majority (50% or 50% - 1), by reducing the maximum duration of its term of office. The elected representatives recovered from the defeated candidates obtain the same status as the others. The “crutch” option is only available in the case of a general election. This option produces a bipartite coalition government.

The leader of the winning party has the choice of forming a coalition for a full term (four years) or applying the “crutch”. In the latter case, the party recovers its best defeated candidates. If the number of MPs of the winning party is increased by 1/4, the duration of the term is reduced by the equivalent amount. The maximum duration of the term and the number of seats in Parliament are then fixed until the next general election. By-elections would use a compensation method comparable to that of the German mixed-member compensatory model.

5- Assignment of candidates and voters does not allow any favouritism in the region.

In a region, since the constituency is no longer a reference, it becomes possible to choose other criteria for bringing together opponents on the same ballot. By allowing each party to run its “specialist” against the candidate of the party in power, this should result in riding-specific debates. For example, the official opposition’s health critic, and doctors and nurses who are candidates of third parties, could all run in the current Minister of Health’s riding.

In chronological order, here is how the ballot of the opponents can be produced in the same riding, for each riding. First, the party in power publishes the names of its candidates in the region. The party in power must be prepared to defend its policies against all comers. In decreasing order of the number of votes cast in the last elections, each party runs its candidates against the candidates already running. The official opposition thus runs an opponent against each of the candidates of the party in power, riding by riding. Then the third party runs a candidate in each riding, knowing the two opponents it will be facing, and so on... After all the candidates of the official parties are declared, the independent candidates may stand. Each riding presents only one candidate per political party, as in the existing system.

Let’s assume that the region has 10 seats to fill. Your date of birth (just the day and the month) determines which riding you vote in. Each riding thus represents an equivalent sample of the population. Each seat represents a sample of the voters born within 36.5 calendar days to each other. The ridings of the same region thus contain the same proportions of men, women, francophones, anglophones, young people, Catholics, rural residents and of any other group characteristic of the region. Between each election, the size of the electorate attributed to each riding can be easily rebalanced by applying a lexicographic rule to the family names of the voters for the birthdays delimiting the ridings.

After all the candidates are assigned, the ridings and therefore the voters are randomly assigned to the previously defined ballots. Since there is no particular relationship between a candidate and their electorate, no promises or special favours can be made in exchange for votes. In this case, an elected representative who defends the interests of a particular class of workers or of any other group necessarily does so out of conviction, not self-interest. With whatever kind of

geographical representation, the MPs of the region are always accused—rightly or wrongly—of being parochial.

Faced with equivalent samples of the population, a candidate is thus encouraged to express any occasional deviations from the party line because the candidate is in competition with his or her fellow candidates. The fluctuations in votes among the candidates of the same party no longer measure particular penchants among constituencies, but rather nuances in the positions and priorities that the citizens are looking for.

Implications for behaviour patterns and implementation.

The electoral system resulting from these five features is preferential, proportional and without constituencies within a region. Consequently, the results should better represent the wishes of the voters by reducing the effects of chance and partisanship. Furthermore, this system is just as adaptable for a by-election.

During the election campaign, debates take place on a global basis, and ideas from around the region are measured against each other. Voters only need to follow the relevant debates in their riding through the media, and can align their vote with the positions and topics debated by the leaders or candidates in their riding. Voters can also qualify their position by using the preferential ballot.

This feature allows voters to focus not only on the positions they want to see the candidates taking but also to prioritize among the issues. Voters are thus able to send to the House of Commons several individuals who have different positions on a topic that everyone considers to be a priority, and to identify topics that are of no interest. The election allows voters to express their views on all the topics discussed by the candidates: Canada's role in the UN, legalization of marijuana, the monarchy, the colour of margarine, wearing the hijab, tax havens, etc. All topics (free trade, pro-life/pro-choice, sovereignty, etc.), and nuances can be expressed in various ways: voters can express their priorities. A voter may also indicate that all the candidates on the ticket are bad by voting "None". An election is thus the equivalent of carrying out a great number of little surveys on different topics, while with the current system, the debate often revolves around a single topic.

Thanks to the support transfer mechanism (Point 2), this voting system resists an artificial division of the vote in favour of one of the suggested options, while allowing all the nuances of these options to be presented. Preferential voting, combined with the support transfer formula, contrasts, and then groups together, all these philosophies. Having a large number of candidates is actually desirable, not a hindrance. Voters are the ones who decide on the ideas that deserve representation. Proportional representation of the suggested model is precisely what preserves independent candidates, and the "crutch" produces a viable coalition or a stable minority government.

This model also reduces the recurrent task of changing constituency boundaries, which is often a source of disagreement among parties. Only the delimitation of regions should be reviewed periodically. In addition, randomly assigning voters in each region avoids having the same voters always being the ones who choose or reject a future prime minister.

This would give each candidate a chance to be elected based on their ideas and statements, not their ability to curry favour with the voters or through the arbitrary play of electoral chance (the constituency where the candidate stands for office, having independents or other parties split the vote). Consequently, this voting method should introduce healthier behaviour patterns in politics. All votes count, directly through proportional representation and in every round of vote counting to ultimately select the last candidate. There no longer are any safe ridings (won in advance or hopeless) where the vote of some voters makes no difference. In comparison to the list proportional representation model, under the suggested model, the voters are the ones who forge the list based on their own criteria in voting for candidates, and the irreversible election of the first candidates on the list is thus avoided.