

Brief on the reform of the voting system

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To ensure each vote counts and each candidate has an equal chance of being heard, I'm proposing the following.

1. Electoral Campaigns
 - a. Authorise, as the only political visibility:
 - i. At the local level:
 1. Equal air time for each candidate. For example, 5 minutes.
 2. Equal text space for each candidate. For example, 2,000 characters.
 - ii. At the national level:
 1. Equal air time for each party, with additional time proportional to the number of constituencies with an official candidate. For example: 1 minute per party + 1 minute for each complete bracket of 10% of constituencies represented, for each party.
 2. Equal text space for each party, with time added proportional to the number of constituencies with an official candidate. For example, 200 characters per party + 200 characters for each complete lot of 10% of constituencies represented.
 - b. Televised and webcast debates, proceed as follows:
 - i. At the local level
 1. Grant equal time to each candidate to address each topic. For example, 2 minutes per candidate per topic.
 2. Allow watchers to evaluate each presentation. For example, a survey with a scale of 0 to 10; 0 being nil and 10 being perfect, with the possibility of adding comments.
 3. Allow each candidate equal time to ask an equal number of questions to the other candidates. For example, each candidate has the right to ask 3 questions, that is, he has 20 seconds per question, and each candidate has 30 seconds to respond.
 4. Draw lots to determine each person's turn to speak.
 5. Allow time for open debates. For example, 30 minutes of free-for-all debate. This is an opportunity to see who can best succeed in bringing order to a chaotic situation.
 - ii. At the national level:
 1. Allow each party 1 representative for each complete bracket of 30% of constituencies presenting an official candidate.
 2. Allow each person representing each party equal time to address each topic, with the time allocated being transferable within the same party. For example, 3 minutes per person, with the possibility of three representatives of a given party allowing one of their teammates to use their group total of 9 minutes.
 3. Allow watchers to evaluate each presentation. For example, a survey with a scale of 0 to 10; 0 being nil and 10 being perfect, with the possibility of adding comments.
 4. Allow equal time for each representative of each party to ask an equal number of

questions to the other parties, with the time being transferable within the same party. For example, each person has the right to ask 2 questions, that is, he has 15 seconds per question, and each person has 30 seconds to respond. A party with 3 representatives can allow one of them to ask all the 6 questions the team is allowed.

5. Draw lots to determine each person's turn to speak.

c. Send the text space contents to all voters. The CEO sends these contents along with the invitation to vote.

2. Vote.

a. Online, telephone or in-person voting, using a PIN sent to each registered voter.

b. Choice between a simple and a complex vote. The choice can be made available at the time of voting. To simplify matters, the simple vote could be set as the default vote, and the complex vote used only upon request.

i. Simple vote: Voter chooses one candidate from the list (current system).

ii. Complex vote: Voter allocates a given percentage of support to a candidate of his choice. The total is rounded to 100% by weighting, such that the voter has only one vote, which he allocates as he sees fit. Electronic voting would facilitate this option. For example: Consider a voter with 6 candidates in his list. He supports the first by 100%, the second by 80%, the third by 100%, is silent on the fourth, supports the fifth by 40%, and the sixth by 80%. This amounts to a total of 400%, and each support must be divided by 4 to bring the total to 100%. The voter would not have to bother with this adjustment. It is done by the system, which allocates 0.25 of the vote to the first (100% support / 4 = 25% = 0.25) and third, 0.2 to the second, 0 to the fourth and 0.1 to the fifth, which amounts to a total of 1, or 100%.

iii. The share of each vote is summed up for each candidate. The share is 100% = 1 for a simple vote. It corresponds to the weighted percentage of each complex vote, for example 25% = 0.25.

a. The total obtained for each candidate corresponds to his number of votes. The number of votes divided by the number of voters in the constituency gives the value of each candidate. For example: For a constituency with 4 candidates and 100,000 voters, where 75,000 effectively voted, assuming that candidate A had 35,250.65 votes, candidate B had 25,605 votes, candidate C had 12,850.48 votes, and candidate D had 1,123.87 votes, we would obtain the following values:

i. Candidate A = $35,250.65 / 100,000 = 0.3525065$

ii. Candidate B = $25,605 / 100,000 = 0.25605$

iii. Candidate C = $12,850.48 / 100,000 = 0.1285048$

iv. Candidate D = $1,123.87 / 100,000 = 0.0112387$

v. Rejected ballots = $170 / 100,000 = 0.0017$.

vi. Voters who failed to cast a ballot = $100,000 - 75,000 = 25,000$; hence, $25,000 / 100,000 = 0.25$.

vii. Total value for the constituency = $0.3525064 + 0.25605 + 0.1285048 + 0.0112387 = 0.7483$. If we add the value of rejected ballots (0.0017) and that of voters who failed to cast a ballot (0.25) to this total, we obtain a grand total of 1, which is the maximum value for any constituency. This highlights the fact that

all votes count and that the higher the participation rate, the greater the chances of the constituency having maximum representation.

c. Political Party Funding

- a. Individual funding in the form of an annual maximum cost, including contribution. For example, a maximum of \$100 per person.
- b. Funding based on proportion of number of members plus the number of votes obtained in past elections. For example, \$5 per member and \$1 per vote.
- c. Mandatory detailed and public financial report.

4. National Assembly

- a. All sessions are broadcast on the web either live or subsequently available for replay.
- b. For each session, each candidate is given the floor for a period proportional to his value obtained during the vote. This is calculated as follows:

- i. T = Total time of session.
- ii. S = Sum of values of all candidates.
- iii. V = Value of one candidate.
- iv. $C = V \times T / S =$ Time of each candidate. For example: For a 3-month session, at a rate of 20 days per month and 8 hours per day, we will have $T = 3 \times 20 \times 8 \times 60 = 28,800$ minutes. For a total of 338 constituencies which should have an average value of 0.7483 per constituency, as in the example above, we would have $S = 338 \times 0.7483 = 252.9254$. $T / S = 28,800 \text{ minutes} / 252.9254 = 113.867567$.
 - 1. Candidate A = $0.3525065 \times 113.867567 = 40.1391$ minutes = 40 min 8 s.
 - 2. Candidate B = $0.25605 \times 113.867567 = 29.1558$ minutes = 29 min 9 s.
 - 3. Candidate C = $0.1285048 \times 113.867567 = 14.6325$ minutes = 14 min 38 s.
 - 4. Candidate D = $0.0112387 \times 113.867567 = 1.2797$ minutes = 1 min 17 s.
- v. Each candidate can use his time in one go or distribute it as he sees fit in a calendar in which each candidate takes turns registering, with the order corresponding to the total time for each candidate, from highest to lowest. The time written would be subtracted after each round and each candidate would revisit the calendar in each round until their time is completed. A candidate is free to change his times at any point, subject to informing the management of the Assembly before his turn is on. It would also be a good idea to update the calendar. For example, candidate A could reserve 10 minutes on November 10, after which he would have 30 minutes 8 seconds remaining for the ensuing rounds. Candidate B may reserve 9 mins and 9 s on October 9, and have 20 minutes remaining. Candidate C could opt to work on all his files during the session and present his work in one shot on December 7. Candidate D could choose a range available on the same day to use his 1 m and 17 seconds to draw attention to the idea he cherishes the most, in the hope that the idea would take hold, and invite interested people to contact him to develop the idea; this would enable others to subsequently monitor their own times if they so wish.
- c. Each decision is subject to electronic voting by all candidates, and each person's vote is worth its value. Continuing with our example above, Candidate A's vote is worth 0.3525065 while D's is worth 0.0112387. This ensures that each candidate represents the exact number of voters as his share of the vote.

5. Conclusion

- a. Apart from complex voting, which requires electronic voting to function effectively, these major changes could be implemented while preserving most of the current system since it is essentially a question of ensuring equitable distribution of the visibility and use of elections results in a way that guarantees that each vote truly counts, including rejected votes and abstentions. Considering existing technology, the cost could be relatively low and implementation time relatively short. This could even be tested right away, for example, over a one-week period, using official results from past elections. This could prove to be a useful experience on several counts and to several people, and would certainly highlight the advantages and shortcomings of the method, and to that extent, enable any necessary adjustments to be made or better alternatives to be sought.