

# One Vote One Value

Change that counts

**Introduction**

# Change that counts

## *Topics*

- Calculation of the Surplus Transfer Value
- Segmentation of the count
- The Reiterative Count “Wright System”
- Online Virtual Scrutiny of Electronic Data

# One Vote One Value

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**Calculation of the  
Surplus Transfer Value**

# Change that counts

*The formula currently used in the senate count to calculate a candidate's surplus transfer value seriously distorts the proportionality and value of the vote:*

- It divides the value of the surplus by the number of ballot papers even though some ballot papers hold a fraction of value of others
- The formula was used to primarily aid a manual count and the reduce the number of mathematical calculations that were required.
- It fails the one vote one value principle.
- Major party ticket votes are increased in value at the expense of minor party candidates that have been excluded from the count.
- It has the potential to effect the overall results of the election disproportional to the vote.
- The problem is magnified when the same system is used in smaller electorates that do not use above-the-line voting.
- With the use of computer based technology there is no longer any justification for retaining the system and formula used

# Change that counts

To demonstrate the effect of the current problem.

- ***Hypothetical***: Victoria's Senate Election 2007 Change "One Nation's" Ticket vote placing the Liberal Party ahead of the ALP before the Greens by swapping One Nation's ALP-Liberal parties ticket preferences. This reduces the Australian Labor Party's vote and forces a distribution of the Liberal Party's third candidate's surplus.

\* *Reference: Antony Green's detailed analysis in his JSCEM supplementary submission (62.1) "Problems with the Senate Counting System" dated 23 July 2008*

# Change that counts

## *Question:*

If 91% of ballot papers (Major Party's Ticket Vote) represent 74% of the value of the vote and  
9% of ballot papers (Minor Parties and BTL votes) represents 26% of the value of the vote

**Do you transfer those votes based on the number of ballot papers (91:9) or on the value of the vote (74:26)?**

If you have 9% of shareholders who own 26% of a company's assets and you are liquidating the company...

**Do you divide the assets of the company equally between the number of shareholders or based on the value of their shares?**

## *Answer:*

**The value of their shares. Why not the value of the vote?**

# Change that counts

The solution is simple.

Change the formula used to calculate the surplus transfer value.

- ✘ Instead of dividing the value of the surplus by the number of ballot papers.
- ✓ Divide the value of the surplus by the candidate's total vote times the value of the vote.

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**Segmentation of the count**



# Change that counts

## *Segmentation what is it?*

- It is an outdated process that was adopted to determine the order in the distribution of excluded candidates voter's preferences.
- A wrong trying to fix a wrong, it was designed to primarily aid a manual count, minimise the number of ballot paper transfers and the reduce the distortion in the vote arising from a "paper based" surplus transfer system.
- A trade off between accuracy, voters choice, democratic representation to facilitate the ease of a manual count.
- Arbitrary, having limited basis of logic or fairness.
- Electoral lotto, its implementation is hit and miss.
- Does not reflect the voters intentions and in the process disenfranchises voter's choice.

# Change that counts

*What are the alternatives and solution to the current system of segmentation?*

- Full segmentation of each transfer (*FIFO*)
  - Individual candidate's primary votes (*FIFO*) and aggregated non-primary vote transfers
  - One single transaction per candidate
  - Last bundle
- ✓ **Better still - abolish it**  
and replace it with a reiterative count

# One Vote One Value

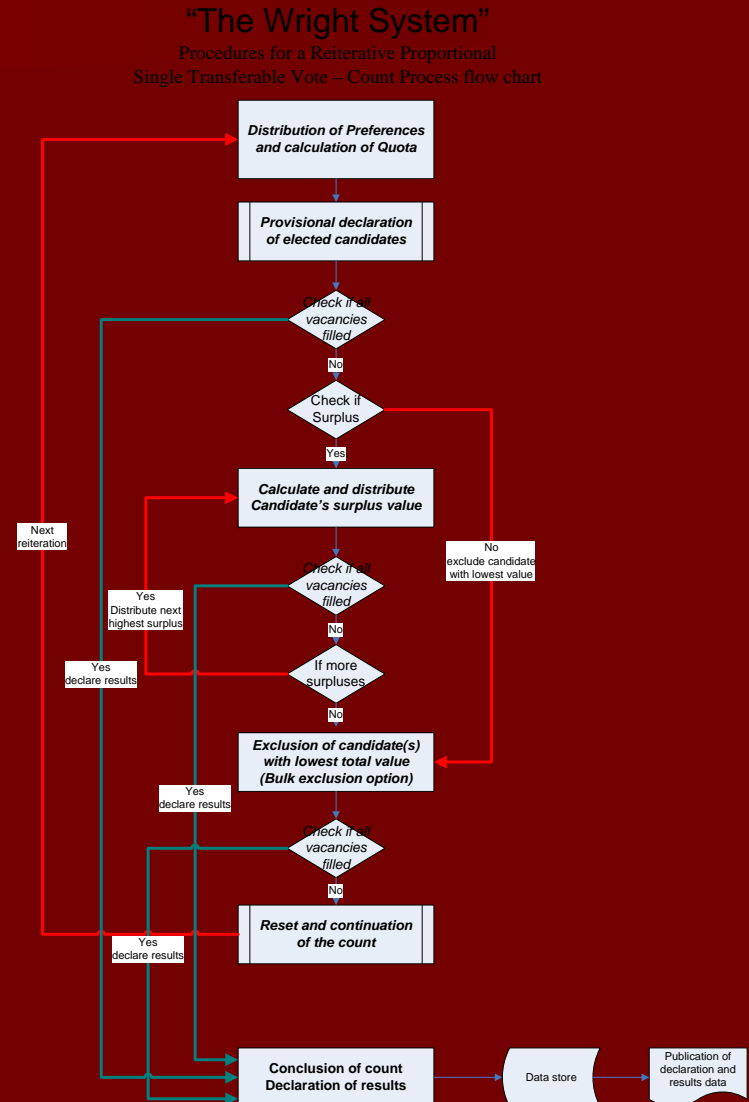
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**The Reiterative Count  
"Wright System"**

# Change that counts

## Process Flow Chart

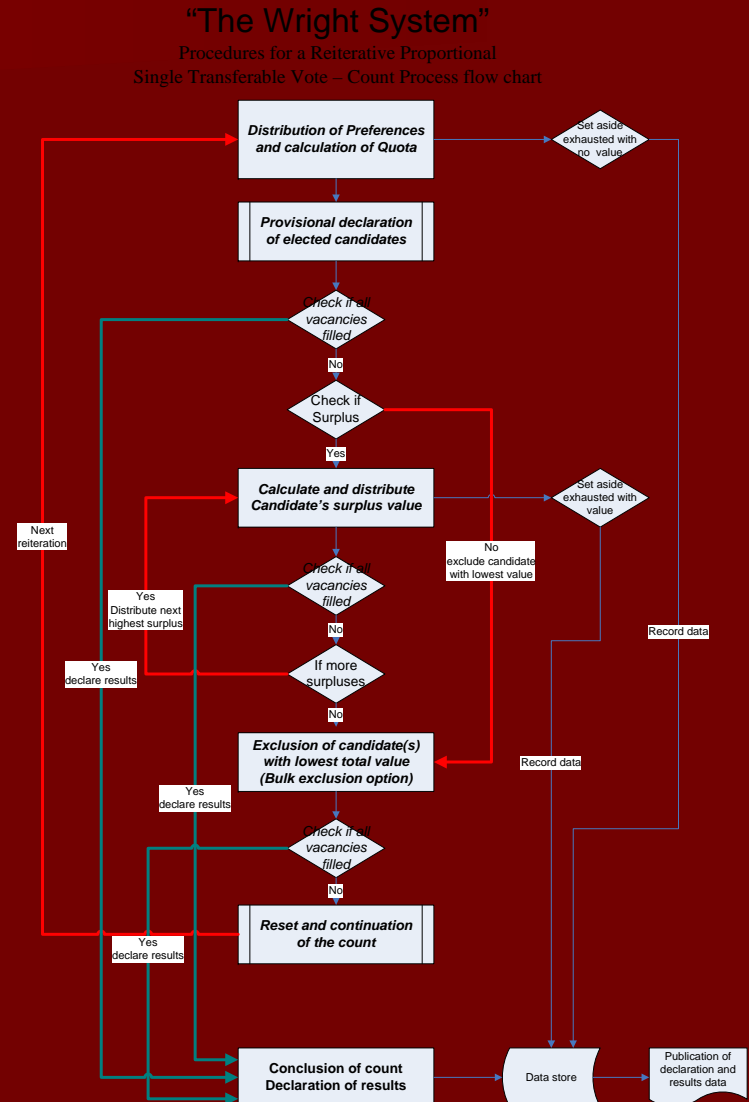
- On every exclusion the count is reset and all votes are redistributed to all remaining candidates.
- Candidates' surpluses are also redistributed.
- The count continues its progressive cycle until all vacancies are filled.



# Change that counts

## Process Flow Chart

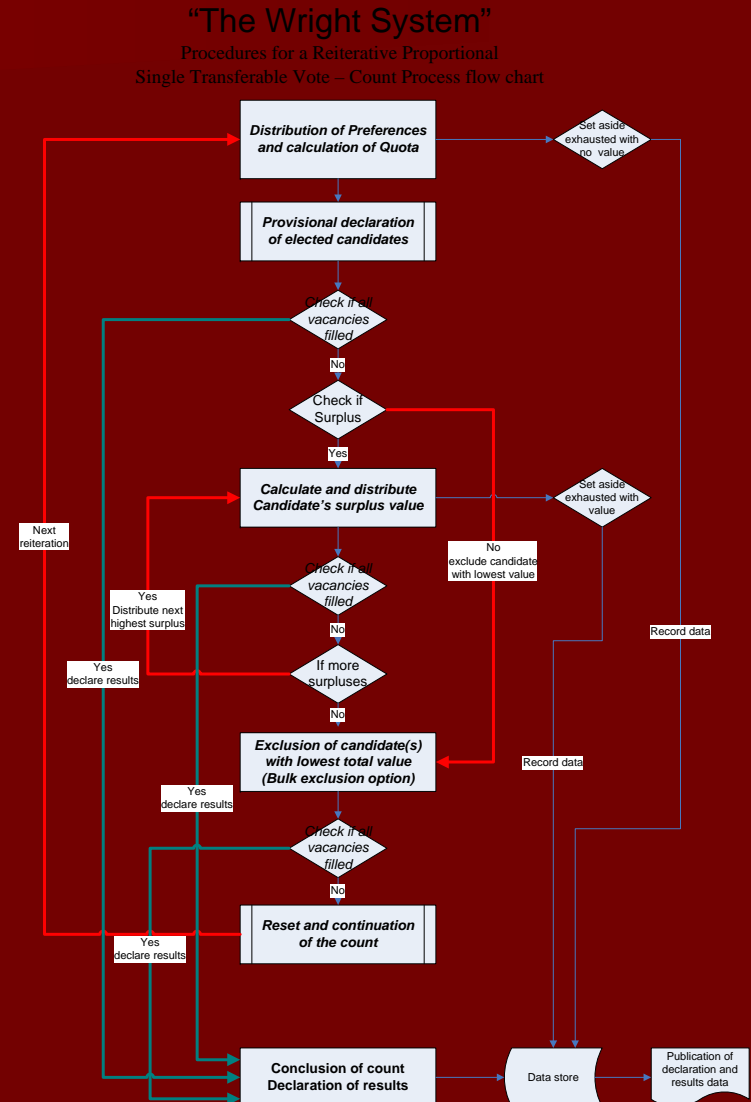
- The quota for election is recalculated at every reiteration following the initial distribution.
- Any votes that are exhausted on the first distribution are recorded without value and the quota is adjusted by default.
- Exhausted votes that form part of a candidate's surplus remain in the count with value



# Change that counts

## Process Flow Chart

- ✓ It is a reiterative count process
- ✓ Surpluses are based on the value of the vote
- ✓ It reduces distortion in the value of the vote
- ✓ No segmentation
- ✓ More accurately reflects voters' intentions
- ✓ KISS Principle (Simple, sweet and understandable)



# Change that counts

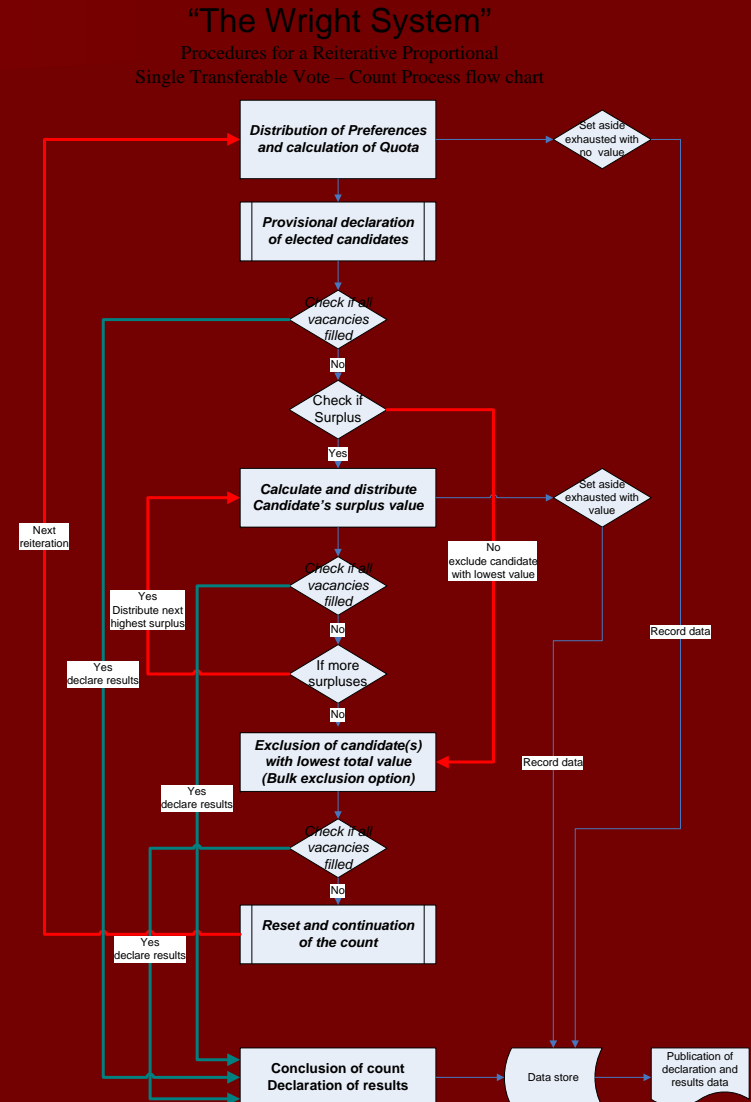
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A reiterative count recalculates the quota each time a candidate is excluded from the count and does a complete fresh recount from the start as it more accurately reflects the distribution of preferences (i.e. under the current segmented system a voter is effectively denied the choice of voting for an elected candidate if the voter's 2<sup>nd</sup> preference is only distributed after their 2<sup>nd</sup> choice has been declared elected!).

This also addresses the current problem in the NSW Upper House in particular, but also in Tasmania and the ACT where the last elected person(s) often come in with an effective quota well below those earlier elected.

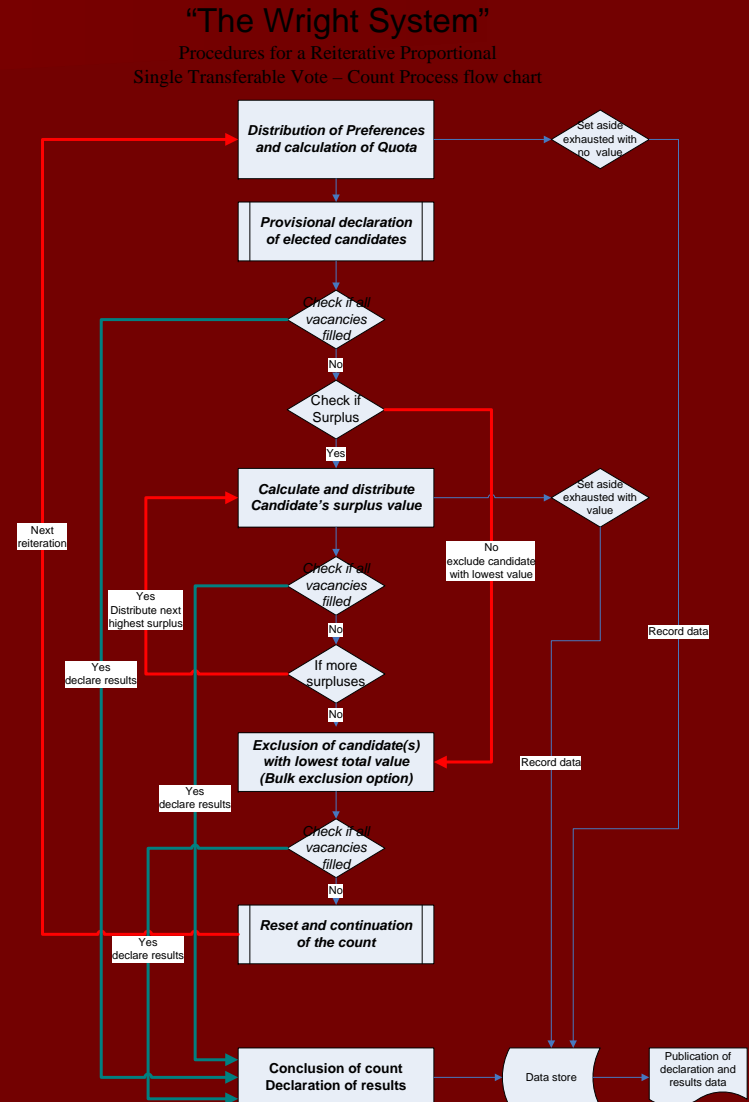
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# Change that counts

## *What change is required?*

- No change from a voters point of view - they still mark their ballot papers in the same way.
- It will require legislative change to implement the new counting rules (*See attached submission - Rules and procedures for a reiterative proportional single transferable vote counting system*)
- It will require modifications to the software used by the Electoral Commission.
- Estimated cost 2 – 6 weeks programming @100/hr approx (\$8,000 to \$24,000)





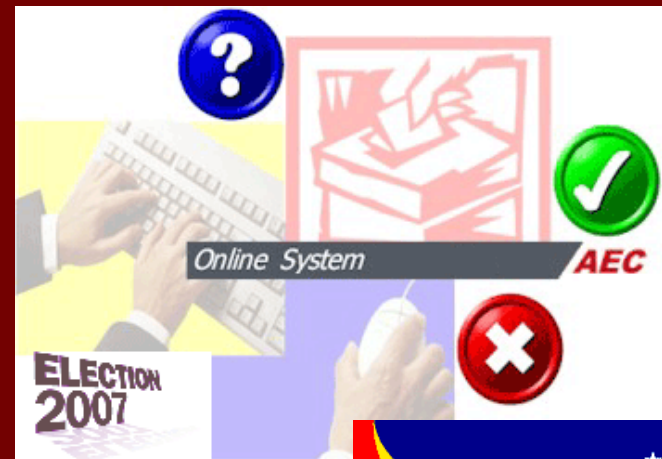
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**Online Virtual Scrutiny of  
Electronic Data**

# Change that counts

The Australian Electoral Commission overall provided a professional, open and transparent electoral process. There is room for improvements in the detail, quality and timeliness of information required for effective scrutiny of the ballot.



# Change that counts

***Information and data is the key to an effective scrutiny of an electronic count***

- Online access to detailed, up to date, polling place return data (*No later than 24 hours after the close of the poll*) and detailed vote statistics, as and when they become available, is essential.
- Better use of the internet to provide public access to information in real time.

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***Better information*** should be provided online showing

- Polling Place return statistics.
- The number of postal votes, pre-poll votes issued and received back per-electorate (Prior to polling day).
- The number of absentee and section votes issued per polling place for each electorate.
- The number of voters recorded as having voted marked off the roll per polling place.
- The AEC did provide some of this data, in part, but much more should be done to ensure that this information is up to date and correct. The number of ballot papers issued for each voter type should be fixed and reported on within 24hrs from the close of the poll as it is included in the polling place return – There should be no surprises with unreported bundles of votes arriving later in the count. Postal vote arrivals being an exception.
- **This information is essential for reconciling the vote and avoiding the mistakes of the Victorian State 2006 election.**

# Change that counts

## *Senate Preference data files*

- One of the biggest criticisms of the AEC's 2007 election count is that it took them 3 months to make available and publish the detailed preference data files used in the Senate Counts.
- The preference data file should have been available immediately after the close of the data-entry process and published on the AEC's web site prior to the execution of the computerised count process with certified copies being required to be published as part of the declaration requirements.
- **Without access to this information it is virtually impossible to properly scrutinise the election.**

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*Thanks to: Antony Green (for his detailed review and analysis of the hypothetical), Geoff Goode, Lee Naish (Proportional Representation Society of Australia) and various commentators who reviewed and contributed to this submission and proposal for change.*