The Single Transferable Vote (STV)

82. The Single Transferable Vote (STV) has long been advocated by political scientists as one of the most attractive electoral systems, but its use for national parliamentary elections has been limited to a few cases -- Ireland since 1921, Malta since 1947, and once in Estonia in 1990. It is also used in Australia for elections to the Tasmanian House of Assembly, the Australian Capital Territory Legislative Assembly, and the federal Senate; and in Northern Irish local elections. The core principles of the system were independently invented in the nineteenth century by Thomas Hare in Britain and Carl Andrae in Denmark. STV uses multi-member districts, with voters ranking candidates in order of preference on the ballot paper in the same manner as the Alternative Vote. In most cases this preference marking is optional, and voters are not required to rank-order all candidates; if they wish they can mark only one. After the total number of first-preference votes are tallied, the count then begins by establishing the "quota" of votes required for the election of a single candidate. The quota is calculated by the simple formula:

$$\text{Quota} = \frac{\text{votes}}{\text{seats} + 1} + 1$$

83. The first stage of the count is to ascertain the total number of first-preference votes for each candidate. Any candidate who has more first preferences than the quota is immediately elected. If no-one has achieved the quota, the candidate with the lowest number of first preferences is eliminated, with his or her second preferences being redistributed to the candidates left in the race. At the same time, the surplus votes of elected candidates (i.e., those votes above the quota) are redistributed according to the second preferences on the ballot papers. For fairness, all the candidate's ballot papers are redistributed, but each at a fractional percentage of one vote, so that the total redistributed vote equals the candidate's surplus (except in the Republic of Ireland, which uses a weighted sample). If a candidate had 100 votes, for example, and their surplus was 10 votes, then each ballot paper would be redistributed at the value of 1/10th of a vote. This process continues until all seats for the constituency are filled.

84. As a mechanism for choosing representatives, STV is perhaps the most sophisticated of all electoral systems, allowing for choice between parties and between candidates within

parties. The final results also retain a fair degree of proportionality, and the fact that in most actual examples of STV the multi-member districts are relatively small means that an important geographical link between voter and representative is retained. Furthermore, voters can influence the composition of post-election coalitions, as has been the case in Ireland, and the system provides incentives for inter-party accommodation through the reciprocal exchange of preferences. STV also provides a better chance for the election of popular independent candidates than List PR, because voters are choosing between candidates rather than between parties (although a party-list option can be added to an STV election; this is done for the Australian Senate).

85. However, the system is often criticized on the grounds that preference voting is unfamiliar in many societies, and demands, at the very least, a degree of literacy and numeracy. The intricacies of an STV count are themselves quite complex, which is also seen as being a drawback. STV also carries the disadvantages of all parliaments elected by PR methods, such as under certain circumstances increasing the power of small minority parties. Moreover, at times the system, unlike straight List PR, can provide pressures for political parties to fragment internally, because at election-time members of the same party are effectively competing against each other, as well as against the opposition, for votes. Many of these criticisms have, however, proved to be little trouble in practice. STV elections in Ireland, Malta and Tasmania have all tended to produce relatively stable, legitimate governments comprised of one or two main parties.