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AN OVERVIEW OF THE FUNDAMENTAL PRINCIPLES OF SELECTED PROPORTIONAL ELECTORAL SYSTEMS					
Department of Constitutional Development					
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NOTE

The contents of this discussion document have no official status, and the document therefore does not necessarily represent the viewpoint of the Department of Constitutional Development, its Director-General, the Minister of Provincial Affairs and Constitutional Development or the Deputy Minister of Provincial Affairs and Constitutional Development.

The document is being made available in order to provide Theme Committee 2 of the Constitutional Assembly with an overview of the main principles involved in proportional electoral systems, as requested by the Secretariat of the Constitutional Assembly. It is likewise made available against the background of the constitution-making process as contemplated in the Constitution of the Republic of South Africa, Act 200 of 1993, as amended. The object of the document is therefore to support the constitutional process by making relevant and useful information available to interested parties.

The submission does not profess to cover all the possible permutations of proportional electoral systems. The intention has rather been to refer only to such examples as are necessary in order to highlight the main principles and considerations involved.

AN OVERVIEW OF THE FUNDAMENTAL PRINCIPLES OF SELECTED PROPORTIONAL ELECTORAL SYSTEMS

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AN OVERVIEW OF THE FUNDAMENTAL PRINCIPLES OF SELECTED PROPORTIONAL ELECTORAL SYSTEMS

EXECUTIVE SUMMARY

1. Proportional representation electoral systems

It is generally accepted that electoral systems based on single-member constituencies often lead to substantial distortions of the actual electoral support. In addition, such systems provide significant opportunities for exploiting their inherent faults and discrepancies, for example in the delimitation of constituencies and through the 'loading' of constituencies.

Many of the shortcomings of a majority system can be avoided by making use of what are termed proportional electoral systems. Proportional electoral systems are aimed at accurately reflecting the true extent of the electoral support enjoyed by each political party in the allocation of representatives to such a party.

1.1 Party list systems

Party list systems require parties to draw up lists of candidates, often in a pre-determined and inflexible order, to fill large multi-member constituencies, which sometimes consist of entire states. The electorate votes for the party list, and the relevant candidates from each list are elected in proportion to the support received by that party. A 'threshold' level of support can be introduced, being the percentage below which a party is not entitled to representation; this reduces the number of 'splinter' parties in parliament.

List systems are usually simple to administer, although the identity of the candidates who are elected normally depends on the political parties compiling the list, and not on the electorate. In some more advanced list systems the electorate is able to determine or amend the order of candidates on the list.

List systems usually promote the existence of large numbers of parties, and tend to reinforce party discipline at the expense of popular participation.

1.2 Single transferable vote

The single transferable vote (STV) electoral system was designed to address certain shortcomings of the list system, such as the fact that votes for parties which do not achieve the quota are 'wasted', and that parties (not voters) play too important a role in determining which candidates are elected. Such a system produces a high degree of proportionality, with the additional advantage that the electorate votes for individual candidates and is not bound by the order of candidates submitted in the party lists. The most significant disadvantage of the STV is its relative complexity.

1.3 Semi-proportional systems

All so-called semi-proportional systems (the restricted, single non-transferable, cumulative and points voting systems) are complex and assume a sophisticated level of voter participation. They also run the risk of substantially distorting, or in some cases prematurely influencing, the results of an election. For this reason, it is not clear whether such systems can be described as being "in general, proportional", as required by Constitutional Principle VIII of the 1993 Constitution.

1.4 Combined systems

Electoral systems do exist which combine the virtues of a proportional system and a majority system. In the light of the Constitutional Principle referred to above, it would seem that such systems in particular deserve to be examined in greater detail.

2. Elements of the South African electoral system that may prove to be contentious

Although, on analysis, the present South African electoral system does not seem to be in conflict with the Constitutional Principles, it nevertheless exhibits certain features which may be contentious, requiring consideration of the following matters, inter alia:

- The exclusive role of political parties in determining the sequence in which candidates appear on the list;
- The exclusive role of political parties in the nomination of senators allocated to the party; and
- The fact that representatives do not directly represent any particular electoral district and are consequently not directly accountable to any segment of the electorate, which serves to reduce the sense of a link between the representative and the electorate.

Besides the above considerations, it is recommended that the purely technical problems experienced with the wording of provisions of the present Constitution regarding the distribution of surplus seats in provincial legislatures (Schedule 2, paragraph 13(c)), and the allocation of seats in the Senate (section 48(2)), should receive attention. (The Constitution does not make it clear whether, when a party does not receive a seat or seats because it has not achieved the applicable quota, its surplus fraction entitles it to a seat or seats allocated in the subsequent distribution of unallocated seats according to the size of the fraction.)

AN OVERVIEW OF THE FUNDAMENTAL PRINCIPLES OF SELECTED PROPORTIONAL ELECTORAL SYSTEMS

1. AIM

To submit to Theme Committee 2 of the Constitutional Assembly an overview of the main principles involved in proportional electoral systems, as requested by the Secretariat of the Constitutional Assembly (reference B.1.1, dated 30 January 1995).

2. BACKGROUND

2.1 The ambit of this submission

The request of the Secretariat draws attention to the Constitutional Principles contained in Schedule 4 to the Constitution of the Republic of South Africa (Act 200 of 1993) (hereafter referred to as the Constitution).

In view of the binding nature of the Constitutional Principles and the workload of the Theme Committee, the present submission confines itself to a general analysis of selected electoral systems which utilise a common voters' roll and which, in the opinion of the Department:

- provide, in general, for proportional representation, (as required by Constitutional Principle VIII); and
- are used in states which exhibit certain similarities to South Africa.

The submission does not profess to cover all the possible permutations of proportional electoral systems. The intention has rather been to refer only to such examples as are necessary to highlight the main principles and considerations involved. (It should be borne in mind that the variety and complexity of available systems make it difficult to cover all the principles that may prove relevant.)

Finally, it may be noted that, for the sake of brevity and clarity, the submission has necessarily been confined to the election of representatives of *central* government legislative institutions only.

2.2 Principles guiding the debate

Constitutional Principle VIII provides binding normative parameters within which the debate about the electoral system can be conducted. In terms of this principle, in addition to the requirement that the electoral system must, in general, provide for proportional representation, it also has to provide for:

- multi-party democracy;
- regular elections; and
- universal adult suffrage.

The duty to consider the role of other normative guidelines such as legitimacy, efficiency, economy, transparency and feasibility lies with the Constitutional Assembly itself and consequently this submission has not presumed to address these aspects of the debate.

3. DISCUSSION

3.1 The structure of the submission

In paragraph 3.2 the broad principles which underlie systems of proportional representation systems are discussed.

Paragraph 3.3 describes different systems of semi-proportional representation.

In paragraph 3.4 systems which are a combination of proportional representation and the election of candidates in single-member constituencies are discussed.

Paragraph 3.5 gives a comparative overview of the functioning of proportional, semi-proportional and combined systems in certain countries.

Paragraph 3.6 deals with those provisions of the Constitution which relate to the electoral system and with the Constitutional Principles that are to form the framework of a new electoral system.

Paragraph 4 contains the conclusions of the submission.

3.2 Proportional systems

It is generally accepted that electoral systems based on single-member constituencies - the so-called first-past-the-post or majoritarian systems such as are used in the United Kingdom and certain Commonwealth countries - often lead to substantial distortions of the actual electoral support. In fact, so serious are these distortions and so detrimental their effect on the representation of minority parties, that electoral systems of this nature are often said to encourage a two-party political system. In such systems significant opportunities exist for manipulating the faults and discrepancies inherent in the system, for example in the delimitation of constituencies.

Many of the shortcomings of a majority system can be avoided by making use of a proportional electoral system or system of equal representation. Proportional electoral systems aim at accurately reflecting, in the allocation of representatives to each political party, the amount of the electoral support which that party receives. Thus they provide representation equal to the electoral support enjoyed (i.e. equal representation) and at the same time proportionality in the representation of parties, in that representatives are allocated in proportion to the extent of the electoral support received. By contrast, in a single-member electoral district, in effect, only the votes in favour of the winning candidate are represented. The rest of the votes are 'lost'.

In proportional systems, in general, the principle applies that the more members elected from a particular electoral district, the more accurately the true will of the electorate will be reflected, i.e. the fewer the votes 'wasted' on candidates who do not achieve enough votes to be elected. It follows that the larger the electoral district and the greater the number of candidates eligible to be allocated seats in the legislature, the greater the accuracy of the system. The logical consequence of such a system is that the greatest proportionality can be obtained if the entire area of the state forms a single electoral district. In many states, this is precisely what happens.

In proportional systems it is usually not possible to correlate precisely the number of votes with the number of seats, since seats are allocated as single units and not as fractions. Most problems of this nature can be solved mathematically. In the majority of systems this involves the determination of an initial quota, in accordance with which an initial distribution of seats is effected. Any unallocated or 'surplus' seats are then allocated in accordance with a particular formula, which may vary according to the nature of that particular system and the effect desired. In the next paragraph a few of the more common systems of proportional representation are discussed.

3.2.1 List system of proportional representation

In the list system of proportional representation the voter must exercise a choice between lists of candidates submitted by different political parties. Generally, the voters' choice is restricted to parties, and no preference for individual candidates may be indicated.

The names of the parties and the lists of candidates submitted by those parties appear on the ballot paper and the voter indicates his/her preference for a particular party's list of candidates. In some variations of this system, the party lists are printed on separate sheets of paper (the ballot papers) and the voter selects the paper of his choice and places it in the ballot box. In some cases only the names of the parties appear on the ballot, and lists are submitted separately.

Further refinements of the list system are possible, normally in connection with the list itself, for example:

In the case of a fixed (or closed) list the voter votes for the list as a whole. In practice, this means that the voter indicates his/her preference on the ballot paper only in respect of the party - the list of names, as determined and arranged by the party, is presented separately. The parties fill the number of seats they win in the order given in the list.

- By contrast, in the case of what is called a single preferential vote, the voter, who has only one vote, can indicate his/her preference for a particular party list by making a cross against the name of a specific candidate on the party list.
- Where a multiple preferential vote system is used, the voter is enabled to indicate his/her preference for a number of candidates by exercising more than one vote. These votes may be used as follows:
 - * To indicate preference between different candidates on the party list;
 - * To record more than one or all of his/her votes for a specific candidate (accumulation);
 - * To delete the name of a candidate or candidates from the party list and replace them with candidates from other lists (panachage); or
 - * A combination of accumulation and panachage.

The above variations on the list system are aimed at making the system more responsive to the will of the voters, although it seems clear that the more sophisticated versions of the list system in particular assume a fairly high degree of voter literacy.

Variations in regard to the electoral district for which a list is submitted are also possible, for example a single state may be regarded as an electoral district, or, as usually happens, the state may be divided into smaller electoral districts in order to provide for greater representation of regional particularity.

3.2.1.1 The allocation of seats from list systems

The formula most commonly used when allocating seats from party lists after an election is the D'Hondt formula. This formula is used to determine the number of votes necessary to win a single seat, and this quota will then apply equally to all parties.

The total number of valid votes for each party list is divided successively by 1, 2, 3, 4, ... etc. The quotients so produced for all the parties are ranked in order, and the available seats are allocated to the parties in the order of these quotients.

The system can best be explained by means of an example: Suppose ten seats are to be distributed among five party lists, and 120 000 valid votes have been cast:

Party A Party B Party C Party D Party E 48 000* 30 000* 24 000* 12 000* 6 000*

Dividing these by 2, 3, and 4 (there is no need to go further in this case) would produce the following quotients to add to those represented by the totals above:

24 000*	15 000*	12 000*	6 000	3 000
16 000*	10 000*	8 000	4 000	2 000
12 000*	7 500	6 000	3 000	1 500

The ten seats would therefore be allocated to those quotients marked by an asterisk (*) and would result in Party A receiving four seats, Party B three seats, Party C two seats, and Party D one seat.

The D'Hondt formula is used in states such as Belgium, France, Luxembourg and Israel, where it is regarded as a fair system.

The are other systems of distribution, however. The Sainte-Lague system is an adaptation of the D'Hondt formula and differs only slightly in regard to the calculation of the averages as employed in the D'Hondt system. The effect of the Sainte-Lague system is that it eliminates the need for minority parties to pool their 'wasted' votes in an informal manner, as the system itself deals with wasted votes in a manner calculated to benefit minority parties.

Likewise, there are calculation systems in which (especially if used in conjunction with a threshold) seats can be allocated in a manner which emphasises virtually any aspect of representation, for example the relative over-representation of minorities or the discouragement of splinter parties, without however distorting the general principle of proportionality between support and representation.

3.2.2 Single transferable vote system

The single transferable vote (STV) system was created to address the 'wasting' of the number of votes cast that are greater than the quota a candidate requires for election.

(The notion of wasted votes is best explained by means of an example: Should a candidate require 50 000 votes to be elected and if in practice he/she receives 52 000 votes, 2000 votes would be 'wasted'. If a candidate receives 42 000 votes, that candidate would not be elected, and the 42 000 votes would also be 'lost' or 'wasted'.)

In the STV system persons and not lists of party candidates are voted for. The STV system primarily affects the position of the individual candidates in an electoral district, and not parties as such, and for this reason it may be termed a 'personal vote' system.

The STV system involves the determination of a quota for each constituency according to the so called Droop formula. This requires dividing the total number of votes cast, plus one vote, by a number which is one greater than the number of candidates to be elected. Voters are asked to indicate their order of preference for all the listed candidates, i.e. by writing the figure 1 next to their first choice, 2 by their second choice, and so on. First preferences are counted and any candidate achieving the Droop quota of first preferences required is elected. If the number of candidates elected in the first calculation is insufficient to fill all the available vacancies, the votes received by candidates which are surplus to the amount required to elect them (i.e. more than the 'quota') are then added to the remaining candidates' votes according to a particular formula, and the second choices indicated on the ballot-papers are considered. Candidates achieving the quota in terms of second-preference votes (with the help of the redistributed surplus of first-preference votes) are elected. If there are not enough surplus votes left to redistribute, candidates with the least number of indicated preferences are eliminated, and the second choices on their ballot-papers are also transferred to the remaining candidates. These redistribution processes are continued, if necessary using third and later preferences, until all the vacancies are filled.

Although the STV system is rather complex, it can produce a high degree of proportionality in multi-member constituencies. It is consequently often used in systems where there is a need to represent smaller parties and in sophisticated systems which wish to offer voters a choice between candidates from different parties. Naturally, STV has the effect of decreasing the relative role of the party *vis à vis* that of the electorate in determining which candidates are ultimately elected.

3.3 Semi-proportional systems

Semi-proportional systems are designed to prevent an electoral system from favouring either majority or minority parties. Four types of systems are generally considered to be semi-proportional, namely the restricted voting system, the single non-transferable voting system, the cumulative voting system and the points system.

3.3.1 Restricted voting system

In the restricted voting system voters exercise one vote less than the actual number of vacancies to be filled, for example, where there are three vacancies, each voter has two votes. A voter may not vote more than once for the same candidate. The theory behind such a system is that, if applied in a multi-member constituency, the result will be more representative. This system was not a success when it was applied in Britain from 1876 to 1885 because, instead of promoting proportionality, it obliged voters to exercise a vote in respect of a candidate they ordinarily would not have voted for at all, causing an artificial result and great uncertainty as to the proper will of the electorate.

3.3.2 Single non-transferable voting system

In this system each voter has only one vote, although there are several vacancies to be filled. The candidates with so-called 'relative' majorities (i.e. those with the most votes, regardless of whether or not such votes are more or less than 50% of the total votes) are declared elected. In this manner minority parties can also be represented.

In such a system it is a theoretical possibility that, if a party obtaining the majority of votes fields a certain number of candidates and its supporters spread their votes evenly, this party might win no seats if the minority parties each field only one candidate and all the supporters of each party vote for their party's candidate. The minority parties would thus be enabled to constitute relative majorities. This system may result in parties with the apparent majority vote being reluctant to nominate their full quota of candidates in a constituency, for fear that some, or even all, would be unsuccessful (and, for instance, fielding one or two candidates only for three seats). This in turn would result in minority parties gaining representation disproportionate to their true support - hence the system is *semi*-proportional.

3.3.3 Cumulative voting system

This is a system in which each voter is given as many votes as there are seats in a constituency. The voter is allowed to allocate more than one vote per candidate, and may even 'accumulate' all his/her votes on a single candidate. Seats are allocated to candidates in the sequence of the highest number of votes. It is conceivable that minority parties may receive disproportional representation in this system under certain circumstances. (For example, if each minority voter accumulates all of his/her votes on a minority candidate, and other voters distribute their votes more evenly.) The system has been used for elections in Switzerland, Luxembourg, Illinois (for the State Legislature) and certain German city councils.

3.3.4 Points system

The points system amounts to an extension of the cumulative voting system. Voters have more votes than there are vacancies in a constituency. The voter must number the candidates from one to, for example, ten. When the votes a candidate has received are counted, the candidates with the lowest score are elected. The points system can be considered very similar to the cumulative voting system, sharing its shortcomings as well as its virtues.

3.4 Combined systems

The advantages of a majority electoral system (accountability and representation of particular interests) and those of a proportional system (accurate representation of the will of the electorate) can also be combined. Such a system combines the virtues of a single-member constituency with those of a list proportional system. Such a system applies in Germany, and is discussed in greater detail in item 3.5.2.1.

3.5. The functioning of proportional electoral systems in certain countries

In the light of the above, it is clear that 'proportional representation' is a generic term which can refer to a variety of electoral systems the general purpose of which is to accurately correlate the extent of electoral support for parties with the number of seats allocated to those parties. Several variations and refinements of proportional electoral systems exist.

3.5.1 Party list systems

As described above, party list electoral systems manage to a large degree to achieve proportionality between a party's share of the votes and the seats allocated to the party, but often do not allow for the expression of preference for candidates or for the representation of electoral districts. Voters have to exercise a choice in respect of complete party lists of candidates, drawn up by the political parties before an election and presented to the voter as a package.

The electoral systems of Guyana, Turkey, Israel, Namibia, South Africa and Norway provide examples of the application of such systems. The electoral systems of Israel and Norway are described below.

3.5.1.1 Israel

Since the founding of Israel in 1948 a national party list electoral system has applied. It functions as follows:

For purposes of general elections Israel is treated as a single large constituency returning 120 members to the *Knesset* (Parliament). For the purposes of election administration (registration and voting) the country is subdivided into electoral districts.

Any natural person over the age of 21 is eligible for election, provided that he/she has the support of 750 persons eligible to vote, or of a party represented in the outgoing *Knesset*. (In practice, most candidates are nominated by large parties although there are a number of splinter groups representing particular parochial interests.)

Each voter may exercise a single vote for the party of his/her choice. All votes are counted nationally, party by party.

The allocation of seats is done in the following phases:

- Firstly, an electoral quota is calculated by dividing the total number of votes properly cast by 120 (the number of seats in the *Knesset*).
- Each party reaching this figure is then allocated seats in proportion to that party's total vote (i.e. if Party A received 75 000 votes and the quota is 20 000, it will initially be allocated 3 seats).
- In the following phase, seats remaining vacant are allocated to those parties with surplus votes.
- Unless the parties elect to combine their surpluses, seats are allocated in sequence of the highest surplus, i.e. the first remaining seat goes to the party with the highest surplus, the second to the party with the second highest surplus, and so on, until all the surplus seats are allocated in this way.

Parties however often pool their surplus votes at this stage and reach what are called surplus agreements. For instance, if Party B has 10 000 surplus votes and Party C 12 000, the two parties may agree to combine their surpluses. The resulting combination of votes is usually sufficient to win another seat and it is usually

given to the party with the highest proportion of the combined surplus, in this case Party C. As can be imagined, the possibility of pooling surplus votes can lead to intriguing political interplay between parties.

The seats allocated to parties are filled in the sequence which appears on the party list. A threshold of 1% of the total vote applies in order to qualify for a seat.

No by-elections are held in Israel. Vacancies are filled by the highest unelected candidate on a party list.

Under the Israeli system all the votes cast are relevant in determining the parties' final share of seats in the *Knesset*. This is in contrast to the position in the United Kingdom, where in practice only the votes cast for winning candidates affect the final outcome of an election, and all votes cast in favour of losing candidates in a multimember district are 'lost', although they may be in an effective majority.

3.5.1.2 Norway

In contrast to the position in Israel where the whole state serves as a single constituency and seats are allocated in a relatively simple manner, the Norwegian electoral system provides for a much more complex system of proportional representation based on direct election from multimember constituencies. Voters are able to indicate their preference for parties and candidates in the constituency simultaneously, by using the list they prefer as a ballot-paper. Representatives are elected in proportion to the number of votes cast for each list. In addition to political parties, other groups may also propose lists of candidates.

The country is divided into 19 constituencies, corresponding to the counties. These in turn are divided into polling districts, with each municipality serving as a single district.

In general elections, 157 constituency representatives are elected to the legislative assembly, the *Storting*. The proportion of these representatives to which each county is entitled is laid down in the Basic Act 9. In

addition, 8 representatives are elected for distribution among the counties after the election.

Municipal and county council representatives are elected in local government elections. The councils themselves determine the number of members, within statutory limits.

According to the electoral rules laid down in the Representation of the People Act, the representatives elected are distributed among the parties that put forward lists in proportion to the number of votes cast on each list.

In general elections and county elections the voters may make changes on the ballot-papers by changing the order of candidates and by deleting candidates. In municipal elections the voters may in addition *cumulate* (i.e. give an additional vote to) candidates and add candidates from other electoral lists. Cumulation is done by placing a cross or writing *kum* behind a candidate's name, or by writing the name once more. There is no limit to the number of candidates who may be cumulated. Voters may add names of candidates up to a quarter of the number of representatives to be elected.

3.5.2 Combined systems

As indicated earlier, a combined or mixed system can be a combination of proportional representation and the majority system. Thus the advantages of a single-member constituency are combined with those of a proportional system. The functioning of the German system, which is an example of a mixed system, is described below.

3.5.2.1 Germany

The German electoral system is a combination of first-past-the-post and proportional representation systems.

Half of the members of the first chamber of the national legislature (the *Bundestag*) are directly elected on a first-past-the-post basis for the 328 constituencies, i.e. candidates achieving a relative majority are elected. The remaining 328 members are elected proportionally on the basis of

lists of candidates put forward by the parties in the 16 Länder (states/counties). No national lists are submitted, resulting in a legislature consisting of persons elected either directly for constituencies or from the states.

Under this system, each person eligible to vote may exercise two separate votes. The 'first vote' is cast for one of the candidates in a particular constituency and the 'second vote' for one of the party lists in the federal state concerned.

In the constituencies, the candidate who polls the most first votes is the winner.

The second vote is exercised in respect of one of the lists put up by the parties in each of the 16 *Länder*. The sequence of the candidates on the lists is fixed by the parties themselves and cannot, in contrast to the Norwegian system, be changed by the voter.

The Federal Electoral Committee establishes the number of seats to which each party is entitled on the basis of the second votes cast for the Länder lists, which is decisive for the election result.

The distribution of seats is based on the method developed by a German mathematician, Niemeyer. It ensures that the distribution of seats corresponds to the voter support received by the parties. Each party's total seat entitlement in the *Bundestag* depends on how many "second votes" it gets nationwide. Only those parties that have polled at least 5% of the "second" votes in the entire country, or which have won at least three constituency seats on the basis of "first" votes, are eligible to be allocated seats. The purpose of this threshold clause is to exclude splinter parties.

In the Niemeyer method:

 The total number of seats is multiplied by the number of second votes obtained by each party;

- The resulting product is divided by the total of the second votes accruing to all the parties that have polled at least 5% of the votes.
- Each party receives one seat for each whole number resulting from this calculation. The remaining seats are allocated in descending sequence of decimal fractions.

Through this approach, it is possible for a party to have what are known as 'overhang' seats, when it wins more seats in the constituencies on the first vote than it is entitled in terms of the second vote calculation.

A further calculation is made, again according to the Niemeyer method, to determine the total number of seats allocated to each party at federal level, which such a party must then distribute amongst its *Land* lists (lower distribution). Seats which a party has already won in the constituencies are deducted from the number of seats allocated for distribution amongst its *Länd* lists. The remaining seats are filled by the candidates on the *Land* lists in the order determined before the election.

It is interesting to note that such a system again introduces certain of the more problematic aspects of the first-past-the-post system, for example the demarcation of constituency boundaries. On average, each constituency consists of 225 390 German citizens. The Federal Electoral Law prescribes that the population in a constituency may not be more than 33 1/3% more or less than this average figure. This is the absolute limit for population variations. If the divergence is greater the constituency boundaries have to be altered.

3.5.3 The single transferable or personal vote system

The single transferable vote system (described in 3.2.3) is used in states such as Ireland, Malta and Tasmania, and in the second chamber of Australia. Its application in the Australian Senate is described below.

3.5.3.1 The Australian Senate

Voters indicate their preference on the Senate ballot papers by numerically indicating their preferred candidates. (The figure 1 beside the first choice, 2 beside the second choice, etc.)

Senate candidates are required to obtain a certain quota of votes in order to be elected. This quota is determined by dividing the total number of formal ballot papers by a number which is 1 greater than the number of vacancies to be filled and by then adding 1 to the result (the so-called Droop quota). All the ballot papers are then examined to ascertain how many first preference votes each candidate received. The candidates receiving the required number of first preference votes are elected. The votes received by such candidates in excess of the quota are called surplus votes.

Surplus votes are transferred to other candidates at less than their full value. The transfer value of surplus votes is worked out by dividing the number of surplus votes by the total number of first preference votes received by the elected candidates. The number of second preferences received by each candidate on the elected candidates' ballot papers is multiplied by the transfer value and then added to first preference totals. The candidates who achieve the quota are consequently elected. If all the vacancies have not been filled after the surplus votes have been transferred, the candidate with the lowest number of votes is excluded. The excluded candidate's ballot papers are distributed to the remaining candidates. The transfer of surplus votes from elected candidates and votes from excluded candidates continues until the required number of senators is elected. Since rather complex calculations are involved, it may take some weeks before it is known who the elected senators for each state and territory in Australia are.

3.6 The 1993 South African Constitution and a new electoral system

3.6.1 The present constitutional dispensation

The 1993 Constitution provides for the direct election of the members of the National Assembly, which can be considered to be the primary representative institution of the country, and for indirect election of senators.

3.6.1.1 Election of the legislative authority

The 400 members of the National Assembly are elected according to a list system of proportional representation. The system ensures that each party achieving a number of votes at least equal to a certain quota (which is determined by dividing the total number of votes cast by the seats in the National Assembly) is allocated seats in the National Assembly in direct proportion to the number of votes obtained. This ensures that (except for tiny minority parties) all parties that take part in an election are represented in the legislature in proportion to the support which such parties receive in the election.

This system has also been refined in order to further enhance the representation of provinces in Parliament. At least 200 of the 400 members are required to be elected from provincial lists in accordance with a formula designed to ensure that, in respect of at least 50% of the seats, a province is represented in the National Assembly in proportion to the number of votes cast in that province in the election.

By contrast, the voters play only an indirect role in the composition of the 90-member Senate. For each province 10 senators are nominated by the political parties which are represented in the (directly elected) provincial legislature. The political parties in the province are entitled to a percentage of the 10 Senate seats allocated to that province in direct proportion to the parties' respective support in the provincial legislature. The Senate is evidently intended to enhance the representation of provincial interests at national level.

It may be noted that the Constitutional Principles do not specify whether a unicameral or bicameral parliamentary system should be established, and that the Constitutional Assembly is not bound to provide for a Senate or similar institution.

3.6.1.2 The executive authority

The executive authority is not directly elected by the voters, although the President is (indirectly) elected by the members of the legislative authority. The voters can therefore only indirectly influence the composition of the executive authority. In a notable departure from the previous Westminster type of executive, the notion of representivity has also been extended to the executive authority. Minority parties which hold more than 5% of the seats in the National Assembly are constitutionally entitled (but not obliged) to representation in the Cabinet in proportion to their percentage of seats.

Furthermore, provision is made, once again based on a minimum percentage of seats in the National Assembly (in this case 20%), for additional representation of minorities in the executive in the form of the post of Executive Deputy President.

3.6.1.3 The judicial authority

At present the Constitution does not provide for the election of Judges of the Supreme Court or the Constitutional Court. It seems, however, as if nothing in the Constitutional Principles expressly precludes such a possibility.

3.6.2 The Constitutional Principles

On analysis, the electoral system provided for in the 1993 Constitution (read together with the Electoral Act, 1993), does not appear to be inconsistent with the Constitutional Principles.

Constitutional Principle VIII requires inter alia:

- representative government including multi-party democracy;
- regular elections;
- universal adult suffrage;
- a common voters' roll; and
- in general, proportional representation.

It would seem that the current Constitution adequately provides for all of the above.

In addition to the requirements of Constitutional Principle VIII, discussed above, Constitutional Principle XIV requires that:

Provision shall be made for participation of minority political parties in the legislative process in a manner consistent with democracy.

It seems that the present system goes even further by also providing for the participation of minority parties in the executive process.

Constitutional Principle XXXII requires that the executive be structured in substantially the same manner until 30 April 1999. This, however, does not preclude the new constitutional text from providing for an executive system differently structured from the present system, and merely delaying the commencement of the relevant sections until 30 April 1999. The Principle also does not preclude the notion of the voluntary dissolution of the existing executive system in favour of another system.

3.6.3 Analysis

It seems incontestable that the current system of proportional representation in South Africa indeed meets the requirements of the Constitutional Principles. Nevertheless, criticism has been levelled at the system. The most substantial criticism results from the fact that, compared with constituency systems, list systems reduce the sense of a link between the electorate and the elected representative. In a system such as the one employed in South Africa, voters can only exercise a choice in respect of a list as a whole, and are not in a position to express preferences for particular candidates. As a result representatives are not held directly responsible or accountable to or by a particular and defined segment of the electorate.

4. CONCLUSIONS

Although, on analysis, the present South African electoral system does not seem to conflict with the Constitutional Principles, and is in line with electoral systems employed elsewhere with relative success, it nevertheless exhibits certain features which may be contentious:

- The exclusive role of political parties in determining the sequence in which candidates appear on the list;
- The exclusive role of political parties in the nomination of Senators allocated to those parties; and
- The fact that representatives do not directly represent any particular electoral district and are consequently not directly accountable to any segment of the electorate, which serves to reduce the sense of a link between the representative and the electorate.

Taking the above into account, furthermore, it is recommended that the purely technical problems experienced with the wording of provisions of the present Constitution regarding the distribution of surplus seats in provincial legislatures (Schedule 2 paragraph 13(c)) and the allocation of seats in the Senate (section 48(2)) should receive attention. (The problem is that the Constitution does not make it clear whether, when a party does not receive a seat or seats because it has not achieved the applicable quota, its surplus fraction entitles it to a seat or seats allocated in the subsequent distribution of unallocated seats according to the size of that fraction.)

Electoral systems do exist which combine the proportional system with elements of majority systems. In the light of Constitutional Principle VIII and the issues identified above, it would seem that such systems in particular merit more detailed investigation.

5. SOURCES OF INFORMATION

Australian Democracy Magazine. undated. The Australian Electoral Commission.

Basson, D. 1994 **South Africa's Interim Constitution**. Johannesburg: Juta & Co.

Basson, D. & Viljoen, H. 1988. Suid-Afrikaanse Staatsreg. Johannesburg: Juta & Co.

Federal Electoral Law: Documents on politics and society in the Federal Republic of Germany, undated.

Constitution of the Republic of South Africa, Act 200 of 1993. Pretoria: Government printer.

Hoffman, A. (ed.) 1992. Facts about Germany. Frankfurt: Societäts-Verlag.

President's Council of the Republic of South Africa. 1992. Report of the Committee for Constitutional Affairs on a proportional polling system for South Africa in a new dispensation. Pretoria: Government printer.

Roberts, G & Edwards, A. 1991. A new Dictionary of Political Analysis. London: Edward Arnold.

South African Law Commission. 1991. **Constitutional Models**. (Project 77). Pretoria.

Strong, C.F. 1972. **Modern Political Constitutions**. London: Sidgwick & Jackson.

The Norwegian Electoral System: Main features. 1993. The royal ministery of local government and labour.

The Norwegian Electoral System. 1993. Ministery of Foreign Affairs.

Van Vuuren, D.J. & Kriek, D.J. (eds.) Political Alternatives for South Africa. Pretoria: Butterworths.



