

2.2 Background

CHAPTER 2

PRINCIPLES UNDERLYING POLICY FORMULATION AND IMPLEMENTATION

2.1 Introduction

In the preceding chapter an introduction was given and the research design of this thesis explained. This entailed an introduction to the field of information technology in public management and implementation in South Africa and supply background regarding this problem. Other aspects addressed were the problem statement and related objectives, defining the research methodology, demarcating the field of study and defining the structure of the thesis.

This chapter has as its aim to introduce the principles underlying the requirements for the formulation and implementation of policy in public sector to the reader. The spectrum of available literature will be described and related to the broader concept of the applied information technology. Elements that could bear relevance to the importance, formulation implementation and monitoring of policies in the public service will be identified and explained and in later chapters be described and validated.

The importance of this chapter is found in the fact that it forms the theoretical basis of the arguments regarding the requirements for formulation and implementation of policies in the public sector. It is also the basis from which an argumentative basis is formed regarding on how data is applied in the public sector for the formulation and implementation of policies.

2.2 Background

The question may be posed as to what policy is. According to Dye (2002:xi) policy is what is concerned with who gets what in politics but more importantly, why will it make a difference. Definitions relating to what policy is, are plentiful. Anderson (1984:2) is of the opinion that these definitions are not always successful. In terms of Anderson (1984:2), policies are:

“.. broadly defined as the relationship of a government unit to its environment”

Fox and Meyer, as quoted by Kuyo, *et al.*, (2002:73), states that policy is

“.. authoritative statements made by legitimate public institutions about the way in which they propose to deal with policy problems”

Anderson, as quoted by Kuyo, *et al.*, (2002:73), defines policy as:

“..a proposed course of action of a person, group or government within a given environment providing obstacles and opportunities which the policy was proposed to utilise and overcome in an effort to reach a goal or realise an objective”

From the definition supplied it becomes clear that policies are the mechanism that government employs to deliver on the requirements and needs. It also becomes clear that policy, and policy formulation, is dynamic in nature and needs to be continuously revisited and reconsidered in order to be effective (Kuyo, *et al.*, 2002:73).

The circle of the policy making process consisting of policy analysis, policy formulation, policy implementation and policy evaluation, requires definitions as well. According to Nagel (1988:3) the definition for policy analysis is the process:

“...of determining which of various alternative public or governmental policies will most achieve a given set of goals..”

Putt, *et al.*, (1998:19) defines policy research as *“.. the differentiated set of activities that touch public policy at numerous points ... (which) do share characteristics...”*

According to Houston (2001:1), policy making in South Africa (and not by definition) was:

“.. towards participatory and direct democracy.”

Having covered various aspects of policy in terms of formulation, definition, analysis and research the consideration of policy implementation is to be addressed. According to Putt, *et al.*, (1998:357-380), policy implementation should be treated like a project. This implies managing the policy required for implementation by means of project management principles.

An aspect neglected on many occasions is that of evaluating the implemented policy. Policy evaluation is not to be confused with policy monitoring as policy monitoring has as its aim the causes and consequences of policies and describes the relationships between policies (Dunn, as quoted by Kuyo, *et al.*, 2002:90). Evaluation on the other hand, does a critical assessment of the implemented policies and determines the worth of such policies (Kuyo, *et al.*, 2002:91). According to Nagel (1988:213), the test for the policy is in being innovative yet lasting, theoretical yet practical. According to Anderson (1984:134-136), the evaluation should be:

“..the estimation, assessment, or appraisal of policy, including the current, implementation, and effects.”

According to Dye (2002:312), complex definitions are offered as to what policy evaluation is. According to Dye (2002:312-313) policy evaluation

essentially is learning about the consequences of an implemented policy.

In terms of this section the basis for the policy formulation and implementation as well as the evaluation of such policy has been laid down. The aim of this section is to form the basis for the argumentation in terms of the requirements for and of policies. The research for this thesis will not cover the need aspect of policy formulation but rather focuses on the requirements for policy formulation and implementation.

2.3 Requirements for Policy Formulation

Policy formulation does not exist on pure instinct. This might be the case in many policies generated by central government, for example what they think is best for the populace. These policies include the social development bills, the anti-smoking bills and a number of other acts implemented. Dye (2002:11) state that models is used in the policy-making process. These models are (Dye, 2002:12-29 and Cloete, *et al.*, 2000:36-37):

- a. Institutional – This model is utilised when government authoritatively determined, implemented and enforced.
- b. Process – This model is applied when various activities with relationships to the public policy are grouped together.
- c. Rational – This model is applied when maximisation of social gain is required.
- d. Incremental – This model is applied when past performance of policies are evaluated and improved on.
- e. Group - This model is applied when pressure groups influence the policy making process.

- f. Elite – This model is applied when the preferences and values of the governing elite are enforced.
- g. Public choice – This model is applied when non-market decision-making based on economic studies influence policy formulation.
- h. Game theory – This model is applied when no independent best choice is available.

2.3.1 Institutional model

Government institutions are responsible for the definition and implementation of policy and policy only becomes public policy when adopted by the governing institution (Dye 2002:12). Three characteristics are attached to public policy. According to Dye (2002:13) these are:

- a. Legitimacy, which implies legal obligation and co-operation when implemented.
- b. Universality, which implies adherence by all of the populace.
- c. Coercion, which implies that through the process of legal litigation, people may be imprisoned if they should not adhere to the implemented public policy.

According to Cloete *et al.*, (2000:37) the aspect of potential changes in institutional structure must be considered when implementing policy. This is due to the potential ramification of any new public policy on the existing structure or through the passing of the public policy, the requirement for establishing a new structure (Dye 2002:13). According to Cloete, *et al.*, (2000:37) this modelling technique is ideally suited for the evaluation between public institutions.

2.3.2 Process model

The process model stems from the behavioural political science. The behavioural studies had as its aim to determine patterns in activities. These patterns became processes (Dye, 2002:14). Cloete, *et al.*, (2002:39) refers to the process model as the systems model and describes it as one of the most valuable tools for policy analysis.

The process model, which follows the basic premise of input, process and output (*Infra*. Chapter 4, figure 4.1) usually has the following outline (Dye, 2002:14):

- a. Problem identification of the policy problems facing government.
- b. Setting the agenda by focussing the attention of the media and the populace on the potential problem that needs to be resolved.
- c. Formulating and developing the policy required.
- d. Enacting the policy by legitimising it.
- e. Implementing the policy through the identified organisations and departments.
- f. Evaluating the policies to determine effectiveness.

Dye (2002:15) states that the process model is ideal in terms of understanding the way policy should be formulated and should not focus on the substance of the policy formulation. Cloete, *et al.*, (2002:39-40), views this as a disadvantage of the process system as it does not describe the transformation or political change involved in policymaking. However, having a process to adhere to when formulating policy has the advantage of having a planned approach thus minimising the potential oversight of important issues.

2.3.3 Rational model

The rational model is set to achieve maximum social gain by ensuring that the potential policies gain to society exceeds the cost to government (Dye, 2002:16). Operative in the rational model is that a cost benefit analysis resulting in maximum potential financial saving, might not be the best solution. Optimum social gain is the operative concept (Dye, 2002:17). Nagel (1988:7), however, warns that the decision-making process based on the rational model has to have adequate information as it is statistically based.

2.3.5 Group model

The rational model requires alternatives, as it is a decision-making methodology that facilitates the rationality of policy formulation (Nagel, 1988:7 and Dye, 2002:17). The decision-making methodology relates to the process approach (*Infra.* Chapter 4, figure 4.1). Information regarding the policy is to be analysed and formulated put into the system, processed in terms of goals and objectives setting as well as preparation for implementation inclusive of the cost benefit analysis and a decision taken on the best policy solution (Dye, 2002:18-19).

2.3.4 Incremental model

The incremental model is based on historical events but applies modifications to these events (Dye, 2002:19). Lindblom, as quoted by Dye (2002:19), states that the incremental model is at flaw in that annual reviews of existing and proposed policies do not occur. These reviews should, amongst other, consider societal benefits and from the results of this analysis propose modifications to existing public policy or propose new policies (Dye, 2002:19).

In many cases governments agree to continue with existing policies as they do not have sufficient time, information, funding or the capacity to do cost benefit analysis with regards to new policies (Putt, *et al.*, 1989:311 and Dye, 2002:19-20). Modifications to existing policies as

well as new policies to support existing public policies are also not proposed due to uncertainty about the consequences thereof (Dye, 2002:20).

The incremental model has inherently the aspect of sunk cost or cost already incurred in previous public policies (Putt, *et al.*, 1989:311 and Dye, 2002:20). In these cases the government consider the cost already incurred as an investment and preclude any change to their investment (Dye, 2002:20).

2.3.5 Group model

As representatives of the voting populace interest groups form a very important facet in policy formulation due to the pressure they bring about on government (Cloete, *et al.*, 2002:35). Interest groups are usually bound by the common goal to bring about change, through demands, in government to the benefit of the populace they represent (Dye, 2002:21).

Interest groups are also in a struggle of their own in that the group with the greater power could force a decision in its favour whereby a group could loose influence in favour of the stronger group (Cloete, *et al.*, 2002:35-36). Optimum group influence is obtained when, at any given time, the groups are at a state of equilibrium, which in turn is determined by the groups' influence (Dye, 2002:21).

Numbers, status, wealth, leadership and internal cohesion determine group influence (Dye, 2002:21). According to Cloete, *et al.* (2000:36) policy-makers are sensitive to the demands of the interest groups and cognisance is taken of their demands when formulating policies. Interest groups who share members (individuals with multi-membership) also maintain the state of equilibrium through the moderation effect on demands (Dye, 2002:23).

2.3.6 Elite model

The elite model, also referred to as the mass model, is based on the assumption that a small elite group is responsible for policy decisions (Cloete, *et al.*, 2000:33). Dye (2002:23) views the elite model as a method by which the governing elite enforces their preferences. This approach implies a downward flow in terms of management as the policies are determined at governmental level and executed by the bureaucracy without gaining the consent of the voting populace (Cloete, *et al.*, 2000:33). The elite model is based on the premise that the elites have the power and give policy directions to the administrators from where policy execution is initiated (Dye, 2000:24).

The elite model actually suggests that the voting populace cannot formulate policy as they are ill informed and that the domain of policy formulation therefore rest with the elite or government as they influence public opinion (Dye, 2002:23 and Cloete, *et al.*, 2000:34-35). The implication of the elite model is that it implies that the voting populace does not play a role in policy formulation thus changes come about through the elites, to redefine their own values especially when events threaten the system (Dye, 2002:24).

Although the elite set policies for survival based on the premise that the populace is uninformed and largely passive, conflict within the elite may occur (Dye, 2002:25). According to Cloete, *et al.* (2000:35) the point of view that the larger populace is uninformed with the elite in total control is oversimplified as the elite may play only a pivotal role in the decision-making scenario implying some form of voting populace participation.

2.3.7 Public choice model

The public choice model is related to non-market decision-making based on economic analysis to public policy (Dye, 2002:25). The

emphasis is on improving the societal welfare, which in this case coincides and supports the rational model (Dye, 2002:26).

Public choice as an applied model lends the society certain basic legal rights (Nagel, 1984:123). According to Nagel (1984:123) these rights are tolerated rights whereby the society allows implemented public policy, and affirmative rights, which are rights society grants. In the context of the public choice model affirmative rights will be policy that is accepted by society for the benefit of society (Nagel, 1984:123). In the case of tolerated rights, these rights would be accepted and allowed as they improve the social welfare of the society being serviced (Nagel 1984:123).

Interpreting the analysis of economics for public choice, Mayer (1985:66-67) states that public policy decisions made by government might be to the benefit of the society it serves (Mayer, 1985:66-67). This approach supports the institutional model (*Supra.* Par 2.3.1). Mayer (1985:66) identifies three types of goods and services that need governmental intervention to wit:

- a. Public goods, which benefits the society and is nonexclusive.
- b. Externalities, which are the effects of an action of one party on another.
- c. Merit needs, which society does not want to invest in irrespective of the societal needs.

Following the approach of Nagel (1984:123), public goods and merit needs will be of affirmative nature whilst externalities would be of tolerated rights. According to Dye (2002:26) government and society enter into an agreement whereby government accepts the responsibility to protect society (Dye, 2002:26). From this responsibility it is accepted that government must perform certain functions that society cannot handle (Dye, 2002:26). Dye (2002:26), as does Mayer (1985:66), also

refers to this function of performance by government for the benefit of society, as public goods, and externalities (Dye, 2002:26).

2.3.8 Game theory model

The game theory model is based on decision-making with more than one participant (Dye, 2002:27). By applying this model, government would make a decision based on the best outcome of more than one scenario as proposed by the participants (Dye, 2002:27). Outcomes in turn are based on the choices the participants make when setting scenarios (Dye, 2002:27). The game theory model is based on the “what if” scenario setting and therefore deductive and abstract and frequently portrayed by means of a matrix (Dye, 2002:28).

Closely resembling the game theory model are the policy and communities models (Cloete, *et al.*, 2000:40). According to Cloete, *et al.* (2000:41) these models utilise the concept of negotiations between stakeholders with regards to the best outcome of possible future events.

Cloete, *et al.* (2000:41) refers to the chaos, complexity and quantum models. These models would also construe a form of game theory modelling as they approach the policy formulation system from the assumption that society is in a state of dis-equilibrium (Cloete, *et al.*, 2000:41).

2.3.9 The process of policy formulation

For the purpose of this thesis the aspect of policy formulation must be considered from the perspective of five basic steps. These might and probably will differ depending on scenarios. For the purpose of this thesis the following five steps are of essence in the formulation and implementation of policies. These steps are inductively deduced from the literature studies of Anderson (1984:23-78 and 134-161), Putt, *et*

al., (1989:1-27), Dye (1987:349-373) and Bobrow, et al., (1987:200-214):

- a. Research – Into the requirements for the (potential) policy.
- b. Analysis and agenda setting – Analysis of the environment for which the policy is intended and the sensitising of media and populace.
- c. Formulation – Of the basic principles to which compliance is required.
- d. Implementation – Of the defined and formulated policy.
- e. Evaluation – To determine whether the implemented policy achieves the aim it was designed for.

Integrated, the aforementioned elements facilitate the total design features for policies. Bobrow, et al. (1987:18-19) refer to this integrative process as the:

“ pursuit of valued outcomes through activities sensitive to the context of time and place.”

2.3.10 Research

According to Putt, et al. (1998:1) research with regards to policy is done by decision-makers. The process is based on gathering and interpreting information but may involve a number of role players and stakeholders (Putt, et al., 1998:8). Anderson (1984:47) refer to research as a problem being converted into an issue, which requires a governmental solution to resolve it. Bobrow, et al. (1987:18-19) refer to research as a design phase when the contextual and actual activities need to be resolved.

Research into potential public policy must be responsive and sensitive towards its intended users otherwise it fails in its aim and purpose (Putt, *et al.*, 1998:9). According to Putt, *et al.* (1998:10), research into policy takes place alongside a diversity of organisations and stakeholders.

Bobrow, *et al.* (1987:19), state that the manipulation of goals often impacts on policy formulation. During the research phase into potential public policy it must be accepted that an imperfect fit will be present (Bobrow, *et al.*, 1987:19). Research according to Putt, *et al.* (1998:8-9) indicates that policy is eventually formulated in terms of decisions made by decision-makers based on information gleaned from staff supporting the process. From the text these are gathered to be in the line-function obtaining information as per transactional level (Putt, *et al.*, 1998:9). According to Anderson (1976:7-9) policies are initiated by means of issues or needs. Research into these needs and issues require three core elements (Bobrow, *et al.*, 1987:19). These elements are:

- a. Clarification of values in order to provide for clear guidelines.
- b. Characterisation of the context of the policy.
- c. The society that will impact and benefit from the policy.

Consensus on societal values and returns will need to be obtained in order for the public policy to be accepted by the potential role-players and stakeholders (Bobrow, *et al.*, 1987:20). According to Putt, *et al.* (1998:10) research into policy-making has necessitated the development of applied technology and information manipulation.

2.3.11 Analysis and agenda setting

Analyses of policy goals are linked to the research done on the requirement for policy (Anderson, 1984:47). According to Putt, *et al.* (1998:41-42) policy is analysed and initiated through the process of information dissemination. Further analyses of needs are done by the

department concerned and based on information available to the decision-maker with regards to the policy formulation (Nagel, 1984:3-4). The problem arises when policy analysis is not done with near perfect information (Anderson, 1976:8). In the scenario where policy analysis is done without applying near perfect information, solving the problem will not be easy if not impossible (Anderson, 1976:8).

Policy needs to be analysed along the near perfect goals of effectiveness, efficiency, cost benefits and social determinants (which are not examined in this thesis) (Anderson, 1976:5 and Mayer, 1985:115). Mayer (1985:115) also states that the determination of goals rest with the decision-making incumbents. According to Putt, *et al.* (1998:253-274), the analysis for policy formulation is not only important but also imperative. According to the author, statistical analysis of any decision and, therefore, executive decisions, should be based on statistical inferences of the problem (Putt, *et al.*, 1998:257-268).

Agenda setting forms an integral part of the policy analysis framework, as the agenda setting will ultimately result in the acceptance, or rejection, of the proposed policy (Cloete, *et al.*, 2000:98 and *Infra*. Chapter 3, par 3.11). Policy analyses include the decision as to what the problem is and what will be decided (Dye, 2002:36). Within the analysis phase, policy agenda setting is thus a deliberate process of planning and action, which defines and prioritises issues and problems and most importantly obtains support for the proposed solution (Cloete, *et al.*, 2000:98).

In policy analysis the formulation and definition of the problem or issue is of great importance and influences the method in which agenda setting has to be executed (Cloete, *et al.*, 2000:99 and *Infra*. Chapter 3, par 3.10). Analysing the problem for policy formulation requires the problem status to be modified and become an issue (Anderson, 1984:47). Preventing a problem to become an issue is a strategy

employed by government so as not to make a decision on a problem (Dye, 2002:37). According to Dye (2002:37) when the dominant elite does not make an issue out of a problem, it is to focus attention away from the said problem, as a solution to the problem might not be in their best interest (Dye, 2002:37).

For agenda setting to be activated a problem must reach crises proportion and no longer be ignored by government, achieve particularity, have an emotive aspect which attract media coverage, have a wide impact, rise issues about power relationships and concern issues which are fashionable for governments (Cloete, *et al.*, 2000:101). Bobrow *et al.*, (1987:20) state that agenda setting is to capture the context and to clarify the values and direction of potential policies. According to Anderson (1984:50) specific problems and issues may attract more attention of the media and due to this additional attention, be converted into agenda items for policy formulation.

2.3.12 Policy Formulation

Dye (2002:41) state that policy is usually formulated by staff members rather than the decision-makers, but is commonly based on the knowledge of what the decision-makers want. Input for the formulation of policies may be obtained from various sources but in all cases information is a requirement (Anderson, 1985:54-55). According to Anderson (1976:51) policy formulation involves the development of appropriate action in dealing with issues. Mayer (1985:137) states that the formulation of policies should be based on objectives related to defined goals. According to Mayer (1985:138) these objectives must be measurable and contribute to increasing effectiveness of the governing process. Cloete, *et al.*, (2000:115) state that cost effectiveness and the cost benefit of policies should be determined through the use of analytical processes before the formulation of such policies.

Policy formulation has two activities within its ambit. They are firstly, the decision taking activity, in other words, is an outcome in the form of a policy a requirement, and secondly, the actual drafting of the policy (Anderson, 1984:55-56). Prior to implementing policy and, hence part of the formulation process, is the review process. Mayer (1985:176-178) and Anderson (1984:61-65) state that the review process must encompass both internal and external reviewing. It is also important that ultimately the proposed policy addresses the cause and not the symptoms of the problem it is meant to resolve (Anderson, 1976:53). Cloete, *et al.*, (2000:137) refers to forecasting as a means to obtain the best solution with regard the optimum solution with regards to policy formulation. Applying the forecasting methodology implies the use of statistics, making assumptions and interpreting current and historical data (Cloete, 2000:138-139).

2.3.13 Implementation

Implementation of policy does not end with the due process of signing and making the policy a law (Dye, 2002:50). Cloete, *et al.*, (2000:164) state that policy implementation was always considered the administrative process and largely ignored. Implementation involves the allocation of the policy to the relevant department, allocating a budget and specifying accountability for the execution thereof (Dye, 2002:50-51 and Mayer, 1985:183-184). Mayer (1985:182) also states that the implementation process must be planned to ensure the successful transition of the enacted policy. Although there might still be a lack of convergence in the field of policy implementation, the importance of the matter must not be underestimated (Cloete, *et al.*, 2000:169).

Policies, after being passed as laws, now becoming public policies, must produce results otherwise the need thereof was non-existent (Anderson, 1976:193 and Putt, *et al.*, 1989:45). The implemented public policies require rules and regulation to manage the policies and

determine departmental mandates (Dye, 2002:52). Should the implemented policy result in the change or creation of a new department or organisation within an existing department, attention must be given to budgets, staffing and facilities (Mayer, 1985:182). The implementation process should be managed as a project, which is defined as having a definite beginning and end (finite) with specific resources allocated to the project to undertake the scope of work (Cloete, 2000:193-196).

Care should be taken when implementing policies that distortion or discrepancies does not occur which could lead to the policy being ineffective (Mayer, 1985:183). Furthermore implemented policies must have developed measurement criteria whereby informed decisions may be used to realise the policies intent (Putt, *et al.*, 1989:46). Policies developed and implemented by the bureaucracy alone (top down approach) might have less of an acceptance than a policy developed and implemented through interest groups (bottom-up approach) (Cloete, *et al.*, 2000:169-174 and Anderson, 1976:193). According to Cloete, *et al.* (2000:178-186) an interdependent 5-C protocol for policy implementation exists and assists the process of policy implementation. The 5-C's are content, context, capacity, commitment, clients and coalitions and have a causal relationship with the policy implementation system (Cloete, *et al.*, 2000:178).

2.3.13.1 Content

Lowi, as quoted by Cloete, *et al.* (2000:179), states that the content of policy has three characteristics to wit distributive, regulatory and redistributive. According to Lowi the distributive function creates welfare for the populace and is thus value adding. The regulatory policies determine rules of conduct and include non-compliance actions. The redistributive policies are in turn aimed at redistributing wealth thus adding value to one group at the expense of another. In terms of Lowi's

perspective, governments utilise policies in a coercive fashion (Lowi, as quoted by Cloete, *et al.*, 2000:180).

According to Cloete, *et al.* (2000:180) the content of policies should not be an end in themselves but a means to an end. The mediation between the ends and the means to an end within the policy formulated should be deterministic in terms of content of the policy.

2.3.13.2 Context

It is important that the context in which the policy is developed and placed is of such a nature that it addresses the problem it is to resolve. The design and development of any policy has to comply to specific social, political and economical issues and place these issues in the correct context within the policy being designed and developed (Cloete, *et al.*, 2000:180).

The context of the designed policy will also be influenced by the institutional mechanism it has to pass through in order to become enacted. However, the interaction with human factor may lead to more favourable acceptance of the proposed context than the hierarchical regulation (Cloete, *et al.*, 2000:181).

2.3.13.3 Commitment

Governments must have commitment when they design, develop and implement policies. This commitment may be equated with the concept of buy-in in other words, acceptance of the partnership. This commitment, buy-in or partnership is applicable to all levels that share in, or benefit from, the policy. The commitment must be based on, not only satisfying the populace and popular need and needs, but also being cost beneficial to all parties concerned. In terms of the cost benefit, the analysis that pre-empts the design and development of such policies should be tested against a cost benefit analysis and

acceptance possibility test. There will be no benefit irrespective of the cost benefit analysis if the policy is not executable either by means of impracticalities or non-acceptance (Cloete, *et al.*, 2000:181).

2.3.13.5 Clients and Coalitions

In the context of obtaining commitment from all parties concerned, a bottom-up and top-down approach will in all likelihood have the most success. In the bottom-up approach the needs of the populace is acknowledged and in the top-down scenario the legitimisation of the policy is made clear (Cloete, *et al.*, 2000:181).

2.3.13.4 Capacity

Implementation of all policies is determined by the capacity of government. Capacity in this regard refers to the tangible ability and having the resources, the knowledge and the funds to implement a proposed policy. Capacity also refers to the intangible resources such as commitment to, and leadership for, the implementation of policies (Cloete, *et al.*, 2000:182).

The criticality of the capacity lies not only in who gets what, when but also how the capacity can be created and operationalised. Obtainment of capacity such as lack of knowledge, insufficient funds and commitment, may be a critical problem but options to bridge them, are available. Capacity building is an option if it is deemed a necessity. The lack of knowledge can be overcome with skills development in order to achieve administrative capability for the implementation of policies. Similarly, funds can be acquired from government (Cloete, *et al.*, 2000:182).

Capacity is to a great degree based on the approach followed for implementation. In this situation the question is whether it should be a centralised or decentralised approach, as the planning implementation and control will depend on the decision reached. In this, the decision to implement or not to implement is based on the governments decision-

making factors such as cost benefit, coercing or added value for the populace and accountability to all is important (Cloete, *et al.*, 2000:183).

2.3.13.5 Clients and Coalitions

It is important to recognise the potential power shifts when formulating policy for implementation within pressure groups. This power shifts may lead to coalitions being formed for the benefit of the policy or policies to be implemented in order to benefit the populace the policy or policies are to benefit (Cloete, *et al.*, 2000:184).

It is the responsibility of the policy makers to determine the potential clients and coalitions prior to the design and development of policies in order to ascertain the acceptance of such policy or policies. All parties concerned must be involved in the policy making process in order for the policy to be accepted when implemented and ownership taken for the execution thereof. Although all parties must be involved, care must be taken not to be derailed by an insignificant few. The 5-C protocol may be seen as an activity that can carry out implementation to the best interest of all concerned but a dogmatic approach must not be followed (Cloete, *et al.*, 2000:185-187).

2.3.14 Evaluation

The final step in policy formulation and implementation is that of evaluating the implemented policy (Anderson, 1984:134). This is to determine whether the policies are achieving their objectives in terms of improved effectiveness and efficiency and whether they are adding value to the process they were designed for and what the cost implication of the policies are (Dye, 2002:54 and 313 and Cloete, *et al.*, 2000:211). It is possible that from this process of evaluation, the process of policy formulation, inclusive of research, may start again if found that the original policy is failing in its intended outcome

(Anderson, 1976:259). Cloete, *et al.* (2000:211) state that linking policy success to outcome achievement is preferable.

A method commonly used for evaluating policy is to determine whether it is politically feasible. This method does not consider societal impact but rather only party political gains or effectiveness and efficiency (Anderson, 1976:260). According to Anderson (1976:260 and 1984:135) it is only when the societal impact in outcome realisation is achieved that evaluation of the implemented policy can be done and ascertained. What governments could do to improve policy evaluation is to implement systematic program evaluation which entails comparisons typical of the before and after situation (Dye, 2002:317 and Dye, 1987:356). Cloete, *et al.* (2000:213) also state that, amongst other, the sustainability of policies after implementation should be evaluated. According to Cloete, *et al.* (2000:215-216) the evaluation process should be managed and properly planned along similar lines to project management.

Policies may not achieve their intended outcome due to a number of reasons. Dye (2002:326) states that when politics substitute analysis this could lead to a failed policy. Other reasons are that the administration of the implemented policy is less efficient than required or that the implemented policies have incompatible goals thus creating conflict (Anderson, 1984:152-153). From the research perspective reasons for policies not achieving their intended outcome are found in the lack of research and lack in the application of information with or without statistical inferences (Nagel, 1988:122-126 and Putt, *et al.*, (1989:53). Cloete, *et al.* (2000:249) state that policies fail due to a number of reasons. These reasons include bad design, external unavoidable reasons impacting on the success thereof, poor research and implementation planning or other unplanned or unforeseen resource constraint. Putt, *et al.* (1989:53) also state that policy evaluation is an ongoing process and should work with policy analysts

and management to collect accurate information for improved policy formulation on an iterative basis.

2.4 Information for policy formulation and implementation

Policy formulation requires accurate and suitable information in order to do statistical inferences (Anderson, 1984:141; Nagel, 1988:174 and Nagel, 1984:359). One particular information problem experienced according to Anderson (1984:142) is the absence of cost benefit analyses during the policy research phase and after implementation. Based on this type of analysis it should become apparent that a particular proposed policy will be either too costly or that the benefit will be greater than the cost incurred (Anderson, 1984:142). Anderson (1984:142) states that in the absence of experimental data the use of quasi-experimental data, that is data that is semi-inferred, lends better results when planning policy implementation.

Bobrow, *et al.* (1987:83) state that the information processing approach is important in reaching decisions on policy formulation. When doing research and analysis for the formulation of policies, the reanalysis of existing data is the least expensive *vis-à-vis* initiating new studies or obtaining new information (Mayer, 1985:135). However, through the use of software or optimising existing software in decision-making, data may be converted to usable information in order to achieve policy goals (Nagel, 1988:129).

Kruskal as quoted by Putt, *et al.* (1989:254) states that:

“.. a government works better if it has reliable and impartial information”

and also that:

“.. body of methods for obtaining and analyzing data in order to base decisions on them”

Although statistics suffer a credibility risk, figures visually presented in a statistical format, lessens the risk in policy formulation and implementation (Putt, *et al.*, 1989:254). Statistical analysis could predict policy outcomes and may be able to consider the cost and cost benefit of such policies prior to them being formulated or even implemented (Nagel, 1984:364).

2.5 Conclusion

This chapter dealt with the process and requirements for policy formulation. Essentially five steps were identified by which process policy should be formulated and ultimately evaluated.

Policy research as a requirement for policy formulation is of essence as this determines the need for the proposed policy. Analysis of the needs lead to the definition and formulation of the policy or policies. From this perspective the policy or policies are passed by government and become law. However, the process is still not completed until the evaluation of the policy or policies have taken place. The evaluation may in turn lead to the requirement for more policies or the amendment of the existing policies. The process of evaluation is also a continuous process.

An aspect of importance noted during the policy formulation and evaluation process was that of the availability of reliable information. Further emphasis was placed on the capability of statistically inferring this data into decision-making information to be applied when evaluating implemented policies.

The contribution of this chapter to the overall problem statement is found in the fact that it sets the basis against which the theory of policy

formulation and implementation applying information management and the empirical research will be validated. This chapter essentially sets the stage against which the researcher's problem statement will be validated.

CHAPTER 3 PRINCIPLES UNDERLYING INFORMATION MANAGEMENT AND TECHNOLOGY POLICY IN SOUTH AFRICA

3.1 Introduction

In the preceding chapter the underlying principles for the formulation and implementation of policy were stated. These have bearing on the thesis in that both the utilisation of information management in the attainment of data is required in order to formulate executable policy.

This chapter has as its aim to introduce the principles underlying the requirements for the implementation of information technology in public policy making and implementation to the reader. The spectrum of available literature will be discussed and related to the broader concept of the applied information technology. Elements that could bear relevance to the importance of applied information technology in the public service will be identified and in later chapters be described and validated.

The importance of this chapter is found in the fact that it forms the theoretical basis of the arguments regarding the application or lack thereof of information technology in the public sector. It is also the basis from which an argumentative basis is formed regarding on how data is applied in the public sector.

Research indicates that much is written about the capability of the information age and information technology on the public sector. The main problem is that most of this literature focuses on the application