Managing Networks in the Public Sector: A Theoretical Study of Management Strategies in Policy Networks

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Public policy usually develops in complex networks of public, quasi-public and private organizations. It is now generally accepted that these networks set limits to the governance capability of the administration. A good deal less is known about the opportunities which policy networks offer for tackling social and administrative problems. This article deals with the way network management enables government organizations to benefit from networks. Building on the theoretical concepts of 'networks' and 'games', two forms of network management are identified: game management and network structuring. Four key aspects can be identified for both of these management forms: actors and their relations, resources, rules and perceptions. At the same time, criteria for the assessment and improvement of network management are examined. The article concludes with a consideration of the limits of network management.

I INTRODUCTION

The importance to government organizations of policy networks for the management of policy processes is clearly illustrated by the failure of the Dutch government to develop and introduce a new passport in the eighties. In 1981, the Dutch Parliament ratified the EC resolution in which it committed itself to the introduction of a new passport according to EC guidelines by 1 January 1985. Tenders were invited from private companies.

Soon, the Ministries of Home Affairs and Foreign Affairs clashed with the result that no decision was taken regarding which company should be granted the assignment of developing the new passport system. The Ministry of Home...
Affairs (MHA) represented the interests of local governments and of the state printing office (SDUB), the state-owned printers of the present passport. The MHA therefore wanted a decentralized passport system which would be developed by the state printing office. They felt the municipalities should be involved in the production and distribution of the new passport. The Ministry of Foreign Affairs (MFA), which was responsible for the introduction of the new passport, wanted a centralized system which would guarantee optimal protection against fraud. This system differed to such an extent from the old one that the MFA did not want the existing network of actors to develop it. It was to be developed by the 'KEP-consortium', which consisted of two giants, Kodak and Philips, and one dwarf, Elba, a small printer of high quality stationery.

In 1985, the Prime Minister intervened in order to break the deadlock. He suggested a compromise. The passport would be distributed by the municipalities and the assignment would be a joint venture involving KEP and the SDUB. During the next few months however, KEP and SDUB failed to reach an agreement. In June 1986, the MFA signed a contract with KEP: the MHA had lost the bureau-political battle.

The KEP contract involved the creation of a completely new network. A special plant was to be set up whose exclusive task would be the development of a passport system according to the MFA guidelines. In January 1988, the first new passport was to be distributed, but before that time problems arose. Within a few months, Kodak resigned from the project. Because the role of Philips was rather marginal, Elba became the main contract partner of MFA. In the autumn of 1987, the MHA made every effort to acquire a specimen of the new passport in order to have a reputable examining body assess the extent to which it was proof against fraud. However, since the ministry did not obtain a specimen in time, the introduction of the new passport had to be postponed. In the meantime, Parliament had become suspicious and decided to conduct an inquiry, which resulted in the resignation of two of the politicians responsible. In December 1988, the contract with KEP was cancelled. Banks consequently refused to extend further credit, KEP went bankrupt. The responsibility for the development of a new passport was transferred to the MHA, which started a new passport project in 1990.

Although several factors jointly responsible for the passport débâcle have been suggested, one appears to be particularly important: the way the MFA managed the process. The MFA was wholly committed to its own design for the new passport system. Actors who had different ideas were excluded from the process. Participation was restricted to those of like mind. By creating its own network, the MFA expected to be able to gain absolute power over the passport development process. By doing so, however, it rendered itself completely dependent upon one other partner. When this partner failed to comply with the contract, the project was doomed.

The example of the passport débâcle illustrates that it is impossible, or at least precarious, to ignore the existence of networks. The network context of policy projects renders top-down management inadequate. Policy networks require a
different method of governing. However, although in policy science the idea of policy networks as a concept for analysing policy processes has gained popularity, little attention has been paid to the question of how policy makers can manage these processes. The aim of this article is to offer a theoretical exploration of the possibilities and limitations of management in policy networks.

II POLICY NETWORKS AND POLICY GAMES

The definition of public policy as being the result of an interaction process between many actors of whom only a few are government bodies has gradually become widely accepted. In policy science there is increasing interest in the idea of policy networks as a concept for describing and analysing the setting in which policy develops and is implemented (Hanf and Scharpf 1978; Rogers and Whetten 1982; Hanf and Toonen 1985; Kaufman et al. 1986; Hufen and Ringeling 1990; Jordan 1990; Rhodes 1990; Marsh and Rhodes 1992; Marin and Mayntz 1991). The logical conclusion of this concept is that when a (governmental) actor tries to govern policy processes, he has to take the characteristics of this network into account.

Networks are described in various ways. One major element common to these descriptions is that they concern more or less long-term relation patterns between dependent actors within which interactions take place (Hanf and Scharpf 1978; Benson 1982; Hufen and Ringeling 1990). We can describe networks, thus, as more or less stable patterns of social relations between mutually dependent actors which form themselves around policy problems or clusters of resources and which are formed, maintained and changed by a series of games (cf. Klijn and Teisman 1991). The policy network is the more or less stable context within which separate games about policy decisions take place.

What is meant by a 'game' is a continuing, consecutive series of actions between different actors, conducted according to and guided by formal and informal rules, and which arises around issues or decisions in which actors have an interest (cf. Allison 1971; Crozier and Friedberg 1980; Rhodes 1981). Policy forms the achieved outcome of these games. The cumulative effect from all the separate games results in specific patterns developing. In this way, policy networks arise around policy issues. Then in its turn the network forms the more permanent framework for subsequent games.

Policy networks: some characteristics

First and foremost, policy networks are characterized by the actors who are part of it and their relations with each other. An important precondition for these relations between actors to arise and to continue to exist is dependence. Actors are dependent on each other if they are unable to conclude games in a manner satisfactory to themselves without the cooperation of other actors. It is owing to this dependence that actors interact with each other. Through a consecutive series of interactions, a pattern of relations is established. The continuing series of games which take place within the network create and perpetuate a certain balance of resources such as powers, status, legitimacy, knowledge, information
and money within a network (Benson 1982; Aldrich 1979). The distribution of resources in turn affects future games within the network but at the same time is perpetuated or changed by those games.

A network is characterized not only by its actors, their relations and the existing distribution of resources, but also by the prevailing rules. Rules are generalizable procedures which are used in games. These procedures, created by the actors jointly in the course of interaction, regulate the separate games within the network without determining them (Weick 1979; Giddens 1984). Rules regulate the behaviour of actors. They specify matters such as what is and is not acceptable, which positions actors may occupy, which actors may take part in which games, which action interconnects with which position, in what way decisions or policy products should be brought about and what costs and benefits correlate with particular behaviour (see, for example, Ostrom 1986). Rules are often ambiguous and there are many rules in existence at any one time, which means it is not always immediately clear to the players which rules are applicable and how rules which might be relevant should be interpreted. Furthermore these rules, in contrast to chess and soccer rules, for example, are not static. They are interpreted and changed during the interaction between the players (Morgan 1986; Giddens 1984; Burns and Flam 1987).

Actors act on the basis of images and interpretations which they have adopted over a period of time. Perceptions are definitions or images of reality on the basis of which actors interpret and evaluate their actions and those of other actors (Weick 1979; Rein and Schon 1986; van Twist and Termeer 1991). On the basis of their perceptions, actors choose to participate in specific games within the network, they choose which objectives they anticipate achieving in those games and they select various strategies in those games. Networks are characterized by specific configurations of perceptions which are related to the history and nature of the network. The extent to which actors share perceptions with each other, however, can vary.

The policy game
Usually, only some of the actors from the network are involved in a game. The actors involved are the players in the game. Their aim in the game is to achieve specific objectives. To this end they employ strategies, i.e. they gear their actions and the objectives which they pursue to the strategic behaviour and objectives of other actors. A strategy is thus a cohesive series of actions whereby one's own desires and ambitions are linked to the assessment of the desires and ambitions of other actors (see also, for example, Crozier and Friedberg 1980). Generally, an actor will not pursue only one objective in a game, but will try to achieve various objectives simultaneously. The dynamics of the game also offer him the opportunity to discover new and interesting objectives in the course of the game (March and Olson 1976).

The position of the players in the game is not only determined by their chosen strategies and their interactions with other actors but also by the resources from the network which they are able to mobilize in the game. In other words: their
power in the game is determined by a combination of the resources which they might potentially mobilize, combined with their strategic abilities to put these resources to use in an actual game. The power of each actor exists and remains in existence on account of the fact that other actors consider him to be powerful. Thus power, like rules, is a construct of the actors in the network.

Policy is a result of interactions between actors in games. Policy outcomes are policy measures or policy products brought about in games: for instance, a completed motorway, a reduction in agriculture's waste emissions, concluding a legislation project, contracts or procedures being agreed between actors, but also non-decisions or blockades. A further characteristic of games is that they are highly dynamic. Uncertainty is an intrinsic characteristic of games in networks. This means that during the course of the game actors adjust their strategies to the behaviour of the other actors and that while they are playing they are acquiring knowledge about the feasibility of their objectives (Klijn and Teisman 1991). So, during the game, learning processes also occur in which actors adjust their objectives and perceptions to the options and opportunities perceived by them.

The interactions between games and networks
Networks and games are closely linked. The conceptualization chosen here was inspired by Giddens' structuration theory (1984). The network forms the context within which games develop. It provides the resources and rules which are used by the actors in the games. The network structures the game without determining its outcome. The outcome and/or the policy are after all dependent on the strategies of the players. In their turn, the outcomes of games can, in the long term, change the characteristics of the network. Actors can, for example, influence the rule structure of the network by interpreting the rules in a particular way. The network is not only changed by conscious efforts on the part of actors. Unintended effects of behaviour on the part of actors may also result in changes at network level.

The network is reproduced and changed in games. Thus, the observation that networks are of a stable nature means, in fact, that the actors repeatedly confirm the distribution of the resources, the prevailing rules and the existing perceptions in actual games. Total stability is, theoretically speaking, highly unlikely. Rules, for example, are mostly ambiguous. They require an interpretation from actors in actual games and this contributes to the change in their content.

III A MANAGEMENT PERSPECTIVE ON POLICY NETWORKS
As the opening case study illustrates, the management of interaction processes in networks takes shape in situations in which various actors with divergent interests and objectives interact. Network management is aimed at improving game interaction and results (Koppenjan et al. 1993). Lynn argues that 'successful public management can be viewed as effective gamesmanship' (Lynn 1981, p. 145). In principle, network management does not serve a central objective, but has a more facilitating role. The manager may be a governmental actor, but he
may also be an actor from outside government. It is possible that the role of manager may be performed by someone from outside the policy network, who will operate as a mediator. Although the manager is concerned with the way the policy process develops within the network, it would be a mistake to suppose that he has no interests of his own at stake. It is because the manager has something to gain, that he is willing to invest time and resources in facilitating the process.

Two types of network management
Based on the difference between games and networks described in the previous section, a distinction can be made between game management and network structuring. Game management concerns the influencing of interaction processes between actors, which involves anticipating the limitations and opportunities which occur within the network. In game management, the manager considers the characteristics of the network as a given. Network structuring on the other hand, is aimed at effecting changes within the network (cf. O'Toole 1988).

The network manager has four key aspects available to him on each level for influencing games and networks: actors, resources, rules and perceptions. Table I shown above gives an outline of the key aspects for management at game level and network level and the corresponding activities. These activities will be further developed in sections IV and V.

IV GAME MANAGEMENT: PROMOTING AND IMPROVING INTERACTION

Game management is aimed at integrating the actors, resources and perceptions present within the network, bearing in mind the prevailing interaction rules and the distribution of resources. By strategic anticipation of the obstacles and opportunities present within the network, an attempt is made to promote the conditions for joint action or for creating common products. The activities indicated by the term game management are outlined below. They are illustrated by examples drawn from the decision making concerning the expansion of Schiphol, the Dutch National Airport.

TABLE 1  Game management and network structuring

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Expanding Schiphol Airport

Together with the port of Rotterdam, Schiphol Airport is the 'engine' of the Dutch economy. Until recently, the expansion of the airport occurred more or less autonomously: there was no planned coordination with developments in the local environment. For instance, because municipalities were not involved in the planning process for the airport, they built houses in places that were later to become badly situated in relation to the airport. The expansion of Schiphol's activities conflicted increasingly with the quality of life in the area. Noise has traditionally been an important problem, but over the years, problems such as external safety, soil and air pollution reached the policy agenda.

In 1986, in an effort to keep up with international competition, the airport executive presented the 'Schiphol master plan' for the further expansion of Schiphol in order for it to become one of the few airports in Europe with Main Port status. This involved more than a doubling of the number of passengers and the building of a fifth runway. The government supported this target on the condition that it was linked to a second goal: the solving of the environmental problems which would accompany such an expansion. The Ministry of Housing, Physical Planning and Environment (VROM) coordinated efforts to develop a plan which would accommodate both targets.

In 1988, a project organization was set up in which relevant parties were invited to participate. It included members from the ministries of VROM, Home Affairs, Transport, Public Works and Water Management, and Economic Affairs, the province of North Holland, the municipalities of Haarlemmermeer and Amsterdam, the Executive of Schiphol Airport and Royal Dutch Airlines (KLM). Environmental groups and representatives of the local residents, however, were not invited. The project began in September 1989, with the signing of a joint declaration of intent, whereby the participants committed themselves to developing a joint plan with regard to the two targets.

Subsequently, participants exchanged information about their preferences, and research was carried out into possible scenarios and their impacts. Two coalitions took shape: the province of North Holland and the municipality of Haarlemmermeer formed the environmental coalition, and the other participants the Main Port coalition. VROM had to adopt a neutral position in order to perform the role of coordinator, and could therefore not openly support the environmental coalition. An attempt to get a joint plan of action accepted failed. Another procedure had to be found. Under the chairmanship of the secretary-general of the VROM (the most highly placed civil servant in that ministry) a selected group of participants negotiated specific issues and their proposals were presented to the other members of the project. If these were not accepted, the process was repeated until they were. In this way a plan of action was formulated on which all the parties agreed. In April 1991, after some final wheeling and dealing, this plan was accepted by all the parties involved.

The plan included a guided expansion of the airport, the re-routing of the forth runway and the construction of the fifth. The capacity of the airport would be used in such a way that noise nuisance would be limited. The demolition of a...
number of houses and the insulation of others was also agreed on. Furthermore, the agreement included a number of measures in the field of external safety, transport and regional development. It was estimated that the plans would cost about 22 billion guilders.

As a result of this network management, the first step was taken towards the coordinated planning of the future development of Schiphol. It proved to be possible to decide jointly on a plan in a way which might benefit all parties. Although the Main Port coalition had had to accept limits to expansion, it might nevertheless gain because of the reduction in the risk of political mobilization. There were also potential benefits for the environmental coalition, i.e. the reduction in environmental damage. Without interaction, the environmental situation in the area surrounding the airport might have been even worse. Although the results of the project have been promising to date, further success is not assured. For instance, a number of important issues, such as night flights, still need to be resolved. Strategies of game management are discussed in more detail below.

Selective activation of actors

In a policy network there are a variety of actors at work. These actors have diverse interests, perceptions and resources. Starting from these different positions they are involved in processes within the network. This does not mean that they play a role in each process or each game. Game management can involve the inclusion or non-inclusion of actors in policy games. To that end, potential relations between actors need to be activated or blocked. This strategy is referred to as 'selective activation' (Scharpf 1978; Friend et al. 1974). By means of selective activation, the formation of restraining or driving coalitions with regard to specific policy proposals can be strengthened or weakened and blockades can be set up, avoided or broken through.

The success of selective activation depends on a correct assessment of which actors are essential to joint action and the willingness of actors to invest their resources (Scharpf 1978; O'Toole 1988). Actors can be essential because they have an indispensable resource at their disposal, or because their participation confers a desired excess value on the joint action. Actors are undesirable if their presence is not strictly necessary but actually hampers joint action. Furthermore, actors can have at their disposal 'veto power', which affords them the option of blocking interaction processes (cf. Kingdon 1984; Marsh and Rhodes 1992, pp. 249–68).

In the case of Schiphol, the actors relevant to both targets (further development of the airport and the safeguarding of the quality of life in the environment) were activated in order to facilitate the coordinated expansion of the airport, and resulting in a project organization in which 16 parties cooperated. Although this ensured the articulation of a variety of interests and issues, it made joint decision-making difficult. Therefore a second round of selective activation became necessary in which the number of participants was limited. This was effected by creating a working group ('the Inner Circle') within the project.
organization. And then, of course, there was the problem of the environmental pressure groups and representatives of local residents which were not invited to participate. This means that in a future round of decision making, these groups will have to be involved. However, because they are not committed to the joint plan of action, reaching an agreement will not be easy.

**Mobilization of resources**

There is a specific distribution of resources within a network. Strategic anticipation of resources demands an exact assessment of the importance of specific resources to the progress and quality of a particular game. The actors who were invited to join the project organization for Schiphol were selected on the basis of their official positions, their expertise, their commitment to the two targets and their capacity to contribute to the creation of political and societal support.

Closely linked to this is the problem of how necessary resources can be mobilized. Mobilizing resources often has its price. Bringing resources and their 'administrators' together in one game, moreover, can cause complications. One possible solution to this is provided by the mobilization of 'supporters', i.e. tapping resources without the administrators of those resources actively participating in the game (Teisman 1992). If the price of mobilizing certain resources or actors is considered too high, replacement of resources can be sought. This assumes that actors do not have a monopoly on particular resources whereby they cannot be passed by. In the case of Schiphol this was effected by deciding to let the environmentalists' viewpoint be represented by governmental organizations instead of pressure groups.

**The use of interaction rules**

In a game, players use rules. Some of these rules are known and are used consciously. Other rules are followed unconsciously, but are no less compulsory. The manager has to be aware of the prevailing rules, because contravening them disrupts the relations between actors and can lead to blockades in interaction. Knowledge of the rules of the network also makes it possible, based on a number of things that can be regarded as 'obvious', to get games underway quickly and, if necessary, to terminate them.

In the case of Schiphol, the interaction between participants regarding such a strategic issue as the future expansion of the airport was a relatively new experience. Adequate routines for interaction were lacking. This meant that at the start of the process a great deal of energy had to be invested in the development of rules. This was effected by the use of arrangements such as the signing of a joint declaration of intent and a joint plan of action. At certain points in the process, the way interactions were organized became the subject of explicit decision making, for instance when it was decided to establish a working group. In order to play the new game, new rules had to be developed. One may surmise that these rules will eventually become institutionalized and thus part of the network.
Managing perceptions

Actors' perceptions about problems and situations are often divergent. In order to achieve a specific policy objective it may be necessary to harmonize the actors' perceptions (cf. Rein and Schon 1986). This is made possible by an exchange of objectives, executing 'package deals' or – in the case of incompatible objectives – 'agreeing to disagree'. If objectives are not mutually exclusive it is possible to achieve 'consensus building' (O'Toole 1988; Hanf and O'Toole 1992).

One way out of conflicts and deadlocks may involve actors abandoning their original position and pursuing new goals which will benefit both parties. By redefining the issues it is possible in many cases to convert win-lose or lose-lose situations into win-win situations. The game manager will do his best to achieve such a redefining of the aim of the game (Forrester 1989).

Managing perceptions was crucial to the Schiphol project. One implication of attempting to accommodate the two seemingly conflicting targets was that parties had to change their perceptions about their interests and goals and the ways to pursue them. Because the targets were formulated in general terms, there was room for participants to look for common ground for decision making. This process was structured by the formation of the working group (the Inner Circle) in which members' conflicting perceptions were confronted. The results of this confrontation were meticulously communicated to the other members of the project organization. By correlating various problems, goals and measures, a package deal was created. The package deal meant that actors had to accept that they could not optimize their interests. It then became possible to find courses of action from which everybody would benefit.

V NETWORK STRUCTURING: CHANGING THE NETWORK

In this section the strategies of network structuring which are available to the network manager will be discussed: strategies aimed at changing the relations between actors, the existing distribution of resources, the prevailing interaction rules and the existing perceptions. They are illustrated by the case of the renovation of post-war housing in the Dutch city of Groningen.

Renovation of post-war housing in Groningen

In the mid-eighties, the renewal of the pre-war housing areas in Groningen, a medium-sized city of 170,000 inhabitants in the north of the Netherlands, had almost been completed. The renewal of these areas was based on the concept of 'building in the interests of the neighbourhood'. This meant a careful improvement of the existing dwellings for the original residents. The aim was to minimize the demolition of dwellings and to keep the new rents as low as possible. The renovations were carried out as a project: one by one, blocks of dwellings were improved mainly by renovating the existing dwellings.

The renewal of the pre-war housing areas took place within a well organized local housing network. The actors of this network were sections of the...
Department of Housing, Physical Planning and Environment, housing associations, tenant organizations, politicians, local estate agencies, financial organizations, developers, architects and research organizations.

In one of the neighbourhoods, which consisted of pre-war and post-war dwellings, a project group which also coordinated the improvement of the pre-war dwellings started renovating those constructed post-war. They used the same procedures for the post-war dwellings as they had used for the pre-war dwellings. However, dissatisfaction with this method of improvement arose in the project group, which mainly consisted of civil servants. Improvements were mainly carried out on the outside (insulation) although some limited improvements on the inside were also made. The housing association and the civil servants concluded that the dwellings remained much as they had been: relatively small and basic. The improvements which were made did little to enhance their popularity on the local housing market.

In September 1987, spurred on by this discontent, the project group came up with a radical new idea for improving the next block; an idea which had the support of the local council executive. The project group proposed demolishing the block of dwellings together with a number of the adjoining blocks and changing the layout of the neighbourhood. This idea constituted a radical break from the proposals that had been made so far and with the existing, mainly prewar, urban renewal traditions. There were vociferous protests from local residents. The social democratic party, which held a dominant position on the council, agreed with the tenants. Eventually, in 1988, the local council rejected the project group's proposal.

This blockage in the decision-making process was the reason why the local Physical Planning and Housing Department initiated a broad-based process which triggered a discussion on what was to be done about the post-war neighbourhoods. After a period of research and intensive interaction between all parties, in late 1989 a concept policy document was produced in which the 'new policy' was laid down. Its main aims were to increase the differentiation of the housing stock in post-war neighbourhoods (in price, size and dwelling type) by implementing more radical improvements and by building new dwellings. Following discussions and negotiations with housing associations, the document was accepted by the local council in early 1991.

In addition, a new way of decision making was agreed by the various parties. The resultant policy document was to constitute the basis for a policy process at neighbourhood level in which plans were made for each post-war neighbourhood which form the basis of the renovation of these areas. The drawing up of the plans was to be a concerted effort by all the actors concerned. Housing associations would perform a coordinating role in this process. In the period between 1991 and 1993, plans were made for all eight post-war neighbourhoods. On the whole, neighbourhood plans were drawn up in relative harmony. In 1993 and 1994, almost all the neighbourhood plans were passed with little problem by the local council. The deadlock which had existed in 1988 was chiefly resolved by...
effecting a radical change in the perceptions of the actors on renovating post-war neighbourhoods and by developing new decision procedures. Some of these strategies will be discussed in more detail in the following sections.

Changing the relations between actors
Network structuring can deal with relations between actors within a network. In addition, it can involve introducing new actors and excluding others or changing the relations between actors. The introduction or exclusion of actors can affect the relations between actors within the network. It can result in closed strongholds being broken open, offer scope for new ideas and enable new coalitions to form. Furthermore, this kind of change at the policy network level does not necessarily make itself felt in every game. The exclusion of actors, though, is not always easy to achieve, owing to rights which might be founded on long-standing practices.

Changing the relations between actors can occur in various ways. Usually it is effected by establishing or changing long-term organizational arrangements which affect a number of games within the network. Arrangements in the framework of network structuring might be, for example, the introduction of consultation procedures, the establishment of advisory bodies, entering into long-term or extensive contracts or the setting up of public or private legal persons.

In the case of renovating post-war housing, the local council used this strategy of introducing new actors or explicitly changing relationship between actors. The most important strategy was the attempt to create a smoothly functioning tenants association at neighbourhood level. Until 1988, only small tenants associations existed but no organization was available which could present the interests of tenants in a specific neighbourhood. Local government tried to create such neighbourhood tenants associations by offering all kinds of (subsidy) facilities. In almost every neighbourhood, the forming of a unified tenants association at neighbourhood level occurred very quickly. In all the neighbourhoods these newly created organisations participated in policy processes. This gave the policy processes at neighbourhood level a strong legitimacy and facilitated the acceptance of the plans by the local council.

Changing the distribution of resources
Changing the distribution of resources within the network is aimed at effecting changes in the position of actors in the policy network by bringing about changes in the resources which they have at their disposal: money, formal positions, manpower, information, expertise and legitimacy.

Influencing the resources in the network can be done in several ways. Influencing the resource information can take place by, for example, introducing new data systems or linking existing systems. Thus, legalizing the linking of databases will strengthen the position of various public services in combating the abuse of social services. Expertise and skills can be strengthened by means of training and schooling. Strengthening the legitimacy of actors or the support which they get can take diverse forms. For instance, the government can
recognize an organization as a discussion partner, give this organization access to permanent consultative bodies or even grant the organization a legal monopoly.

Strategies to influence the distribution of resources were not a dominant feature in the case of renovating post-war housing in Groningen. Nevertheless, some strategies can be identified which were aimed at effecting minor changes in the resource division. Several subsidy instruments were developed to make the policy process concerning the neighbourhood plans more attractive. Besides the fact that funds were reserved for neighbourhood improvements (on condition that concrete plans were submitted) there was also the possibility for tenants associations to receive subsidies for special activities. These subsidies, which in principle were reserved use over a long period, were intended as an incentive for various actors to participate in the policy process at neighbourhood level.

**Changing interaction rules**

In spite of the attention focused on the concept of rules (Burns and Flam 1987; Ostrom 1986), the form of management which involves the influencing of interaction rules has received little attention. The idea underlying this concept is that it is possible to steer a process in a particular direction by influencing the interaction rules. Given that actors are often only partly conscious of the rules which determine their behaviour, and that changing the rules is usually a long-winded affair, interaction rules are often difficult to influence.

In the case study, the idea of 'steering by means of procedures' was practised in the sense that new procedures for decision making were agreed upon. But implicit attempts were also made to change the more informal rules of the network. It used to be standard procedure for new initiatives on renovation to be taken by the local Physical Planning and Housing Department. By allowing housing associations to take the initiative in developing neighbourhood plans, the department, supported by the local council executive, tried to call into question the 'given nature' of this informal rule and to stimulate housing associations to take new initiatives.

**Changing norms, values and perceptions**

Network management can also deal with changing the existing values, norms and perceptions of the actors within the network. By directing 'internalization processes', the manager can attempt to steer the values and perceptions of a target group in the desired direction (In 't Veld 1991).

In addition to persuasion strategies, network management can address itself to the organizing or promoting of an 'open debate' (Majone 1986, p. 457). A more radical, 'tougher' method is that of reframing. Reframing is an intervention which stimulates the actors involved to put their own frame of reference (frame) into perspective and to consider a situation or relation from another frame of reference. Reframing is aimed at effecting an illogical, irrational leap which can be compared to a 'paradigmatic shift'. 'The approach' results in changing perceptions, behaviour and relations', according to Levy and Merry (1986, p. 96).
Reframing can be effected by simulations or by organizing a confrontation between actors with new points of view. Striking, shocking events often serve as a ‘trigger’ for reframing, whether consciously directed or not.

In the case study, reframing strategies were important. In fact, one of the major causes of the initial blockade in the decision making on post-war neighbourhoods were the differences between the various actors’ perceptions on renovation. Generally speaking, it can be said that in the beginning most parties had a ‘technical orientation’ towards renovating post-war neighbourhoods. This orientation emphasized the technical defects of the housing stock and was aimed at making low investments to improve those defects. Conflicts arose when a new orientation became dominant. This ‘housing market orientation’ stressed the problem that the post-war dwellings did not meet with their inhabitants’ preferences and could only satisfy the housing preferences of a very small group of inhabitants who had low incomes. This meant that more radical measures for changing the housing stock of a neighbourhood sometimes needed to be taken. The local Physical Planning and Housing Department succeeded in legitimizing this new orientation by means of an intensive process of research coupled with interaction between all the important actors within the network.

VI ASSESSMENT OF AND RECOMMENDATIONS FOR NETWORK MANAGEMENT

Notwithstanding the previous arguments, there still remains the question of what should be understood by ‘good’ network management and which criteria should be employed in determining this. The problem with answering this question is that actors pursue different objectives which, moreover, can change in the course of the policy process. For this reason, the achieving of objectives cannot be a guiding criterion in structuring and assessing network management. In this section a number of norms will be formulated which emphasize the quality of policy processes.

Based on the idea that networks are often characterized by cooperation problems caused by the lack of a dominant decision centre, network management is considered a success if it promotes cooperation between actors and prevents, by-passes or removes the blockades which obstruct that cooperation. This can be effected by taking advantage of the opportunities and avoiding the threats which can occur at game level and through actively influencing opportunities and threats at the level of the network and its environment. This general norm for assessing network management is further developed below based on six properties which are required of ‘good’ network management.

1 Achieving win-win situations
Instead of concentrating on one actor achieving his objective, network management needs to address itself to bringing about a situation which
represents an improvement on the starting position for all those concerned. This
does not mean that all those involved will achieve their objectives to the same
extent. In many cases it will not be possible to give all the actors a feeling of
winning. In such cases, a situation can be fostered which makes non-
participation in interactions less attractive than participation (Dery 1984;
Teisman 1992, p. 96). Good management contributes to the stimulation of
interactions which will lead to such a situation, and to the breaking through of
deadlocks which prevent the achieving of win-win situations.

2 Activating actors and resources
Interaction assumes that actors are willing to invest their resources in a joint
process. This means that they need to realize the attractiveness of that interaction
process. Network management needs to be aimed at promoting that willingness
and should therefore stimulate enthusiasm.

3 Limiting interaction costs
The costs of interaction should be kept within reasonable limits. If interaction
leads to endless squabbling or trench warfare it can cause participation in the
interaction to result in a waste of resources and energy. It is necessary to prevent
actors pulling out in disillusionment after an enthusiastic start. Interaction costs
should be proportionate to the stake in the game. Network management should
be aimed at restructuring, avoiding or ending interactions which lead to win-lose
or, lose-lose situations (Koppenjan 1993). In addition, good management of
conflicts makes heavy demands on network management. Suppressing conflicts
threatens the quality and transparency of the interaction. Regulation should
prevent conflicts becoming dysfunctional and destructive (Termeer 1993).

4 Procuring commitment
In addition to mobilizing actors and resources, network management needs to
induce those involved to make a commitment to the joint undertaking. Without
this 'voluntary binding', cooperation threatens to founder on the strategic
uncertainties which play a role in collective action: the danger that the impact
of actions will be shifted onto others or that actors will pull out at crucial
moments and leave others with the risks (Olsen 1965). By procuring a form of
commitment to the collective action, this danger of withdrawal can be curbed.
This commitment from the parties concerned can consist of informal agreements,
or of more formal arrangements entering into convenants or contracts or the
establishing of autonomous legal persons (Teisman 1992).

5 Political-administrative management
In network management particular attention needs to be focused on political
commitment. The functioning of networks, indeed, is sometimes seen as posing a
threat to the position of representative bodies such as municipal councils, the
Provincial States and Parliament (Hufen and Ringeling 1990, p. 251). The
existence of policy networks does not mean, however, that representative bodies are by definition excluded. On the contrary, they are often part of networks. For this reason, good political-administrative management is a part of network management. It is particularly important to link up the various games in which representative bodies are involved with the games which are being played elsewhere in the network. The quality of political-administrative management stands or falls by the manager’s ‘feeling’ for determining which information is relevant and for choosing the correct moment for political-administrative harmonization attempts.

6 The quality and openness of the interaction
Network management needs to do justice to the quality and openness of the interaction within networks (Majone 1986). After all, one of the dangers connected with the functioning of networks is that external effects are produced which are damaging in the longer term, both to those involved within the network and to others not represented within the network. Furthermore, it is necessary to prevent a stranglehold consensus emerging within the network which results in ‘groupthink’ type situations in which criticism is not accepted and risks and the external impact of decisions are ignored, with all the concomitant repercussions (Janis 1982; ‘t Hart 1990).

VII THE MARGINS OF NETWORK MANAGEMENT

Management in policy networks requires a great deal of patience and a feeling for the relations and the options which can be found within the network. The network manager has limited resources at his disposal and is dependent on others. Not all key aspects are equally easy for him to influence. His attempts to influence can be neutralized by the strategies of others. His efforts to improve interaction processes can be in vain. The margins for network management are not always wide. Moreover, the manager is himself part of the network and has his own interests, values and perceptions. This complicates his relation with the other actors.

On the other hand, he can undertake attempts to influence, in the same way as other actors, which means he is not powerless. His interventions can promote interaction, help to restructure the direction of interaction processes and introduce new values, ideas and actors. Network management cannot guarantee better interaction development and better policy outcome but does increase the chances of these things occurring. The opportunities for network management should not be underestimated, either. The fact that many actors are involved in policy processes in networks affords the manager the scope to introduce his own ideas and reactivate stagnating processes. Furthermore, the influence of the – often indirect – management strategies dealt with here, could well be much more radical and far-reaching than those of the classical, more short-term oriented, direct strategies.
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