# CAUSES OF POLICY CHANGE

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This article deals with the issue of policy change with an emphasis on one particular type of policy change, namely policy succession. It starts with a short introduction to new theoretic developments in terms of a typology of policy outcomes. It subsequently elaborates categories within one type of outcome, policy succession, sketching briefly the particular problems of policy change for those categories. Then it proceeds to an analysis of the causes of and the factors facilitating or hampering policy changes. Finally the framework of analysis is applied to a case of drastic change of one particular policy in the Netherlands.

# 1. A TYPOLOGY OF POLICY OUTCOMES

Policy change and policy succession are a relatively new focus for research and theoretical development. This is understandable because most policy are considered to be relatively stagnant. Lindblom's view on policy making as »muddling through»<sup>1</sup> or disjointed incrementalism<sup>2</sup> is very widely accepted as a properpresentation of reality. This, of course is contrary to the normative view of policy and decision making as being a rational process which may lead to any sort of change, radical change as well as incremental. Dror in building his model of optimal policy making, suggests that the policy making process should satisfy certain criteria in order to be optimal and feasible. He adds, however, that drastic changes are more likely to occur in developing countries than in industrialized countries. In the latter the structures of decision-making and the environment of policy making are mostly impeding drastic change in

policies.<sup>3</sup> After an era in which attention was focussed on rational policy making (PPBS, policy analysis etcetera) and which more often than not was a source of frustration for policy makers and academic policy model builders, it is quite natural that researchers wish to go back to the reality and investigate when and why desired drastic change was successful or failed.

Among the recent literature on this subject the publications by B.W. Hogwood and B.G. Peters deserve attention.<sup>4</sup> They distinguish four types of outcomes of policy making: policy innovation, policy maintenance, policy termination and policy succession.<sup>5</sup> It seems desirable to add a fifth type: policy expansion. As in all typologies in social sciences also this typology is not rigid; many policy outcomes have traits of two types.

Policy innovation refers to truly new policies. Here the term innovative is not conceived in the sense of new ideas or new approaches, but refers mainly to the object of the policy. In industrialized countries policy innovation occurs rarely. The »policy space» is very crowded. There exists hardly any area of policy making which is not partly covered by at least some legislation, some policy or some plan. Any policy, therefore, may be either changing existing policies or expanding them. In the latter case there may be policy innovation. In developing countries policy innovation is more likely to take place as the policy space is not yet nearly filled.

*Policy maintenance* speaks for itself. The policy remains as it was, even in cases where efforts are made to change. The wellknown and common phenomenon of non-decision manifests the frequency of policy maintenance. Under this type we should reckon marginal changes in policies.

Policy termination is perhaps an even rarer phenomenon than policy innovation. There exists hardly any policy which is fully terminated in the sense that it is not succeeded by policies which at least somehow cover the same field. Among those few cases are policies which have been made for situations of temporary emergency such as food rationing during war time. They are mostly terminated as soon as the emergency situation is finished. Policy termination (as in fact drastic policy succession) is difficult to achieve as any policy creates a clientele which will tend to strongly oppose infringements on their rights and interests.

In view of the practice of maintaining policies even if the ratio for their existence is finished, the new concept of horizon or sunset legislation and budgeting has been developed. They set a date for the termination of the law or policy.

The fourth type of Hogwood and Peters is *policy succession*. This refers to changes in existing policies. It is safe to assume that the vast majority of policy changes are coming under this type. Close to this type, but in a way different from it is *policy expansion*. This refers to those cases where a policy is expanded to new sub-area of the wider policy area. Examples are the ex-

pansion of social assistance to new groups of the population, or of economic policies, e.g. providing subsidies for private enterprise in distress. As I said earlier policy expansion may have more or less features of innovation. It thus makes it into an important category as it may be hypothesized that policy innovation is in some respects easier, in other respects more difficult to realize than policy succession. On the other hand policy expansion may have strong traits of succession, because more often than not policy strategies and instruments for policy expansion are borrowed from the existing policies, which is likely to have a positive effect on their acceptance and implementation.

The term policy succession itself does not indicate any measure of the changes achieved. However, the interest of students of policy change is focussed on drastic change of existing policies. The term drastic may refer to the scope of the change, that is the policy area which it covers; it may also refer to the intensity of the change, being fundamental in its contents: that is objectives or policy means.<sup>6</sup>

The following analysis focusses mainly on policy succession that is changes of a particular policy in a particular policy area. However, policy succession in one policy area can often not be divorced from changes of policies in other policy areas. In the first place in a complex society policies are often closely intertwined. And in the second place the setting of priorities involves several policy areas which may affect their policies.

# 2. CATEGORIES OF POLICY SUCCESSION

It seems useful to distinguish various categories of policy succession as the problems of drastic policy change may differ in some respects among categories. I shall not elaborate this point to a large extent but present the categories their properties, and their consequences for the likelyhood of drastic change. It is necessary, however, to add that it is not always possible to make a sharp distinction among them. Cases within each category may possess some elements from other categories.

I suggest then the following categories:

- a. Policy succession which takes place within one policy sector;
- b. Policy succession concerning multi-sector policies;
- c. Policy succession among policy sectors;
- d. Policy succession regarding a particular object of policy making;
- e. Policy succession with regard to the structure of government, and to politico-administrative processes in general.

# a. Policy succession taking place within one policy sector

This category contains fundamental changes in the general policy with regard to one sector of government policy or major parts of it. Examples are: the introduction of a national health service, development of a new schoolsystem for important groups of youth, setting up a system of regional economic development, a revision of the social benefits which affects considerably (in a positive or negative direction) the basis of the social benefit system.

The policy making process for preparing such policy succession is mostly limited to actors who are primarily concerned with this policy sector or parts thereof.

The causes for success or failure in achieving drastic change of policy are therefore to be found mainly within the network of actors of this sector. As there is no, or only a limited need for co-ordination among sectors, the obstacles for drastic change are much less then is the case for category b. Nonetheless, actors from outside the sector may influence the change in policy. Of course financial limitations and constraints from the environment will have an impact.

There may, however, be cases in this category for which succession is closely related with other policy sectors. The introduction of restrictive measures for the sake of environmental protection, for instance, is closely linked with and dependent on the economic sector.

#### b. Policy succession concerning multi-sector policies

Many policy problems are related to a number of policy fields or sectors. It seems that the interrelationships among policy sectors has considerably augmented during the last few decades. But certainly the perception of policy issues as being multi-sectoral issues has increased. The more sectors are involved in a certain policy issue, the more sectoral interests and sectoral organisational networks are involved. Consequently co-ordination of policies and weighing of interests become a considerably more complicated administrative and political process. As a result drastic changes in policies are less likely to occur.

# c. Policy succession among policy sectors

This category does not concern so much changes in multi-sectoral policies as well marked changes in emphasis among policy sectors. Such changes are mostly caused by shifts in priorities; causes of such shifts may differ from case to case. A well known example of this category of policy succession are the policy shifts in the USSR with a successive emphasis on agricultural policy and heavy industries.

As in this category more vital interests and organisational networks are involved, decisions about such policy changes are in a sense hard to achieve. On the other hand the urge for such changes are often coming from external pressures e.g. economic recession or crisis in one sector. The urge for a drastic shift in priorities may therefore be strong. The shift in emphasis from welfare policies to policy for the sake of combatting economic recession and unemployment is a case in point.

# d. Policy succession with regard to a particular case or object of policy making

This category refers not to changes in general policies as the previous categories do, but to policy change with regard to a particular case or object. Usually this will concern long term projects such as the building of a nuclear plant, a large scale public works project, a large military project and such like.

Such projects may be situated primarily within one policy sector, or may have aspects concerning various sectors. In the latter case the same problem may arise as in category b.: the need for negotiations and agreement about the interests of the various sectors may constitute an obstacle for change.

## e. Policy succession regarding changes in government structure and processes

It seems justified to mention this as a separate category. I am not thinking here of such changes which go hand in hand with changes in the contents of policies, but of changes which are concerning fully or mainly structures and processes of government and administration. We can thereby think of the introducing of new systems of decentralisation of local government, reorganisation of the machinery of government, or introducing a new system of budgetting.

There are two reasons why to consider this as a separate category. In the first place changes in government structures and processes - and specially central government - prove to be very hard to achieve. In the second place this is the single policy area on which there is perhaps the largest amount of literature.

The Delta/Oosterschelde case which will be analysed in the second part of

this article, lies in category d. It concerns a project of sea defense works which started in the mid-fifties and is planned to be finished by the mideighties. It is quite understandable that in the case of such big long term projects there will occur causes for changes in the projects which may be so fundamental that it should be considered as policy succession. This was what in fact happened in this particular case.

# 3. CAUSES AND FACTORS FACILITATING OR HAMPERING POLICY CHANGE

Policy succession as defined in section 1 is relatively rare in industrial societies with a Parliamentary system of government. Preconditions for such drastic change are partly non existent or weak. There exists a clear tendency towards incremental change in policies, as was stated earlier.

This does, however, not mean that drastic changes do not occur. In most countries one can point at a number of examples. The present recession period combined with the financial emergency situation in which many states find themselves, has definitely increased the number.

It is safe to assume that obstacles for policy succession are especially strong in countries with coalition governments. There the mechnisms for incrementalism are clearly prevailing. And for political actors it is mostly hardly possible to manipulate such obstacles and mechanisms. Consensus on important political issues is hard to achieve among parties in power, or sometimes with those in the opposition, otherwise then on the basis of a weak compromise: muddling through.

When we examine drastic changes in policies in Parliamentary democracies, we can observe a number of possible causes.

#### a. Changes in societal values

Strong changes in societal values which are supported by large groups in society, and in particular the politically active groups, may be a strong stimulus for drastic change in policy. Such changes may concern the contents of policies ro processes of social interaction and powerstructure.

Changes in contents concern views on what is important in society, on individual and collective human welfare or well being, on (limits of) economic development, on the role of work in human life, on the place of nature in human individual and collective life now and in the future. As such values are Since the sixties we have witnessed several of such changes in values. This statement should be qualified to the extent that in several cases such values were not new, but yet rather latent, less widesspread, and publicly advocated by only a small group. As examples could be given: the values of natural and human environment, the values of peace. They obtained strong and wide spread political support only since the sixties.

Changes in processes of societal interaction refer to the structuring of communications and decisionmaking, in private organisations (productive and non-profit organisations) as well as in public organisations and in the political system at large. In our times the democratisation of industrial and commercial organisations, and the participatory mechanisms of government and administration in their relationship with the population are typically the result of changes in values with regard to societal interaction. It is evident that processes of societal and political interaction are closely linked with power structure (see under c below).

#### b. Important factual changes in the environment

Not only environmental factors in the realms of values, but also drastic changes in factual circumstances may be an important cause of policy succession. Economic recession, threat of war, natural calamities may impose on the government the need of drastic changes in existing policies.

#### c. Changes in political (and bureaucratic) power

Considerable shifts in principal political actors or in general in the political power structure resulting in other political groups (parties), persons or bureaucratic units moving to the centre of power is likely to result in changes in policy. In an (essentially) two party system, for instance, the succession in Government by the other party, is likely to lead to drastic changes in politics, in particular if environmental conditions are favourable for it. In coalition systems the likelyhood is less because of reasons explained above. On the other hand a presidential system of government in a multi-party political system is more likely to lead to changes in policies than a non-presidential system in such a political system (e.g. France). In addition the degree of stability of the new government in power is a crucial factor in its willingness and ability to enforce drastic changes in policy (UK under Thatcher is a notable case). The power structure in the political and bureaucratic system may be determined by formal powers or by the real power networks. In the Delta/ Oosterschelde case the relevant effects of the formal power structure will be discussed.

It is likely that the correlation between changes in values and changes in power structure in a particular case will affect the measure of policy succession. If the new political or bureaucratic powerholders have different views of values than their predecessors, policy succession is (more) likely to occur than in the case their views are rather similar.

#### d. Financial restrictions

The present financial situation of governments in most European countries (linked with the prolonged economic recession) has given rise to a thorough reconsideration of government expenditure and of the performance of tasks by public authorities.

In fact, severe financial limitations of government frequently leads to considerable changes in priorities, even in cases where the values of the government remain by and large the same.

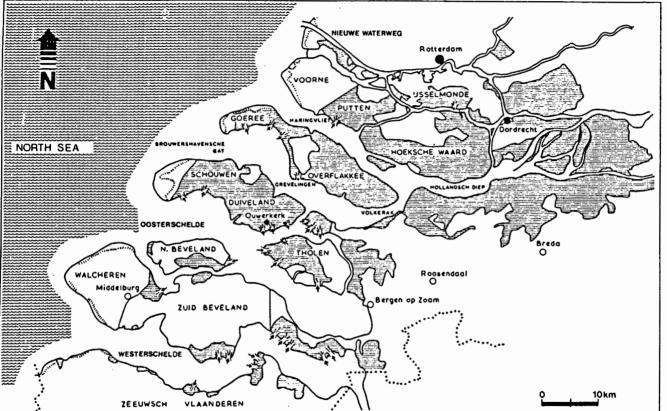
This list of possible causes of policy succession is not exhaustive, but contains the most important ones. The impact of each cause on policy succession differs among cases. Mostly a concurrence of at least some of the causes is necessary to achieve policy succession. In fact the causes mentioned here are in some sense also preconditions for drastic change, although no absolute preconditions.

The Delta/Oosterschelde policy change is a case in point of the concurrence of a number of causes or enabling factors for policy succession.

# 4. DESCRIPTION OF THE DELTA/OOSTERSCHELDE CASE<sup>7</sup>

On 1 February 1953 the heaviest stormflood since centuries destroyed many dykes in the South-west of the Netherlands, the Delta of Rhine, Maas and Scheldt. Large areas were flooded, 1835 people drowned (see map).

Within two years a study committee fully composed of experts in the field of watermanagement made a plan which was to be the largest and most difficult sea defense work ever undertaken. All sea arms would be closed by dams, except the northernmost and southernmost ones, the shipping ways to Rotterdam and Antwerp respectively.



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The shading indicates the flooded areas.

The alternative solution, strengthening and heightening the dykes, was rejected because of the length of the dykes (over 1.000 km) and technical problems.

The main objective of the plan was to provide safety: it would reduce risks of flooding to one in 4000 years (or 1/4000 per year). An important sideeffect of the plan would be to reduce salination of agricultural soil. Moreover the plan would provide better communication for the rather isolated, partly insular region. The plan met with strong and almost unanimous support in Parliament if not of the general public opinion. First and foremost, safety had to be secured for the area.

The execution of the works progressed according to plan and most of the dams were about to be finished by mid-60-ties when the programming of the closing of the last, and biggest sea-arm, the Oosterschelde had to be taken up. This work was reserved to the last because of the degree of difficulty of closing this sea-arm, nine kilometers broad and marked by very strong tidal currents.

About the same time the movement for environmental protection which was very weak in the fifties, began to develop and to gain public as well as gradually political support, particularly from a few smaller political parties on the left of the political scene (Democrats '66 and Progressive Radical Party). Preservation of the unique natural tidal environement became their most important target. A number of action groups were created in the area, which later joined with national organisations for the protection of nature as well as recreational organisations into a committee called SOS. Efforts to influence policies and to reconsider the closing of the Oosterschelde stranded on the tenacity of the Minister of Transport and Public Works and more specially of its influential Department of Waterways, which wished to stick to the execution of the original plan. They were strongly backed by the provincial government for the area, the Province of Zeeland: above all, risks of a repetition of the calamity had to be prevented, and safeguards should be provided as soon as possible (1978 according to the Deltaplan).

Meanwhile technical arguments for the closing by a dam were weakened as a result of studies made by a group of staff and students of the Technical College in Delft, proposing a half open dam which would keep tidal currents, essential for the preservation of the natural environment, intact, but could be closed in case of stromfloods. This alternative was, however, not taken up by the Department of Waterways.

The breakthrough of environmental considerations at the political level came with the advent of a new coalition government in 1973. For the first time since 1966, progressive parties were in the Government again. In their joint electoral programme the three progressive parties had suggested the possibility of re-considering the Deltaplan for the Oosterschelde. The Cabinet was composed of Christian Democrats, the largest party, Labour (the second largest) and the two smaller progressive parties who were strongly advocating environemental policies. The leader of the Labour Party, Den Uyl, was Prime Minister, the Two crucial portefolios of Transport and Public Works, and of Physical Planning and Housing were held by a Christian Democrat and a Democrat '66 respectively, one of the two smaller parties.

The Cabinet soon installed a Oosterschelde Committee, which this time was composed of experts from different disciplines. The Committee was to examine the possibility of bringing the necessary protection of the area against seafloods in agreement with the conservation of the natural environment. It made its recommendations within six months time: a half open dam, more or less in accordance with the ideas which had been advanced by the studygroup of the Technical College of Delft.

The policy making concerned two aspects. In the first stage the fundamental decisions which alternative for sea defense had to be selected. There were three options:

a. A closing dam;

b. A turn of the storm surge barrier;

c. An open Oosterschelde with strengthening of about 250 km of dykes (which was proposed by most of the action groups). This met, however, with strong opposition from the Minister of Transport and Public Works and Provincial Government and most of the population of Zeeland.

After hard battles within the Cabinet and the Parliament, a stromsurgebarrier was adopted in November 1974, and after further information on research findings were available confirmed in June 1976.

The second aspect concerned the size of the opening of the stormsurgebarrier. This is relevant for the degree in which the tidal natural environment could be preserved. The final (compromise) decision was taken in September 1977. And from there on the elaboration of the technical plans could start. The stromsurge-barrier was planned to be ready in 1985, providing for security for the local population by that time. The execution has, however, been delayed and the works are expected to be finished by 1987.

On the basis of the definition of policy succession given in section 1 I am of the opinion that this Delta/Oosterschelde case is an example of policy succession.

The totality of the objectives and in particular the rank ordering among them, changed drastically. Also the means for realizing the new policy not only deviated strongly from the original one, but also meant a striking technological innovation.

# CAUSES OF POLICY SUCCESSION IN THE DELTA/OOSTERSCHELDE CASE

In this section an effort will be made to explain the policy succession in the Delta/Oosterschelde case with the aid of the set of causes mentioned casu quo preconditions in section 3. As was stated in section 1 policy succession refers to drastic change in policy contents. And policy contens can be distinguished in objectives and means. I shall also examine whether some causes had a stronger impact on either objectives or means.

There is one additional aspect of policy succession which needs attention, that is the question whether the causes of policy succession have a direct effect or an indirect effect on policy contents.

It is assumed that (change in) the process of inter-departmental and intra-Cabinet decisionmaking was an important enabling factor to realize the change in policy and can therefore be considered as intermediate factor for the realisation of the policy succession. This will therefore be discussed separately.

# Effects of change of values on the policy contents and policy process

The major shift in values during the period under review was in the area of protection of the environment.

The Deltaplan was from its outset inspired by the predominant objective of providing safety to the local population. Consequently the strongest and safest type of sea defense was chosen. Perhaps one could add that economic growth values played a role insofar that the two access waterways for shipping to Rotterdam and Antwerp were exempted from the solution applied to the rest of the area. However an equal safety was supplied there by strengthening the dykes.

The situation prevailing values changed as a result of the birth, or rather the rapid growth of the values of the natural environment in the course of the sixties. To some degree this value became competitive with the value of safety for human life.

This competition became an acute issue when in 1973 the new Cabinet stronger adhered to the environmental values and made it as its objective to realize it as much as possible for the Oosterschelde, in view of its unique aquatic, bothanic and biological character. It was evident that conservation of the existing natural environment could not be achieved in case of construction of a solid impermeable dam. The solid dam was, however, a symbol of safety for the local population.

Thus the aspects, objectives and means were strongly intertwined from the perspective of realizing the two predominant values. A solid dam was the ideal solution for safety; on the other hand strengthening the dykes was optimal for conserving the natural environment. How to combine the realisation of the two objectives (values) in terms of the instrument for it, was the crucial question for the Oosterschelde commission. It suggested a wizzard's solution, the stormsurge-barrier. This was supposed to provide equal safety, but also to leave most of the natural environment intact.

Another change in values manifested itself from the early sixties, beginning with the Provo movement in Amsterdam. This movement concerned the rejection of autocratic attitudes of government at the various levels and of rigid closed behaviour of bureaucrats. Governmental decisions were no more accepted as irreversible facts. Active opposition against them became a feature of political life and for some groups a moral obligation.

Moreover the existing system of representative government in which the representative were supposed to have a mandate from the voters without need of subsequent consultation, was denounced by political activists at first and subsequently at a wide scale.

These changes in political values manifested themselves clearly in the Oosterschelde case. The demand and pressures for non-execution of the existing plan (the solid dam) became strong. Actiongroups and traditional pressure groups undertook strong political extraparliamentary action in order to reverse the policy. They became strongly involved in the policymaking process at the provincial and national level. It is safe to say that but for their action the Oosterschelde would have been closed by a solid dam.

#### Factual changes in the environment

In this variable I should include *changes in factual information* on the environment, even in case there is no factual change in the environment itself.

In the Delta/Oosterschelde case there were several instances of changes in the environment or new information about the environment. Such changes contributed to the discussion on change in policy contents and perhaps to the change itself. Perhaps the most important changes occured with regard to other aspects of interests than the two major ones, safety and protection of the environment, namely the quality of the water in the area. One of the secondary objectives of the policy had been from the outset to create a large basis of high quality fresh water. Arguments in favour of this focussed on the one hand on the combat against salination of agriculture by seawater, on the other hand on water for human consumption. A solid dam was considered to be the adequate solution for guaranteeing waterquality. However it proved impossible to realize this objective. The water of the Rhine, which passes through the area, became heavily polluted by German industries (gradually

less) and salt from the French potassium mines. Moreover the quality of the water in those parts of the Delta which were already closed, being stagnant, had badly deteriorated. Evidently this situation weakened the position of the advocates of a closed Oosterschelde.

Secondly, new research showed that the eastern part of the Oosterschelde was an important breeding place for North Sea fish. As the fish situation in the North Sea had become rather unfavourable as a result of excessive fishing, it would be disadvantageous to destroy this breeding place as a result of closing this sea arm by a solid dam.

(It is interesting to note that one of the arguments for maintaining tidal currents in the Oosterschelde was that this was necessary for the flourishing oyster and mussel culture. When later the oyster culture was destroyed by a disease, a new start was made in one of the closed sea arms, which proved to be very successul.)

Thirdly, during the studies by the Oosterschelde-commission, there occurred several dangerously high waterlevels in the Oosterschelde as a result of storms. This seemed to justify the view that the existing situation created unacceptable risks for safety. It induced at least two members of the commission to conform with the general opinion to propose a stormsurge-barrier in spite of their preference for strengthening the dykes.

### Changes in political and bureaucratic powerstructure

It is not my intention to discuss here the powerbasis of the various actors, the shifts in their power and the way they used it. This has been analysed in detail elsewhere (4). I shall concentrate my analysis on the most crucial changes.

In the beginning of the seventies the political scene changed in the Nether-lands. From 1966 the Cabinet had been composed of a coalition of Christian Democrats and Liberals (in fact on the right of the scale of political parties).

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Both parties gave a low priority to environmental problems, the Liberals having strong links with the business world. Moreover, the Christian Demo-crats had a strong support among the population of the province of Zeeland, which was most affected by the risks of stormsurges and consequently in general strongly in favour of a solid dam according to the Delta plan.

The Christian Democratic/Liberal Cabinets had withstood the increasing pressures from the lobby of environmental protectionists and Parliamentary pressures by the small political parties, the Democrats '66 and the Progressive Radical Party.

In 1972, however, the construction of the sam was already in full progress and considerable expenses had been made. The new Cabinet was composed of three progressive parties and the Christian Democrats, who had a minority. In his first official Statement the Labour Prime Minister announced the installation of a commission of independent experts coming from different disciplines (and not only engineers), the Oosterschelde-commission. The commission had to examine how safety could be combined with conservation of the natural environment. This was the first step towards reconsidering the Oosterschelde-policy.

As stated above, the commission proposed a stormsurge-barrier which would keep the natural environment mainly intact whilst providing approx-imately the same safety as a dam would do — under the proviso that an adequate technical construction could be developed.

Initially there was no clear majority in the Cabinet for this solution. Societal pressure in favour of the dam on the one side and in favour of the strrengthening the 250 km of dykes (the target of the environmental protect-ionists) on the other side were very strong and sometimes emotional. The Cabinet and Ministers were under high pressure. In the Cabinet the ministers of the two small parties and some Labour ministers were in favour of the stormsurge-barrier as an adequate compromise. The Christian Democrat among whom the Minister of Transport and Public Works fought hard for the dam. The ministers of the two small parties threatened with resignation and the Parliamentary fraction of Democrats '66 with withdrawal from the Government. As this would have meant the end of the Cabinet the Labour Minister persuaded his Labour Collegues to support the proposal of the commission. Finally, the Christian Democrats, including the Minister of Transport and Public Works, took a turn and withdrew their opposition.

Another interesting aspect of power position concerned the division of portefolios among Cabinet ministers. Originally the portefolio of Transport and Public Works was assigned to a minister from Democrat '66, a staunch supporter of a solution which would save the environment. In final resort,

however, a Christian Democratic minister obtained the portefolio and soon proved to be a stubborn advocate and executor of the Delta Plan, a solid dam. The said D'66 minister then obtained the portefolio of Housing and Spatial Planning. In this quality he demanded the responsibility for the *process* of policy co-ordination for the Oosterschelde (not for the content). This proved to be an important change in the power structure. I come back to this below.

#### Financial means

I wish to give only passing attention to this possible cause of policy succession. In fact it played only a minor role in the policy making process in spite of the very strong increase in expenditure. Under the present conditions of economic recession, the need of cuts in government expenditures running into milliards, the drastic change in policy implying an explosion of costs would have been out of question. The dam would have been built.

#### Changes in the policy-making process

Besides the primary factors analysed in section 3 changes in the policymaking process played an important role, as a secondary factor. The changes in the process were mainly caused by changes in values and changes in the power structure.

During the first period of the policy-making process since 1953, it was fully controlled by the Ministry of Transport and Public Works and its Department of Waterways. They were competent for at least four major aspects of the Deltaplan: defense against the sea, quality of the water, waterways and roadcommunications. The only other ministry involved was the Ministry of Agriculture and Fisheries. The Ministry of Transport and Public Works was in charge of co-ordination, and in fact by far the most important source of information. This position of co-ordinator and an almost monopole of information gave it a very strong position, also later when pressures for change of policy mounted.

The actions by environmental protectionists and related organisations, made the Delta/Oosterschelde plan again a political issue. Its scope was broadened, and it in fact became clearly a multidisciplinary multisectoral issue. The multidisciplinary composition of the Oosterschelde-commission underlined this shift. Other ministries became involved, and since 1973 in The changes in the environmental situation and new information about the natural environment played in the card of policy change oriented groups and political parties. Moreover the change in bureaucratic and political power-structure, and specially the elimination of the near to monopolistic position of the ministry of Transport and Public Works, was an important cause of policy succession.

Of course the change from solid dam to stormsurge-barriers could never have been realized if the preconsition technical feasibility had not been satisfied. The ability of researchers and technicians to develop a highly innovative and technologically complex construction was vital. If they would not have succeeded the battle about the choice between a solid dam or an open Oosterschelde with strengthening of the dykes would most probably have been won by the advocates of the first mentioned solution, and no policy change would have taken place.

Although I have stated earlier that in coalition governments the factors favouring incrementalism are difficult to manipulate, the Delta/Oosterschelde case demonstrates that successful manipulation may nonetheless take place:

- a. The action by environmentalist groups which were very successful in (i), pushing the Oosterschelde-case onto the political agenda, and (ii), obtaining massive support by mass media and public opinion.
- b. Reversing the unfavourable position in which the pro-policy-change Minister of Housing and Spatial Planning originally was, into a central position in the policy making process.
- c. The threat of a Cabinet crisis by the advocates of policy change in the Cabinet.

#### NOTES

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