MONITORING: FUNCTIONAL OR FASHIONABLE?

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An increasing stream of monitoring activities has entered the public sector. In the Netherlands there are hundreds of monitors on a wide range, so it can be stated that monitoring is fashionable in the Netherlands. But monitoring seems to be functional, too. Without monitoring, organisations would not even survive. Research about the use of research information and evaluations makes clear that information is not always used in a direct and transparent way. This statement raises three, interrelated research questions, which we try to answer in our paper: (1) What is the amount and the character of (intragovernmental) monitors in the public sector in the Netherlands? (2) What forms of utilisation can be distilled and how are intragovernmental monitors used in practice? (3) How do these functions of monitors relate to recent insights in the complexity of governmental performance and the role information can play in complex systems?

The paper concludes with the observation that the current mode of monitoring is dominated by rationalistic assumptions. Important functions from a complexity perspective, as learning and communicating, seem to be underestimated. Monitoring is fashionable, but it seems to be less functional.

Keywords: (intragovernmental) monitoring; complexity theory; information

1. INTRODUCTION

New Public Management and monitoring

The rise of New Public Management (NPM) is one of the most striking international trends in public administration (Hood 1991). Its important elements of NPM are the emphasis upon outputs and outcomes, transparency, accountability, a shift toward more performance measurement and quantification (especially in the form of systems of performance indicators and/or explicit standards), a shift toward greater competition in the public sector, emphasis upon private sector

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styles of management practices, and emphasis on service quality and a consumer orientation (Hood 1991; Pollitt 2003).

Alongside with the wave of NPM methods, an increasing stream of monitoring activities has entered the public sector (Power 1997; Rossi et al. 1999). In the Netherlands there are hundreds of monitors on a wide range. Monitoring has grown up to a fashionable phenomenon (Engbersen et al. 1997) and to an instrument with a big potential and a growing importance for the Dutch public sector (Ministry of Home Affairs 1999). This development is stimulated by ICT, which makes generating large amounts of information much easier.

Monitoring seems to be *functional,* too, from the perspective of the actor who initiates it. It seems to be an important instrument to rationalise decision-making and optimise goal attainment. Later on, we shall see that monitors fulfil different functions. Although monitoring is considered important and the actual monitoring practice is widespread, there is a lack of theoretical attention for this instrument (Poister 1983; Vedung 1997).

Research about the use of research information and evaluations (Weiss – Bucuvalas 1980; Beyer – Trice 1982) and knowledge-transfer (Glaser et al. 1983; Krogh and Roos 1996; Kriwet 1997) makes clear that the (direct) use of information is not self-evident. This statement raises the question in how far the information of monitors is utilised. Are they, more or less, functional or are they only fashionable?

Central question

In this paper we shall answer the following three research questions:

1. What is the amount and the character of (intragovernmental) monitors in the public sector in the Netherlands?
2. What forms of utilisation can be distilled and how are intragovernmental monitors used in practice?
3. How do these functions of monitors relate to recent insights in the complexity of government and the role information can play in complex systems?

Research methods

In order to answer these questions, we combine different research activities and methods (triangulation). First of all, we reviewed the relevant (secondary) litera-

ture on monitoring and complexity theory. Second, we made an inventory to get insight in the actual presence of Dutch (intergovernmental) monitors. Third, we interviewed the key actors who are involved in monitoring activities in the Dutch public sector.

Structure of the paper

First, we explore the notion of monitoring. We also formulate some theoretical assumptions about its possible functions. Then we formulate some expectations about the use of the information generated by monitors and the possible dangers and challenges of monitoring. These theoretical findings will be evaluated by using notions derived from complexity theory.

Recently, interesting notions from complexity theory have been integrated in strategic management literature (Stacey 2003); in knowledge-management literature (Griffin et al. 1999; Merry 1995) and in public-policy literature (White 2001). These contributions enable us to make an extra application with respect to monitoring (see Section 2).

After, we give an overview of the actual presence (amount and character) of the phenomenon in the Dutch government sector (on the national, regional and local level), by presenting the outcomes of an actual inventory. Based on this, we shall describe the main functions monitors actually play in practice.

Next, we confront the theory that is described in Section 2 with the practice described in Section 3. Finally, we give some conclusions about the "modes of monitoring" and the effect of this on the quality of the utilisation of monitor information. Thereby we give some recommendations for the process of monitoring, meant for increasing the potential usefulness of monitors (Section 5).

2. INTRAGOVERNMENTAL MONITORING: FUNCTIONS, CHALLENGES AND DANGERS

Towards a definition

Monitoring is a complicated and wide notion that is interpreted in different ways (Mayne – Zapico-Goni 1997; Poister 1983; Power 1997). For this reason it is necessary to define the concept of monitoring. There are four features that characterise monitors:

1. Monitoring is a *systematic* activity. That means that monitoring activities are not *ad hoc* or incidental, but repeated activities which more or less standards research-methods and indicators to measure developments.
2. Monitoring is, thus, a *periodic* activity (Poister 1983). Permanent monitoring (surveillance) is not taken into account.
3. Monitoring is focused upon policy-relevant *developments*. The assumption is that there are at least two measurement moments, t_0 and t_1 that can be compared.
4. The result of monitoring is a *description (ibid.)*. In most of the cases, this description has the form of a report. Sometimes, the result is a database.

Sometimes, monitoring is incorrectly confused with the benchmarking, policy evaluation and policy research. Benchmarking is an instrument that describes and compares different organisations at *one moment* (t_0). Monitoring is, on the contrary, an instrument that describes and compares *different moments* (the differences between t_2 and t_1 for example). However, monitors *can* be used for benchmarking purposes.

Monitoring and policy evaluation are also different instruments (Casley – Kumar 1987). Policy evaluation is "the process of assigning a value or worth to something" (Fischer 1995, 241). Monitors, on the contrary, do not in the strict term of the word, contain normative judgements. Monitors *can* be used for evaluations by the way.

Monitoring is also not the same as policy research, because policy research is not always a permanent part of the policy process, while monitoring is. Further, policy research is automatically scientific, monitoring is not.

We thus give the following definition of monitoring as a practical lead for this paper: monitoring is *the systematic and periodic scanning and describing of policy-relevant developments*.

Motives for monitoring

In relation to the above-mentioned developments, the question can be raised how to explain the use of monitors in Dutch public administration. The underlying question is: why do policymakers need (more and more, as it seems) information?

Part of the answer is the fact that we are living in an information society in which information plays a very important role. Knowledge and information are the essential materials of the new production processes in our modern network society (Castells 1997, 345). Businesses need information to improve products and to compete with other businesses, citizens need information to compare products,

and governments need information to make policy choices, to improve public services. Monitors can be important sources of information. Of course there are a lot of other sources for governments and policymakers. Examples are citizens, civil servants, the world-wide web, newspapers, policy documents, letters, libraries and so on. Information is the necessary prerequisite for organisations to survive in today's world (Mayne – Zapico-Goni 1997, 26).

We shall argue that the need for information (generated by monitors) is influenced by four possible motives: the quest for certainty, the quest for control, the quest for cognitive improvement and the quest for communicative dialogue. These motives are partly derived from a literature study we did, and partly from an empirical study on the functions monitors state to have. Based on these motives we can also make a distinction between four functions of monitoring, respectively monitoring as signalising, monitoring as steering and accounting, monitoring as learning and monitoring as communication.

The Quest for Certainty

In his book, *The Quest for Certainty* (1929), Dewey speaks about the permanent human desire to reduce uncertainty. Auditing (and monitoring) also arises from the common human need to alleviate anxiety (Lee 1993, quoted in Power 1997, 122). By signalising developments and potential problems in the environment, policy actors reduce surprises or get reassurances that there are none (Feldman – March 1981, 176). Monitoring activities can make the complex reality visible to policymakers and help them make "rational" choices (see also Simon 1976). The first possible function of monitors is therefore signalising: certainty is derived from an extensive scanning of the relevant organisational environment.

The Quest for Control

Controlling the physical and social environment is a basic human need (De Mul 2002, 60). Policy actors can try to reach these goals by steering (and accounting). Steering is "to influence in a purposeful and sense making way in a certain context" (Bekkers 1994, 21). Because steering and information are connected *(ibid.)*, monitors can supply the information which policy actors need to steer and influence the policy environment. Policy actors, however, can go too far in reaching this goal. The book *The Quest for Control* contains a critique of the rational central rule approach in public affairs:

> Under normal circumstances the rational-central-rule approach cannot work in the world we live in. Its rationality is inappropriate because it is too far removed from ongoing forms of life and from politics in particular. Because the steering centre lacks requisite variety its capacity for learning is too small […] If the rational-central-rule approach can work at all, it can do so only under special circumstances such as a reliable basis of knowledge, power and cooperation and a stable field of application. However, in most cases these special conditions cannot be brought about by policy actors (Gunsteren 1976, 150).

The second function of monitoring is steering and accounting. Control can be realised by accounting and steering upon detailed monitoring information.

The Quest for Cognitive Improvement

Policy information plays an important role in policy learning and policy change (Sabatier 1988). Evaluation can improve policymaking (Sanderson 2002). Monitoring can fulfil the same function. Monitoring can contribute to improved decision-making and ultimately to improved service delivery (Poister 1983, 208). The third function of monitoring is (cognitive) learning.

The Quest for Communicative Dialogue

Monitoring is a social process in which actors with different frames of reference are involved. The "rendezvous" function of monitors means that their information is a base for discussions among different parties involved in the policy process. The fourth function of monitors is communicating (Mayne – Zapico-Goni 1997).

Table 1 contains the four distinguished motives of monitors linked to their four (possible) functions.

Table 1. Motives and functions of monitoring

Four motives for monitoring	Four functions of monitors
The Quest for Certainty	Signalising
The Quest for Control	Steering and Accounting
The Quest for Cognitive Improvement	Learning
The Quest for Communicative Dialogue	Communicating

Challenges and dangers of monitoring

As we shall see, monitoring has become a common feature of the Dutch public sector. It has become a common practice, widely spread over governmental agen-

cies. This phenomenon does have both challenges and dangers. In our definition of monitoring, we mention that monitoring focuses upon policy-relevant developments, and that monitoring is meant to support policy processes. So, when we look at the value of monitoring, its challenges and dangers, we have to consider its functions in policy processes.

Opportunities

First, monitoring can be seen as a chance, because measuring developments supply the policy actors with facts (feedback) and are aimed to reduce uncertainty. In this way monitoring can contribute to improved decision making and ultimately to improved service delivery (Poister 1983, 208). The improvement of performances lies in line with the ambition of NPM. The wish of transparency is also in line with NPM-ambitions.

By means of monitoring governmental actors can control the course and implementation of policy proposals. Information can thus serve as a mean to adjust implementation strategies in order to improve goal realisation.

Monitoring can also serve as a mean to get people around the table. Monitoring builds a concrete informational base for discussion between all the involved actors in which results and performances are made visible. Communicating can become the base for increased mutual understanding and trust between governmental actors.

Threats

The "facts" generated by monitoring can be a goal instead of a mean: delivering a (thick) report can become a powerful symbol of controlling and knowing the truth. Monitor can become a "hollow" ritual without the ambition of improving policy.

Another danger is the fact that monitors can reduce reality to abstract figures. To monitor reality, you have to make reality measurable. It is necessary to create auditable/measurable performance indicators (Power 1997, 68). And that is very difficult, so good monitoring systems are hard to design (*ibid.* 120). Another problem is the potential overload of information, generated by monitors. A normative critique is that information generated by intragovernmental monitors can be misused to enlarge the control of actors in disadvantage of other actors.

There is also a risk of perverse effects that are manifest in the performance paradox. At the core of the performance paradox is the idea that many measures run down with use, they lose variability and hence the capacity to discriminate good

from bad performance (Meyer – Gupta 1994). "Methods of checking and verification are diverse, sometimes perverse, sometimes burdensome, and always costly" (Power 1997, 1).

Yet another risk is that information can be misused (for example for strategic reasons, or to enlarge positions at the cost of others). The result can be a lack of trust and a lack of cooperation.

Summarised, when we try to connect these specific challenges and dangers to the four functions of monitoring we have distinguished, we can compose *Table 2*.

Table 2. Challenges and dangers of monitoring, by functions

Function	Challenge	Danger
Signalising	feedback (mastering)	reducing reality to numbers; right choice of indicators
Steering and Accounting	transparency; improved awareness of the importance to realise good performance	performance paradox; domination, power struggle; misuse of information
Learning	factual insight in policy processes etc.	overload of information; reduced notion of reality
Communicating	base for discussion and cooperation which can result in increased trust	base for conflict and "fact-fighting" which can result in distrust (reduced trust)

3. MONITORING IN A COMPLEX ENVIRONMENT

In the previous section we described some key functions of monitors and the possible challenges and dangers of monitoring. Our evaluation of these possible functions as well as the possible challenges and dangers of monitoring is based on a more ore less "radical" perspective upon (policy processes and) the role of monitoring (in it), namely complexity theory (Stacey 2003; Griffin et al. 1999; Flood 1999; White 2001). We shall argue that, from a complexity perspective, the current mode of monitoring emphasises hard values (rationalistic assumptions) and pays little attention to the more soft dimensions of learning and communication, which are highlighted by complexity theory.

First, we describe shortly the main characteristics of complexity theory, then evaluating the findings of the former paragraph from a complexity perspective. After presenting our empirical material, we shall give some conclusions about the current mode of monitoring (based upon the acknowledgement that reality is complex).

What is complexity?

"Complex systems generally exhibit a number of attributes that make them more difficult to understand and manage than simple and complicated systems" (Gallopín et al. 2001, 225). From the many sources in literature, we can summarise the most important characteristics of a complex phenomenon as follows:

– *multiplicity of legitimate perspectives* (the resolution of a conflict over common property cannot be reached without taking into account the perspectives and interests of different stakeholders);
– *non-linearity* (the many relations in a systems are not linear – this generates for example counterintuitive behaviour in a complex system);
– *emergence* (the whole is more than the parts: true novelty can emerge from the interactions between the elements of the system);
– *self-organisation* (interacting components cooperate to produce large-scale co-ordinated structures and behaviour);
– *multiplicity of scales* (many complex systems are hierarchic: systems are both subsystems and supra-systems);
– *irreducible uncertainty* (non-linear processes; purposeful behaviour including different actors or agents each with their own goal) (cf. Gallopín et al. 2001; White 2001; Stacey 1995).

Additional characteristics of complex systems have been identified by Holland (1995, quoted in White 2001, 246). He lists four properties he considers common to all complex systems (alongside three mechanisms by which complex systems operate, which we leave out of consideration):

– *Aggregation (and recursion):* Complex systems can be grouped into categories that can then be nested into larger aggregates. A human being is a complex system, but also acts as an agent in a larger complex adaptive system (an organisation), which forms part of a still larger complex adaptive system (the economy), and so on.
– *Non-linearity:* A given action can lead to several possible outcomes, some of which are disproportionate in size to the action itself. Through multiple interactions, organisations are capable of many responses that are complex and unpredictable, leading to many outcomes.
– *Flows (in networks):* The agents of complex systems are connected by networks and nodes. These webs of connected individuals and/or organisations are, or can be, connected in a non-linear way. They can give rise to flows, which can lead to multiplicator effects and recycling effects.

– *Diversity:* In complex systems there are wide variations and differences in their structure and specifications.

In this paper we use a complexity perspective based upon the assumption that the government sector is a complex phenomenon. This assumption is not further investigated. However, it does not seem difficult to argue that complexity theory offers a hopeful perspective for a dynamic, ever-expanding, fragmenting, complicating public sector that has numerous types of multi-actor settings in it, lots of differing actors with their own ideas, goals and roles, many forms of emergent order, spontaneous informal rules within formal structures, etc. Governance, as the process to which government, public agencies, private actors, citizens, stakeholders and others give form, what we name "public policy" (Kickert et al. 1997), can be seen as an even more complex phenomenon. White (2001, 248) argues why complexity theory can help us by analysing governance as follows:

> To summarize: it is assumed that today's society is characterized by dynamics, complexity and diversity, and it has been shown that the responses to this situation, such as partnerships and multi-agency arrangements, are also complex. These organizational forms are dynamic in that the composition of forces will result in non-linear cause-effect patterns of governing. They are also complex in that they are configured as a network and have multiple and diverse parts and the interaction between the parts is necessary in working on problems as well as solutions. They are diverse, in that there exists variations, and differences in their specification. Finally, in order that the governance system can respond to the dynamics, complexity and diversity of society, it must be capable of producing or reproducing its own organization and reproducing its governance structures. That is, the emergence of organizations for governance can be articulate as self-organizing.

Monitoring in complexity

In the rest of our paper we apply this complexity perspective to explore the phenomenon of monitoring, in more detail. We cannot of course explore all details of complex governance, but we shall present a couple of important notions, derived from complexity theory, for our understanding of the value of monitoring. When we confront complexity theory with the four functions of monitoring, then we can make some important observations *(Table 3)*.

The latter functions, learning and, especially, communicating, fits better in a complexity perspective than the first two functions (signalising and steering). However, we shall see in the next paragraph that most monitors in the Dutch public sector fulfil these two functions. The dominance of rationalistic assumptions in the current mode of monitoring is striking, especially when we confront it with assumptions from the complexity theory.

Table 3. Functions of monitoring from a complexity perspective

Function of monitoring	Characteristic	Reaction from complexity theory
Signalising *(The Quest for Certainty)*	Monitoring can help us reduce the complexity of our environment	Reality is inherently uncertain. Monitoring can only provide some provisional insights. Monitoring does not give us certainty, at best some more indicators about what we can do
Steering and accounting *(The Quest for Control)*	Monitoring can help us steer in our complex environment	Reality is inherently uncontrollable and self-organising. Monitoring can to a very little extent serve as a control mechanism
Learning *(The Quest for Cognitive Improvement)*	Monitoring can help us get insight into our complex environment	Learning is especially a social activity, not very cognitive. Learning takes place in social relationships, not by reading thick reports
Communicating *(The Quest for Communicative Dialogue)*	Monitoring can help us create mutual understanding of our complex environment	Communication is very important. Through interaction, novel or emergent, order (as trust and shared goals) is created. When monitoring is seen as a communication tool, it can help organise reality

So far our theoretical considerations. We now present our empirical findings on (the functions of) monitoring in the Dutch government sector.

4. EMPIRICAL RESULTS: INTRAGOVERNMENTAL MONITORING IN THE DUTCH PUBLIC SECTOR

The phenomenon of monitoring

There are a lot of statements about the "assumed" amount of monitors in the Netherlands. Albeda (2002) speaks about the "uncontrolled growth" of monitors. The same statements were made by interviewed civil servants who spoke about the "danger of uncontrolled growth and confusion" (interview, 10 September 2002), who compared monitors with "mushrooms that grow everywhere in the forest of monitors" (interview, 14 May 2003), stated that "of course there are too much monitoring activities" (civil servant in mail, 10 July 2003) and spoke about "the jungle of monitoring" (civil servant in mail, 21 October 2003). The problem of these statements is that they are seldom based on facts.

In order to get *factual based* insight to the actual presence of the phenomenon of monitoring in the Netherlands, we made an inventory of (intragovernmental)

monitors in 2003. Before we present the results of this inventory, we explain our method in more detail.

The first question is what (organisational level) *actors* are part of the inventory. The Dutch government is divided into three levels: the national, the provincial and the local level. In order to make remarks about the amount and character of monitors in the public sector of the Netherlands, these three levels must be included. Part of the inventory were national monitors (used by all the 13 Dutch ministries), provincial monitors (used by all the 12 Dutch provinces) and local monitors (used by the four big cities: Rotterdam, Amsterdam, The Hague and Utrecht. (There are two reasons for not making an inventory of all Dutch local governments. The first reason is that there are more than 500 local governments in the Netherlands. The second reason is the assumption that monitors in small cities are also used in big cities, so an inventory of all the local governments will probably not produce fundamentally different insights.)

The second question: How is the information about monitoring activities collected? First, we searched on the internet. We visited the websites of all the actors identified above and used the word "monitor(ing)" as a keyword. We combined this activity with a document study. In a lot of cases we visited the libraries of the actors to have a closer look in monitor reports. The strength of this method is that it results in a lot of valuable and accessible information. The weakness is that there is no guarantee that the monitors are still used (that is, whether the information on the website is up-to-date).

For this reason there was a second scientific activity, which has the character of a personal "check". In most of the cases, a key actor was asked to check and criticise the concept inventory. The question was: "Which monitoring activities are undertaken by your organisation and/or by/to what monitoring activities is your organisation involved?" The result is a list with "checked" actual monitors that are used in the Dutch public sector. Let us have a closer look at the results now (see *Table 4*).

Table 4. Monitors of the Dutch public sector in 2003

Level of government	Number of monitors
Departments	336
Combination of departments	26
Provinces	136
Combination of provinces	4
Four big cities	225
Total	727

What does this table say about the amount of monitoring activities in the Dutch public sector? The number of departmental monitors means that there are 336 monitors in which a department gives order to undertake monitoring activities. Sometimes a combination of different departments together set up a monitor (26). The main conclusion of this table is that there are monitoring activities on *all* levels of Dutch governments.

Intragovernmental monitors

Table 4 contains instruments that the public sector in the Netherlands conceives as monitors. A weak point is that different actors may use different criteria and definitions of monitors. For this reason, the "long list" (presented above) is filtered by using some unequivocal criteria. The result of this is a "short list" which contains only *intragovernmental monitors* that comply with *univocal criteria*. These criteria have to do with the distinguished four characteristics of monitors: systematic and periodic activity, focus on developments and reporting (in report and/or database). The fifth criterion is the question if monitors are intragovernmental or not. Intragovernmental monitors are ones in which at least two different levels of government (policy actors) are involved. An example is the "Overheedsmonitor" (environmental monitor), because in this case the national, provincial and local governments exchange information.

Our focus on *intragovernmental* monitors has different reasons. The main reason is a practical consideration. We cannot analyse in this paper more than 700 monitors. A choice for intragovernmental monitors, however, has some specific advantages. One reason to highlight the intragovernmental dimension of monitoring is that a lot of intragovernmental relations are problematic (Teisman 2001, 32). Cooperation is more the exception than the rule (Bekkers 2001, 289). This makes interorganisational coordination (Rogers et al. 1982) and cooperation (Aiken – Hage 1968) important. In this sense, intragovernmental monitoring can support relation building between different levels of government. But it can also result in increased tensions: "Mind your own business" is often heard when the different governmental levels ask each other for (monitoring) information. The "Bestuursakkoord Nieuwe Stijl", signed in 1999, is an attempt to improve the cooperation and trust between the three different levels of government in the Netherlands.

When we look at the whole list of monitors and the share of intragovernmental ones in it, the image is striking *(Figure 1)*.
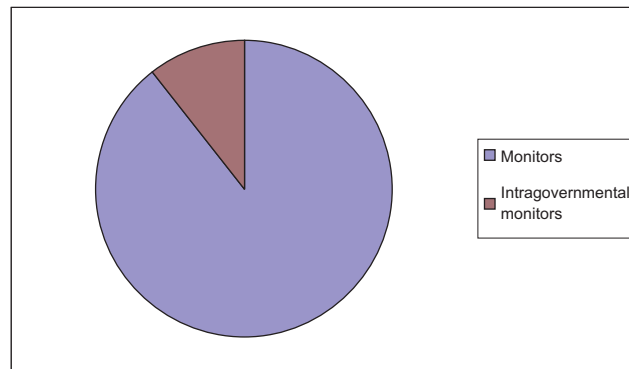
Figure 1. (Non)intragovernmental monitors

We can conclude that a relatively small part of the total amount of monitors in the Dutch public sector contains of intragovernmental monitors. From the 727 monitors in the inventory, 24 are intragovernmental (3.3%).

In the next part of this section we have a closer look at the intragovernmental monitors. Above we argued that monitoring activities in the Dutch public sector are divided over different levels of government. An interesting question is if intragovernmental monitoring activities in the Dutch public sector are also divided over different policy areas. *Table 5* will help us answer this question.

Table 5. Policy fields of intragovernmental monitors

Internal affairs and public management	0
Foreign relations and development cooperation	0
Defence	0
Justice and security	2
Education and scientific research	1
Public health, welfare and care	0
Social affairs	8
Housing, spatial planning and environment	7
Culture and recreation	0
Fuels and energy	0
Agriculture and fisheries	0
Economic affairs	2
Traffic, transport, communication and water management	4
Total number of intragovernmental monitors	24

The main conclusion that can be drawn from the table is that intragovernmental monitoring activities in the Dutch public sector are not equally divided over different policy areas. The share of "social affairs" and "housing of the people, town and country planning, and environments" is relatively high.

The need for monitors: four functions of monitoring

Monitoring activities are part of the governmental quest for (policy) information. We supposed that information from monitors could supply different needs. To put it in other terms: we supposed that monitors fulfilled different functions. *Figure 2* elaborates the functions that intragovernmental monitors fulfil in practice.
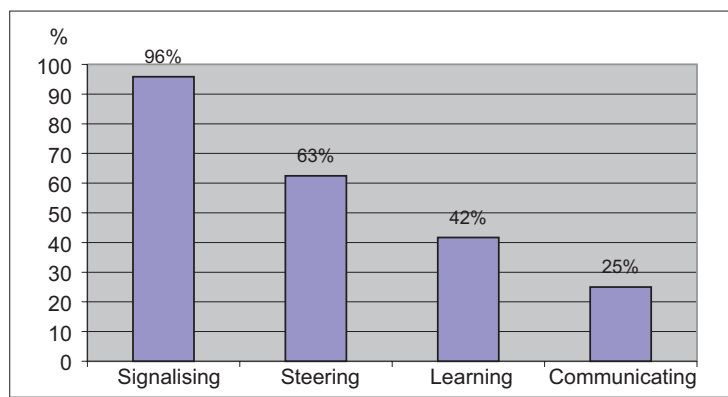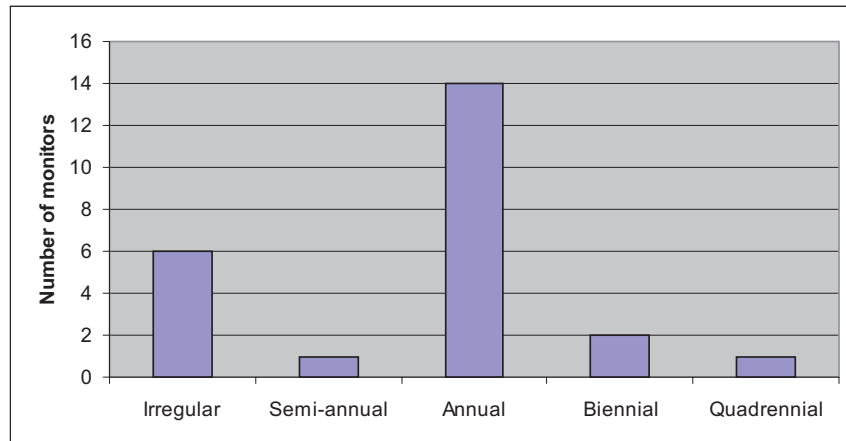

Note: n = 24.

Figure 2. Functions of intragovernmental monitors

The inventory of Dutch intragovernmental monitors made clear that monitors in practice can fulfil one or more of the next functions: signalising, steering, learning and/or communicating. We have to say that we are speaking only about formal functions. "Formal" means the functions or goals that are *explicitly formulated* in the monitor reports ("formal" functions). This information does not give a definite answer to implicit targets or functions ("hidden" functions).

Two conclusions can be drawn. The first is that the attention for "signalising" and "steering" (accounting as part of it) is higher than attention to "learning" and "communicating". The second conclusion is that in most of the cases, intragovernmental monitors fulfil different functions together.

Earlier we mentioned that monitoring give policymakers insight to developments and that it is a repeated activity. *Figure 3* gives insight to the frequency of intragovernmental monitors in the Dutch public sector.

The figure makes clear that the frequency of intragovernmental monitors in the Netherlands varies from semi-annual to quadrennial. Periodical monitors are ones with unknown or irregular frequency. We can also see that most of the intragovernmental monitors have an annual frequency.

Note: n = 24.

Figure 3. Frequency of intragovernmental monitors

We will finish this section by making some summarising remarks.

(1) A lot of monitoring activities in the Dutch public sector are not only divided over different levels of Dutch government, but also over different policy areas.
(2) When we compare the monitors in general with intragovernmental ones, the share of the latters is relatively small.
(3) The four main functions of monitors we have extracted from literature can be found in the practice of Dutch intragovernmental monitoring. The functions of signalising and steering get more attention than the functions of learning and communicating.

In the next section we confront our empirical findings with our theoretical assumptions and statements.

5. CONCLUSIONS

In this paper we have tried to answer three questions:

– What is the amount and character of (intragovernmental) monitors in the Dutch public sector?

– What forms of utilisation can be distilled and how are intragovernmental monitors used in practice?
– How do these functions of monitors relate to recent insights in the complexity of government and to the role information can play in complex systems?

In our "quest for monitors" we discovered some important things:

(1) Monitoring is a widespread phenomenon in the Dutch government sector. Intragovernmental monitors form a minority in the great amount of monitors.
(2) "Signalising" and "steering" are the most common functions of monitors. There is less emphasis on "communicating" and "learning".

Although intragovernmental monitors can have a bridging function (building trust and forms of cooperation) between governmental layers, their main functions are signalising and steering. One of four monitors also has a communication function. From a complexity perspective, monitors fulfil functions that have little added value while the more potential functions are neglected. Increased mutual understanding and building shared interpretations and ambitions are not therefore promoted with the current mode of monitoring. In general, we can say that monitoring emphasises several things, which conflict with notions from the complexity theory. We shall highlight three different characteristics.

Emphasis upon the measurable, controllable aspects of policy

Complexity theory emphasises the irreducible uncertainty of our world. Monitoring is meant to reduce uncertainty by making things measurable and controllable. But does it make sense to reduce uncertainty by focusing upon the sort of things we can control? Are the more invisible things more important? Complexity theory argues that we have to be aware of the intrinsic dynamics of our environment. Information has a very short lifetime.

Emphasis upon goal realisation

From our inventory we see that monitoring is frequently used as a measure to control the implementation of policy programmes. When failures are detected, changes are made. In complexity terms: monitoring generates *negative feedback* that serves as input for policy changes. The focus is especially addressed to the predefined policy goals. The question is: How do we do our job in terms of our

earlier stated goals? But monitoring is not prepared to generate novel ways of seeing the world. Monitors do not facilitate creative solutions for unique problems. But our understanding of the world is enriched when we look to it with different perspectives.

Furthermore, monitoring enrich our understanding of what we (in essence) know, but do not provide much opportunities to discover what we do not know.

> Rigid control structures (as monitoring is) are optimally effective only when the environment within which they operate is sufficiently stable that the organisation and meaning of the information both constituting and describing that environment behave predictably throughout the relevant time frames of corporate decision-making, direction, control, and production (Wytenburg 1999, 53).

Emphasis upon the product (the monitor) instead of the process of monitoring

Monitoring activities are often focused upon delivering a monitor, a thick report with all the (potential) relevant information. But in terms of complexity, monitoring has to add to the learning potential of processes of information gathering. Complexity theory emphasises the necessity of continuous learning, that is seen as a relational activity. The intrinsic motivation of public servants to learn from monitoring is the necessary prerequisite for monitoring information to become useful knowledge. Monitoring is more part of the job of each individual agent. Their intimate relation with the environment of an organisation provides more useful insights than a centrally commanded information programme.

The goal of a monitoring process is not the report, but the process in which actors collect, interpret and learn from information, in which they interact with each other, and in which they create new knowledge.

6. LESSONS, REFLECTIONS, RECOMMENDATIONS

In the current mode of monitoring we see a dominance of rationalistic assumptions in which complexity is ignored or reduced. The less rationalistic functions of monitors, that fit better in a complexity perspective (learning and communicating), are under-utilised. We would like to argue that policymakers should pay more attention to the "soft" part: communicating and learning. In recent literature about policy processes, policy networks and governance, emphasis is placed upon the notion of sharing information and communication. From a complexity perspective, these functions are the most valuable functions of monitors. Learning

from information is a social activity and occurs in relations between persons. So, communicating about monitoring information is much more relevant than writing a thick report with very specific data. The process of "mutual sense making" can be supported by monitoring, but only when monitors have a clear communicative function.

The popularity of monitoring is a direct consequence of the dominant belief in the value of NPM. "The hollowing out of the state by NPM generates a demand for audits and other forms of evaluation and inspection to fill the hole" (Power 1997, 44). Coordination between subsystems in a complex environment, however, can only take place when there is a mutual recognition that communication and dialogue will bring mutual understanding and will generate opportunities to realise shared ambitions. A top-down monitoring programme can only work contra-productively. Audits do not form a basis for communicating and dialogue (*ibid.* 127).

One of the central dilemmas of our present society consists of the ever-expanding need to know in the neverending complexification of our society. These contradictory developments lead to new challenges for public knowledge management. Reducing complexity by trying to grasp it in a long list of possible relevant indicators does not work today. The potential to get insight to our complex reality lies in a joint effort of different actors with different experiences, bodies of knowledge and interests (see Merry 1995). Monitoring can have a serving task, in making communication and dialogue possible. In an open process of information gathering and interpretation, whereby learning and understanding are more important than control and correcting (Baets 2002), the real potential for monitoring lies. Only then monitoring can become a functional fashion.

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