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# **Roles of performance measurement in local government**

Explorative case studies in Dutch municipalities

**Willem Jan van Elsacker**

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Dodd, Mead & company, New York, 1954.

# **RIJKSUNIVERSITEIT GRONINGEN**

## **Roles of performance measurement in local government**

Explorative case studies in Dutch municipalities

### **Proefschrift**

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op gezag van de  
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Prof. dr. L. Torres

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This thesis is basically a status report; a report on my progress into the field of management accounting research. It may show that I have taken some steps on the route from practical to theoretical knowledge of accounting and control (which is sometimes described as the road from “ought” to “is”), but it does not describe much of the path that I have taken, nor the road ahead. It is perhaps comparable with playing the first measures of written jazz music, starting with a bass line. You can read the notes (and ask yourself how it is played by real artists), and start playing. You can only guess what will follow; not until the rest of the band has taken it further, will the intro show its value<sup>1</sup>.

During this route I have benefited from the help and knowledge of many. The start of this research was only possible by the support of Tom Groot and Caren van Egten, who put me on the road, and by the inspirational discussions with Tjerk Budding and Frank Hartmann, who provided me with helpful insights and horizon.

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<sup>1</sup> Some intros are almost self explaining. The answer to this line (ones played by Paul Chambers on March 2 1959) has become a standard (and has guided me through many hurdles during this research).



But most importantly, I could only have started and finished this study because of the support of my family. Thanks to my parents, I was able to study in my early years at my own pace. It took me a while (I took the scenic route), but they can be proud on their contribution. Thanks to my wife Anne-Marie I was able to lead the life of a workaholic for many months. I think that my son Bas and daughter Floor will thank me for ending this study, so that I can finally play more games of table tennis and make more jigsaw puzzles.

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# 1. Introduction

*This chapter introduces and raises the research questions, and documents the relevant content and context of this study.*

## ***A more businesslike use***

Results are important for Dutch local governmental organizations. Nowadays Dutch municipalities often underline the importance of specific, measurable and accountable organizational results. Examples of the importance of results are easily found. For example, many Dutch cities are currently involved in programs to increase the focus of the organization on results<sup>2</sup>, are increasingly using results in contracts or formal agreements with other governments<sup>3</sup>, and are referring to results in their communication<sup>4</sup> with the press.

Performance measures are at the center of all this. Performance measures are used as a tool for various reasons. For example: to set the objectives of governmental organizations, to make results measurable and specific, as indicators for managing processes, and to make results accountable. This use of performance measures by Dutch municipalities appears to be widespread and pronounced. Nowadays performance measures are being used for both external-oriented communication<sup>5</sup>, as well as for more internal-oriented strategic, political and operational reasons (Ter Bogt, 2004, 2005). Currently many of the major cities in the Netherlands are formally using financial and non-financial performances for accounting and control purposes (Van Helden and Ter Bogt, 2001, Van Helden and Johnsen, 2002).

The use of performance measures by Dutch local government is certainly not just of recent date. Government has always used performance measures to plan and control its activities or its intended results. For example, the involvement of Dutch Water Boards in performance measures can be traced back to the Middle Ages<sup>6</sup>. These

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<sup>2</sup> The city of Amsterdam, for example, has recently started a program with the title "Only results count". The aim of this program is to "work smarter", to continuously stimulate civil servants to focus on efficiency and effectiveness of their work.

<sup>3</sup> i.e. in covenants between the central and local government, such as the Large Cities Policies or LCP (in Dutch "Grote Stedenbeleid" or GSB).

<sup>4</sup> i.e., the mayor of the city of Rotterdam (mr. Ivo Opstelten), one of the more pronounced advocates of the use of result based policies in recent time, included the following text in his speech on January 2, 2006: "We started this term with a clear program, with clear choices for which we wanted to be accountable. We were result oriented: no vague policies, but specific actions. No empty promises, but accountable targets" (original spoken in Dutch).

<sup>5</sup> for example, doing an internet search (Google) at the beginning of 2006 on the words "prestaties" (performance), "gemeente" (council), and "internet sites from the Netherlands" resulted in circa one million hits. The majority of the hits referred to documents from a large group of Dutch municipalities, or to sites for comparing the performances of Dutch municipalities (such as <http://www.watdoetjegemeente.nl>).

<sup>6</sup> According to a charter signed by Jan van Nassau on May 12, 1277, a public board of local executives was made responsible for the maintenance and repair of the dyke of the river Lek, an important dyke for the protection of the cities in the provinces of Utrecht and Holland against floods.

early governmental organizations, established to ensure some level of collective protection against human and natural disasters, are not of course comparable with our modern municipalities. Governments then were in essence boards of executives, with the authority to collect taxes and to temporarily recruit inhabitants for performing specific tasks. Nowadays municipalities are often large organizations, with a wide variety of tasks, providing a large number of products and services both to the general public and to specific citizens. However, to a certain degree financial and non-financial performance measures have always been present.

Contemporary interest in performance measurement in Dutch local government is often regarded as an example of the changes that many governments in Western countries have been going through in the past decades. In this period most Western governments have been confronted with tensions between increasing organizational size, growing demands for governmental services, the stress of fiscal scrutiny on the organization, as well as criticism from citizens. In response governments have changed their organizations, in order to improve both their managerial performance and their accountability to society (Accoin, 1990; Hood, 1995, Pollitt and Bouckaert, 2000).

“Bashing bureaucracy” has been a popular term for the solution to this challenge; or in the words of Osborne and Gaebler (1993, p. xvii):

*“We believe that industrial-era governments, with their large, centralized bureaucracies and standardized, “one-size-fits-all” services, are not up to the challenges of a rapidly changing information society and knowledge-base economy.”*

Although oversimplified, this basic view of the preferred direction of change for governmental organizations has stimulated a move towards a less centralized, less formalized, and more entrepreneurial government in many western countries, with more autonomy for managers and other employees (Hood, 1995). Hood (1995) related this public management reform to two doctrines: lessening or removing the differences between the public and private sector and shifting the emphasis from process accountability to accountability in terms of results. He actually labeled the reform as New Public Management (NPM), and added that *“the ideas of NPM were couched in the language of economic rationalism”* (p. 94). Business organizations were seen as role models, and their (assumed) economy, efficiency and effectiveness were used as goals, and a more businesslike use of planning and control instruments was addressed as one of the means for achieving it (Pollitt and Bouckaert, 2000).

The introduction of businesslike instruments in governmental organizations has stimulated the use of performance measurement and output control. A new generation of “econocrats” and “accountocrats” (Hood, 1995, p. 94) emerged, and promoted the use of more quantitative information and administrative control. “Businesslike use” of planning and control instruments became a label for the use of formal systems (especially accounting information systems) for organizational result control purposes. Businesslike use of planning and control documents refers in general to the use of businesslike instruments (i.e. decentralized organizational devices, output control, and performance measurement systems) and private sector management

styles (i.e. the usual employment and pay conditions in the private sector), with accounting and performance measures as key elements (Pollitt and Bouckeaert, 2000).

This international trend has had an influence on the majority of Dutch governmental organizations in the past decennia. Two major changes are generally attributed to this influence: a changed organizational structure (decentralization of autonomy) and the introduction of businesslike planning and control instruments (such as medium-term plans, output budgets, hierarchical planning and control systems, and performance reports) (Van Helden, 1998; Van Helden and Ter Bogt, 2001; Van Helden and Jansen, 2003; Groot and Budding, 2004).

### ***Businesslike use in practice***

The introduction and adaptation of businesslike planning and control instruments in Dutch municipalities has developed gradually over the last 15 years. The initiative to change the control systems, in order to facilitate a more businesslike use, was taken by some large Dutch municipalities in the 1980s. Around 1990 all Dutch municipalities were stimulated by the Dutch central government to apply a set of specific businesslike instruments (Van Helden, 1998). Over this period the spread of businesslike ideas and instruments has diffused (Van Helden, 1998) and became part of the practice of local governments. Although the effects of the introduction of these instruments in Dutch municipalities, in terms of efficiency and effectiveness, has not been studied extensively to date (Van Helden and Jansen, 2003), recent empirical accounting research has given some insights into the use of businesslike instruments.

Research findings show that according to most municipal managers, one of the main objectives of the introduction of businesslike instruments was achieved: this was improving the information provided to the municipal council. Managers also seem to value the businesslike planning and control instruments positively, in terms of increased attention given to efficiency and division between political and managerial levels of the organization (Van Helden and Ter Bogt, 2001).

Research findings are, however, less clear on the effects of the businesslike use of planning and control instruments. The suggestion here is that the reforms have not significantly increased the attention to organizational efficiency or improved the clear division of responsibilities between the political and managerial organizational levels (Van Helden, 1998; Van Helden and Ter Bogt, 2001). It may have only increased the related number of documents and the time spent discussing them (Ter Bogt, 2005).

Accounting research analyzing the use of businesslike instruments in Dutch municipalities has concentrated mainly on two inter-related issues: the factors that have hindered the introduction and adaptation of businesslike instruments, and the use of performance measures.

Firstly, research has pointed to various factors that have probably hindered the successful introduction and adaptation of new accounting techniques in Dutch municipalities. Factors that have been recognized are, for example:

- limitedly homogeneous outputs (Bordewijk and Klaassen, 2000),
- difficulties in planning the output of non-programmable or ad-hoc tasks (Van Helden and Ter Bogt, 2001),

- ambiguous organizational objectives (Van Helden, 2001),
- instrumental approach during the adaptation process (Van Helden, 1998), or
- the underdeveloped planning attitude of municipal management (Ter Bogt and Van Helden, 2000).

Secondly, the use of performance information has also been researched. These types of studies reported, amongst other things, that performance information rarely seems to be used for motivating or evaluating managerial performance (Ter Bogt, 2001, 2004), is used only to a limited extent for variance analysis (comparing actual with planned performance) (Bordewijk and Klaassen 2000; Van Helden and Ter Bogt, 2001), or is used in a more ritualistic or symbolic way (i.e. Bordewijk and Klaassen, 2001).

The use of performance measures in a more ritualistic or symbolic way has also been documented in research findings on governmental and non-profit organizations outside the Netherlands<sup>7</sup>.

Pollitt (2001), an exponent of this viewpoint, argued that the real convergence of many West-European governmental organizations in order to improve outcomes may be a useful myth. In his words (p.945): *“Thus, ‘real’ convergence may be more story than fact, but if so, it is a myth that will support careers, enhance images and boost the incomes of those who purvey its sign and symbols”* (underlining added).

The above documented findings could give the impression that the introduction and the use of businesslike instruments have not contributed much to the improvement of financial management in Dutch local government. Businesslike instruments, such as the use of output control and performance measurement, may have only a marginal effect on the functioning of public sector organizations. To put it in other words, governmental organizations may have been changed, but it still remains questionable as to what extent they are being managed more businesslike than before the reforms.

But is this impression adequate, does it reveal the actual use of accounting information for controlling governmental organizations? Does recent accounting research fully explain the use of performance measures in these organizations, or are some aspects being overlooked?

These broadly stated and fairly general questions cannot be answered easily. Public accounting research delivers a rich flow of insights into various specific topics, theories and methods (Van Helden, 2005), and contributes to these questions in several ways. Thus, the general critique that accounting research overlooks relevant aspects

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<sup>7</sup> It has been suggested that, for example, these reforms have not only improved the use of accounting information, but also invoked more symbolic or ritual processes (Brignal and Modell, 2000). Modell (2001) argued that Scandinavian not-for profit organizations often lack a clear linkage between organizational goals and management information (as performance measures) and found evidence for a symbolic and ritualistic use of performance measures. Modell (2004) confirmed his earlier made assumption, and interpreted the use of performance measures in terms of emerging and declining organizational myths.

Lapsley and Pallot (2000), researching local government in Scotland and New Zealand, found in Scottish local government evidence of symbolic use, and argued that *“management of these local authorities adopted structures and practices which they can portray themselves as rational, modern organizations”*(p.227).

may be hard to support. However, in my opinion there is still an aspect that deserves more than passing attention. This aspect was addressed earlier and discussed by researchers, but leaves unresolved issues. This aspect is documented below.

### ***Assuming performance measurement use***

As briefly discussed in the previous section, businesslike use of planning and control instruments in Dutch municipalities was associated with the notion of business organizations as a role model. This role model was perhaps more a label than a complete blueprint of business organizations. It mainly emphasized specific aspects which were supposed to apply to business organizations, such as economy, efficiency, effectiveness, rational planning and control systems, decentralization of authority, and result control. For example, businesslike organizational control was often portrayed as on average rational and technical processes, in line with the traditional functional view on management accounting<sup>8</sup>. At the same time the attention to the more sociological and political influences on organizational control appears to be limited (Ter Bogt, 2005).

The motivation for accepting this “businesslike“ label as an achievable goal for organizational control appears to be built on at least two underlying assumptions:

- (a) performance-based output control can be a dominant control mechanism in public organizational control, and
- (b) performance-based output control is a dominant control mechanism in business organizations.

Support for assumption (a) can not be found easily. On the contrary, the majority of accounting theory delivers arguments against it. For example, in management accounting research two often applied theoretical perspectives (contingency theory and sociologic institutional theory) provide evidence against the dominant use of formal and rational controls in governmental organizations. Both theoretical perspectives are summarized below.

The first theoretical perspective is the contingency theory<sup>9</sup>. A general theme of the contingency theory is that formal controls (such as process and output control) are more appropriate for controlling routine tasks in a stable tasks environment, while informal controls (such as clan control (Ouchi, 1979), professional control (Abernethy and Stoelwinder, 1995), and political control (Hofstede, 1981)), are expected to control more non-routine tasks in a more dynamic or ambiguous environment (i.e. Perrow, 1970; Ouchi, 1979, Hofstede, 1981). Couched in this contingency theory is the notion that organizational decisions are made under varying degrees of uncertain

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<sup>8</sup> The traditional functional view on management accounting suggests that managerial accounting should reflect and promote rationality in decision making. Accordingly, management accounting information used by managers serves as quantitative expressions of organizational goals and is used to support rational decision making. (Covaleski e.a., 1996, p. 6).

<sup>9</sup> These studies are in general researching the relationship between contingent factors (such as task technology and environment, organizational size or organizational strategy) and the design and functioning of the various organizational arrangements for coordinating and controlling tasks (Covaleski e.a., 1996; Chapman, 1997).

conditions and that the required information of decision makers is driven by uncertainty (i.e. Simon, 1945; Chapman, 1997). Managing routine tasks under stable circumstances is generally associated with a low level of task uncertainty; organizational goals are clear, and tasks are well understood and can be pre-planned. If tasks are less understood, more knowledge is required during task execution and fewer activities can be planned in advance. In such circumstances communication must be more sophisticated<sup>10</sup> in order to align sub-unit decision making with organization objectives (Galbraith, 1973). Under these more uncertain conditions complete reliance on accounting information for organizational control can be inappropriate (Hofstede, 1978, Hopwood, 1972).

By applying this more technical perspective, contingency theory associates the use of performance measures for output control mainly with the presence of stable and certain organizational tasks for achieving formal, clear, and relatively unambiguous organizational objectives.

However, tasks in governmental organizations are often less stable and certain, and can be subject to more ambiguous and unclear objectives, resulting in the reliance on more political forms of control instead (e.g. Ouchi, 1979; Hofstede, 1981; Anthony and Young, 1994). The dominant use of performance measures for output control in governmental organizations is therefore not supported by these general assumptions of the contingency theory.

Limited studies have been made of the actual use of performance measures for output control in governmental organizations, referring to this general perspective of the contingency theory. Perhaps one of the most outspoken studies in this field is Ter Bogt (2004b). He tentatively concluded that aldermen (executive politicians) in Dutch municipalities, when responsible for less concrete and less measurable outputs, would be less inclined to decentralize control, and would prefer more sophisticated and less formal information. However, he also concluded that aldermen rarely used performance measures for control purposes at all, and suggested that more research on this issue was needed.

More research has been done into the actual presence of performance measures in planning and control documents. It was initially expected that output control in governmental organizations required a significant number of performance measures, which described concrete levels of products or services and focussed attention on data that could be useful in decision making (Mayston, 1985). In practice, however, performance measures in Dutch municipalities seldom revealed the total number of units to be produced or the desired cost per unit. Thus the relevance and controllability of the performance indicators were considered as rather poor (Bordewijk and Klaassen, 2000, Van Helden and Johnsen, 2002). The heterogeneous sets of inputs, processes, and products of Dutch municipalities were addressed as one of the main causes for this. Consequently, it was concluded that the standard format of output control (using variances between actual and budgeted performances, differentiated in volume and price variances.) was hardly applicable (Bordewijk and Klaassen, 2000).

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<sup>10</sup> Accounting instruments are classified as more sophisticated when they capture, for example, not only financial, historic, and internal oriented information, but also more non-financial, future, and external oriented information (Chenhall and Morris, 1986).

Instead, performance measures were used to characterize a wide range of desired or accomplished results (Van Helden, 2001).

The second theoretical perspective is the new institutional sociology (abbreviated in this study to “institutional theory”), which is associated with the legitimacy of formal structures<sup>11</sup>. In this institutional perspective, the use of performance-based output control is mainly related to aspects of politics, power and gaining society’s continuous support for legitimizing and justifying decisions. This in order to promote specific interests and values, and to legitimize and rationalize an organization’s actions to dominant external stakeholders (Meyer and Rowan, 1983; DiMaggio and Powel, 1983, 1991; Burchell e.a., 1980). Confronted with the impact of conflicting institutional pressure, organizations can try to avoid conformance to these pressures, and can use accounting information in a more symbolic and ritualistic way. They can try to conceal the organizational activities behind a façade of acquiescence and can decouple<sup>12</sup> their internal control structures from external observation (Oliver, 1991).

Non-profit and public accounting research has frequently taken an institutional perspective to study organizational behavior<sup>13</sup>. These studies seldom support the suggestion that in practice output control is a dominant organizational control mechanism. On the contrary, the majority of these studies use concepts of institutional theory for explaining why performance-based output control has only limited relevance to organizational control. The use of performance measures has often only been related to gaining legitimacy or conformance to institutional pressure, although some recent research is adding nuances to these suggestions<sup>14</sup>.

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<sup>11</sup> Traditional contingency theory accepts legitimacy as given and managerial decision-making as rational, being oriented on delivering the formal organizational objectives. Institutional theory suggests that an organization’s survival requires not only achieving production efficiency, but also conformance to social norms of accepted behavior. These social norms are part of specific institutionalized social structures, and are not to be regarded as general values (Meyer and Rowan, 1983; Covaleski e.a., 1986, 1996). The norms of rationality of highly institutionalized governmental organizations can thus differ from those of less institutionalized public organizations, and can be more infused with aspects of honesty, fairness and mutuality than the in general more economically oriented norms of business organizations (Hood, 1995), and can more be involved in processes of accommodating conflicting institutional demands as imitation, coercion, and legitimation (Meyer and Rowan, 1983).

<sup>12</sup> Decoupling implies that formal inspection, evaluation and control of the way operational activities contributes to formal objectives are minimized (Meyer and Rowan, 1983).

<sup>13</sup> A few examples: Covaleski and Dirsmtith (1986) conducted a case study in six U.S. hospitals on the use of budgets. They concluded that budgets were not only for objective and rational control over sub-units, but were also an integral part of the politics and power of organizational life and are used to legitimize action. They suggested that a political view of budgeting definitely appears to be useful for understanding the budgeting process. Ansari and Euske (1987), analyzing the use of cost accounting data by military repair facilities in the US, concluded that there was little technical rational use of accounting. They suggested that the accounting system was mainly concerned with institutional notions of rationality, such as gaining external legitimacy and making the system “appear functional”.

<sup>14</sup> Johnsen (1999) came to a different conclusion. Conducting a case study on the implementation of four performance measurement projects at Norwegian local governmental organizations, he suggested that loose coupling can act as a facilitator for instrumental or businesslike use of performance measures. The suggestion that loose coupling should not be regarded as a buffer between objectives and activities, but as a coupling device between different interests, is also supported by Collier (2001).



To summarize, in general contingency and institutional theories do not strongly support the assumption that performance measures for output control is a dominant control device in governmental organizations (assumption a).

Assumption (b), concerning the dominance of performance-based output control in business organizations, is both supported and nuanced by theoretical and empirical studies. The importance of performance measures has been extensively proposed in both theoretical and empirical literature, both for planning and implementing organizational strategy (Kaplan and Norton, 1996; Simons, 2000; Nørreklit, 2000; Chenhall, 2005)<sup>15</sup> and for output control purposes (e.g. Merchant and Van der Stede, 2003, Anthony and Govindarajan, 2003).

Theoretical support for the use of performance measures for output control is found for example in economics and organizational theory<sup>16</sup>. Applying economic theory, the use of performance measures is expected when it can effectively communicate pre-set outputs, provide information on the performance of employees, or can be reliably and validly measured, (e.g. Ouchi, 1979; Merchant and Van der Stede, 2003). Applying organizational theory, the use of performance measures is often related to the execution of programmable or certain tasks (Galbraith, 1973; Chapman, 1997).

Empirical studies in business organizations convincingly document the use of performance measures, both for the purpose of strategic planning and for organizational control (e.g. Simons, 2000; Anthony and Govindarajan, 2003). These findings approach the use of performance measures mainly from a rational and formal perspective, seeing performance measures as being financial or non-financial, formal and written information related to formal preset objectives.

However, the importance of this formal information for organizational control in businesses can vary considerably. Performance measures and output control are not of equal importance for all firms in all environments. Even when the technical characteristics of organizational tasks contribute to the use of output control, and financial performance information reveals all necessary information, organizational control in firms is seldom built exclusively on performance measures and output control. Institutional, social and political influences can have a considerable effect on the control structure of businesses, and can vary considerably between businesses. Output control is therefore often dovetailed with more behavioral and political control mechanisms (Ouchi, 1979; Merchant and Van der Stede, 2003). Consequently, managers of businesses often prefer rapid, informal, and speculative information to precise, aggregated, written performance information (e.g. Mintzberg, 1972).

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<sup>15</sup> These theories build on Porter's (1980) concept of strategy, and state that a firm's strategy should be driven by its environment, and not by its competencies or resources. Performance measures are used as a tool for translating strategy into measurable objectives and to align departmental and personal goals to overall strategy (Kaplan and Norton, 1996).

<sup>16</sup> Economic theory on organizations is often built, amongst other things, on basic assumptions of organizational theory; e.g. on the assumption that authority in organizations rests on the acceptance or consent of subordinates (Barnard, 1938), and on the principle of self-interested individuals with preferences over a wide variety of things but with limited capacity (Simon, 1945). Economic organizational theories further assume that firms will seek efficiency and try to maximize their value. Performance measures and output control will therefore be expected when they contribute to the motivation and evaluation of employees in order to achieve these organizational goals.

Thus, it seems that the general assumption that all private organizations rely significantly on performance measures and output control for organizational control purposes (assumption b) is not really supported. The general assumption would probably be more evidence based if it was re-phrased in terms of “The importance of performance measures use and output control in business organizations can vary significantly, and is always accompanied by forms of informal controls”.

Notwithstanding the fact that the previous discussion only documents some general findings on the use of performance measures and output control in governmental organizations, it is illustrative. It emphasizes that the rational use of performance measures for formal control in governmental organizations is not solidly founded on theoretical or empirical grounds. Suggesting that organizational control is (or can be) primarily achieved by the rational use of performance measures and output control may therefore be less realistic for contemporary governmental organizations (at least for local government in the Netherlands).

However, research findings clearly suggest that performance measures are being used in the planning and control instruments of Dutch local government. If they are not used in a rational and technical way for organizational control, what then are they used for? What is the role<sup>17</sup> of performance measures? This study concentrates on this last question, and aims to explain the role of performance measures in Dutch local government.

The role of performance measures is the subject of study, but the focus of research is not limited solely to its use. Only researching the use of performance measures will not explain the different roles managers attach to them. By focussing on the role played by performance measures, attention is directed to the way accounting procedures and information are used and integrated into organizational control processes (Chapman, 1997), and on the way accounting can arise out of technical and political processes (Burchell e.a., 1980).

### ***Research question***

In accounting literature, explicit attention to the different roles of performance measures surfaced around 1970. By then authors focused on wider concept of accounting information, and defined accounting information as a function of a complex and institutionalized mechanism for economic and social management (Hopwood, 1972; Burchell.e.a., 1980). In the words of Burchell e.a. (1980, p.13): “*Accounting, it would appear, is made to be purposive rather than being purposeful*”.

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<sup>17</sup> Three fairly close related words can be used in this context: function, purpose, and role. This study is using role (meaning: usual or customary function, “what is his role in the organization?”), instead of function (meaning: intended purpose, “it is the function of the hammer to hit nails into wood”, or purpose (meaning: the reason for which anything is done) (source: Collins, 1986). By using the phrase “the role of budgeted performance measures”, this study is addressing a more general function for which performance measures are being applied. For example, roles can relate to more general reasons as to facilitate result control, or to learn. “Function” will be mainly used in this context for describing a more specific purpose (for example: the role of BPM can be broken down into several functions).

The role of accounting information has been theoretically and empirically researched, in both the public and the private sector (e.g. Burchell e.a., 1980; Ansari and Euske, 1987; Coveleski and Dirsmith, 1986; Simons, 1990; Vanderbosch, 1999). These studies often apply different concepts and research methods, and have produced many insights and nuances that can be used as a basis for explaining the role of performance information. Notwithstanding their differences, these studies are often built on the assumption that accounting information can simultaneously support more internally oriented processes of organizational control as well as more externally oriented processes of discussions with external agents. The differentiation between the internal or external organizational context is often characterized by its technical or its institutional environment (Meyer and Scott, 1983).

The technical context is in essence related to the technology and environment of the organizational task. Applying a technical context to control, the focus is on a more rational and technical use of performance measures and the importance of output control. Within this perspective, managers can use performance information not only to compare actual with expected performance and to manage by exception (Simons, 1990, 1995), but also for monitoring, detecting change, identifying problems and opportunities, and disseminating information (Mintzberg, 1972), or for operational planning, performance evaluation, communication of goals and strategy formation (Hansen and Van der Stede, 2004).

This context, associated with a more technical rationale on organizational control, is labelled as a "businesslike control context" in this study.

From a more institutional perspective, the organizational context is based on institutionalized social structures, processes and ideologies. Applying this control context, the focus is on conflicting institutional pressures on organizational goals and objectives. Within this perspective, managers use performance information to legitimize choices made by the organization and to create a common understanding of what is appropriate (e.g. Burchell e.a., 1980). This context is labelled as a "political control context" in this study.

In order to define both contexts in more general accounting based terms, contemporary accounting research on public and private sector organizations is used.

However, both types of research differ considerably, and cannot easily be used to complement each other. Private sector accounting research, especially that conducted by North American researchers, is more quantitatively oriented, appears to be more focussed on performance measurement, costing and cost management, using economics and organisation theory as theoretical frames of references (Van Helden, 2005).

Public sector accounting research, on the other hand, is rarely analytical or survey-based, is more qualitatively oriented, and appears to be more concerned with budgeting and performance measurement. Considering the importance of budgeting for resource allocation, the interest of public sector accounting research in this subject is

understandable<sup>18</sup>. Public sector accounting research mainly applies organizational and neo-institutional sociological theories (Van Helden, 2005). As a result, public sector accounting research is not primarily focussed on delivering statistical testing of more general hypotheses. Indeed, recent research has produced valuable and specific information, but has hardly explored the use of accounting information in more general terms (e.g. Bordewijk and Klaassen, 2000; Van Helden en Ter Bogt, 2001; Lapsley and Pallot, 2000, Van Helden and Johnsen, 2002, Ter Bogt, 2004)<sup>19</sup>.

In order to relate or preferably to integrate these differently-oriented approaches and concepts of the roles of accounting, a frame of reference is needed that connects or covers both. But using a more open and generally applicable framework is likely to result in a more simplistic concept, and will come at the cost of losing some of the details, variety and diversity of reality.

An appealing model that can be used for this purpose is the “traditional” model presented by Earl and Hopwood (1979). Taking a management information systems (MIS) perspective, Earl and Hopwood inventoried the problems in the development and use of MIS. Information overload on the one hand and information gaps on the other were used to express the disappointment of managers with the systems. They argued that information processing was viewed in a too narrow and technical manner. Information was seen as a “*thing*”, and “*the underlying concepts and languages tend to encourage the formalization, bureaucratization, standardization and mechanization of information processes*” (p.5). It was stressed that information systems often neglected the less formal and less routine information processes, and were neglecting the more social and political roles of accounting information. MIS, therefore, were only partly supporting the roles that information can serve in organizations. They composed a framework to define several different roles of accounting information use.

Although only focussing on a few explanatory factors and presenting archetypical roles of accounting information use, the use of the Earl and Hopwood framework for analyzing different roles of accounting information has three main advantages.

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<sup>18</sup> Budgetary control, however, is a complex organizational form of formal control. Private sector accounting research has often addressed the many limitations and major shortcomings of budgeting, and underlined that budgeting operates in a social context in combination with other forms of control (Birnberg e.a. 1983; Hansen e.a., 2003). Researching the use of accounting for budget control can therefore easily result in an inadequate or incomplete picture.

<sup>19</sup> Survey-based management accounting research, testing more general hypotheses, is not often published. Cavalluzzo and Ittner (2004) is an example of a survey study into the development and use of performance measure (PM) in US federal state agencies. This study confirms several variables that are supposed to have a positive relation to the development and use of PM, such as information system capabilities, ability to specify performance measures, management commitment, managerial authority to make decisions on performance information, training, and legislative mandates to comply with performance measurement systems. Van Dooren (2005) is an example of a survey on the supply and demand of PM in Belgian sections within the Ministry of the Flemish Community. This study shows that implementation and use of PM are significantly correlated. Furthermore this study confirms positive relations between PM (implementation and use) and standardization of activities, political involvement, organizational size, street level discretion (only related to implementation of PM), and goal orientation (only related PM use).

Firstly, the framework explicitly addresses both the more technical and the more social-political context of the use of accounting information for decision-making and control, using uncertainty of objectives as a factor.

Uncertainty of objectives is applied to determine whether accounting information is likely to be used for (a) managing the organization in a technical goal directed way or (b) for more political reasons (such as gaining influence, or legitimizing and rationalizing executed tasks).

Secondly, the framework explicitly addresses the technical environment of the organizational tasks. Using differences in task uncertainty (i.e. managers' beliefs in the causal relationship between the means and ends of tasks execution) the likelihood of using accounting information for formal control is made operational.

Thirdly, the framework explicitly addresses different roles of accounting information use, corresponding for example to a mechanical use (control in a technical cybernetic way, correcting variances on pre-set targets) or to a rationalizing use (as a response to institutional pressures) of information. This framework of dimensions and archetypical roles is used in this study as a starting point and as a source of inspiration.

The use of this framework also has some serious limitations. First, it is more a statement than a theory. It is written to inspire system designers, managers and researchers to adopt new metaphors, language and frameworks (Earl and Hopwood, 1979). Secondly, the specified different roles are merely examples. Some normative and actual applied roles are documented, without the intention to be complete. Furthermore, the roles themselves are specified in a tentative and suggestive manner, and were not based on sufficient empirical studies of the organizational operations of the accounting systems (Burchell e.a., 1980).

Using this framework as a source of inspiration for further analysis, and not as a set of testable hypotheses, thus seems to be in line with the intentions that lie beneath it.

By researching the role of performance measures for controlling municipal organizations, this study focuses on the use of formal performance measures (PM). Most of the PM in municipal organizations are set in formal budgets (such as program and product budgets) and documented in formal reports (such as interim and annual reports). PM in governmental organizations can therefore be regarded as budgeted performance measures (BPM). So, BPM and PM are interchangeable, at least in this study.

By using budgeted measures, this study centres on dominant parts of public sector resource allocation (Anthony and Young, 1994; Hood, 1995), and on a complex organizational form of formal control which operates in a social context in combination with other forms of controls (Birnberg e.a. 1983; Hansen e.a., 2003). Researching the use of BPM can therefore reveal and enrich our knowledge of both the businesslike and the political use of BPM.

This study attempts to explain the practical use of information by answering the research question:

*What is the role of budgeted performance measures in the organizational control of Dutch municipalities?*

Using Earl and Hopwood's framework as a source of inspiration, and focussing the research on the use of BPM at the top of the organisation, where politicians are assumed to steer and managers to row, the main research question can be broken down into three more specific sub-questions:

- a) *Which aspects can explain the relationship between different contexts of organizational control (businesslike or political context) and the roles of BPM applied by top management and politicians in Dutch local government?*
- b) *To what extent do the aspects, introduced under a), explain the roles of BPM in Dutch municipalities?*
- c) *Do the applied roles of BPM explain the use of BPM by top management and politicians in Dutch municipalities?*

The first sub-question aims to provide a research framework, using existing, generally accepted accounting literature as sources and the framework of Earl and Hopwood (1979) as inspiration. The framework is used to provide more insight into the applied archetypes of budget use, and aims to recognize different roles of budget use and the aspects that can be used to characterize these roles.

The second sub-question aims to explore the research framework in practice, by researching Dutch municipal organizations. This study is designed to describe, explore and interpret. It does not test specific deductive hypotheses; it aims to document a way of measuring different roles of BPM, and to contribute to the formulating of hypotheses that can be tested later on. The third sub-question is focussed on the use of performance information, and analyzes whether the specific use of performance information can be related to the roles identified in Dutch municipalities.

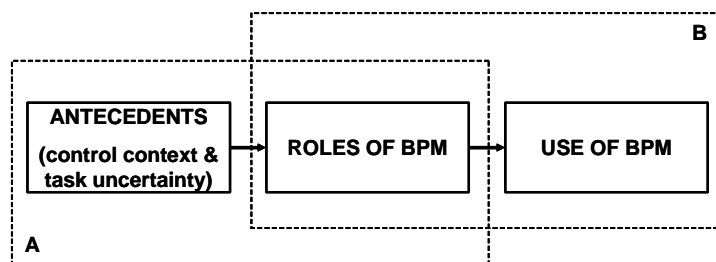
## **Research motivations**

The relevance of this study arises from theoretical and practical positions.

Management accounting literature clearly indicates that both the importance of budgets and the way of using budgets can vary under fluctuating levels of uncertainty, but it differs considerably on the underlying reasons (Earl and Hopwood, 1979; Ouchi, 1979, Hofstede, 1981; Simons, 1995, Abernethy and Brownell, 1999). By including both the businesslike and the political context, this study is intended to contribute to the currently limited knowledge on this subject, and aims to offer some relevant insights into the daily practice of budgeting in Dutch local government organisations. A better distinction and definition of different roles of budgeted performance measures may highlight relevant aspects that could influence the effectiveness of performance measure use. Also, and perhaps even more importantly, further insight into the actual use of performance measures could address the future design of accounting systems

and the use of performance measurement. By concentrating on the use of performance measures by the persons at the top of the organization (politicians and top managers), is not only the actual use of performance measures at the top of municipal organisations explored, but also the meaning of performance measures for both political and civil executives.

By addressing the different roles of performance measures explicitly, this study explores the contribution of existing theory to explaining empirical situations. As suggested by Abernethy and Brownell (1999), uncertainty of objectives (being an aspect of the control context) and task uncertainty are included as factors that can explain different ways of (budgeted) performance measurement use (see A in Figure 1). The existing theory on the relationship between these antecedents and roles is more indicative and suggestive than empirically and statistically affirmed. The relationship between the roles and the use of performance measures (see B in Figure 1) has only been partly researched. By exploring the relationships between multiple roles and performance measurement use, this study explores existing theory which may contribute to the identification of testable assumptions or hypotheses. Statistical testing of assumptions is beyond the scope of this research.



**Figure 1** Research Questions

The relationship between the antecedents (with uncertainty of objectives and task execution as aspects) and (budgeted) performance measurement use (see A+B in Figure 1) has been researched frequently from a contingency theory perspective. This study mainly uses the more organisational design-oriented studies of Perrow (1970), Galbraith (1973), and Chenhall and Morris (1986), and aims to refine this relationship by analyzing the specific context of Dutch municipalities.

Locating the study outside the profit organizational context fills a void pointed out by prior researchers (e.g. Ittner and Larcker, 1998; Chenhall, 2003). Previous studies on the roles of accounting information and performance measures have been more focussed on profit organizations (e.g. Simons, 1990; Davilla, 2000; Lawson and Lillis, 2001), or on health care organizations (e.g. Abernethy and Brownell, 1999). Studying local governmental organizations can address some specific characteristics of government and their possible impact on performance measure use. Frequently recalled characteristics specific to local government are, for instance: the more ambiguous

objectives, its openness, its politically uncertain environment, and the lack of a “bottom line” (Anthony and Young, 1994, Pollitt and Bouckaert, 2000; Bovens e.a., 2001).

By focussing on organizational instead of managerial performance, this study can add some empirical knowledge to the contemporary stream of publications on reliance on accounting based performance measurement by managers (Hartmann, 1997; Ter Bogt, 2001, 2003, 2004).

The descriptive, explorative and more qualitatively oriented nature of case study methodology is chosen to describe and interpret the role and use of BPM, and to build knowledge about the phenomenon. This could provide a starting point for more quantitative studies later on (Yin, 1994; Brownell, 1995). The cases are basically intended to describe and explore the existing situation and to refine existing theory. Existing theory is addressed as a starting point, and is allowed to unfold gradually through interaction with data. By adopting this theory specification approach, the purpose of the scope of this study is to merge theory with the complexity and heterogeneity of practice, prior to subjecting the theory to more rigorous testing (Keating, 1995). As in any case study, this study’s possible weakness lies in controlling the effects of key variables. The “identification of all possible rival explanations is clearly a practical impossibility” (Brownell, 1995, p.62). To minimize possible bias, special attention is given to the selection of the case study sites and the design of the case study protocol.

## ***Summary***

Governmental organizations have incorporated a significant level of performance measures into their planning and control documents, but the role(s) of performance measure is still largely unclear. Recent research points to the limited use of performance measures in Dutch governmental organizations for budget-based output control, but has not yet analyzed other possible roles for the performance measures in depth. This study aims to clarify these roles and the related use of performance measures. However, a research framework for explaining differences in the use of performance measures, related to possible different roles of use, is not yet operational. This study aims to contribute to the construction and documentation of such a framework. A research framework is constructed, using three constructs: the control context (businesslike or political), the role and the use of BPM (budgeted performance measures). The next chapter documents in more detail the main accounting theories that are used to compose the research framework.

## ***Structure of this dissertation***

The outline of this dissertation is as follows. Chapter 2 presents a brief overview of the most relevant theoretical concepts which are used to compose a research framework. Chapter 3 documents the plan that is used to collect data for answering the research questions. Chapter 4 contains the reports of the four case studies. Chapter 5 is the last chapter and documents the analysis of the case studies and the answering of the research questions.





## 2. A Theoretical Research Framework

*This chapter presents a brief overview of the most relevant theoretical concepts of management control, accounting information systems, performance budgets and the roles of budgets. These general accounting concepts, applicable in both the private and public sector, are used to compose a research framework for analyzing the role of budgeted performance measures in Dutch local government.*

### **Organizational and management control**

Control, next to strategy formulation and objective setting, is one of the critical management processes (Merchant, 1998; Merchant and Van der Stede, 2003). The term “organizational control” has no single generally accepted definition. Literature presents various definitions, describing organizational control as a process (of setting a standard, observing what is happening, comparison of observation and standard, and if necessary, behavior altering communication), or by its main goal (e.g. assuring implementation of strategies).

Anthony (1988) has provided a general accepted structure for organizational control. His traditional framework distinguishes three separate and distinct processes; being strategy formulation, management control, and task control. Within this concept, task control and strategy formulation form the boundaries of the management control process. Strategy formulation is the process of deciding on the goals of the organization and the strategies for attaining these goals. Task control is the process of ensuring that specific tasks are carried out effectively and efficiently. Management control fits between the two concepts, and is defined by Anthony (1988, p.8) as “*the process by which managers influence other members of the organization to implement the organization’s strategies*”.

Anthony considers management control to be a rational and systematic process; as a formal prescribed set of activities with the purpose of achieving the organization’s pre-set or emerging objectives (Anthony, 1988, Anthony and Govindarajan, 2003, p. 9, p.11). This formal and rational process is in essence cybernetic, involving some kind of standard setting, variance analysis and feedback activities.

The notion that formal systems of management control are in essence cybernetic is generally accepted within accounting literature. But defining the management control process as systematic and cybernetic is by no means to be seen as defining management control itself as cybernetic (Fisher, 1998). Even highly formalized, quantified and computerized organizational processes usually involve communication between people and their motivation, which means that they contain psychological elements (Hofstede 1978, 1981).

Although Anthony’s framework suggested that the basic source of discipline for studying control is behavioral science, it has often been narrowed down to an ac-

counting based control approach with a behavioral flavor, and as a mainly formal and functional system (Otley, 1999; Hartmann, 1997).

Taking a more behavioral and organizational approach, management control is conceptualized as a human activity, with humans as objects of management control (Hartmann, 1997). Studying only performance measurement and management methods is therefore unlikely to result in a totally coherent outline or a rational set of control mechanisms well-suited to the purpose for which they have been designed. The scope of management control should thus be wide enough to also encompass activities such as: discussing strategy, selection of personnel, management and organizational development practices and business process re-design techniques (Otley, 1999).

Following this line of reasoning, management control includes “*all the devices managers use to ensure that the behavior and decisions of people in the organization are consistent with the organization’s objectives and strategies*” (Merchant, 1998, p.2). These devices can in practice involve limitless kinds of control mechanisms, which can be formal or informal in nature. According to Merchant (1998) it is the function of management control systems to influence behavior in desirable ways. The assumption behind this function is that individuals act more in their own best interest than in the organization’s interest. Control systems are used to increase the probability that individuals will behave in such a way that the organization’s objectives will be achieved (Merchant, 1998).

This study is researching organizational control on an organizational level, and is mainly referring to management control processes. Strategy formulation and task control is beyond the scope of our study. However, strict boundaries between management control, strategy formulation and task control will mainly exist in theory. In practice, management control is part of the wider organizational context (Birnberg, 1983). Merchant’s (1998) vision of organizational control is used in this study as a reference.

Ouchi (1979) analyzed different control mechanisms and described three fundamentally different mechanisms “*through which organizations can seek to cope with the problem of evaluating and control*” (p. 833). He identified three archetypes of control mechanisms: markets, bureaucracies and clans. Taking a technical efficiency perspective, he argued that the choice between the three control mechanisms should depend on the organization’s ability to measure (individual) contributions (measured in outputs or behavior) to the achievement of organizational objectives.

If prices contain all the necessary information for decision making purposes, a market mechanism should be an effective control mechanism. But when market prices are not available, the measurability of organizational outputs or behavior should determine whether bureaucratic/administrative controls or social controls are the preferred main control mechanisms.

Bureaucratic control, as defined by Ouchi (1979), relies upon rules and close personal surveillance and the direction of subordinates by superiors. Rules are to be regarded here as “*an arbitrary standard against which a comparison is yet to be made*” (Ouchi, 1979, p. 835). Using bureaucratic control, an organization will create an explicit set of rules about behavior (e.g. budgets or cost standards), or level of production or output. This set of rules will not completely specify the duties of an employee, but will reduce the involvement of hierarchical authority to a desired level. Bureaucratic control can thus be seen as a mechanism to reduce hierarchical information overload, and as a means of improving organizational information processing capabilities (Galbraith, 1973). Galbraith (1973) argued that decision-makers attempt to find a match between the degree of information processing demanded by the environment and the processing capabilities of the organization. He argued that when uncertainty is low, tasks are well understood prior to their performance and many activities can be pre-planned. This concept of pre-planning seems to be strongly related to the image of the mechanistic organization with its hierarchy and procedures. But when uncertainty increases, tasks cannot be fully programmed and the organization’s information processing requirements will increase (Chapman, 1997).

This concept of programmability of tasks is similar to Perrow’s (1970) routineness of tasks, which expresses the extent to which tasks can be reduced to a well-defined set of rules. Perrow (1970) argued that organizational planning and control processes are related to the extent to which tasks are analyzable and homogeneous (number of exceptions).

Bureaucratic control can be classified as a formal and rational form of control. Bureaucratic control of an organization requires measurement and monitoring of, in essence, the behavior of employees or the results of those behaviors. If desired behavior can be specified and watched with reasonable precision, behavior control can create an effective control mechanism. But if the knowledge of the means-end relationships involved in the basic products or service activities is imperfect, behavior control is less effective.

On the other hand, if the results of behavior (or outputs) are measurable with reasonable precision and superiors in the organizational hierarchy can monitor multiple output objectives, output control can be effective (Ouchi, 1979, Hofstede, 1981).

Bureaucratic controls, such as behavior and output control, are thus not always applicable. As Ouchi (1979, p. 845) concluded:

*“Under conditions of ambiguity, of loose coupling, and of uncertainty, measurement with reliability and with precision is not possible. A control system based on such measurements is likely to systematically reward a narrow range of maladaptive behavior, leading ultimately to organizational decline”*

When the assessment of performance is unclear, an organization is likely to try to reduce goal incongruity by relying more on informal, social, ritualized, or ceremonial forms of control. Social forms of control, such as clan control, are unable to monitor and evaluate anything but attitudes, values and beliefs, and “*require the stability of*

*membership which characterize the clan*" (Ouchi, 1979, p. 844). These forms of control relate to the socialization process among members of the clan or the profession. Socialization processes emphasize agreement on a broad range of values and benefits (Ouchi, 1979), or on negotiation and judgment (Hofstede, 1978).

The choice between market, bureaucracy or clan control is, according to Ouchi, in essence an economic one. However, Ouchi added that real organizations will contain some features of each of the modes of control (p. 840).

Implicit in Ouchi's analysis is the assumption that organizational control operates whilst agreement on goals and objectives exists (Birnberg e.a, 1983). It is, however, doubtful whether this assumption of unambiguous objectives is always valid (Anthony and Young, 1994; Hofstede, 1978).

Hofstede (1978, 1981) argued that ambiguity of organizational objectives is "*the most crucial criterion for management control*" (1981, p. 194), and stated:

*"When ambiguities in objectives exist, control is always political control, dependent on power structures, negotiation processes, the need for the distribution of scarce resources, particular interests and conflicting values: however, political control at the top of an organization can go together with other forms of control inside the organization, because for members, the political top may have resolved the ambiguities"* (p. 198).

Hofstede (1981) identified three main reasons for ambiguous objectives: (a) conflict of perceived interest and/or values among those having a say in the activity, (b) lack of knowledge about means-end relationships in which the activity considered represents the means, and (c) fast changing environments which enforce new objectives or make existing objectives obsolete, without immediately suggesting new ones. Hofstede (1981) underlined that every organization, public or private, contains activities that demand different forms of control and can have ambiguous or unambiguous objectives. Consequently he added:

*"unambiguous objectives exist for activities for which there are no conflicts of interests and/or values among those concerned. Then there is consensus among organization members with regard to the activity, based on shared traditions, shared indifference, or an unquestioning acceptance of a central authority that sets the objectives"* (Hofstede 1981, p. 145).

Hofstede's (1981) control framework is defined by four criteria, of which the ambiguity of objectives is considered as the first and most crucial. Measurability of outputs, knowledge of the effects of management intervention and level of repetitiveness are the remaining three criteria. Unambiguous objectives and measurable outputs are regarded as minimum requirements for applying cybernetic models of control (using variances between actual performance and pre-set norms in order to decide if intervention in the task execution or adjustment norms is appropriate). Purely cybernetic models assume rationality of the entire system. Control models will become less cybernetic when the effects of intervention are not known in advance and psychological elements enter the control system. Non-cybernetic models of control rely more on the values and rituals of the group in which decision-makers operate. Hofstede stated

that values and rituals are manifestations of the culture of a group, and because cultures between groups can differ, no universally optimal procedures for non-cybernetic models of control exist. Political control is, as he put it, “*a vague model*” (Hofstede, 1981, p.202).

Summarizing, many organizations can apply administrative or formal forms of control, such as behavior and output control, as long as their objectives and production processes are relatively stable and certain, and the organizational hierarchy can transmit control with any accuracy from top to bottom (Ouchi 1979). As discussed in more detail in chapter 1, “Introduction”, the use of formal administrative controls is mainly associated with a more technical rationale on control; with the importance of achieving formal, relatively unambiguous and clear organizational goals. This context stresses the importance of the formal organizational structure and processes, and rules and routines that serve to bring order and minimize uncertainty for boundedly rational<sup>20</sup> employees.

However, the circumstances of many organizational tasks in the public sector may not fit these specifications (Ouchi, 1979; Anthony and Young, 1994). Tasks in governmental organizations are often not stable and certain, and relate often to more ambiguous and unclear objectives, resulting in a reliance on more political forms of control instead (Hofstede, 1981).

This study takes Ouchi’s and Hofstede’s framework as the basis from which to analyze performance measures for both administrative and political forms of control. Ouchi’s framework is used to analyze whether administrative controls are to be expected. Hofstede’s criterion of ambiguity of objectives is used to give additional insights into the use of political control.

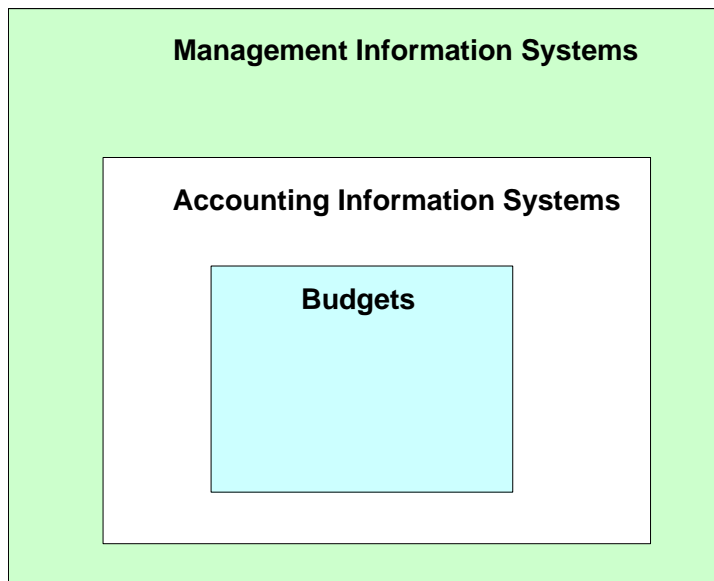
## ***Accounting Information Systems***

Forms of formal organizational control can be addressed as systems<sup>21</sup>, for example as management information systems (MIS), management accounting systems (MAS), or as accounting information systems (AIS). Although some disparities in the conceptual definition of MAS, MIS and AIS exist in literature, they all refer to formal routines and procedures, the use of information, and a focus on patterns of activities (Simons, 1992). In this study the formal control system is labeled AIS, and is defined within the context of MIS. Figure 2 gives a simplified picture of the positioning of MIS, AIS, and budgets.

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<sup>20</sup> Bounded rationality addresses the assumption that it is people’s intention to act rationally, but that this intention is bounded by personal and organizational limitations (Simon, 1945). Rational is referring, amongst others, to the alignment of personal and organizational goals. According to Simon (1945, p88): “*When we speak of people behaving irrationally what we generally mean is that their goals are not our goals, or that they are acting on the basis of invalid or incomplete information, or that they are ignoring future consequences of their actions, or that their emotions are clouding their judgments or focusing their attention on momentary objectives*”.

<sup>21</sup> A system is a prescribed and usually repetitious way of carrying out an activity or a set of activities (Anthony and Govindarajan, 2003, p. 6). In this study formal control and systematic control are used as synonyms.



**Figure 2** MIS, AIS and budgets

Taking an orthodox management accounting perspective, the function of AIS is to facilitate decision making and to control behavior (Zimmerman, 2000). AIS can serve decision making, or decision management, by providing information to reduce ex-ante uncertainty. Then AIS supports strategy formulation and implementation, provides information for coordination of activities, and facilitates organizational learning (Simons, 1995; Abernethy and Brownell, 1999). AIS can also serve control by providing ex-post information about the actions of subordinates (Zimmerman, 2000).

It is suggested that the design of AIS represents a response to the requirements for organizational coordination and control. AIS is perceived as effective when it is designed to provide information that meets the requirements of the user and is at the same time consistent throughout the organization (Galbraith, 1973; Anthony, 1988; Nicolaou, 2000).

The design and use of AIS can be characterized by the dimensions of AIS and by the quality of the provided information (Anthony, 1965). Accounting literature has focused mainly on the dimensions of AIS, such as financial versus non-financial, internal versus external, or historical versus future orientated (Chenhall and Morris, 1986; Abernethy and Vagnoni, 2004). The essential characteristics of the quality of AIS have been addressed within the accounting literature but especially in the information system literature. Quality of AIS is often characterized by its relevance (the importance of the information for the user), accuracy (error free), precision (exact) and completeness (meets the needs of the user) (e.g. Anthony, 1988; Doll and Torkzadeh, 1988). A generally accepted approach for capturing the quality of the provided information is by measuring the satisfaction of the user of accounting information (Doll and Torkzadeh, 1988). User satisfaction is seen as a surrogate measure for AIS effectiveness; the underlying general assumption is that better information systems would lead to higher user satisfaction, without specifying which factors contribute the most (Goodhue, 1995).

Managers need information for different purposes; management information can serve multiple roles<sup>17</sup> simultaneously. Managers can use management information, amongst other things, not only to be able to compare actual with expected performance and to manage by exception (Simons, 1990, 1995), but also for monitoring, detecting change, identifying problems and opportunities, and disseminating information (Mintzberg, 1972), or for operational planning, performance evaluation, communication of goals and strategy formulation (Hansen and Van der Stede, 2004).

Managers use both informal and formal information sources. Managers are dependent to a large extent on informal information sources. For example, these could be: informal talks, regular scheduled or ad hoc meetings, informal memorandums, and personal inspection. Informal information processes can carry news quickly, convey nuances and can process qualitative information. Informal information processes often represent actuality, provide concrete descriptions of unique situations, indicate true causality and provide private and tacit views. (Mintzberg, 1972; Earl and Hopwood, 1979). Formal information processes relate to AIS and to a variety of non-routine information processes. The formal non-routine information processes can relate to a variety of subjects, such as meetings, conferences, studies and task forces (Earl and Hopwood, 1979, Simons, 2000).

This study focuses on various different sources of formal control information. Dutch municipalities use a planning and control approach, therefore sources are included that relate to, for example, programming, budgeting, and the reporting of regular and ad-hoc tasks. Both the design criteria and the quality of AIS are researched. This is in order to characterize the relevance of information for users, and to relate this information to specific roles of AIS.

### ***Budgeting and operational planning***

Budgeting is a major component of most AIS. Budgeting refers to the budget, as formal and quantitative expressions of plans as a set of numbers, and to the budget process (Horngren and Forster, 1987). Budgeting is used by management as a means of coordinating and communicating priorities, for facilitating lower management commitment to those priorities, and is often used by management to decentralize decision making to lower-level managers.

Budgeting is a near universal organizational process, and is so important for "*day-to-day decision making guidance for managers that it might be said that the primary purpose of the other planning cycles (such as strategic planning and programming) is merely to develop a smart budget*" (Merchant, 1998, p. 336).

Budgeting can be a "top down" and "bottom up" process, and involves short-term planning. With top down budgeting, top management set lower level budgets. Top management often use the preparation of operating budgets not only for the purpose of coordination (detecting inconsistencies), assigning responsibilities, and obtaining lower managers commitment, but also to fine-tune the strategic plan. This top down budgeting process often puts emphasis on the link between the strategic plan and the operational budget.



With bottom up budgeting, lower management participates in setting budget targets. Bottom up budgeting often puts emphasis on both strategic planning and operational planning<sup>22</sup> (Merchant and Van der Stede, 2003; Anthony and Govindrarajan, 2003).

Budgeting is the cornerstone of the management control process, but it is far from perfect. Despite its ubiquitous use, and its function to serve performance planning and ex-post evaluation of actual performance versus plan, budgetary control (exercising control through the use of budgets) has many limitations. Budgeting is not only time consuming, it can also hinder allocation of organizational resources, encourage myopic decision making, and it is also a strategic game which can result in dysfunctional behaviors (Hopwood, 1972; Hofstede, 1981; Merchant 1998; Merchant and Van der Stede, 2003).

Hansen e.a. (2003) categorized the perceived criticism of practitioners of budgeting use into three groups. Firstly, budgetary control is only useful when the budget provides a valid plan for a reasonable period of time and when managers have a good predictive model for providing performance standards. Secondly, budgetary control often imposes centralized and primarily financial-oriented controls, which often support "*such mechanical practices as last-year-plus budget setting and across the board cuts*" (Hansen e.a., 2003, p. 97). Thirdly, budgetary control focuses on responsibility centers, and will impede empowered employees from making the best decisions. Budgetary control seems thus to be the most valid approach under relatively certain environmental circumstances. Under more uncertain circumstances the validity of strict budgetary controls is assumed to diminish. Organizations that face unpredictable environments are likely to use budgets in combination with more subjective performance evaluations (Hopwood 1972; Simons, 1987; Ittner and Larcker 1998; Abernethy and Brownell, 1999).

Budgets can contribute considerably to the tightness of formal controls, but budgetary control is only one way to exercise tight control; personnel and cultural control can also contribute to tight control (Simons, 1995; Merchant, 1998; Anthony and Govindarajan, 2003). Budgetary control is considered to be tighter if it has a greater effect on decision making or if it provides a higher degree of certainty that employees act in a desirable way (Merchant, 1998). Tight budgetary control can be achieved by: defining complete and specific goals, congruent with organizational objectives, effective, timely, frequent, and convincing communication, frequent, detailed and timely monitoring of actions or results, and enhancing the value of rewards for employees (Merchant and Van der Stede, 2003).

According to Van der Stede (2001) tight budgetary control involves, in order of importance, (a) low tolerance for interim budget deviation, (b) detailed line-item follow-ups, (c) intense discussions of budget results, and (d) strong emphasis on meeting short-run budget targets.

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<sup>22</sup> The link between budgeting and operational planning is not intensively researched. According to Hansen e.a. (2003), this lack of research evidence is probably due to the focus on management control and strategic management (and on top management), and less on operational or task control (and on functional or operational management levels).

Control tightness is in general related to diagnostic controls, using variance analysis on important targets to focus managers' attention (Simons, 1995). Control tightness is however, not exclusively related to diagnostic controls. Tightness can also be obtained when managers frequently exchange information, analyze and debate action plans, and when top management is strongly involved in the day-to-day activities of subordinates (Van der Stede, 2001). Van der Stede(2001), empirically analyzing large diversified Belgium firms, suggested that especially detailed line-item follow-up and intense discussions by top management contributed to this more interactive use of the control systems.

A fundamental distinction must be made between the use of budgets for measurement and control of individual performance or organizational performance. Control of individual performance is in principle directly related to human behavior, to aspects of possible dysfunctional behavior, and to the incentives to managers to misinterpret information (Hopwood, 1972; Simons, 1995; Merchant, 1998). There is an implied connection between the performance of individuals and organizations. If AIS is found to be useful at an organizational level, it is likely to be used by individuals, who then can improve their decision-making and better achieve organizational goals. There are however "*broad leaps in logic*" from useful AIS, to improved job satisfaction and enhanced organizational performance, and "*there is no compelling evidence that such links exist*" (Chenhall 2003, p. 132).

This study is not addressing the possible impact of performance measure use on organizational and managerial performance.

Budgets can be financial and non-financial, and can relate to operational cost and expenditure or capital spending decisions. Concentrating on operational budgets, two basic types of budgets can be discerned: (a) budgets for cost centers (or expense centers or input budgets) and (b) budgets for profit centers (Hofstede, 1981; Anthony and Govindarajan, 2003). Cost centers are responsibility centers associated with financial controls (price or cost) and efficiency (price or cost per unit quantity); inputs are measured in monetary terms, but outputs are not. There are two general types of cost centers, engineered and discretionary, of which only the first can optimize the physical output in relation to the input. Engineered cost centers (or production centers) can be used for loosely coupled financial and non-financial control. Profit centers express both inputs and outputs in monetary terms and can be applied for inter-related financial and non-financial control.

Budgets of governmental organizations are a dominant part of public sector resource allocation and performance measurement (Bordewijk and Klaassen, 2001; Van Helden and Johnsen, 2002). Dutch municipalities use budgets in their hierarchical planning and control documents, which support various functions such as: information provision, accountability and control (Van Helden and Ter Bogt, 2001).

### ***Performance measures in budgets of Dutch local government***

Performance can have various meanings, but in general it relates to qualitative and quantitative descriptions of results which can help to shape employees' views of what

is important (Merchant and Van der Stede, 2003). The relevance of performance measures can be stated by the popular quote “*what you measure is what you get*” (Kaplan and Norton, 1996). In general, performance measures relate to organizational activities, production or output. In the Dutch government sector, performance measures relate primarily to activities, outputs and outcome (Ter Bogt, 2004).

Organizational performance measures are often multi-dimensional in nature and can be divided into financial and non-financial measures. Financial information refers to quantitative monetary information. Non-financial information refers to both quantitative and qualitative non-monetary information (Ittner and Larcker, 1998) and can refer to, for example, efficiency, productivity, product quality, and to citizen, customer or employee satisfaction.

A general conception of the use of performance measures is that they are used to support the formulation and implementation of organizational strategy (Kaplan and Norton, 1996; Merchant, 1998; Otley, 1999; Simons, 2000; Anthony and Govindarajan, 2003). Profit organizations, with their financial “bottom line”, can view non-financial performance measures as an indicator of financial performance (Kaplan and Norton, 1996) or can calculate the financial consequences of increased non-financial performance (Nørreklit, 2000). Profit organizations aim to use the financial and non-financial performance measures to reflect the interest of shareholders, organization and customers, and probably strive to ensure a fairly strictly balanced and integrated relationship between actions, objectives, and organizational strategy (e.g. Kaplan and Norton, 1996; Ittner and Larcker, 1998).

Objectives of governmental organizations are often regarded as more ambiguous, and seldom apply a business “bottom line” of integrating multiple goals into single financial targets. Consequently, performance measures in governmental organizations tend to be less balanced (often controlling financial and non-financial performances separately) and less integrated (often resulting in loosely coupled performance measures between different hierarchical levels) than in profit organizations (e.g. Kaplan and Norton, 1996; Brignall and Modell, 2000; Bordewijk and Klaassen, 2001).

Performance measures are an important part of governmental budgets (Johnsen, 1999; Bordewijk and Klaassen, 2001; Van Helden and Johnsen, 2002; Van Helden, 2005). Dutch municipalities use budgeted performance measures (BPM) widely, e.g. in output and outcome budgets, in performance reports, for setting performance standards, and for the purpose of benchmarking (Van Helden and Ter Bogt, 2001; Bordewijk and Klaassen, 2002). These BPM are related to various stages of the transformation process (input, throughput, or output measures) and are used to provide a broad set of indicators on the goals, on the organizational activities, or on specifications of resource availability (Van Helden and Jansen, 2003). In terms of relevance and controllability the applied performance measures are often assumed to be rather poor. Performance measures in output and outcome budgets give little information on the volume of the service and its quality, are often heterogeneous or meaningless (Van Helden and Johnsen, 2002; Van Helden and Jansen, 2003).

Dutch local governments also use BPM in their relationships with external parties, such as with central government or government agencies. Examples of this kind of use of BPM are the performance contracts with central government which are used for main city policies<sup>23</sup> or for controlling police organizations.

### ***Roles of budgeted performance measures***

The roles of AIS in general and the specific functions of budgets have been studied by management accountants for a long time and from various perspectives, mostly focusing on the profit sector. Although no clear single starting point for these studies can be pointed out easily, the formal start can be attributed to the “founding fathers” of management accounting, such as Taylor (1911)<sup>24</sup> or Simon (1945)<sup>25</sup>. Contemporary interest in the roles and functions of (budgeted) accounting information often approaches these aspects as attributes of control systems (e.g. Simons 1987, 1990, 1995; Merchant and Van der Stede, 2003), or as servants of decision making (e.g. Burchell e.a., 1980), or as instrumental for various planning and control reasons (Hansen and Van der Stede, 2004).

One of the more current studies on the roles of AIS in profit sector organizations is documented by Simons (1990). Simons (1990) was researching the relationship between the use of AIS and the implementation of organizational strategy, and concluded that the same management information was used differently, depending on what managers did with it. He observed that organizations with different strategic stances use AIS in different ways: in a diagnostic or interactive way. Simons later defined diagnostic control systems as prototypical cybernetic feedback systems or as *“the formal information systems that managers use to monitor organizational outcomes and correct deviations from preset standards of performance”* (Simons 1995, p.170). Interactive control systems were defined as the formal information systems that managers use to personally involve themselves in the decision-making activities of subordinates, with the purpose of focusing everyone in the organization on emerging strategic uncertainties, on the emerging threats and opportunities that could invalidate the assumptions upon which the current business strategy is based (Simons, 1995, p.171).

Simons articulated that the differences between the two control systems are not their technical design features, but the way senior managers use these systems. When managers use diagnostic control systems, periodic exception reports are used to monitor a limited amount of critical performance variables. Managers are only ex-

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<sup>23</sup> In Dutch: “Grote Stedenbeleid” or GSB.

<sup>24</sup> F.W. Taylor’s Principle of Scientific Management (1911) relates mainly to the execution of operational tasks. For example, as stated on page 17: *“The work of every workman is fully planned out by management at least one day in advance, and each man received in most cases complete written instructions, describing in detail the task which he is to accomplish, as well as the means to be used in doing the work”*.

<sup>25</sup> H.A. Simon’s Administrative Behavior (1945) focuses on decision making processes in administrative organizations. Simon suggested that accounting systems were designed to inform and to influence operating decisions, for example by attention directing, scorekeeping, and problem solving.

pected to invest time and attention to the causes of variances when significant variations occur. Interactive control systems are used by managers for ongoing debate and dialogue in order to signal what is important. The debate is focused on new information, assumptions, and action plans.

This notion of the different roles of AIS was earlier normatively explored by Burchell e.a. (1980) and Earl and Hopwood (1979). These two conceptually interlinked studies related organizational decision-making and the roles of AIS<sup>26</sup> by using two dimensions of organizational uncertainty: uncertainty of objectives and uncertainty of the patterns of actions which determine the consequences of action. Earl and Hopwood (1979) defined several roles, and used “*an all too unsatisfactory machine analogy*” (p.8) to address them.

They argued that when uncertainty on both dimensions is low, decision-making is structured and control is assumed to be programmable. The associated role of AIS is labeled as “*answering machines*” and is comparable with the use of Simons’ diagnostic control systems.

They continued that in situations with clear objectives but increased uncertainty of cause and effect, “*we need to explore problems, ask questions, analyze the analyzable and finally resort to judgment. Here MIS [AIS] cannot provide the answer but they can go part of the way, providing assistance.*” (Earl and Hopwood, 1979, p. 8, [AIS] added by the author). This role of AIS is labeled as “*learning machines*”.

The emphasis on the role of AIS as a learning machine was expected to be limited. They argued that instead of using AIS to confront the uncertainty of cause and effect, AIS is likely to be used to reduce or even camouflage it. Algorithms, formulas and standardized rules were seen as tools for making a significant portion of organizational decision making programmable, which can complement or replace human judgment (Burchell e.a. 1980). Earl and Hopwood (1979, p.9) concluded:

*”In other words our parent disciplines of computing, accounting and management science have sought for answers where they cannot always be specified, aiming for technocratic solutions regardless of the context of either the user or the organizational environment.”*

Earl and Hopwood (1979) also explored situations with low uncertainty of cause and effect but increased uncertainty of objectives. Here they argued that the values, principles, perspectives and interests of people can conflict. Political processes are expected to be important. They formulated a normative view on the role of AIS, which suggested that information processes would support discussion and problem sharing and would be used as “*dialogue machines*”. In practice however, they expected that AIS would often be used to articulate and promote particular interested positions and values.

Burchell e.a. added that, under these circumstances, organizations are not to be seen as cohesive mechanisms for rational action, but as arenas in which members of the organization, with a diversity of interest, participate. Under these uncertain cir-

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<sup>26</sup> Earl and Hopwood (1979) referred to the wider concept of MIS, instead of the more narrow defined concept of AIS that is used in this study.

cumstances control will be political. This role of AIS is labeled as “*ammunition machines*”.

The last defined role is related to uncertainty of causation and objectives. Here Earl and Hopwood assumed another way of using AIS. They argued that, with the need for inspiring and creativity triggering information, AIS can be used as “*idea machines*”. Notwithstanding this inspirational concept, this “*idea machines*” role was likely to be more normative than practical. They expected that the context of extreme uncertainty can create the need for AIS to serve as “*rationalization machines*”. The main purpose for this role is to legitimize and justify the organization and its actions with its external constituencies. This need for retrospective understanding might be particularly the case where there are dominant external interests in the decision making context (Meyer and Rowan, 1983; Burchell e.a. 1980).

Although the distinction between basic variations in the roles of AIS is admittedly simplistic, it is nonetheless suggestive and can help to articulate archetypes for a variety of use (Burchell e.a., 1980, p.15). The Earl and Hopwood/ Burchell e.a. framework of archetypal roles is used here as a basis to identify aspects that can be analyzed empirically.

## ***Building a research framework***

### **From research questions to a research framework**

The next step is to compose a research framework of measurable aspects by which the different roles of BPM can be explained. The three basic building blocks of the research framework (antecedents, roles of BPM, and use of BPM) have already been introduced in the first chapter (see Figure 1 on page 14 and Figure 3 on page 32), and are now given further consideration.

#### ***The first antecedent: control context***

Two different contexts of organizational control are constructed in this study, these being a businesslike and a political context.

The businesslike control context stresses the importance of the formal organizational structure and processes, rules and routines. This context is associated with relatively certain, clear, or unambiguous organizational objectives (Earl and Hopwood, 1979; Hofstede, 1981; Birnberg e.a, 1983). These clearly defined organizational objectives are assumed to be achieved by a comprehensive and coordinated set of goals, targets at various levels of the organization, or by sets of integrated performance indicators through organizational hierarchy (Kaplan and Norton, 1996; Hyndman and Eden, 2000).

Budget systems are considered to be important managerial control systems, and are part of the formal control structures and processes. Budget systems can contribute considerably to the degree of certainty that employees act in desirable ways (Merchant, 1998). Budget tightness is therefore used as an aspect of a businesslike control context.

The political control context stresses the importance of the gain for organizational legitimacy, and addresses the organization and its confrontation with internal and external institutions (Hofstede, 1981; Meyer and Rowan, 1983). This perspective attaches meaning to the budgeting process beyond the role of formal control (Covaleki e.a, 2003).

The presence of a political control context can be identified by focusing on possible conflicting pressures on organizational objectives by groups of people<sup>27</sup>, or the possible results of conflicting pressures such as uncertain<sup>28</sup> or ambiguous objectives.

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<sup>27</sup> Differences in perceived interests between groups of people can, amongst others, be related to differences in subcultures between organizational groups, e.g. between top management and middle management (Hofstede, 2003), or to possible role conflicts between organizational levels, e.g. between managerial and professional organizational units (Abernethy and Stoelwinder, 1995), or to the ability of organizations to conform to multiple conflicting pressures (Scott 1987).

<sup>28</sup> Relatively certain objectives are in this study associated with a more businesslike control context, and relatively uncertain objectives are associated with a more political control context. Using these two contexts has the advantage of using two separate but interlinked constructs, both with different theoretical and philosophical bases. By using the businesslike and political context instead of the single dimension of uncertainty of objectives, extra caution is taken in order to prevent some unification between different theoretical approaches (Chenhall, 2003).

This study primarily uses uncertainty and ambiguity as aspects of a political control context.

One of the assumed effects of organizational resistance to institutional pressure for an increased degree of multiplicity is involvement in tactics of resistance, and the attempt to decouple technical activities from external contacts (Ansari and Euske, 1987; Abernethy and Chua, 1996; Oliver, 1991). By decoupling (or loose coupling), organizations can protect their formal structures from evaluation on the basis of technical performance, e.g. by performing activities beyond the purview of managers, by making objectives more ambiguous, by the avoidance of integration, and by making human relations very important (Meyer and Rowan, 1983). In some cases loose coupling can lead to more ceremonial posturing, which may involve a preferred departure from technical efficiency (Powell, 1991). Although differences between ceremonial and operational structures cannot easily be generalized into one single factor, loose coupling is often used as an indication of the existence of disconnections between both (Fogarty and Rogers, 2005). Loose coupling is also expected to affect the balance (integration of financial and non-financial measures) between the integration (throughout the hierarchy of an organization) of performance measures (Brignall and Modell, 2000). Management control systems can be decoupled at different hierarchical levels, which may result in crude financially-oriented budgetary control and limited integration of performance measures (Abernethy and Chua, 1996; Ansari and Euske, 1987; Brignall and Modell, 2000). Loose coupling is not explicitly included in this study as a measurable aspect of a political control context; it merely serves as a concept which can be referred to later on.

#### The second antecedent: task uncertainty

Task uncertainty, or uncertainty over the consequences of actions, is one of the dimensions of Earl and Hopwood's (1979) framework. Task uncertainty relates to both the businesslike and political control context.

One possible trajectory for researching task uncertainty is to research the measurability of output and processes. Ouchi (1979) offers clear relationships between mechanisms of task control and measurability of tasks, and these insights can be used for analysis when output or process measures are to be expected. This framework is however less clear on the possible different roles of information use. Another option is to apply the information-use related aspects of task uncertainty, based on Galbraith's (1973) principle of information gap, but this concept is only indicatively being used to construct measurement instruments<sup>29</sup>. The third option is to use Perrow's (1970) framework, and apply the level of routines of tasks as an indication for task uncertainty. This framework is in accordance with Galbraith's notion of programmability and information deficit, and various accounting studies have applied measurement instruments, based on this framework (Chenhall, 1998). This study therefore refers to Perrow's aspect of routineness in order to frame task uncertainty.

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<sup>29</sup> One possible approach is to estimate the total amount of information that managers require and can process (Jansen, 2000). Existing accounting literature has however not yet rigorously tested this conceptual instrument empirically.



### Roles of BPM

Four of the archetypical roles are used as reference: the “answering” role<sup>30</sup>, the “learning” role, the “ammunition” role, and the “rationalization” role. The more normatively defined roles, such as the “dialogue” and “idea creation” machine role, are not directly included in this research. The explorative nature of the research design and analysis, however, does not preclude the possible application of these roles. Simons’s interactive control systems could probably be regarded as a “dialogue”, “learning” and “idea creation” machine for implementing strategy (Abernethy and Brownell, 1999), and can function as a reference for research later on.

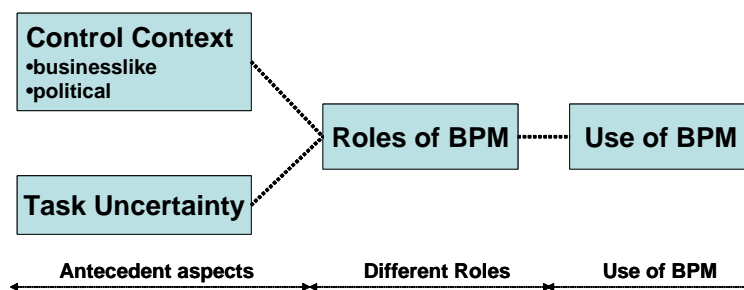
In order to express the expected essential functions of the four roles, Earl and Hopwood’s descriptions of roles are used to compose a descriptive phrase per role. These phrases are used to express the main characteristics of the roles.

### BPM-use

As has been documented in the previous sections, AIS can be defined by its design characteristics and by its quality. Both aspects are used in this study in order to define the use of BPM.

### **Measuring the research framework**

In this section the defined constructs and aspects of the research framework are documented in more detail and made operational for empirical research. Figure 3 presents a picture of the constructs.



**Figure 3** Research framework

### Measuring the control context: uncertainty and ambiguity of objectives

Measuring uncertainty of objectives is an area that is not well covered within management accounting literature. Most of the accounting contingency literature is focused more on the effects of specific forms of uncertainty, e.g. of environmental uncertainty on organizational structures or performance, and often uses risk, hostility, diversity, or complexity as contextual factors (e.g. Otley 1980; Chapman, 1997; Chenhall, 2003).

At an organizational level, certainty of objectives can be replaced by the concept of clearness of objectives. Clearness of objectives, or goal clarity, is a concept that is frequently used in RAPM-literature, and can combine elements of goal specificity and

<sup>30</sup> For convenience of the reader the “machine” additive is left out in the rest of the research.

role ambiguity (Hartmann, 1997). Role ambiguity is related to an individual's perception of others' expectations of him- or herself, and can be conceived as a shortfall of information relevant for performing a role adequately (Marginson and Ogden, 2004). Role ambiguity thus relates to individual and psychological aspects, and is not included in this study. Aiming to capture organizational objective related aspects, only Hartmann's (1997) instrument for measuring goal specificity (see appendix) is used in this study to estimate the relative level of uncertainty of objectives.

Indications of the level of ambiguity of objectives can be obtained by measuring possible conflicts of interest between relevant groups of persons (Hofstede, 1981). Oliver's (1991, p. 162) notion of multiplicity, as "*the degree of multiple, conflicting, constituent expectations exerted on an organization*" is used to capture the likeliness of ambiguous objectives. Oliver (1991) suggested that organizational awareness of these conflicting institutional pressures can be used as a predictive factor of multiplicity. A specially designed instrument for the purpose of measuring multiplicity in this research is used to apply this aspect.

#### *Measuring the control context: integration*

Limited accounting research has been published on the integration of BPM in governmental organizations. The majority of research is more descriptive and qualitative in nature, and mainly suggests specific relevant aspects instead of testing more general hypotheses. This study is therefore only using the more qualitative aspects.

Two different concepts of integration are used in this study; between financial and non-financial BPM and between lower and higher hierarchical levels in the organization. The integration between financial and non-financial BPM is researched by analyzing both financial and non-financial BPM separately, using the planning and control documents of responsibility centers as an indication. The concept of integration of BPM throughout the hierarchy can be qualitatively researched by capturing the presence of loosely coupled performance measures (e.g. Kaplan and Norton, 1996; Brignall and Modell, 2000).

Integration throughout the hierarchy can also be captured by Hartmann's measurement of goal specificity. This measurement applies, among others, to the concept of integration of goals with tasks as an indication of the clearness of objectives. Clear objectives are here related to greater integration of goals and tasks. Hartmann's measurement is used to capture integration, and adapted for use in a more qualitative case-based research setting within Dutch local government.

#### *Measuring the control context: tight budgetary control*

According to Merchant (1981), budgetary tightness can be obtained by: definition of goals (more complete, specific, and congruent), communication of goals (more efficiently, timely, frequently and convincingly), monitoring of actions and results (more frequent, detailed, and timely), and by rewarding (stricter relationship between rewards and achieved performance).

Van der Stede (2000) suggested to measure tight budgetary control by four factors:

- (a) tolerance of interim budget deviation,
- (b) detailed line-item follow-ups,

- (c) intense discussions of budget results, and
- (d) strong emphasis on meeting short-run budget targets.

Van der Stede's instrument for measuring tight budgetary control is used in this study, and adapted for use in a more qualitative case-based research setting within Dutch local government.

### Measuring routineness of tasks

Routineness is defined by two dimensions: well established or analyzable techniques for task execution and the degree of variety in the tasks encountered. The routineness of tasks is high when tasks are highly analyzable and the number of exceptions is low (Perrow, 1970). A conventional way of measuring task uncertainty is by using the instrument originally developed by Withey e.a. (1983). This instrument is a well-established method for measuring both task analyzability as well as the number of exceptions (e.g. see Abernethy and Brownell, 1997, Hartman 1997), and is adapted for used in Dutch local governmental organizations (Budding, 2004).

### Measuring the roles of BPM

In order to capture the four archetypical roles of BPM, each role is characterized by a characteristic phrase, and is related to its antecedents (context of control and tasks uncertainty). In order to apply the characteristic phrase in empirical research, for each phrase one or more key characteristics are added. These key characteristics do not replace the phrase, but aim to highlight the most important characteristics.

The *answering role*:

- is characterized by the following phrase: The "answering" role stresses the assumption that the control process, by using pre-set standards, formulae and rules, can evaluate performance variances by itself; act as an automatic mechanism for providing answers (Earl and Hopwood, 1979; Simons, 1995). Applying this phrase, the key characteristic is to diagnose performance variances (compare actual and budgeted performance),
- is expected to relate to the businesslike context of organizational control,
- is expected to relate to relatively high levels of task routines.

The *learning role*:

- is characterized by the following phrase: It is the function of the "learning" role to assist decision making and to reduce ex-ante uncertainty (Burchell e.a., 1980; Earl and Hopwood, 1979). Applying this role, managers or politicians use the control systems for decision support, using a trial-and-error approach. With this trial-and-error approach the focus is on learning to achieve desirable outputs. But if the ability to measure outputs is low, output control is not feasible and only informal controls (such as clan control) can be applied (Ouchi, 1979). Applying this phrase, the key characteristics are: to learn and to change ways of doing, and unequivocal signaling of what is important (focus on key issues);
- is expected to relate to the businesslike context of organizational control,
- is expected to relate to relatively low levels of task routines.

The *ammunition role*:

- is characterized by the following phrase: It is the function of the “ammunition” role to make specific information visible in order to promote particular interested positions and values to obtain resources (Burchell e.a., 1980). By applying this role, top managers and politicians are using political processes and political control. Control is here in essence non-cybernetic and is applied more via a control structure than a control process (Hofstede, 1978). Top managers and politicians are using the “ammunition” role to try to influence decision making, and to obtain resources to be spent. Applying this phrase, the key characteristics are: unequivocal signaling of what is important (focus on key issues), and influencing future budget increases;
- is expected to relate to the political context of organizational control,
- is expected to relate to relatively high levels of task routines.

The *rationalization role*:

- is characterized by the following phrase: It is the function of the “rationalization role” to provide retro-active understanding of actions, specifically to external constituencies. By applying this role, top managers and politicians are using performance measures for the need to justify and legitimize actions already taken. Applying this phrase, the key characteristic is: to report on past performances for reasons of justification,
- is expected to relate to the political context of organizational control,
- is expected to relate to relative low levels of task routines.

### Measuring BPM use

In order to capture the information-related aspects of budget roles, BPM use is characterized by the design characteristics and the quality of the AIS (Anthony, 1988). Aiming to include budget-related design characteristics of AIS in governmental organizations, both the short-term<sup>31</sup> financial and non-financial information must be included (Van Helden and Ter Bogt, 2001; Merchant and Van der Stede, 2003). The first design characteristic thus captures the use of financial or non-financial information.

Secondly, the time horizon of information is included; the historical or future orientation of the information. Accounting information on past and actual performances is viewed as historical, and information relating to estimates, forecasts, and future events is classified as future oriented (e.g. Kaplan and Norton, 1996).

Thirdly, often formal information for organizational control purposes is not exclusively restricted to budget related information. Often additional formal information is used for planning, communication, and evaluation purposes (Simons, 2000). Additional formal information is included as a design characteristic.

In conclusion, four general information-related characteristics of budget control are included: (I) financial or non-financial pre-defined quantitative norms (budget), (II) information on actual accomplishments (actual), (III) variance information between

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<sup>31</sup> The planning horizon of cost budgets in governmental organizations is on average one year (Ter Bogt, 2001). The planning horizons of capital spending budgets are assumed to vary with the length of capital spending-project.

actual and budget, (IV) additive information (on past performances, estimates, forecasts, and future events).

The four archetypical roles are assumed to relate to specific design characteristics of BPM-use. Using the descriptive phrases as indications, some suggestions can be made. The answering role stresses the use of variance information, using actual and budgeted performance measures as a reference. The learning role underlines the importance of additional information, using actual and budgeted performance measures, and information on performance variance as a reference. The ammunition role focuses on influencing decision makers to obtain future budget provision. However, no assumptions are made on the extent to which actual, variance or additive performance measures can be of importance. The rationalization role addresses historical information, and is expected to relate to reported measures on achieved performances. No assumptions are made on the extent to which information on budget, variance or additive performances can be relevant. Table 29 in the appendix documents a comprehensive overview.

Quality of AIS is captured by using user satisfaction as a surrogate measure.

End-user computer satisfaction (EUCS) is considered in the information system literature as a respectable and reliable measure that can assess the success of the AIS use (McHaney e.a., 1999). EUCS consists of five components: ease of use, content, accuracy, format and timeliness (Doll and Torzadeh, 1988). Table 32 in the appendix documents the twelve questions in the EUCS-test. The questions of the EUCS-test are adapted for use in a more qualitative case-based research setting within Dutch local government.

By characterizing the design criteria of AIS through the user satisfaction measure, AIS is identified by its perceived relevance for the user. It is being assumed that this user-satisfaction is positively related to the use of AIS for control purposes.

### **Overview of the research framework**

The research framework is composed using three main constructs: the antecedents of roles of BPM (being the contexts of organizational control and task uncertainty), the roles of BPM (represented by four archetypical roles), and the use of BPM (see Figure 3 on previous page).

Using existing accounting theory, the use of two separate contexts of organizational control are called for; the businesslike and the political context. These contexts are not mutually exclusive, but are expected to highlight specific aspects that are assumed to relate to both contexts. Four aspects are used to define the two contexts: uncertainty of objectives, ambiguity of objectives, integration, and tightness of budgetary control (see Table 28 in Appendix VIII Summary of Aspects). Assumed values of aspects are motivated and linked to the two contexts, but no assumptions are made on the various combinations of aspects that can occur<sup>32</sup>.

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<sup>32</sup> For example, perceived certainty of objectives or integration between objectives and BPM (as indications of a businesslike context) and higher levels of ambiguity of objectives (as an indication of a

Measures for the aspects are selected<sup>33</sup>. Uncertainty of objectives is captured by valuing goal specificity, ambiguity of objectives by using multiplicity, tight budget control by using four interrelated aspects (tolerance for deviation, detailed follow-ups, intensity of discussions, and emphasis on targets), and integration of BPM is measured by goal specificity.

Task uncertainty is captured by using routines of tasks, measuring both task analyzability as well as the number of exceptions as aspects.

		control context	
		businesslike	political
task uncertainty	low	<b>“answering” role</b> providing variance information	<b>“ammunition” role</b> promoting particular interests
	high	<b>“learning” role</b> assist decision-making	<b>“rationalizing” role</b> providing retro-active understanding

**Table 1** Positioning of the archetypical roles of budgets

Four identified roles of BPM are explicitly characterized by a descriptive phrase, and are related to the perspectives and to task uncertainty (see Table 1).

Referring to the descriptive phrases of the roles of BPM, several information-related aspects are abstracted:

- to diagnose, to compare actual and budgeted performance (answering role)
- to learn and to change ways of doing (learning role)
- unequivocal signaling what is important (learning role, ammunition role)
- influencing future budget increase (ammunition role)
- to report and explain past performances (rationalization role)

The quality of BPM use is captured by using user satisfaction (applying the user satisfaction measurement instrument of Doll and Torkadeh, 1998), which captures the aspects: ease of use, content, accuracy, format and timeliness.

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more political context of control) can occur simultaneously. Empirical information will indicate the actual mix of factors, which can suggest the presence of one or both contexts.

<sup>33</sup> see Table 28 in the Appendix.



### 3. Research Design

*This chapter documents the plan made to collect data to answer the research questions.*

#### ***Using the research framework***

The research framework can be seen as a fairly open framework of some specific and some generally defined theoretical concepts. The notion that different contexts of organizational control can influence the roles of BPM is used as the starting point for this exploration. This notion must be regarded as a suggestion in order to “*explicate social reality and challenge technocratic wisdom*” (Earl and Hopwood, 1979, p.11). In line with this, this study does not reject the traditional, rational view of using budgetary control, but aims to include the possible influences of both the businesslike rationale as well as the more political rationale on the different roles of BPM.

The relationship between the possible different contexts of BPM and the actual applied roles has as yet been only limitedly researched. Only fragmentary research is currently available, especially on the roles of BPM use in governmental organizations. Usable theory and related hypothesis on the relationship between BPM roles, their assumed context, and possible performance information use appears to be sparse. More insight and knowledge is needed in order to replace suggestions with assumptions. Consequently this study is mostly concerned with exploring and refining existing theory, not with quantitative testing of predefined hypothesis. A contribution to quantitatively-testable assumptions is seen as one of the desirable results of this study.

With the focus on exploration, the production of a high level of statistical generalization is not put at a premium. External validity is therefore mainly approached analytically, which involves an assessment of the extent to which a particular set of research results generalizes to a theory (Brownell, 1995).

Case study research is seen as a suitable methodical choice. Case study is described by Yin (1994, p13) as “*an empirical enquiry that investigates a contemporary phenomenon within its real-life context, especially when the boundaries between the phenomenon and its context are not clearly evident*”.

In analyzing the four archetypical roles of BPM, a minimum of four cases are used in this study. The four cases are intended to produce theoretical replications, using the research framework (see paragraph “Building a research framework”) to produce four different results for predictable reasons (Yin, 1994). In order to produce four contrasting results, case selection aims to include contrasting values of measurable aspects. Research validity is enhanced by checking for pre-defined contextual factors. An open mind is kept on these contextual factors during the research; cases can produce conflicting theory, and initial propositions can be re-evaluated.



Construct and internal validity and reliability are further strengthened by using Yin's (1994) guidelines. In order to improve construct validity, both documents and interviews are used as sources of evidence. Also, with the aim of analyzing the use of "vertical" information flows, both superiors and subordinates are interviewed, about the same unit of analysis. Interviews are held in a semi-structured way. The interviews are guided by the use of case protocols. Experts (such as management consultants, academics, and municipal managers) are involved to calibrate questions to local needs, and key informants are approached to review drafts of the case study reports.

Detailed case study protocols are used. A case protocol contains an overview of the project, the field procedures, the case questions, and a guide for the case study report. The protocol is the main instrument to maximize the reliability of case study research (Yin, 1994). The protocol contains checklists of desirable procedures, semi-structured questionnaires and open questions. These can be adjusted during the project when relevant variations occur.

The focal point of this study is the way BPM is being used to control subordinate management in governmental organizations, with an initial focus on the top of the organization. The main unit of analysis is therefore the control relationship of politicians with top managers (the top civil managers). In order to include more possible contextual details in the exploration, the next lower organizational level is also included in the case study. The embedded unit level of analysis is therefore the control relation of top management with middle management (next level management).

This embedded multiple case study method is chosen to recognize possible refinements of the research framework and to make it more compelling and robust. Embedding is seen as a necessary design choice to "*prevent that the entire nature of the case shifts during the course of the study*" and to use it as an "*important device for focusing a case study inquiry*" (Yin, 1994, p. 51).

The embedded analysis is undertaken with a view towards supporting the analysis conducted at the more aggregated level. Embedded analysis will therefore result in aggregated measures on the main level of analysis. The rationale for this embedded design is the access it can give to multiple data gathering (Brownell, 1995). Semi-structured interviews (using both structured and open questions as predefined questionnaires) and desk research (to serve a role of convergent validation of other data) are used as sources of evidence. Interviews are recorded, and interview reports are confirmed by interviewees.

### ***Selection of cases***

In order to select appropriate cases, a two-step approach is taken. The purpose of the first step is to select those organizational activities for which the roles of the budget are expected to vary the most. The second step is aimed at selection of the most suitable organization(s) for case research.

## **Selection of organizational activities**

The first step in the selection process is the selection of a minimum of four different (groups of) organizational activities that are assumed to relate closely to the four different roles of budget use.

Dutch municipalities use different structures for grouping organizational tasks. Concentrating on structures that are used for defining organizational objectives, three different types of groups are mainly used: program-, product-, and function-related groups. Many municipalities have recently presented integrated outcome-related program budgets to define and refine their political objectives. These programs are often focused on issues which are frequently thought to be interrelated by the local population. Programs can focus, for example, on safety, culture, education, or the local economy. Product structures are in general used to determine the more operational objectives, targets and performances. Product structures often relate to the specific organizational structure, to responsibility centers within the organization, and to specific product managers. The last structure is the organizational function, and consists of pre-defined groups of products. The organizational functions are mandated by central government and applied by all municipalities, in order to facilitate processes of accountability to society and central government, for example, and of inter-organizational benchmarks<sup>34</sup>.

As a consequence of this mandated use, organizational activities in principle cover all organizational functions and are comparable between different municipal organizations. This study therefore uses the structure of organizational functions to select relevant organizational groups of tasks. A listing of organizational functions has been obtained by using the national standard formats for annual reports and budgets for local government (the so called "BBV-format"<sup>34</sup>).

However, the organizational functions can be heterogeneous; they can contain many different types of activities or tasks (with for example different level of routineness of tasks) and can relate to multiple types of objectives (with possible different levels of uncertainty). During the selection process extra attention is paid to identify these possible heterogeneities.

For the selection process, interviews were held with 11 senior managers from various large Dutch municipalities (circa 100,000 inhabitants or more). A specially prepared selection protocol<sup>35</sup> was used, containing several semi-structured questions. The main purpose of the interviews was to identify groups of activities that are assumed to relate to the four archetypal roles. Applying the previously defined research framework, the selection process mainly collected information on uncertainty and ambiguity of objectives and on task uncertainty. The interviews were also used to identify alternative suggestions, insights and practices that could be of importance in conducting the case research later on.

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<sup>34</sup> As a result of the Budget and Accountability Act for provinces and municipalities, in Dutch "Besluit Begroting en Verantwoording provincies en gemeenten" or BBV.

<sup>35</sup> Available on request.

During the interviews, a checklist of organizational functions was used. This list was mainly used by the interviewer, and contained a number of pre-selected functions expected to be mentioned by the interviewees. This list was not limiting and during the interviews functions could be added to it. Interviews lasted approximately one hour, were recorded, and summarized reports of the interviews were communicated to the interviewees.

Interviews were held at the municipalities of Schiedam, Alkmaar, Emmen, Zwolle, Dordrecht, Hengelo, Zoetermeer, Helmond, Apeldoorn, Leeuwarden, and Tilburg. Almost all of the interviews were held solely with the general manager, in some cases the concern controller participated.

The interviews revealed some general observations.

Firstly, all municipalities seem to organize the planning and control process in similar ways. Annually updated medium-term plans (often with a planning horizon of five years) are used to document the objectives, and programs and products are used to structure the objectives. Bi-annual management reports and annual reports are used to inform politicians and other stakeholders. The objectives and desirable performances are described in the medium term plans, in the yearly budget, and in more detail in operational planning documents.

Secondly, the process of setting objectives is generally perceived as being relatively easy. Setting objectives is often a minor concern and given limited effort. Large municipalities (belonging to the group of the 26 largest municipalities in the Netherlands) are also involved in a more mandatory and centrally-coordinated process of setting objectives. This process is part of a national program to allocate special funds to main cities. Discussions become more intense only when specific political issues are highlighted during the process of objective setting, can.

Thirdly, setting clear and measurable objectives for all policy fields or political programs is not always seen as realistic. Objectives can sometimes be vague and difficult to achieve, caused by the heterogeneity and diversity of the underlying activities. The need to make the objectives more specific and realizable is often perceived as a long term improvement process, not as an issue that needs urgent attention. Apparently-unrealizable or not fully-realizable objectives are not always adjusted. This happens for instance when external factors are perceived as the main cause of the failure to achieve.

To recognize the more political perspective of control, ambiguity of objectives is used in the selection phase as a key selection criterion, and is captured by the more externally-oriented aspect of multiplicity. Differences in multiplicity are captured by recording the conflicts over setting and using organizational objectives, as perceived by the interviewees. Managers were asked to name a number of functions considered to relate the most and the least to the conflicting pressures of stakeholders. Interviewees were not asked to evaluate all the functions on the BBV-list, but to name a minimum of four functions (two related to limited conflict and two related to relatively high levels of conflict). A list was made by collecting the scores of the eleven interviewees,

and functions were grouped by the number of times they were named relative to high or low levels of conflict.

Interviewees indicated that the levels of conflict of functions, or parts of functions, differed significantly in their organization. Discussing multiplicity, and the level of dispute that is assumed to be associated with it, it appeared to be easier to name functions associated with high levels of dispute rather than with low levels. High levels seem on average to be associated with changes in political priorities, often by changes in political programs. Significant external uncertainties were recalled, especially uncertainties related to obtaining funds from central government or to national economic trends that can interfere with local social and economical objectives. Activities that involved intensive consultations and negotiations with citizens and businesses were also mentioned.

Analyzing the results of the interviews, perceptions about multiplicity vary considerably between organizations. A number of organizational functions score four or more times on high multiplicity: such as spatial planning (7), housing (6), and public safety (4). The scores for low level of conflicts were less obvious, and contained functions such as: sports, sewerage, and public libraries (see Table 30 in the appendix).

Analyzing the variation in the level of routineness, the observations seem to vary less than those related to multiplicity. Interviewees revealed little difference in the perceived level of routineness between different functions. The routineness of almost all organizational functions was perceived as relatively high. When the routineness of organizational functions appeared to be lower, interviewees explained that this was only a temporary situation. It was suggested that functions were temporarily less routine, due to changes in the organization's structure or organizational processes. Interviewees expected that when these changes were implemented, processes or functions would become more standardized and controlled by procedures. In general, top managers of municipalities seem to prefer high levels of routineness of tasks. When analyzing the results of the interviews, it was taken into account that differences in the level of routineness are less-explicitly articulated. A number of functions can be seen to have relatively high levels of routineness (for example: welfare payment and sewerage), and consequently low levels of routineness (for example spatial planning). Table 31 in the appendix contains the complete list of the named organizational functions.

Combining the two analyses, a set of four (partial) functions were selected for this study. A choice for combination of 'businesslike context and low task uncertainty' and 'political context and high task uncertainty' appeared to be quite straightforward. The interviews pointed to Sewerage and Spatial planning<sup>36</sup> as reasonably clear examples of these two positions. But the interviews resulted in far less straightforward results for the other diagonal of the framework. Welfare Payment<sup>37</sup> was eventually selected as a function that relates to a 'political context and low task uncertainty', but the inter-

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<sup>36</sup> In Dutch: "Riolering en Ruimtelijk beleid".

<sup>37</sup> In Dutch: "Bijstandsverlening".

views also suggested that aspects of a ‘businesslike context’ could be of some importance too. The selection of the last organizational function could not be made by referring to interviews only. Additional consultation with experts in this field was used to resolve this issue. Economic Policy<sup>38</sup> was eventually selected as an example of a function that is related to a businesslike context and low task uncertainty, because it is involved with the function of industry and small business policy.

Table 2 summarizes the four selected functions in relation to the control contexts and the level of task uncertainty.

	<b>Businesslike context</b>	<b>Political context</b>
<b>Low level of task uncertainty</b>	<b>Sewerage</b>	<b>Welfare Payments</b>
<b>High level of task uncertainty</b>	<b>Economic Policy</b>	<b>Spatial Planning</b>

**Table 2** Selected functions

### **Selection of organization(s)**

Four considerations were used in the selecting of an organization: the main purpose of the cases, the organizational size, the variety of organizational functions, and factors to control for.

The desired result of this study is to identify testable hypotheses on the causal relations between relevant dimensions and factors, not to test them. Consequently, this study is not primarily concerned with the reliability of measuring variables, but more with the elimination of errors and biases (Brownell, 1995). Explanation building is used to compare the theory with the case findings and “*revising the propositions to accommodate these data and then re-examining the case evidence from the perspective of this new proposition*” (Brownell, 1995, p. 64).

The number of organizations could be small because the case study is not relying on statistical but on analytical generalization (Yin, 1994). The selection of cases within one organization could even be preferable. Limiting the research to one single organization could eliminate the number of control factors that would otherwise be required to check for organizational differences. The obvious drawback to restricted external validity is the limited use of an objective and replicable selection-process. The limited check on factors that are not directly included in the research framework, but which can significantly influence the analysis, is also a factor.

Organizational size is another relevant factor (e.g. Otley, 1994, Merchant, 1998). Not only is an increase in size assumed to relate positively to the use of formal controls but larger organizations also need to institute controls such as documentation, spe-

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<sup>38</sup> In Dutch: “Economisch beleid”.

cialization of roles and functions, extended hierarchies and greater decentralization down hierarchical structures (Chenhall, 2003).

This study analyzes the use of formal controls in a hierarchical setting; consequently, it is preferable that the selected organization is not too small. The embedded level of analysis imposes another restriction on the size of the organization. The cases aim to capture different roles of budgets and include three different hierarchical levels (between politicians and top managers and between top managers and lower level management). These three hierarchical levels must be directly related, and preferably able to capture possible conflicts in values or interest. These conflicts are in general expected to occur between politicians and top management or between top management and professionals. (Brignall and Modell, 2000). Consequently, the preferred organizational size ought to facilitate an embedded level of analysis between top management and professionals. This restriction excludes very large organizations with multiple management levels.

After consulting Dutch local government experts (both academics and consultants), the preferred organizational size was found to be a municipality with around 100,000 inhabitants or more. This selection criterion eliminates relatively small organizations.

The variety of organizational functions is another selection criterion. The selected organization must, at least potentially, provide services or products matching the aspects which are the subject of this study. Insiders on BBV indicate that municipalities with around 100,000 inhabitants or more differ little in the number and complexity of organizational functions. Therefore variety in function is not included as an extra selection criterion.

The validity of research can be improved by including relevant control factors in the selection process. Contingency literature on management accounting indicates that, amongst other things, environment, technology, size, structure and strategy are relevant factors which can influence the effectiveness of management control (Chenhall, 2003). Differences in these contextual variables are expected to influence the design and the use of the management control system.

Both environment and technology are explicitly integrated in the research framework. Ambiguity of objectives is used as an environmental aspect. An indication for ambiguous or uncertain objectives is derived by using multiplicity as a factor that can articulate the presence of possible conflicting or disputed organizational objectives. Clearness of objectives is a more direct measure of unambiguous objectives, and is used during execution of the cases.

Technology has many meanings in management accounting literature, and can be identified as: complexity, task uncertainty and interdependence (Chenhall, 2003). This study uses routineness of tasks as a substitute for task uncertainty.

Size is already accounted for, which leaves organizational structure and strategy as two important contextual factors to be addressed.

Management accounting literature offers many definitions of organizational structure. Accounting systems are often seen as part of this, and are often investigational as-

pects of centralized or decentralized decision-making in organizations (Chapman, 1997). This study aims to check for differences in organizational structure by addressing this aspect in the selection process.

Decentralization is multi-dimensional by nature, and can be measured in various ways. A general way to characterize decentralization is to differentiate the mechanisms for decentralizing general management decisions, i.e. by differentiating between the use of the functional, divisional, or holding company model (Galbraith, 1994). A more instrumental way to measure decentralization is to measure the relative use of profit, production and cost centers by the next management level (Christie, 2003). This study uses the existence of cost centers at operational level as an indication of a decentralized organizational structure.

Strategy is a concept that is mainly constructed and analyzed within the setting of profit organizations, and is regarded as ill-defined within a governmental organizational context. Transporting this profit-oriented concept of strategy into the governmental environment requires specific in-depth research, which is outside the scope of this study. Therefore, organizational strategy is not included in this study.

However, in order to recognize possible strategy-related factors, some aspects are included in this research. Strategy of profit organizations is often seen as a concept that shows the organizational strategic preferences and focuses, for example on cost control or on product innovation, that are expected to deliver desirable financial “bottom line” objectives (e.g. Miles and Snow, 1978; Simons, 1990). Governmental organizations, however, lack this “bottom line”. The organizational emphasis is often on financial and non-financial performances, on financial budgets and social performances. Aiming to document possible differences, this study researches financial and non-financial performances separately.

In researching organizational control, the possible impact of organizational change must also be considered, at least to some extent. Organizations can develop gradually within a relatively stable environment, or can be involved in sudden and specific changes, and changes in, for example, organizational strategy, organizational size, or organizational structure can influence the design and use of AIS (see for example Shortell and Zajac, 1990).

Recent changes in organizational size (inhabitants and number of civil servants) and organizational structure (i.e. change of the AIS) are measured per municipality<sup>39</sup>. Desk-research and archival data were used for collecting information, and telephone interviews were conducted when data had to be checked or added.

After applying the above-documented selection criteria, and because they were willing to participate, the municipality of Leeuwarden was chosen as a suitable organization within which to conduct the empirical research.

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<sup>39</sup> See Table 33 in the appendix.

## 4. Four Case Studies

*This chapter contains reports on the four case studies. These case studies were made within one Dutch municipality, and relate to four different functional groups: Welfare Payment, Sewerage, Economic Policy, and Spatial Planning. The chapter begins with a brief introduction to the case studies and an overview of planning and control in the municipality. The rest of this chapter contains the four individual case study reports.*

### **Introduction**

The municipality of Leeuwarden is the subject of research. The city is situated in the northern part of The Netherlands, and is the capital of the province Fryslân. Important criteria for selecting this municipality were, amongst others: its size (the town has around 100,000 inhabitants), its relatively stable organizational structure in the recent past (e.g. no recent mergers with other local governmental organizations, no recent large scale re-organizations), and its history of gradual development of planning and control systems.

Prior to the start of the four case studies, some intake interviews were held with the civil chief executive and the controller of the municipality. The purpose of these interviews was to collect information about the four selected functional groups, and to compare this information with the findings of the selection phase<sup>40</sup>. In general, the interviews confirmed the findings of the selection process. No clear indications of ill-selected cases or organization surfaced at the start of the case studies.

The focus of the research is on the use of performance measures for management control, and therefore on the design and use of planning and control and the use of performance information within the municipal organization. The planning and control instruments, the planning and control process, and the budget process are thus the objects of the study.

Due to the descriptive and exploratory nature of this research, its aim is to embrace a wide range of items that relate to the use of performance measures. Central to this process of collecting, documenting, and analyzing information is the research protocol<sup>41</sup> (see previous chapter). This protocol contains the processes to be followed, the activities to be performed, the rules to be followed, and the questions to be asked. The protocol is more than a guideline, it defines specific rules that must be respected, and specific information that must be gathered. It also leaves room for the researcher to address additional issues and to ask for complementary or supplementary information. Information is gathered by desk research and interviews. Draft versions of the interview reports were communicated to the interviewees. The case

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<sup>40</sup> During these interviews the checklist, previously used to select organizational functions, was applied.

<sup>41</sup> Case study protocol is available on request.



study reports were based on the final interview reports, and were discussed with the involved persons (for an overview of the interviewed persons see Appendix III Interviewed persons).

The four case studies were sequentially executed and reported. When relevant or useful, additional observations were included during the research. Beforehand it was assumed that aspects could differ significantly per case study. Each case study therefore documents the specific context of the researched aspects. To enhance the comparability between different case studies, they are reported in a uniform format. Although this format means there is some repetition, due to common ground within each case study, there is still the flexibility to document specific items.

The main stands of the four case study reports are therefore comparable. Each case starts with a report of the most relevant strategic objectives, a summary of the legal and organizational context of the researched group of activities, and a brief description of the relevant planning and control documents. The use of performance related information is then documented from three different organizational perspectives; from the viewpoint of the aldermen, the director (civil servant), and the operational manager. Each case study ends with a documentation of the aspects as defined by the researched framework.

The next section introduces the planning and control instruments used by the municipality. Subsequently, the four cases are presented.

## Planning and control at an organizational level

The researched municipality (Leeuwarden) uses a planning and control approach for formulating and evaluating its strategic objectives and for controlling the execution of these objectives. Central to this approach is the use of various predefined planning and control instruments. These instruments can be classified in two groups: once or occasionally drawn up instruments (often future-oriented with a time horizon of more than one year) and instruments produced within the annual planning and control cycle.

Most of the municipal policies and strategic objectives have a multi-year horizon, and many instruments of strategic planning are produced outside the annual planning and control cycle. A few typical examples are:

- The Executive Program 2002-2006, determined by the executive board (made up of the mayor and aldermen), in which the municipal council of Leeuwarden (abbreviated as Council) outlines its vision and strategic priorities for the coming years.
- The “City Vision 2002”<sup>42</sup>, set by the Council, which contains strategic concepts relating to living in the city and to the accessibility of the city.
- The “Regional Vision”<sup>43</sup>, set by the province of Fryslân, with reference to the researched Council and the local water board, concerns general themes such as strengthening the position of the city in relation to surrounding cities (in terms of living, working, culture, health services and education).
- The City Covenant, an agreement between the Council and the province of Fryslân.
- MOP2, the second version of a long term development program, used in a “large city”<sup>44</sup> covenant between the city and central government. This covenant stimulates and finances projects related to the specific situation of the thirty largest cities in The Netherlands.
- Several policy documents and plans<sup>45</sup>.

These documents contain specific visions, policies, goals, objectives, and plans. These documents are often set up for a specific purpose and focus essentially on the aspects relevant to that purpose. Together these documents form the complex, detailed, yet not closely related and even sometimes divergent policies of the municipality.

The annual planning and control cycle is used to carry out the local government’s policies. This yearly cycle integrates the organizational policies into comprehensive organizational formats (often relating to the current or coming year), and contains all

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<sup>42</sup> In Dutch the “Stadsvisie”, titled “Sailing under own flag” (“Varen onder eigen vlag”).

<sup>43</sup> In Dutch “Regiovisie Stadsregio Leeuwarden en Westergo zone”.

<sup>44</sup> In Dutch “Grote stedenbeleid” or “GSB”.

<sup>45</sup> Such as the 2001-2004 Art and Culture policy plan, a plan for public school concentration, a plan to stimulate the local economy, a parking policy plan, and several medium term programs (e.g. infrastructural or sewer system programs).

the instruments necessary for yearly organizational planning and control. The yearly cycle in Leeuwarden is contained in the following instruments (see also Table 3).

- The Pre-Budget Report, a brief reflection on the mainly estimated financial or- ganizational policies. This report gives an insight into the boundaries for the coming years, and is used as input for program and budget setting. The dis- cussion of the Pre-budget report in the Council gives the executive board feedback on the need for, or opportunities for, policy changes.
- The Program Budget, the main budget of the municipality, documents the budgetary results for which the executive board is held accountable to the Council.
- The Sector Plan, produced by the sector manager and set by the civil execu- tives, documents the objectives and actions of the Program Budget in more detailed and operational terms.
- The Interim Report (TURAP), in which the executive board reports to the Council the progress of the activities defined in the Program Budget.
- The Quarterly Report, in which the sector managers report progress against the Sector Plan.
- The Sector Account, year end report, in which the sector managers report the realisation of the Sector Plan to the civil executives.
- The Annual Account and Report, in which the executive board gives an annual account of the realisation of the Program Budget.

organizational level	Planning		Report	
Council <--> aldermen	Pre-budget report	program budget	interim report (TURAP)	annual account and report
civil executives <--> opera- tions		sector plan	Quarterly report	sector account

**Table 3** Planning and report documents

The planning and control instruments listed are interrelated, often having a similar structure and layout, and are often similar in content. Concern Control, an organiza- tional staff group, co-ordinates the production and setting of the Pre-Budget Report, the Program Budget, the Interim Report, and the Annual Account. The production of the Sector Plan, Quarterly report, and Sector Account is mainly done by those organ- izational units directly involved in them.

The Program Budget is one of the central instruments in the yearly planning and con- trol cycle of municipalities. With the agreement of the Council on the Program Budget, the executive board is charged with realising the objectives, performances (financial and non-financial) and actions that are laid down in it. The Program Budget documents the municipal policies mainly in a summarized form. It often makes only passing reference to various related policies, and aims to integrate the various poli- cies into different programs.

Leeuwarden has recently started to use the Program Budget. The first Program Budget was for the budget year of 2004. The Program Budget 2005 was in concept comparable with the previous version, but encompassed several adjustments and developments. The Program Budget 2005 will be analyzed further.

The Program Budget 2005 defines sixteen programs, two of which are strictly financial in nature (the programs “General grants” and “Incidental expenditures”). The remaining fourteen programs are similarly structured. In all fourteen programs three questions are posed and answered. The questions are “What do we want to achieve?” (related to the objectives), “What are we going to do?” (related to the activities and non-financial performances), and “How much is it going to cost?” (related to financial performances).

Every program describes strategic goals, defined by general and main goals. The strategic goals aim to define the desired situation from a societal perspective, and do not define actions to be taken or cost to be incurred. Table 4 gives an example of the strategic goals for the “Housing” program.

<b>Program “Housing”</b>	
Strategic goals:	
<i>General goals:</i>	
A balanced, competitive housing market with sufficient .... supply of houses ....	
<i>Main goals:</i>	
<ul style="list-style-type: none"> <li>• Sufficient supply of houses....</li> <li>• A good living environment for specific target groups ...</li> <li>• Cautious use of space in urban zones</li> <li>• Multiple choice for buyers of houses</li> </ul>	

**Table 4** Examples of strategic goals (source Program Budget 2005, p. 57/60)

The objectives of each program are described, and are made measurable by attaching one or more indicators to them. Indicators often have target values; series of measures to be attained in the coming years. Table 5 gives an example of the objectives and measures in the program “Housing”, as documented in the Program Budget 2005.

<b>Objectives</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>
A New housing				
<i>Indicator: average number of newly build houses</i>	480	520	520	520
B Differentiation of sale vs. rental				
<i>Indicator: Target differentiation 85:15</i>	437:43	442:78	442:78	442:78

**Table 5** Objectives and measures (source Program Budget 2005, p. 57/60)

An overview of the current situation per program is given, and insights into the most relevant actual developments and expected consequences of each program are documented. References to important policies are also made. The planning of each program is made measurable by the documented desired performances. Table 6 gives an example of the planned performances of the “Housing” program.

Performances	2005	2006	2007	2008	2009	Effect
<i>Structural</i>						
• Project Zuiderburen	X	X	X	X	X	A/B/C/
• Project De Zuidlanden	X	X	X	X	X	E/F/H
<i>Incidental 2005</i>						A t/m H
Housing market policies and coordination						
• develop long term housing program,						
• coordination of and advice over ...housing programs						
• organizing information services						
• making governmental subsidies available						
• relation management .....						

**Table 6 Performances** (source: Program Budget 2005, p. 57/60)

Performances are often described in terms of processes to be followed combined with indications of the amount of work to be done (e.g. co-ordination of twenty housing programs). Performances mainly address the planned results or processes in general terms, and are often formulated in terms of “to perform, to restrict/ to promote”. Clusters of performances can relate to specific objectives, or can contribute to several different objectives.

Each program has its own financial budget. This financial budget refers to consolidated products<sup>46</sup>, and documents the total costs and benefits. The financial budget of a program is defined by the total cost of per program-listed products.

The Program Budget also contains many additional summaries and appendices, such as:

- a current overview of the long term development program (MOP) and the medium-term capital spending program (MIP),
- several financial sections, with overviews on the development of cost, income, financial reserves, tariffs (of several local government taxes), treasury, and organizational processes (e.g. human resource management),
- appendices, which document in detail financial changes (increases, decreases, changes, and additions), for the products as well as the capital spending projects.

Every half year the executive board presents an Interim Report<sup>47</sup> to the Council. This Interim Report is mainly a variance analysis, only explaining significant financial vari-

<sup>46</sup> Called “policy product” or in Dutch “beleidsproducten”.

<sup>47</sup> In Dutch abbreviated to TURAP.

ances between year-end estimates and budgeted values. The Interim Report 2004<sup>48</sup> did not report on the (estimated) realisation of objectives and performances.

The main structure of the Interim Report is comparable with the Program Budget, but some remarkable differences in detail appear. For example, the financial variances are explained by general ledger groups (e.g. depreciation, interest, personnel cost, expenses) instead of using the program and product structure of the Program Budget. Only general expenses are explicitly explained per program.

The Interim Report also documents progress made in the special efficiency project, contains lists of new policies to be discussed, and specifies actual discussion points and risks.

It is through the presentation of the Annual Report to the Council that the executive board accounts for the execution of the Program Budget. The Annual Report 2004 consists of an annual statement of account and an annual report. The annual statement of account is set up to conform to central government mandated guidelines<sup>49</sup>, and is mainly driven by the need to be financially accountable. The Annual Account has to be certified by external accountants. The Annual Report explains how the programs have been realized, using financial variances<sup>50</sup> as measures. Realised objectives and performances are often documented, but seldom analysed in detail. Table 7 gives an example of the way performances are documented.

Objectives	Account 2004	Budget 2004	variance
A New housing			
<i>Indicator: average number of new houses</i>	364	400	-36
B Differentiation of sale vs. rental			
<i>Indicator: Differentiation 85%:15%</i>	246:118	262:140	-14:-22

**Table 7** Performances in the annual report (source: annual report 2004, p. 77)

Realised performances are in general terms evaluated (with a plus, plus/minus, or minus). A plus (+) is used as a sign of an on average positive performance, and is not illustrated further. Explanation and illustration of achieved performances only occurs when performances are not valued positively, using a plus/minus (+/-) or a minus (-). Performances are often process and project-related indicators, and consequently the evaluation of performances mainly relates to more operational aspects. The Annual Report 2004 documents evaluations of achieved yearly performances, and of expected developments in the coming period.

The Annual Report presents no financial details and the financial variance analysis is comparable with the approach of the Interim Report. The variances are explained by groups of general ledger accounts and per program. The variance analysis in the

<sup>48</sup> The 2005 Interim Report was not available during the field research.

<sup>49</sup> In Dutch "Besluit Begroting en Verantwoording" or BBV.

<sup>50</sup> Between year-end values and budgeted values.

Annual Account reports many more financial details. Here all relevant financial variances are explained. The Annual Account also documents and explains the financial year results and the balance sheet.

The Annual Report 2004 includes a general status report on the progress of the medium-term capital spending planning (documenting main variances between planning and actual progress on year end). The Annual Report 2004 has several sections attached to it, with detailed background information and reviews of several specific projects and developments in the reporting period. Additional information is also present in the minutes of the meeting where the Annual Report is presented to the Council. The written answers of the executive board<sup>51</sup> document in much more detail some of the content and context of relevant political discussions.

In conclusion, a coherent system of planning and control instruments exists at the organizational level of the researched organization. Using a step by step approach the objectives and performances are incorporated into budgets and accounted for in reports. The main purpose of these instruments is to support the Council with the planning and evaluation of policies, objectives and performances.

The Program Budget can be regarded as a central instrument in this yearly cycle. The Program Budget provides the Council with a lot of information on objectives and performances, explains the relationships between objectives and performances, and provides financial information. As documented in the Program Budget, this instrument has only recently been developed and must be regarded as a work in progress. Areas for improvement have been announced, and in the near future some improvements will already have been addressed<sup>52</sup>. The municipality's aim is to synchronise the Program Budget with the information needs of the Council. To give an example of this aim, performances will be documented only when they are viewed as essential for the Council<sup>53</sup>.

## **Budget control**

Budget control, as officially laid down in Leeuwarden's documented internal control mechanism, relates formally to objectives, related performances, and available financial means. In practice budget control is mainly restricted to internal financial control. The internal budget guidelines mainly underline the importance of financial statements and the behavioural restrictions that are attached to budget responsibilities. Non-financial objectives and performances are not unimportant. They are present in every planning and control instrument, and top managers and controllers who were interviewed all stated the importance of realising objectives and performances. The detailed internal guidelines, however, mainly describe the rules for attaining financial obligations and spending or receiving money.

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<sup>51</sup> In Dutch: "Memorie van antwoord n.a.v. de behandeling van de Jaarstukken 2004".

<sup>52</sup> Such as: improving the relationship between goals and objectives, improving the relationship between objectives and performances, making performances more "smart" (specific, measurable, realistic, and timely).

<sup>53</sup> Source Program budget 2005, p.6.

Financial budgets relate to both cost and income (for products) as well as to cash (for capital spending), and define the expected boundaries of financial control for any year. These budgets are mandates; the executive board gives responsibility to employees to use specific resources, but the board remains ultimately responsible for all the decisions that are taken.

Budget responsibilities are attached to several organizational levels. Operational managers (heads of teams and groups) are often responsible for the direct expenditure of limited amounts, which is laid down in detail. Heads of sectors are often the formal budget managers; they account for the realisation of the budget to top management. The budgets of sector managers are laid down in products<sup>54</sup>, which relate mainly to aspects such as direct expenses, receiving grants, collecting taxes, deciding on social welfare. Rules of budget control not only relate to management control but also to internal control. A sector manager can be responsible for a budget of millions of euros, but is still obliged to ask his superior manager to sign for expenditures in excess of € 25,000,- for example.

Departmental directors are often responsible for budgets related to personnel. Departmental directors are responsible for the number of employees (in full-time equivalents), the financial budgets for employing personnel, and for budgets for temporary personnel. Directors are also accountable for budget control of lower level management to the executive board. The financial accountability of departmental directors is laid down in summary products<sup>55</sup>.

Capital spending budgets are usually assigned to specific project managers, and also use rules of management and internal control. For example, the authority to decide on tender contracts often rests with departmental directors or members of the executive board.

In summary, the municipality applies a detailed budget system, with an emphasis on financial control. Financial control is executed using pre-defined rules and guidelines, relating to budgeting, delegation of decision rights, and internal controls. As a result, budget managers have to conform to several detailed instructions. A budget manager not only has to meet budgetary limits, but s/he is also restricted in her/his decisions on liabilities. This specific and detailed behavioural control system functions at all managerial levels in the organisation; from the lowest level of team manager to the executive board. At a higher organisational level, budgets are often composed by the aggregation of more detailed products. Financial overspending on one underlying product is therefore compensated by under spending on other products. This compensation principle is applied to capital spending budgets too. Projects can be clustered in groups, and managers can be assigned to account for the budgets of a group. At this group level managers only account for consolidated budgets, and detailed variances of underlying projects are for this reason less important.

However, budgets of non-consolidated products and projects cannot be adjusted easily. Strict and detailed rules must be followed for adjusting budgets, and higher

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<sup>54</sup> in Dutch: "beheerproduct".

<sup>55</sup> in Dutch: "beleidsproduct".



level managers are always formally involved in the decision to adjust or reallocate budgets.

### **A financial survey of the municipality**

An indication of the financial position of the municipality of Leeuwarden is documented in the Program Budget 2004. On page 189 the executive board stated “*Although we are not a wealthy municipality, this crisis is manageable*”. The context of this text is the year 2003, in which the city had to cope with some recent organizational developments, the national economic downturn, and the budget reductions imposed by central government. The municipal organization was going through turbulent times. Due to political tensions the mayor and an alderman had to step down from office about 18 months earlier, and at the same time organizational effectiveness was openly criticized by the Council in the local media. This turbulent period resulted in the start-up of several action plans<sup>56</sup>.

During the making of the Program Budget 2004 most of these plans appear to have been achieved or to be in progress. In 2004 attention was shifting more to the financial situation of the municipality. The financial reserves were seen as sufficient, but the medium term forecasted budget could only balance after the addition of a restructuring program of around €5.6 million. This restructuring program demanded cost reductions in management and services (€2 million), in limiting the range of products and services to the public (€2.8 million), and an increase in tax income (€0.8 million). Compared to the total organizational budget of €342 million, these budget reductions seem to be of limited importance. However, related to the sum of local tax income of €32 million (the income that the city can generate on its own account), this restructuring can be qualified as significant (circa 18 percent).

The restructuring program is defined in line with the assumptions of the 2002-2006 Executive Program. Examples of these assumptions are:

- balanced medium term budgets,
- increase of municipal tax income, using real estate values for calculating tariffs, are limited by inflation factors and changes in the quantity of real estate,
- full cost recovery when service delivery to the public is charged with tariffs and prices,
- structural and incidental benchmarking with other municipal organisations.

The Program Budget 2005 indicates a sound financial position for the municipality. The financial reserves are strengthened (from € 3 million to € 10 million), and the restructuring program is on target and on budget. Even a budgetary capacity of €1 million is available for new initiatives. The total budget of the organization is circa €320 million. For more detail on this budget see Table 8.

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<sup>56</sup> Such as a plan to improve managerial and service processes in the organization, to increase the focus on performances: to downsize the number of employees, and to stimulate the integration of policy making and policy achievement.

	million €	%
Depreciation and interest	35.0	11
Subsidies	122.5	38
Salary costs	67.5	21
Miscellaneous expenses	95.0	30
Total	320.0	

**Table 8** Budget 2005

The budget for salary cost covers the cost of current and former personnel and politicians. The total personnel formation in 2005 is 1000 full time equivalents (fte). The different components of this formation are documented in Table 9.

	fte	%
Municipal council, executive board, registry	47.8	5
Concern staff	17.8	2
Welfare	204,4	20
City development and management	407,7	41
General affairs	253,6	25
Fire department	68,8	7
Total	1000,0	

**Table 9** Number of employees 2005 (source: Program Budget 2005, p. 148)

The following sections will present the four case studies.

## **Welfare Payment case study**

*Firstly, the context in which social Welfare Payment works will be briefly examined. Subsequently, the most relevant planning and control instruments and their embedded objectives and performance measures will be described.*

*In order to gain an impression of the use of objectives and performance measures the opinions of politicians or managers on three different organizational levels were sought: the executive board, the director, and the operational manager. Finally, the points which emerged during the research into planning and control documents will be discussed.*

### **Welfare Payment policies**

One of the main tasks performed by the Council's welfare department is the granting of social welfare payment, which serves as a safety net for people who cannot support themselves financially. The policy framework for Welfare Payment is mainly determined by the national Work and Assistance Act, which in turn dictates much of the organizational set-up and activities in this field.

The Work and Assistance Act was introduced on 1 January 2004. To prepare for this Act at the local level, the municipal council of Leeuwarden adopted a long-term policy plan. This policy framework outlined the 2005-2009 period and distinguished between work and income. Because it is not easy to evaluate policies on work and income separately, these policies are included in the Council's program budgets as one program. They form part of a chain of internal and external municipal activities. The Work and Income program is of vital importance from a financial point of view. Not only because this program has been allocated the highest budget (approx. €100 million, compared with a total 2005 budget of €430 million), but also because this program constitutes a considerable financial risk (up to €5 million a year). This financial risk is chiefly attributable to the part of the program that relates to supplying income to citizens. It is also connected to any unexpected and unforeseen increase in the number of persons entitled to welfare payment and also to other developments with regard to relevant government grants.

One of the components of the Work and Income program is called Income Provision. It includes providing welfare payment, which is done by the Social Affairs Sector. Besides providing welfare payment, this sector also focuses its attention on limiting the number of people starting to claim payment. Its organizational structure is geared to the implementation of the Work and Assistance Act, which is carried out by a large proportion of the Social Affairs Sector, including a front office, various mid-offices and back offices, and a management office. The total number of staff in this sector is equivalent to approximately 140 fte<sup>57</sup>.

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<sup>57</sup> Fte stands for full time equivalents.

Over recent years the operational tasks and the working environment of the Social Affairs Sector have changed continuously. In the words of an employee “*There is always something going on around here*”. Both internal and external initiatives have contributed to this process of continuous change. Examples of internal drivers of change are: the restructuring of work processes<sup>58</sup>, the introduction of a new process information system, the impact of an organizational development program on the sector, and the increased attention to internal control<sup>59</sup>. The sector has also had to respond to external influences, such as: the foundation of the Centre for Work and Income (CWI) and the introduction of the Work and Assistance Act. Both have had a significant impact on the tasks performed in the sector, on the coordination processes between the Social Affairs Sector and the rest of the municipal’s organization, and on the municipal’s role in the work and assistance related chain of activities. Another consequence of the Work and Assistance Act was the decentralization of responsibilities from central to local government, including some material financial risks that are attached to the provision of income for welfare purposes.

### **Planning- and control documents**

Objectives, desired effects and performance measures relating to Welfare Payment are set out in several planning and control documents, such as the Program Budget 2004 and 2005, the Sector Plan 2004 and 2005, the Annual report 2004 and the Quarterly Report of 2005.

The Work and Income program in the Program Budget 2004 includes aims that are directly related to Welfare Payment. The Income Provision section, for example, contains a description of the target for a reduction in the number of people who are dependent on Welfare Payment. The aim is to prevent financial deficits by matching the estimated Welfare Payments with the known contributions to be received from central government. The budget sets out targets for income (€58.4 million) and expenditure (€68 million), outlines developments and financial risks that are expected and are considered relevant, and lists a number of performance requirements. The deficit of income and expenditures (circa €9 million) is covered by other municipal incomes. The actual or budgeted number of persons dependant on welfare is not documented in the Program Budget 2004 as an objective, but is included in explanatory texts or is documented in attachments.

The performance requirements of the Social Affairs Sector are expressed in operational terms. They are described in terms of future activities, including the number of activities to be conducted, e.g.

- the number of new payment applications to be dealt with (2500),
- the number of current payments to be provided (4000),

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<sup>58</sup> such as: abandoning the city district structure and introducing a city wide customer oriented approach, resulting, amongst other, in a more pronounced allocation of authority between the sectors responsible for Work and Income.

<sup>59</sup> as a response to incidental cases of fraud.

- the number of debtors (2300) and accounts receivable (3000) to be managed, and
- the handling of welfare frauds (750).

The Interim Report that was presented to the Council halfway through the year 2004 does not mention any expectation that the budget for Welfare Payment will not be complied with, financially speaking.

The Annual report 2004, which was adopted in April 2005, is a complete overview showing the extent to which the budget was met. It explains developments with regard to the number of persons entitled to welfare payment and it also outlines the financial results. The overview of the number of people shows an increase of 5.6 percent in 2004. This non-financial result is compared with a comparable average national percentage of 10.4 percent. Analysis on variances on annual report versus Program Budget, or on national versus local developments is hardly documented.

Financial results are outlined. These show that additional government grants resulted in a credit balance for Income Provision. It should be noted that the annual statement of accounts is based on the adjusted 2004 budget. During that year the estimated income (€56 million) and expenditure (€65.5 million) were both adjusted downwards by approx. 2 million euros. These budget amendments were not explained in the Interim Report or in the 2004 annual statement of accounts. They were presented to the Council in budget amendment resolutions.

The Annual Report contains broad assessments of the realization of estimated performance (i.e. good, mediocre, poor), but does not include any further explanation.

The Program Budget 2005 is different from the previous program budgets in various ways. In the Income Provision section, for example, the objective (in desired effect) is quantified using an estimated increase in the number of welfare payment clients. In the budget, the zero measurement for this indicator is 4350 persons entitled to welfare payment and the desired maximum value of the 2005 increase is set at 6% (see Table 10).

Objectives Welfare Payment	Reference	2005	2006	2007	2008
D Increase in number of Welfare Payment clients	4.350	6%	3%	1%	
<i>Indicator: Increase in number of clients</i>					

**Table 10** Objectives of Welfare Payment 2005 (source: Program Budget 2005, p. 52)

With regards to financial frameworks for Income Provision, the budget also outlines financial risks to which the municipality might be exposed, e.g. expected developments with regard to government grants. Total 2005 costs of Welfare Payment are budgeted at €68 million, income (grants) at €59 million, resulting in a deficit of circa €9 million (see Table 11). This deficit is comparable with the 2004 budget, and is compensated by other income.

<b>2005</b>	<b>cost</b>	<b>income</b>	<b>results</b>
<i>(*€1000)</i>			
Labor market and social integration	27.819	-23.734	4.086
<b>Welfare Payment</b>	<b>68.136</b>	<b>-59.175</b>	<b>8.691</b>
Poverty reduction	4.565	-0.229	4.336
Childcare	0.367	0.00	0.367
<i>Total</i>	<i>100.886</i>	<i>-83.459</i>	<i>17.749</i>

**Table 11** Costs Work and income program (source: Program Budget 2005, p. 55)

The list of performance requirements (in terms of operational activities to be conducted) is largely comparable to the list mentioned in the previous budget. Examples from this list are:

- number of new welfare requests (2.500),
- handling of concurrent clients (4.500),
- timely, error free, and legal justified payments,
- debit control on (formal) clients (5.600),
- processing of fraud reports (750) and fraud records (95),
- performing a single audit.

In the Social Affairs Sector Plan for a particular year, ambitions from the Program Budget are translated into tasks to be performed by the sector in that year. As far as Income Provision is concerned, the Sector Plan 2004 contains a lot of performance requirements that are expressed in general terms, such as promoting client participation, developing new policies and regulations. The Sector Plan 2004 also describes action points relating to management, i.e. performance interviews, sickness absence, mobility and job vacancies, education and training, and the like. In addition, the plan sets out applicable financial budgets, reports, administrative and organizational points for attention, and also pinpoints consultation opportunities.

The Sector Plan 2005 can be seen as a further elaboration of the Sector Plan 2004. It is strongly emphasized that team leaders should be involved. Relating to the handling of 2,500 new welfare requests, for example, several activities are described in more detail (intake, research, reporting, auditing, assigning, administration and archiving). In addition, the Sector Plan contains a lot of technical definitions, such as descriptions of measurement instruments that will be used to measure effects and indicators<sup>60</sup>. The Sector Plan makes no mention of objectives (desired effects) for 2005, and consequently no related performance requirements are translated for the sector. The causal relationship between objectives and performance requirements is not specified in more detail in the Sector Plan.

Furthermore, the Sector Plan includes a description of performance relating to client orientation and quality of services, and contains additional information on various

<sup>60</sup> for example, the indicator "increase in number of clients" is defined by: the source of information (the name of the information system), the frequency of reporting, the organizational level of reporting (sector), and the work list of actions (adjusting the report format).

aspects of management. The Sector Plan also contains an outline of relevant capital spending projects, a risk section, and a list of various reports that have to be compiled throughout the year. These are drawn up for the management, the municipal executive board, the Council members, several ministries, the Agency for the Reception of Asylum Seekers, the Central Bureau of Statistics, and other sectors.

The Quarterly Report for the first three months of 2005 outlines to what extent the desired effects, based on the Program Budget 2005, and the desired performance based on the Sector Plan 2005, have been realized. This Quarterly report is based on the Sector Plan. The report contains quantitative information to clarify the realization of aims as well as to explain the sector's performance. Team leaders as well as the sector manager use the Quarterly Report as an instrument for rendering account, namely to the sector manager and the department manager respectively.

The Quarterly Reports mainly report on the current situation in the sector, but present no analysis of the current developments. Unfavourable developments in the number of clients, for example, are accounted for, but the possible consequences of this increase on the financial budget or the internal processes are not explained. Financial budgets are accounted for at a consolidated budget level, but provide no insight into the budget use of underlying products.

## Use of objectives and performance measures

The use of objectives and performance measures is analyzed in two ways. An impression of their use is documented on three different organizational levels (aldermen, civil director, and operational manager). The most relevant aspects arising from this analysis are discussed.

### Aldermen

The Alderman found objective setting and performance measurement important. Upon request, the essence of the current organizational objectives could be recalled (the development in the number of persons entitled to welfare payment) but he could not quote the objective in precise terms (maximum increase of 6 percent in 2005). Also the performance measurements were explained during the interview (such as the importance of a timely and accurate process of handling new payment applications and fraud charges).

The alderman perceived objectives relating to Welfare Payment as reasonably clear, for both himself and the managers concerned. As he expressed it: "*they can be put to good use*".

The alderman said that he was kept up to speed about various important operational and process issues within Welfare Payment through a two-weekly meeting with operational level managers. The alderman seemed to see objectives as aims or estimations. Apparently, the scope for policymaking left by legislation (an effect of legislation) and political discussions determined what objectives would be used. In his own words: "*The Council can set objectives only to the extent that the law enables it to choose different policies*".

The alderman indicated that the perception of the objectives was less clear to the elected members of the Council, this notwithstanding the financial importance of Welfare Payment<sup>61</sup>. He explained that the Council discussed financial and non-financial objectives in different Council committees. The non-financial objectives, being more relevant to the political and social issues of Welfare Payment<sup>62</sup>, were discussed in the Welfare committee of the Council several times. The financial aspects of Welfare were assessed in the regular annual planning and control documents, such as the Program Budget and the Interim Report. This process sometimes led to a somewhat disconnected discussion of financial and non-financial objectives, in the sense that financial implications of change on non-financial objectives were not always made apparent. The alderman illustrated this point with an example. The Council's policy on Welfare was reductive: the number of subsidized jobs was to be downsized and special welfare minimized. As a result of this restrictive policy, people were losing their subsidized jobs and becoming entitled to welfare. This was thus counterproduc-

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<sup>61</sup> The financial budget of Welfare payment consumed in 2005 circa 65 percent of the Work and Income program budget, and made up 20 percent of the total cost of the council.

<sup>62</sup> Examples of political issues were, amongst other, the provision of special welfare and of by the council subsidized jobs.



tive in terms of achieving Welfare Payment's objective of minimizing the increase in welfare payment.

The alderman underlined the uncertainty about central government's financial contribution to local welfare payment. Downwards adjustments of these financial contributions did not only cause financial problems but also led to the idea of adjustment of social and political policies. Discussing financial and non-financial implications in different Council committees resulted in a diminished clarity of objectives for most of the Council members.

Desk research gave additional insights into the use of this information by the elected members of the Council. The Welfare committee received two reports per year (named "monitor WBB"), which account for progress in the past period in detail. The committee also received copies of special reports made to inform central government of the implementation of the Work and Assistance Act. These reports reported on the progress of non-financial performances, for example on the actual development of: unemployment, available jobs, reintegration processes, subsidized jobs, poverty, and fraud. Information on financial performances was not included.

All elected Council members received reports on financial progress. These financial reports form part of the Program Budget and the Annual Report, and contain limited detail on the financial situation of Welfare Payment. For example, the Program Budget 2005 announced an expected financial deficit of € 9 million, but did not explain in simple terms how this deficit was caused or covered. The Annual Report only documented a higher than expected financial contribution by central government, and a donation to financial reserve accounts due to a surplus on Welfare, but gave little explanation of the reasons for this. Only financial surpluses or deficits were to some extent documented.

The Council's interest in variances rather than total budgets was also observed in relation to non-financial objectives. Planning and control documents highlighted two main groups of non-financial objectives: results-oriented objectives (for the number of people entitled to welfare), and process-oriented objectives (amongst others for controlling the legitimacy of welfare payment). The results-oriented objectives appeared to be used inconsistently.

The Program Budget 2004 and the corresponding Annual Report 2004, and the Program Budget 2005 and the corresponding Sector Plan 2005 and Quarterly Report 2005, used different numbers to compute the results-oriented objective, but appeared to be consistent as regards the expected change of objectives<sup>63</sup>. This underlined the notion of the Council's main interest being in objectives changes, and its lesser focus on the actual results.

The Council was also informed about process-related objectives and performances, such as achievements in compliance with legally set transaction terms, or a compari-

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<sup>63</sup> For example, the Program Budget 2005 objective on Welfare payment was a maximum increase of 6 percent, and referred to 4350 persons, resulting in a maximum of 4611 persons ( $1.06 * 4350$ ) on year-end 2005. This Program Budget contained explanatory text, mentioning a reference number of 4500 persons and a year-end number of 4800. The quarterly Report 2005-I however mentioned a reference number of 4250 and a 2005 yearend objective of 4509 ( $1.06 * 4250$ ).

son of the effectiveness of operations between comparable cities (by participation in inter-organizational benchmarking projects). Unfavorable changes in performance, for example an increase in the number of appeals granted to citizens on Council decisions, were used to critically question the organization.

The alderman indicated that it is not easy to set objectives in relation to the Work and Assistance Act. He stressed that the Council can hardly influence employment and unemployment trends. The interviewee stressed the importance of the active application of the economic policies of the Council, but added that the Council had scant economic influence on the decisions of large businesses operating nationally and internationally. The Council's influence on trends in Welfare Payment was therefore seen as limited. The total number of people entitled to welfare was also explained from a more historic perspective. In the recent past the Council was faced by relatively high levels of unemployment. This level now conformed somewhat more closely to national employments statistics. Although in the last 10 years this high level of unemployment had decreased considerably, it still remained high compared to the average national unemployment rates.

The alderman explained the use of these types of objectives and statistics by politicians. He explained that objectives can be used in different ways. In his own words: *"If objectives are not achieved, the objectives were too ambitious, if the objectives are achieved, the Council performs excellently"*.

He expressed the opinion that politicians did not use objectives and performances in order to prioritize. Priorities were mainly driven by actual developments.

Despite the limited role objectives played at this political level, clear objectives were considered to be important. Clear objectives were considered a good means of improving communication.

The alderman added: *"objectives can lodge themselves in the Council's collective memory"*.

#### Civil Director

The next level at which the use of objectives and performance measures was discussed was that of the civil director, who is a professional manager. The civil director stated that objective setting and achievement and performance measurement for the Welfare Payment area were seen as important in controlling the organization. They were seen to be supportive of the Council's targets, by detailing specific tasks that needed to be carried out. She stated that this process not only supported the collection of specific information (such as information needed for adjusting policies or informing politicians), but also made actual trends visible and analyzable. The use of a performance indicator for the percentage of youngsters dependent on welfare was used as an example. This performance indicator was used to analyze whether the process of reintegration was working as expected, or whether other aspects influenced the trend.

According to the director, these trends provided insight into the effectiveness of achieving organizational objectives. She illustrated the use of these trends. The

trends were discussed in regularly held departmental management meetings of the director and sector heads. The agenda for these meetings often included progress on performances, and discussions on more organizational process related performances (related to, for example, sickness leave, work load, case load of employees). The focus in these meetings was on factors that could be influenced by the department, and often included current developments in both the Social Affairs Sector and the Work and Income Sector. The sector managers used detailed information on current developments to be able to quickly identify signs of developments that required them to take supplementary measures. According to the director, objectives and performances are not used for prioritizing operational tasks: priorities in operations were more mandated by actual developments than by pre-set objectives.

The director stressed that the municipal organization cannot control the entire process of achieving the objectives of Welfare Payment. It was argued that the Council cannot set objectives for which it is solely responsible because, in the Netherlands, several parties are jointly responsible for Welfare Payment. She stressed that the municipality was doing its utmost to steer the parties involved (the chain partners) in the right direction. But if its efforts did not have the desired effect, the municipality would have to bear the financial risks and take the consequences of the policies pursued. The director considered the recently announced reduction in central government's financial support for local welfare as a strong motivator for the effective coordination of the parties involved.

The relationship between uncertain financial support by central government and achievement of the Council's objectives was also mentioned by the director. However, she mainly emphasized the practical operational consequences of this uncertainty, and did not comment much on the possible conflicting political pressures exerted on the objectives. She used the supply of subsidized jobs as an example, and explained that the relationship between a decrease in the number of subsidized jobs and an increase in people entitled to welfare payment was recognized. Her approach was to search for practical solutions, and to find additional financial means within existing agreements with central government to increase the number of subsidized jobs.

#### Operational manager

At the lowest level researched two managers were interviewed. The interviewees also thought that objectives and performance measures relating to Welfare Payment were sufficiently specific. They could not, however, quote the exact formulation of the 2005 objective as documented in the Program Budget 2005. Welfare Payment was seen as an open-ended scheme, mainly influenced by the increase or decrease in the number of Welfare Payment clients. The objective of a 6 percent maximum increase was not seen as the main objective for the sector. In the words of a sector manager, the main objective was formulated in terms of: "*as many people as possible back to work*". He explained that operational objectives were mainly focused on the process effectiveness within the sector. He added that he did not get much support from organizational objectives and performance requirements when setting pri-

orities in his sector. Moreover, the interviewee was not sure about the feasibility of the financial objectives.

The uncertainty about financial support from central government was also pinpointed by operational managers, but a pragmatic approach was demonstrated. Operational managers argued that it was their task to optimize operations within available financial and non-financial means. In the words of a sector manager: *“To make Welfare Payment policies more effective demands much creativity from the professional managers, but sometimes results in political disputes between elected members of the Council”*.

The interviewees stressed the importance of specific performance measures. They saw them easing the making of clear agreements with external parties<sup>64</sup> and for supporting the sector with relevant process information. The manager of the Work and Income sector explained that process control, standardization, and computerization were becoming increasingly important, and the development of monthly progress reports was seen as one of the central instruments of control.

Desk research found evidence of this increase in the emphasis on process control within the sector. Previous Sector Plans and Quarterly Reports documented an increase in the description of processes and related performance indicators. For example, very few performance reports were made in 2004, but Quarterly Reports were standard in 2005. To illustrate, some performance information from the Quarterly Reports 2005 is documented below:

- the monthly trend in the number of terminated Welfare Payments, and the comparison of this development to the budget,
- the trend in the percentage of youngsters on welfare to the budget,
- the monthly trend in the number of welfare payment clients compared to the budget target,
- financial year-end forecast,
- workload and sick leave of employees.

### **Aspects of budget use**

The previously described opinions of the alderman, the director, and the operational managers will be used here to analyze relevant aspects against the research framework. The main level of analysis is organizational, with its focus on the use of objectives and performance measures at the top of the organization. The research framework and its defined aspects will be the focus of the analysis, but if applicable, other aspects are also included.

The evidence is presented in a summarized form and analyzed and interpreted by the researcher with reference to desk research and interviews where suitable. Personal impressions and opinions could play a part in the interpretation of the case study findings.

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<sup>64</sup> such as the Center of Employment and Income, in Dutch “CWI”.

### Design and quality of the accounting information system

The municipality's accounting information system yields both financial and non-financial information. The financial information relates in particular to the products and investments of the municipality, such as the costs and income of products and the income and expenses of investment projects.

Financial objectives and performances are documented in all planning and control documents. The Program Budget 2005 for example, contains summarized versions of budgeted costs and income for all programs and related products, medium-term investment planning, and summaries of several additional sources of income. More financial detail is available at an operational level. Sector Plans for example, contain budgeted costs and income in detail, and the Quarterly Report 2005 contains detailed variance analyzes (analyzing the variances between actual and budgeted values). Annual Report and Accounts of both the municipality and the sector contain detailed financial information, and present detailed analysis of variations between achieved and budgeted values.

In addition, the accounting information system provides a lot of information about non-financial objectives and performances. Information about non-financial main objectives is primarily present in the more strategically-oriented planning documents, such as the medium-term policy plan "Expedition Work" and the Program Budget. Non-financial performances are often documented in the operational documents. Quarterly Reports in particular contain many non-financial performance measures, and provide insights into current developments and trends. This information is mainly used for process control. Examples of detailed reports are the Quarterly Reports 2005 of the Social Affairs sector. These reports contain many performance measures, such as the actual and the budgeted number of terminated welfare payments, the number of youngsters on welfare, and the number of payments made for special welfare.

Interviews indicated differences in the perceived quality of accounting information at different organizational levels. At the top of the organization the quality is perceived as lower than at operational level. The information provided to politicians and top managers does not appear to meet the requirements sufficiently, and additional information is often requested. This additional information is provided, but not always in time. The quality of information is seen as higher at the more operational level, and is also often provided on request. Operational managers are aiming to develop standard reports that will better fulfill their information requirements. They would value the information provided if it was sufficient, accurate, on time and up-to-date. Accounting information is produced at an operational level. The sources of operational accounting information are the sectors themselves, and the main drivers for the development of operational accounting information are the sector managers. Complying with a sector's own information requirements seems therefore a simpler task than complying with the requirements of others. At an operational level, the interviewees focus on a scorecard with a limited number of indicators that is used to manage their

own sectors and is also used during progress meetings with the director and the municipal executive.

To conclude, the accounting information system in Welfare Payments contains both financial and non-financial information. This information is detailed, and includes budgeted values, achievements on budgets, and additional information. The observations are tentatively quantified into a score<sup>65</sup>. The scope of the accounting information system for Welfare Payment is valued by the researcher. Using a 5-point scale, the scope is labeled as “above average”<sup>66</sup>. The quality of the accounting information is valued in the same tentative way as the scope, and is labeled as “above average”<sup>67</sup>.

### Applied role

The interviews gave a view of the different ways in which accounting information is used in practice; they gave an insight into the roles of performance measures. This study has defined five different sub-roles or functions by which archetypal roles of performance measures can be recognized<sup>68</sup>. These five functions and the related archetypal role (indicated between brackets) are:

- to diagnose, to compare actual and budgeted performance (answering role),
- to learn and to change ways of doing (learning role),
- unequivocally signaling of what is important (learning role, ammunition role),
- influencing future budget increase (ammunition role),
- to report and explain on past performance (rationalization role).

*Firstly*, the results of the interviews and desk research are now used to assess whether the use of performance measures is for diagnostic reasons, that is, for comparing financial and non-financial variances in performances.

Budget information is increasingly used to report on the progress of Welfare Payment’s performance targets. The Quarterly Reports in 2004 and 2005 contained in-

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<sup>65</sup> Aiming to make these observations somewhat comparable through the four case studies, these observations are represented by a score. This score expresses the observations in a simple and summarized form, and reflects the researcher’s personal perception on this subject. This score is to be regarded as a subjective, qualitative and aggregated measure. The limitations of this impressionistic approach are recognized. Yet they are presented here as additional information, which might give an opportunity to aggregated embedded case findings, and present an overall and condensed measure at the main level of analysis. This score is not to be seen as a substitute for the other case observations; it is merely offering an additional label that can be used in further analyzes.

<sup>66</sup> Measurement of the scope of the accounting information system is based on interpretation of all relevant documents, which are included in the desk research (for a list of documents included see the appendix). The scope is determined by using a 5-point scale, ranging from small (only financial budget information related to the current budget period) via average (both financial and non-financial budget information related to the current budget period) to broad (both financial and non-financial budget information on the current and future budget period and additional information). The range between small and average is addressed as below average, and between average and broad as above average.

<sup>67</sup> Measurement of the perceived quality of accounting information is based on the remarks of interviewees and on the answers to the set of close questions (based on the EUCS-test of Doll and Torzadeh, 1988) collected during the interviews. The perceived quality is interpreted by using a 5-points scale, ranging from 1 as low, 3 as average, to 5 as high.

<sup>68</sup> For more detail on the theoretical definition of the roles and their function see chapter 2, A Theoretical Research Framework.

creasingly detailed performance information on the actual status of the sector, and reported on both financial and non-financial performances.

The use of these reports for diagnostic reasons appeared to be limited. The sector reports did contain variance analyses (based on a variance between actual or expected values and budgeted values), but contained mostly trends of actual achieved financial and non-financial performances.

The financial budgets appeared to function more as a frame of reference than as achievable results. Financial budgets were adjusted during the budget period, but in order to adjust budgets managers must act according to detailed and explicitly stated budget rules. These budget rules relate, amongst other things, to timely and formal announcement of desirable budget changes to superiors and to necessary justification for these adjustments. Financial control by top managers and politicians is mainly applied at a general level using highly consolidated figures (program level) and does not often reveal specific developments in Welfare Payment.

*Secondly*, the use of performance measures for learning, signaling and influencing future budgets is assessed.

Evidence of the use of performance measures in budgets, sector plans, and performance reports for signaling is clearly found. The documents mentioned contain information that underlines the importance of specific performances, which is used for control activities. Examples of information included are:

- organizational objectives in the Program Budget and in the Sector Plan on the maximum increase in Welfare Payment clients,
- charts in the Quarterly Report, displaying the actual progress on the number of Welfare Payment clients,
- addressing specific activities in the Program Budget and Sector Plan, such as the performance of a single audit,
- the large amount of process-related performance measures in the Program Budget, Sector Plan, and quarterly Report

Support for this signaling function is found in the interviews. For example, people involved see objectives and performances as important signals for underlining specific aspects of policies that require considerable attention. Operational managers also indicate that the use of process-related performances helps them to emphasize the importance of well-performed operational processes. The presence of several detailed process overviews in the Quarterly Reports is seen as supporting this tentative conclusion<sup>69</sup>. Managers say that this type of information helps them to make current trends more visible, and to make the consequences of operational processes more objective. They use process-related performances to inform people outside the sector about important developments, and as motivators for decisions about operational process changes. Trends in the development of the number of Welfare Payment clients for example, are being used to coordinate the process between the municipal

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<sup>69</sup> For example: composition of the group of people for whom Welfare Payment is ended, number of provided payments, number of formal objections lodged on the municipality, case load, workload and sickness leave of employees.

organization and external chain partners (such as the CWI and the reintegration offices). In these meetings these trends are used as indicators for the effectiveness of the Welfare Payment process.

Actual status reports of non-financial performances are also used to inform politicians and top managers about the estimated effects on the future financial position of the organization. The trend in the number of Welfare Payment clients, for example, is used to justify whether a change in policies on subsidized jobs should be considered in the near future. Anticipated changes in financial support by central government for Welfare Payment is also used to underline the importance of a balanced municipal budget to Council members, local press, and local and national politicians.

*Thirdly*, a brief assessment of the use of performance measures for reporting and explaining past performances is presented here.

Performance measures are regularly used to inform various users, such as the Council, citizens, local businesses, and governance bodies. The municipality even produces specially made reports on this subject, the so-called “Monitor work and income”. This report is prepared twice a year, and is a comprehensive overview of past developments, such as: local employment, number of welfare payments, and number of jobs. These reports contain much information for internal use, but are also written for a general audience, and special attention is given to readability and the presentation of texts and data. Structure, content, and lay-out of this Monitor differs significantly from internal reports.

To conclude, all five functions related to the archetypal roles are observed, but to different extents.

- Performance measures are only partly used for diagnostic reasons. Only financial performances are used in a diagnostic way, and only on highly aggregated budgets. Performance measures are often used in budgets, operational planning (in Program Budget and Sector Plan) and as status reports (in Quarterly Reports and Annual Reports), and in special purpose reports.
- Performance measures are used to learn. Trends in performance developments are used to discuss possible changes to operational processes and to future operational performances.
- Performance measures are used to signal unequivocally on important issues. Three reasons are identified: to emphasize important issues, to coordinate and to adjust the chain of welfare-related processes.
- Performance measures are clearly used to influence next period budgets.
- Performance measures are used to report on, explain, and account for past performances to external parties.



### Businesslike and political context

As previously discussed, a more businesslike context is associated with:

- specific organizational objectives,
- relatively tight budgetary control (low tolerance for intermediate budget variances, detailed analysis of budget variances, intensive communication about budgets, emphasis on meeting the budget),
- integration of strategic objectives and operational performances (formal organizational planning is coupled with operational control).

A more political control context is especially associated with a high level of multiplicity on objectives.

The aspects relating to the two contexts are discussed in detail in the next section.

### *Specificity and integration of objectives*

Specificity of objectives is measured by including three different aspects: the clarity of the objectives for the interviewed person and for other people involved, and the clarity of the priority of the objectives for the person interviewed (Hartmann, 1997).

In summary, interviewees perceive the objectives of Welfare Payment as sufficiently clear. As discussed previously, there exist slight differences between interviewees, but objectives and performances are regarded as clear and measurable. Interviewees perceive objectives and performance measures as clearly coupled; objectives and performance measures sufficiently explain actions that should be undertaken and performances are in general perceived as relevant.

The findings from the interviews and from desk research, however, are less clear on the relationship between objectives and performances. It is often largely unclear whether objectives are achieved when performances are met<sup>70</sup>.

Interviewees generally said that objectives and performance measures were not used to prioritize operational activities. The prioritization of activities appears to be more dependent on actual circumstances.

Additional desk research illustrates that objectives and performances can also be seen at an organizational and operational level. Objectives and performances named in the Program Budget are incorporated in the Sector Plan, and are part of the progress reports prepared at all organizational levels. All interviewees also referred to a comparable set of objectives and performances. Organizational objectives and operational performances therefore could be regarded as coupled.

### *Multiplicity of objectives*

Multiplicity of objectives is an indication of the presence of multiple, conflicting pressures on organizational objectives by different groups (stakeholders).

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<sup>70</sup> To illustrate this remark: many performance measures relate to operational norms, such as the number of new welfare requests (2.500) or handling of concurrent clients (4.500). It is however not clear if increases or decreases of these norms relate to the achievement of the strategic objective (maximum of 6 percent increase of Welfare Payment clients).

The Welfare Payment case study clearly shows the presence of different views and opinions about organizational objectives. All interviewees described at least three different groups of people that have influence over setting and achieving organizational objectives. These groups are: central government (setting legal rules and determining financial contributions to local welfare costs), the elected Council members (restrictive policies on subsidized jobs and special welfare), and management (decisions on operational processes that can influence the effectiveness of the process). The formal authority of the Council is not questioned (managers act according to the Council's decisions), but there is a continuous discussion between politicians, aldermen, and the civil servants on the policies that can contribute to minimizing the number of welfare payments and the financial risks.

### *Tightness of budgetary control*

Field research shows that the importance of budgetary control is two-fold.

On the one hand, politicians stress the importance of budgets, and especially of financial budgets. Overspending on budgets for which the alderman is accountable to the Council (programs and high aggregated products) is regarded as highly undesirable. Reporting financial progress to the Council (Interim Reports and the Annual Account and Report) is perceived by aldermen to be important, and significant effort is directed both to the preparation and to the discussion of these reports. The Interim Report focuses mainly on financial variances; if no financial surplus or deficit occurs, no comment is documented in the report. Variances in non-financial performances are not used as reasons for progress reporting to the Council.

On the other hand, financial budgets are adjusted. Managers are allowed to propose budget adjustment<sup>71</sup>, but within strictly defined rules. Only when budget changes influence the high aggregated budgets for which aldermen are accountable, is the Council involved in the process. Central in this budget adjustment process is the timing and the explanation. Managers with budget responsibility must inform superiors in time (as soon as can be reasonably expected) and must justify budget changes with valid reasons. According to all interviewees, validity relates to uncontrollability. If a responsible manager cannot be held responsible for specific budget influences, in other words when s/he can not significantly control this influence, the justification for budget changes is generally regarded as valid. A consequence of this line of reasoning is that influences outside managers' control on budget are considered as less important by them. Actually, conforming to budget rules appears to be more important than meeting the budget. A clear example of this mechanism is the budget for the financial contribution to Welfare Payment made by central government. It is remarkable that significant budget adjustments, such as the downwards adjustment of €2 million in costs and income in 2004, are often only documented in special Council memo's and in the Annual Account and Report, and are not explained in Interim Reports.

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<sup>71</sup> For example, allocate funds between related budgets or request for additional budget.

Another aspect of this mechanism is that formal decisions on budget adjustment by the Council are often handled in a separate decision-making process, which is often discussed separately from the generic planning and control instruments. Decisions on budget adjustments are often part of decisions on specific policies or issues. Budgeted performances are then just one of the factors the Council has to decide on. From a budgetary control point of view, these budget adjustments appear to be of less importance.

Non-financial performances are also perceived as important. Objectives and performances are absorbed in Program Budgets, Sector Plans, and Interim Reports. Emphasis on meeting the non-financial performance budgets appears to be in line with the average; status reports on non-financial performance are frequently produced, and changes in achieved performances are closely watched and discussed throughout the organization at all organizational levels. Variances between actual and budgeted performances are, however, less frequently discussed, at least not in the researched years. These performance measures can relate to the number of welfare payments, but also to legal terms that must be applied<sup>72</sup>. The sector has an internal control system for monitoring these terms. A number of those non-financial performances are also part of an inter-governmental benchmark. This benchmark compares the Welfare Payment performances of several local governmental organizations. Relatively negative scores in the benchmark, and consequently unfavorable positions in the benchmark, result in special attention to the specifically named performance by alderman and elected Council members.

Interviewees indicated that in general, during budget reviews by superiors, interim budget variances on both financial and non-financial performances were to a large extent tolerated. Detailed information on the development of actual non-financial performances was, however, discussed intensely at all organizational levels. For example, the number and composition of persons entering and leaving the welfare payment system is closely monitored, reported, and discussed monthly. At an operational level the frequency is high (every two weeks), at organizational level the frequency is low (twice a year). Only when unexpected events occur (such as an announcement by central government to decrease financial support for welfare), are discussions held more frequently. Progress reviews between aldermen and management are rarely concerned with financial budget variances. This regardless of the importance that both politicians and top managers attach to budgetary control.

To conclude, tightness of budgetary control is qualified as average, which can be prompted by these four aspects:

- Intolerance of interim budget variances appears to be limited; managers and aldermen perceive interim budget variations as limited important.
- Detailed budget-item follow ups appeared to be average.
- Intensity of budget related discussion is average (monthly), mainly on the development of actual non-financial operational performances.

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<sup>72</sup> For example, the time frame in which the municipality must decide on a welfare payment request.

- Emphasis on meeting budget targets is considered as average. Emphasis is high at the top of the organization, but mainly for highly aggregated financial budgets. Emphasis on meeting budget targets appears to be lower at a more operational level, especially when adjustments do not influence the highly aggregated budgets.

### *Measuring the political and businesslike context*

In order to characterize the control context of Welfare Payment, the above documented findings on the different aspects are combined. Combinations of aspects function as indicators for the presence of a specific control context.

Aiming to qualify the findings, the findings are interpreted by the researcher and labeled in a simple score<sup>73</sup>.

Specificity of objectives of Welfare Payment is perceived as above average<sup>74</sup>. This measure shows that objectives are sufficiently clear, relevant, and integrated for the interviewees, but are not being used for prioritizing decisions.

Multiplicity of objectives is valued as above average<sup>75</sup>. Conflicting pressures on objectives by central government, the elected Council members, and operational management are recognized as relevant factors.

Tightness of budgetary control is valued as average<sup>76</sup>. Combining these factors, the control context of Welfare Payment appears to have both a more businesslike and a political classification.

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<sup>73</sup> This tentative approach to the labeling of findings with a qualitative measure is comparable with the measurement of the use of BPM as documented in the previous section.

<sup>74</sup> Measurement of the specificity of objectives is based on interpretations of the interview reports and of the desk research (for a list of documents included see the appendix) by the researcher. Specificity is measured by using a 5-point scale, ranging from low (all related factors are valued as low) via average (some of the related factors are seen as relevant and some are interpreted as not or hardly contributing to a high level of specificity) to high level of specificity (all related factors contribute significantly to the perception of specific objectives).

<sup>75</sup> Measurement of the multiplicity of objectives is based on interpretations of the interview reports by the researcher. Multiplicity is measured by using a 5-point scale, ranging from low (no clear conflicting pressures of different stakeholders on the objectives and performances) via average to high (significant conflicting pressures of different stakeholders on the objectives and performances).

<sup>76</sup> Measurement of the tightness of budgetary control is based on interpretations of the interview reports and of the desk research by the researcher. Tightness is measured by using a 5-point scale, ranging from a low level or loose budgetary control (tolerance for intermediate budget variances is seen as high, detail analysis of budget variances is not applied, no intensive communication about budgets, no clear emphasis on meeting the budget) via an average level of budgetary control (some of the related factors are seen as relevant and some are interpreted as not or hardly contributing to a tight budgetary control, measurement is not based on a mathematic weighted average of related values, but on personal interpretation) to a high level or tight budgetary control (all related factors contribute significantly to the perception of budgetary control).

### Routineness of tasks

The operational tasks of Welfare Payment are described by all interviewees as routine. Tasks are perceived as mainly standardized, with little exceptions to general rules, and with known ways to solve exceptions to the rules. Although the interviews did not reveal sharp contrasts, the operational managers seemed to emphasize routineness the most. They were the most outspoken on the importance of process management for achieving the Welfare Payment objectives.

The routineness of tasks is therefore valued as high<sup>77</sup>.

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<sup>77</sup> Measurement of the routineness of tasks is based on interpretations of the interview reports by the researcher. Routineness is measured by using a 5-point scale, ranging from (tasks are perceived as not standardized, with no general rules, and with no known ways to solve operational decisions) via average to high (tasks are perceived as standardized, with no exceptions to general rules, and with known ways to solve exceptions to the rules).

## **Summary Welfare Payment case**

Welfare Payment is concerned with providing income to persons entitled to social welfare. The Council's main organizational objective for Welfare Payment is restrictive: to limit the increase in the number of clients. By restricting welfare payments, the Council basically aims to limit the number of people that are dependent on it, to stimulate operational control of Welfare Payment tasks, and to reduce the risk of future financial deficits.

Interviewees saw the external environment of Welfare Payment as dynamic, uncertain and uncontrollable. Politicians and managers of the municipality see the development of the client population as hard to control. They are also uncertain about the effects of the policies set by the Council, the emerging changes in national laws and regulations, and the financial contribution of central government to Welfare Payment. The internal environment, however, is seen as highly predictable; managers know the tasks to perform and see processes as controllable.

The objectives and performances of Welfare Payment are seen as sufficiently clear, at both an organizational and an operational level. Conflicting influences on setting objectives are clearly present, through the influences of central government (setting legal rules and financial restrictions), of Council members (restrictive special welfare), and management (effectiveness of operations). Clarity of objectives and conflicting institutional pressures on setting objectives appear to coexist in this case.

Objectives and performances are viewed as integrated between organizational and operational level and between financial and non-financial performances. Financial and non-financial objectives and performance are used at an organizational level to address current developments and trends, and for justifying changes in policies and future budgets. Frequent status reports on actual performance and monitoring actual trends are valued highly.

The fact that the city bears the significant financial risks of Welfare Payment stimulates an awareness of politicians and managers of the uncontrollability of financial and non-financial objectives and performances. Aldermen, communicating with elected members of the Council and civil servants, appear to use objectives and performances more as points of reference than as targets. Objectives and performances are also used as signals, to express and communicate issues that they perceive to be important.

Performance measures are more important at an operational than at an organizational level. Performance measures (budgeted, actual, and forecasted) are used as signals to the organization to express important trends, for example on the development of Welfare Payment clients and on actual workload. Trends are also used for process control purposes. Objectives and performances are used for budgeting and operational and organizational reporting. Performances are clearly used for status reporting, and reporting on current operational trends. The use of performances and objectives for variance analysis reasons, comparing actual developments to the budget, is only limitedly registered. Actual trends appear to be used for evaluating

whether change in processes, performances and objectives should be considered in the next budget period.

Performances also appear to be used for retrospective reporting, to explain to the city Council, to governance bodies, and to citizens what has been done and progress made.

An overview of the aspects relating to Welfare Payment is documented in Appendix VIII Summary of Aspects.

## **Sewerage case study**

*The structure of this section is comparable with the other case study reports. Firstly, the context within which Sewerage functions will be briefly examined, and the most relevant planning and control instruments together with the embedded objectives and performance measures will be described. Subsequently, their use is described by documenting the opinions of politicians or managers at three different organizational levels: the executive board, the director, and the operational manager. Finally, the points that have emerged during research into planning and control documents will be discussed.*

### **Sewerage policies**

The provision of a sewerage system is a legal requirement for municipal councils. A national environmental Act mandates local authorities to collect and transport their wastewater and rainwater. Under the streets of the city of Leeuwarden there are approximately 470 kilometers of sewers. These transport the wastewater<sup>78</sup> and rainwater out of the city.

These systems can be viewed as links in a chain. Rainwater and drinking water (and sometimes groundwater) flow into the sewers. The sewer transports it to the waste water treatment basins, and the wastewater treatment plant discharges its water into the canals and lakes. Sewerage is affected by rainfall (the weather), the amount of water supplied (tap water) and the amount of waste transported by it (sanitation, waste of businesses), and relates to wastewater treatment (governed by water boards), and the required water quality and water level in canals and lakes (governed by water boards and provincial governments).

Sewerage is part of the Council's Environmental program. As stated in the Program Budget 2004 and 2005, the main goal of Sewerage is to collect wastewater without polluting the environment. Limiting overflow of the sewer systems during heavy rains and maximizing wastewater collection are the specific goals of Sewerage.

In 2004 a new mid-term plan was made<sup>79</sup>. This plan contained lists of Sewerage projects that were planned for the coming years. This planning is based, amongst other factors, on a recently held inspection of the older sewers (older than 35 years).

The operational activities of Sewerage are managed by the City Development and Maintenance department. The District Affairs<sup>80</sup> sector of this department is responsible for Sewerage policies and operations. This sector is also responsible for the control and maintenance of roads, bridges, waterways, and green areas (such as parks and grass). The sector consists of several teams, of which the Planning<sup>81</sup> team is in

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<sup>78</sup> In 2005 of about 36.500 households and 4200 businesses.

<sup>79</sup> Called the City's Sewerage Plan (in Dutch "Gemeentelijk Riolerings Plan" or GRP).

<sup>80</sup> In Dutch: "Wijkzaken".

<sup>81</sup> In Dutch: "Bedrijfsbureau".



charge of Sewerage projects. Small-scale projects are also managed by this team, but for larger-scale projects the engineering team in the Spatial Planning and Execution<sup>82</sup> sector acts as contractor.

The District Affairs sector includes sector management and five teams (Planning, Field Work, Policies and Support, Graveyards, and District Management). The sector has a staff of 185 full time equivalents. The municipality’s operational tasks consist of planning, coordinating and controlling sewerage projects. Projects to construct new or maintain existing sewer systems are mostly executed by external contractors. Only minor maintenance work is actually done by the municipality itself.

**Planning and control documents**

Objectives, desired effects and performance measures relating to Sewerage are set out in several planning and control documents, such as the Program Budget 2004 and 2005, the Sector Plan 2004 and 2005, the Annual report 2004 and the Quarterly Reports of 2004 and 2005.

Sewerage, as part of the Environmental program, does not have strategic objectives specified in the Program Budget 2004. The strategic objectives of the environmental program implicitly cover Sewerage. Examples of these strategic objectives are:

- to realize a sustainable system for a clean and liveable city,
- to aim for a sustainable environment, by minimizing the amount of pollution,
- to realize an appealing environment to live in.

The explanation on these strategic objectives documents the organizational objectives of Sewerage (see Table 12)

Objectives Sewerage	reference	2004	2005
B1 Satisfaction of citizens with the maintenance of Sewerage (measured every two year by a survey).	42%	42%	44%
B2 Number of complaints in the registration system, relating to nuisance caused by sewer water.	48	60	55
B3 Preventing inconvenience by sewer water			
B4 Preventing inconvenience caused by factors other than sewer water.			

**Table 12** Objectives 2004, Sewerage (source: Program Budget 2004, p. 115)

These objectives specifically refer to the inconvenience to citizens if sewers malfunction. In the explanatory notes to these organizational objectives reference is made to measures taken to prevent such a calamity<sup>83</sup>.

<sup>82</sup> In Dutch: “Ruimtelijke Ordening en Inrichting” or ROI.

<sup>83</sup> For example, to project that deliver excess water storage capacity.

The performance requirements for Sewerage are expressed in operational terms, such as:

- to provide for the continuous removal of waste and other surplus water,
- to make operational plans, put out tenders, inspect the sewers, clean the sewers,
- to collect wastewater within the city area,
- to transport wastewater to the wastewater treatment installation,
- to remove waste, caused by sewer overflows, from the bed of the waterways,
- efficient control and effective use of the sewers.

The explanatory notes clarify that the city does not use a special Sewerage tax. The coverage of Sewerage costs is provided by a separate part of the city's housing tax<sup>84</sup>. As documented in the Program Budget 2004, the city expects to use a special purpose tax for Sewerage in the near future.

The Program Budget 2004, which was drawn up in the autumn of 2003, did not acknowledge risks presented by the current Sewerage policies, but announced a new mid-term Sewerage plan, to be set by the end of 2003<sup>85</sup>.

The financial objectives for Sewerage are detailed under the heading "Sewerage" in the Program Budget. The budgeted product costs in 2004 are about €10 million, which is 40 percent of the cost of the Environment program (see Table 13)

<b>2004</b> <i>(*€1000)</i>	<b>costs</b>	<b>income</b>	<b>results</b>
Environmental permissions	1.118	44-	1.075
Collecting garbage	11.490	9.257-	2.233
<b>Sewerage</b>	<b>9.998</b>	<b>2.829-</b>	<b>7.169</b>
Environmental policies	734	83-	651
Surface and sound	913	213-	700
Environmental communication	137	-	137
Vermin extermination	30	-	30
Graveyards	699	529-	170
Mortuary	103	-	103
Canine services	299	378-	79-
Cadaver disposal	3	-	3
Businesses	120	-	120
<i>Total</i>	<i>25.643</i>	<i>-13.333</i>	<i>12.310</i>

**Table 13** Costs and income program Environment (source: Program Budget 2004, p. 126)

As Table 13 shows, Sewerage has a deficit of €7.2 million. This deficit is fully covered by local tax income. It is noteworthy that the coverage of Sewerage costs is calculated by the use of a financial calculation scheme. This scheme equalizes the ex-

<sup>84</sup> Citizens pay one housing tax assessment in which the sewerage costs are included.

<sup>85</sup> This municipal council has set this plan in 2004.

penses of investment programs, by using financial funds. Expenses and costs are accumulated annually and evaluated with a budgeted norm. Only the cost related to the personnel in the sector (such as salaries and office support) is booked directly to the profit and loss account. The surplus or deficit between actual and norm is booked to these funds at the end of every year. The total deficit for Sewerage in the profit and loss account is therefore largely predefined.

The Interim report 2004 does not doubt that the budget for Sewerage will be complied with, financially speaking.

The Annual Report 2004 documents to what extent Sewerage’s objectives were realized. The satisfaction of citizens with the maintenance of the Sewerage (objective B1) was measured and appeared to be as expected (norm 42%, actual 40%<sup>86</sup>). The number of complaints in the registration system, relating to problems with sewer water (objective B2) was however higher than expected (norm 60, actual 132). The Annual Report explains this high score by saying that the registration system was actively promoted<sup>87</sup>, and that 2004 was characterized by some abnormally high rainfall. The achieved performances of 2004 are all evaluated positively (with a plus). However, further explanation of this performance evaluation reveals however severe delays in the time schedules of projects. These delays appear to have had no effect on the evaluation of the performances. The Annual Account 2004 presents the financial performances of Sewerage (see Table 14).

2004	costs	income	results
<i>(*€1000)</i>			
Budget 2004	9.998	2.829-	7.169
Adjusted budget 2004	8.806	3.789-	5.017
Account 2004	7.632	462-	7.170
<b>Result</b>	<b>1.174</b>	<b>3.327-</b>	<b>2.153-</b>

**Table 14** Financial result Sewerage (source: annual report 2004, p. 132)

The Annual Report 2004 limitedly explains the mechanisms behind this row of figures. It explains that the variance between costs and income is predefined by a kind of financial closed circuit scheme, resulting in a deficit that equals per definition the budgeted value. If a variance between realized and budgeted costs occurs, the amount of income for Sewerage is compensated in accordance with this variance. This income is of an administrative nature and represents a booking to an equalization fund.

<sup>86</sup> The measurement of citizens’ satisfaction with sewer maintenance is part of the city’s district signaling system. This signaling system collects data every two years, by asking citizens to react to a written questionnaire. The exact meaning of the citizen’s satisfaction measure is not clarified during the research.

<sup>87</sup> The city had put extra effort into promoting the registration desk to the public by actively promoting the purpose of the desk and the phone number by which it could be reached.

The components that lead to variance of cost are clearly explained. The lower than budgeted costs are caused by lower Sewerage project costs (mainly lower depreciation charges and lower direct expenses).

The Program Budget 2005 is the first program budget with strategic objectives for Sewerage: minimum discharge of waste. The organizational objectives are comparable with those in the Program Budget 2004. Two objectives are documented: citizen’s satisfaction with Sewerage maintenance (44%) and the number of complaints in the registration system relating to problems with water (55) (see Table 15). These objectives are not explained further.

<b>2005 Objectives Sewerage</b>		<b>reference</b>	<b>2005</b>	<b>2006</b>
B1	Maintenance of sewer drains Indicator: Satisfaction citizens	42%	44%	46%
B2	Water hinder Indicator: reduction of number of complaints in the reporting system	48	55	50

**Table 15** 2005 Objectives Sewerage (source: Program Budget 2005, p. 100)

The aims in the Program Budget 2005 are comparable with those of the previous program budget. Examples are:

- maintaining the continuous removal of waste and other surplus water,
- making operational plans,
- putting out tenders,
- inspection of the sewers.

The Program Budget 2005 explains that in addition to these requirements, Sewerage also has to comply with the aims as set by the new mid-term plan (the “GRP 2004”)<sup>88</sup>.

The Program Budget 2005 also contains information additional to the GRP 2004, such as the separation of rainwater and wastewater, participation in an inter-organizational benchmark for Sewerage, and attention to groundwater policies.

The budget 2005 costs and income of Sewerage are €10 million and € 2.2 million, resulting in a deficit of about €7.8 million (see Table 16). This deficit is covered by a designated part of the local government housing tax.

<sup>88</sup> The previous GRP was used by the city over a longer period of time than originally intended. Desk Research revealed that through pressure by central and provincial government a new GRP was commissioned. Desk research of this “GRP 2004” plan gave insight into the objectives and performances documented in this plan. This plan documents three groups of objectives: related to wastewater, sustainable environment, and maintenance and use. Each group is related to specific objectives. These objectives are formulated by using mainly civil technical terms, norms and measurement methods.

2005 (*€1000)	cost	income	results
Sewerage	10.000	2.185-	7.815

**Table 16 Costs and income Sewerage** (source: Program Budget 2005, p. 109)

The objectives of Sewerage, as documented in the Program Budget 2004, are also present in the Sector Plan of the District Affairs sector. The Sector Plan also contains a list of performance measures that are more specific than those in the Program Budget. The Sector Plan details, for example, that 47,500 drains are to be kept clean, 467 km of sewers are to be maintained, 30 km of sewers are to be inspected, and that several categories of waste are to be disposed. The Sector Plan also describes the way the performances are to be measured and reported<sup>89</sup>. For an overview of projects to be executed the Sector Plan refers to the previous and to the new mid-term plan (GRP). Financial budgets (documented in the appendix) provide financial detail on ledger accounts, responsibility centres, and products.

The Quarterly Report 2004 and 2005 of the District Affairs sector explains little about the achievements of the financial and non-financial performance targets. They do mention the increase in sick leave, the amount of temporary personnel, and organizing job appraisal interviews in the sector. The Quarterly Reports do not provide an insight into progress on or any possible delays to or bottlenecks in sewerage projects.

The District Affairs sector has produced a Sector Account 2004. This Sector Account explains the year-end position for detailed costs of responsibility accounts and products, on the number of people employed, and on man hours spent on projects and products. Sewerage receives only a few general remarks.

A more functional evaluation of the performance of Sewerage is documented in the GRP 2004, but this evaluation refers to the years between 1997 and 2001. Evaluation of performance in the years after 2001 is not given. References in the GRP 2004 to the year 2002 and beyond only explain relevant developments, but not the achieved performance.

### **Use of objectives and performance measures**

The use of objectives and performance measures is analyzed in two ways. Insight into their use is documented at three different organizational levels (aldermen, civil director, and operational manager). Then, by referring to these points, relevant aspects are discussed.

<sup>89</sup> Measured for example by the district signaling system (one per two years), by visual inspection in the field, by registrations of failures or break-downs, by sickness percentage (per quarter). Reported for example by the monitor "Large City Policies" (twice a year), and Quarterly and Annual Reports.

### Aldermen

Sewerage is of only minor interest to the responsible alderman. Sewerage, according to him, does not need intense political attention. He recognized the importance of Sewerage as a vital function for the city, but added that short term political influences on this function are limited. In his view, the more practical political discussions about Sewerage were held about 10 years ago,. Shortfall in the maintenance of sewers and political interest in improving the quality of surface water resulted then in a significant and structural increase in the financial budget and a more ambitious improvement program. The elected members of the Council do not often discuss the financial and non-financial objectives of Sewerage. There is, in the alderman's opinion, no reason to discuss Sewerage on a regular basis.

Political discussions are mostly held during the renewal of the mid-term plan, the "GRP". The alderman said that discussions in the Council on this GRP concentrated on three issues: limiting overflow of the sewers, sewers in rural areas, and the financial budget for the coming years. During these discussions the Council also evaluated the performances of Sewerage in the past year. He added that this evaluation showed that almost all objectives were achieved.

According to the alderman the main emphasis nowadays is on stimulating Sewerage projects. This is in order to prevent further setbacks in planning. He explained that some projects recently failed to be completed on schedule. He underlined that his influence on Sewerage was not focused on the achievement of objectives, but on mechanisms that could stimulate operations. In his own words "*A machine must start up and stay running. Detailed budgetary control by politicians does not add value to this*".

Political interest is therefore directed more to stimulating operational actions than on preventing budget overspending. The alderman referred to the financial scheme of Sewerage as the main reason for this limited political interest in financial performances. The flattening effect of this scheme, spreading financial differences over many years, released him from the need to control Sewerage closely. An additional aspect is that underspending of the total budget (mainly on depreciation due to delays in the executions of projects) is more realistic than overspending.

The objectives for Sewerage are clear to the alderman, but he perceived them as having limited importance. He sees objectives as guidelines for the professionals responsible for operational activities. He added that the Sewerage objectives often directly related to other policy fields. For example, the objectives for the technical design of the sewers are defined by the objectives for the quality of surface water. The objectives for the quality of surface water are mainly discussed and set in other policy fields. Political discussions about Sewerage therefore seem to "disappear"; to shift to other political settings.

### Civil Director

The director confirmed the limited political interest in the objectives and performances of Sewerage. In his words: "*This is a political organization, and for Sewerage it*

*is easy to say what has to be done. Sewerage simply must operate adequately, and the available money has to be used*'.

He views objectives as specific and clear; the objectives are in line with the desired technical quality and available financial means.

The director's attention is mainly focused on stimulating the progress of Sewerage projects; in order to prevent underspending of the budget. He has a limited involvement in the more technical aspects of the projects. His attention is more focused on the support and coordination of all civil projects. In his opinion, objectives and performances are of limited importance for controlling these technical projects. He stressed the importance of hiring the right persons, and of stimulating the interaction between persons. In his words: *"professionals can be controlled by ambition and passion, not by performances"*.

He added that the function of objectives and performance measures for Sewerage are mainly for the evaluation of past performances, to evaluate and report on the progress that has been achieved.

#### Operational manager

Operational management<sup>90</sup> underlined the importance of objectives and performance measures, but referred mainly to technical objectives and performance measures as defined in the mid-term plan GRP 2004. They referred to objectives in technical terms, for example: reduce discharge points that are unconnected with the sewer, reduce overflow of the system, and build separate systems for waste- and rainwater. The more politically formulated objectives, documented only in the Program Budget, were not of much value to them (for example on the number of complaints in the registration system).

Operational managers said that their annual planning is based on the GRP 2004. They referred to the GRP 2004 not only for the objectives and performances, but also for the list of specific projects that must be realized every year. In their opinion the yearly costs of Sewerage are based on this list of projects.

Interviewees explained that the projects on this list are not automatically put into operation. At the beginning of each calendar year, the list of projects is discussed, and the need to start-up a project is evaluated. Technical field-inspection reports are used to decide on the technical urgency for actions. Meetings with other sector managers give insight into the possibilities of coordinating Sewerage projects with other civil and infrastructural projects at specific locations. Projects with a high ranking for technical urgency and coordinated action are put into the plan for the coming year. Projects with a low ranking are rescheduled and will appear on future planning lists. Projects are mostly rescheduled to future starting dates, seldom to earlier starting dates. Projects in operation tend to take more time too. For example; most of the projects in operation in 2005 were based on the previous GRP.

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<sup>90</sup> At operational level three persons were interviewed. Their answers are presented here in a summarized form.

Although the registration of public complaints about the sewers is still not of great importance to the operational planning of projects, operational managers considered this registration system to be important. The registration system has, in their view, improved communication between the public and local government. They said that people are now better able to express their opinions about the sewers to the local government. The managers expected that this registration system would be used to prioritize specific Sewerage projects<sup>91</sup> in the future.

Managers discussed the progress of each individual project on a regular basis (weekly, monthly, and quarterly). Operational managers perceived project control as important, and explained that the organization put emphasis on improving project control. The introduction of new project control methods, the new assigned project controllers, and the rigid evaluation of project planning were named as examples of improved project control.

All interviewees expressed the view that the financial control of projects had been improved significantly over recent years. They all stressed that projects are being achieved within budget limits. The control of non-financial performances, especially time control, is seen as a point that still needs special attention. They were fully aware of the fact that the total costs budgets for sewerage were never overspent, and recognized that delays in projects were the main cause. The reasons for these delays are, according to operational managers, problems during the start-up of projects and unexpected situations in the field during the project execution. Digging beneath the surface of the city often reveals other things, previously unknown to the project manager. Not every cable or pipe is registered, and archeological findings often appear unexpectedly. Also, digging up roads often appears to require more coordination and communication than expected<sup>92</sup>.

### **Aspects of budget use**

The previously described opinions of the alderman, the director, and the operational managers will be used here to analyze relevant aspects against the research framework. The main level of analysis is again organizational, with its focus on the use of objectives and performance measures at the top of the organization. The research framework and its defined aspects will be the focus of the analysis, but if applicable, other aspects are also included.

The evidence is summarized and analyzed by the researcher with reference to desk research and interviews where suitable.

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<sup>91</sup> For example, if overflow of sewers often results in registered complaints in specific districts or streets, projects that can reduce this inconvenience can be given a higher priority on the planning list.

<sup>92</sup> For example, because of the desire to minimize traffic inconvenience.



### Design and quality of the accounting information system

The accounting information system of the municipality yields both financial and non-financial information. The financial information relates in particular to the costs of products and the expenses of investments by the Council. Financial information is documented in all planning and control documents, such as the Program Budget, Sector Plan, Quarterly Report, project plans and project reports. The financial information for Sewerage often relates to differences between achieved performances and budgeted norms (such as the total annual cost budget and the project expense budget).

The accounting information system also delivers non-financial information, and provides in particular operational planning information (start and end dates, milestones, and time planning of projects, and time scheduling of personnel), and information on operational progress (such as: on hours worked by personnel and on sick leave). Managers use this information to control the operational processes and projects. Examples of reports for operational use are the Quarterly Reports in 2004 and 2005 of the District Affairs sector. These reports contain a lot of detail on the availability of personnel<sup>93</sup> and indicate progress against the performance targets of the sector. However, these Quarterly Reports rarely refer to Sewerage in particular.

The quality of accounting information is perceived as reasonable at all organizational levels. At the political level, the quality of information is perceived as good. Alderman and councilors appeared to be satisfied with the information provided in general, although the content of the information did not always match their specific needs. At the same time, it seems that the requirement for information about Sewerage by politicians is very low. Operational management perceived the quality of information as lower. It appeared that accounting information did not fully support the requirements of managers for controlling large numbers of different projects. Collecting valuable information for supervising projects is also considered to be difficult.

To conclude, the accounting information system for Sewerage contains both financial and non-financial information. Financial performance information is presented in great detail, and relates to budgeted norms and achieved values of individual projects and products. Non-financial performance information is also present in volume and in great detail, and relates to budgeted norms, achieved values, and to additional information (such as prognoses) of individual projects. However, the presence of such detailed information does not appear to completely fulfill the information needs of the operational managers who are responsible for clusters of projects.

The observations are tentatively quantified into a score<sup>65</sup>. The scope of the accounting information system for Sewerage is valued by the researcher following the previously introduced method of assessing the various case findings. Using a 5-point scale, the scope is labeled as “average”<sup>66</sup>. The quality of the accounting information is valued in the same tentative way as the scope, and is labeled with as “average”<sup>67</sup>.

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<sup>93</sup> Such as: sick leave, vacancies, temporary personnel, personal performance evaluations and plans, and training and education.

This valuation of quality aims to express the perception of a high quality of information in combination with a limited use at an organizational level.

### Applied role

The interviews gave an overview of the different ways in which accounting information is used in practice; they provided insight into the roles of performance measures. This study has defined five different sub-roles or functions by which archetypal roles can be recognized<sup>94</sup>. These five functions and the relating archetypal role (between brackets) are:

- to diagnose, to compare actual and budgeted performance (answering role),
- to learn and to change ways of doing (learning role),
- to unequivocally signal what is important (learning role, ammunition role),
- to influence future budget increase (ammunition role),
- to report and explain on past performance (rationalization role).

*Firstly*, the results of the interviews and desk research are used now to assess whether the use of performance measures are for diagnostic reasons, that is, for comparing financial and non-financial variances in performances.

Managers and politicians in Sewerage appear to use performance measures in two different diagnostic ways; in a general organizational and in a detailed operational way. The total budgeted costs of Sewerage, as defined in the Program Budget, are used as a highly aggregated total norm for financial performance. Compliance to this norm is perceived as important by all interviewees<sup>95</sup>. However, managers and politicians are hardly aware of the actual financial performances of Sewerage. This is mainly due to the complex financial scheme in use and the structural underspending on Sewerage costs budgets. The diagnostic use of annual financial performance measures is thus hardly applied at an organizational level. Only at the end of the mid-term plan, during the evaluation of this plan, does a more complete financial overview appear to exist. However, this overview is retro-active.

Budgetary control functions at an operational level, as a project control instrument, for controlling separate financial and non-financial project performances. Status reports on projects support a diagnostic use for each project separately. The detailed budget rules are used to direct project managers to act within the clear project boundaries. Tools for controlling all the Sewerage projects on a more organizational level, in terms of both financial and non-financial performances, appear to be absent.

*Secondly*, the use of performance measures for learning, signaling and influencing future budgets is assessed.

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<sup>94</sup> For more detail on the theoretical definition of the roles and their function see chapter 2, A Theoretical Research Framework.

<sup>95</sup> For example, (a) projects are only start-up if the expected cost of these projects does not result in a overspending of the budget, (b) occurring budget variances per project can be compensated by reallocation of budget of other projects, as long as the total budget stays within to pre-set year norm.

Performance measures appear to be rarely used for signaling Sewerage related information at an organizational level. Status reports often reveal detailed operational project information, are produced in a pre-defined format, and focus on information relevant for project control purposes. Managers indicated that these status reports rarely show to them possible bottlenecks in achieving organizational performances or objectives. They perceived the large number of projects and the standard lay-out of status reports as one of the main causes of this lack of insight. According to operational managers, the only way to control multiple projects is to arrange meetings with several project managers. Verbal information, collected during these meetings, is regarded as the most effective way to manage all the projects. Managers at all organizational levels often participate in meetings about large projects. These meetings appear to provide a forum for coordination and control between supervisors and project managers. The available information mostly relates to operational details, and is mainly used by project managers. Top management and politicians do not make much use of this information. They focus on the prevention of under spending of financial budgets and on the stimulation of the start-up of individual projects. For them, the information in the Annual Report is the most relevant source of information on organizational progress.

Interviewees see control of Sewerage as an on-going process. The actualization of the mid-term plan (GRP) is seen more of the start of a new budget cycle. Desk research on the process of setting the GRP 2004 found no evidence of the use of performance information for influencing future budgets, or for motivating budget increases.

*Thirdly*, a brief assessment of the use of performance measures for reporting and explaining past performances is presented.

The achievement of objectives is reported at the end of each GRP. An evaluation of a GRP takes place formally every four years, but this period can be longer when the making of a new GRP is postponed. This GRP mainly documents and evaluates the achievements of non-financial performances. This retrospective evaluation is discussed in the Council, and can be regarded as a general organizational evaluation. Sewerage also participates in a national benchmark scheme. This benchmark compares financial and non-financial performances between municipal organizations. The information from this benchmarking process is reported to the Council, but does not seem to trigger any discussion. The reason for this lack of interest in the benchmark information by management and politicians has not been explained during this research<sup>96</sup>.

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<sup>96</sup> This lack of interest can be caused by various reasons, for example: councilors have limited interest in Sewerage (seen as a field for technical skilled professionals, or perhaps because the systems itself is mainly below the surface), or citizens have limited interest in Sewerage (coverage of Sewerage is included in a housing tax and the sewer system causes little inconvenience).

To conclude, performance measures are:

- not used very much for diagnostic reasons at organizational level<sup>97</sup>. Financial and non-financial performance measures are used in budgets, operational planning and in status reporting, but the evaluation of performances at an organizational level only occurs when the mid-term plan (GRP) is renewed.
- limitedly used for signaling important issues. Only under-spending of financial budgets is used as a signal for stimulating project managers to deliver on time.
- hardly used for learning, for changing ways of doing.
- not being used for influencing future budget increases.
- used for reporting on past performances, and providing insight in more general terms into the achieved performances of Sewerage.

### Businesslike or political context

As previously discussed a more businesslike context is associated with:

- specific organizational objectives,
- relatively tight budgetary control (low tolerance of intermediate budget variances, detailed analysis of budget variances, intensive communication about budgets, emphasis on meeting the budget),
- integration of strategic objectives and operational performances (formal organizational planning is coupled with operational control).

A more political control context is especially associated with a high level of multiplicity on objectives. The aspects relating to the two contexts are discussed in detail in the next section.

### *Specificity and integration of objectives*

Sewerage appears to have two different types of objectives: political objectives as defined in the Program Budget (aimed at inhabitants of the city) and the technical objectives in the GRP. Both types of objectives are perceived as specific. The objectives in the GRP, and the related functional demands and technical requirements, largely determine the planning of tasks for Sewerage. The objectives in the Program Budget relate to the public perception of the effectiveness of Sewerage in running the sewers.

Both types of objectives can be seen as linked. It is reasonable to expect that the long-term objectives in the GRP lead to the same point as the objectives in the Program Budget. But this link is not made explicit<sup>98</sup>.

So, in practice both types of objectives can be seen as a relatively loosely coupled control system, by which the Council focuses on registered complaints and the managers focus on technical norms. In formal terms this loose coupling is, however, non-existent. Both GRP and Program Budget are discussed and set by the Council, and the Program Budget makes explicit references to the GRP.

Managers and politicians do not perceive any problems with these two types of objectives. On the contrary, it is seen as a preferable development. In the words of the

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<sup>97</sup> However it is used diagnostically at the operational level of individual projects.

<sup>98</sup> For example: the registration of complaints is a measurement that is also documented in the GRP, but the design of the system relates basically to national defined design norms.

responsible alderman: “*I can approach this subject in more abstract terms, but professionals must think in clear operational terms*”.

The link between Program Budget and GRP is especially clear when looking at the formally documented performance measures in the Program Budget 2004 and 2005. The Program Budgets makes explicit reference to the performances in the GRP.

To conclude, objectives and performances are specific, although not extensively used for control purposes. Integration of financial and non-financial performances is only recognized at an organizational level when the GRP is evaluated. Strategic objectives and operational performances are integrated.

#### *Multiplicity of objectives*

There are no indications of conflicting pressures on organizational objectives. Multiplicity of objectives is thus considered to be low.

#### *Tightness of budgetary control*

Budget tightness in Sewerage is limited. It seems that the sensitivity of and interest in the financial results of Sewerage is relatively low. Budgetary control relates to Sewerage’s products (basically yearly maintenance budgets) and projects (often with a multi-year time span). Financial and non-financial information on projects is available, but is regarded by managers as of limited use for organizational control.

Financial control is carried out within the organization’s control rules and guidelines<sup>99</sup>. Product and project managers have to comply with these specific rules and procedures. Tightness of budgetary financial control at operational level is therefore considered to be high. Budget responsible managers are not allowed to incur more costs than budgeted, to spend more cash than budgeted, and can only authorize payments up to specific pre-set amounts. These behavioral restrictions at project level do not result automatically in tight budgetary control at an organizational level. For example, overspending on one project budget can be compensated by under spending on other projects. This compensation mechanism is controlled by internal rules, and demands the formal approval of senior management. Furthermore, as discussed before, Sewerage’s budgets are mostly under-spent. Overspending at an organizational level seldom occur, which puts limited pressure on budgetary control at an organizational level.

The use of a financial scheme, for flattening the cost over a period of at least four years, is another aspect that decreases budgetary tightness. Even when overspending occurs in a specific year, this deficit is booked to a general ledger account. Managers and politicians seem to have no specific knowledge of the function of this scheme, and on the mechanisms that define the yearly financial results for Sewerage. The general procedure of this scheme was often explained during the interviews, but in answers to more detailed questions they all suggested that it was better

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<sup>99</sup> For more information in financial control, see the section “Planning and control at an organizational level” in this current chapter.

to consult the financial experts (“*you should address that question to the finance sector*”).

Non-financial budgetary control relates mainly to the time planning of individual projects, and to the milestones within the project planning. Management confirmed that there are problems with controlling the time aspects of projects. Time planning of projects has not been well executed and time is not well controlled. Discussing this subject, managers mentioned several issues such as: delays in starting projects on time, time consuming coordination between Sewerage projects and other infrastructural projects, and unexpected situations in practice (unknown cables, pipes, pollution, archeological findings etc.).

Information on the progress of individual projects was available, but information for controlling non-financial performances at an organizational level seems to be largely missing. Thus, coordination of projects at a more organizational level appears to be hard, and the consequences of not delivering non-financial performances seem to be difficult to see. An exception to this general conclusion is the control of Sewerage projects in most of the development districts or areas. The development of new areas or districts seems to be in control, this despite the fact that the realization of these development projects was performed by private parties, outside the direct influence of the city Council.

To conclude, tightness of budgetary control is qualified as limited, due to four aspects:

- Intolerance for interim budget variation appears to be limited, particularly for organizational control purposes. However, for various reasons, exceeding annual budgets never seems to happen.
- Detailed budget-item follow-ups appear to be limited. Detailed follow-ups are applied for operational project control, but this aspect is not of significant importance for organizational control.
- Intensity of budget-related discussion is limited; budgets are seldom the subject of discussion for organizational control.
- Emphasis on meeting the budget is considered as average. Meeting the annual budget appears mainly to be important for operational planning purposes, and for emphasizing the importance of time control (minimizing under spending of budgets).

#### *Measuring the political and businesslike context*

Specificity of objectives within Sewerage is qualified as high<sup>74</sup>. This measure expresses the findings that objectives are perceived as clear, relevant, integrated, and used for prioritizing. Multiplicity of objectives is valued as low<sup>75</sup>. No clear conflicting pressures on objectives surfaced during the research. Tightness of budgetary control at an organizational level is valued as below average<sup>76</sup>. Referring to these measurements, the context of organizational control of Sewerage is mainly characterized by businesslike aspects (specificity of objectives).

### Routineness of tasks

Interviewees had different views on the routineness of tasks in Sewerage. Tasks were often described as “performed in a known way”, easy to forward plan in phases and steps, and often repetitive in nature. On the other hand, most of the interviewees said that tasks were often performed on an ad-hoc basis. They saw the environment of Sewerage’s projects as difficult to predict, both beneath the surface (unknown elements) and above (difficult coordination with others). Only in the case of a totally predictable environment, would the tasks of Sewerage be described as having a high level of routineness.

So, the tasks of Sewerage are seen as basically highly routine, but the implementation of sewer projects appears to happen on a more ad-hoc basis. Sewer projects are planned in advance, but often have to be rescheduled during the execution of the projects. The routineness of tasks is therefore quantified as average, expressing the high level of technical routineness and the more ad-hoc situation of the actual project implementation.

## **Summary Sewerage case**

Sewerage is about collecting and transporting rainwater and waste water, in such a way that environmental pollution and overflow of the sewer systems are minimized. Although the main organizational objectives of Sewerage are formally aimed at securing citizens' long term satisfaction, in practice Sewerage is directed by a mid-term project plan (GRP).

The external environment of Sewerage is perceived as certain, and political interest in Sewerage is very limited. Only, when the Council evaluate the old and set a new GRP (every four year or longer), is some political interest documented.

Planning and control in Sewerage is largely carried out in an environment where professional engineering knowledge dominates. Objectives and performances are perceived as clear and integrated, and conflicting pressures on setting organizational objectives are not seen. Objectives are to a large extent the result of the technical norms, knowledge and methods that determine the planning of Sewerage. The tasks to perform are often well-known and pre-programmable, but performing tasks on time (large projects in particularly) is often organized on an ad-hoc basis.

The use of objectives and performance measures appears to be limited at organizational level. Financial performance measures are mainly used to set the total yearly volume of sewer projects, but the use of financial performance measures for organizational control is limited. Yearly financial variances which occur (between budgeted and realized financial performance) are resolved by a technical financial scheme, which equalizes financial variances over the plan period.

Meeting project deadlines is in general considered to be the most important non-financial operational performance target, but appears hard to achieve. For example, start-ups of sewer projects are often delayed, and the execution of sewer projects often takes longer than planned.

Operational performance measures are important for the project manager; control of individual projects uses operational financial and non-financial performance measures in detail. These operational performance measures give insight into individual projects, but are hardly used for organizational control purposes.

An overview of the aspects relating to Sewerage is documented in Appendix VIII Summary of Aspects.



## **Economic Policy case study**

*The structure of this section is comparable with the other case study reports. Firstly, the context in which Economic Policy is made will be briefly examined, and the most relevant planning and control instruments, with their embedded objectives and performance measures, described. Subsequently, the use of objectives and performance measures is described by documenting the opinions of politicians or managers at three different organizational levels: the executive board, the director, and the operational manager. Finally, the points that have emerged during research into planning and control documents will be discussed.*

### **Economic Policy**

Economic Policy's has an influential role in policy documents. Economic Policy is referred to as central in the Executive Program "Work in Progress" (2002), in the City Vision "Sailing under own flag" (2002), and in the Mid-term Development Plan 2005-2009 (MDP II).

In 1996 Leeuwarden participated in Large City Policy<sup>100</sup> (LCP), a program under the supervision of central government, and this appears to have been an important catalyst in furthering the development of its Economic Policy. Both the City Vision and the Mid-term Development Plan are supported by LCP. The basic assumptions of LCP are, according to the Program Budget 2004, "grounded in the city's processes"; the Program Budget 2004 and 2005 contain the objectives and performances as defined by LCP.

The MDP is an important document in the covenant between the Council and central government. It defines the subjects that are stimulated by LCP, and describes the economic ambitions of the Council<sup>101</sup>. LCP's budget is made available by central government as a general grant under the name "Economy and Social".

The MDP II also documents, in relation to Economic Policy, a number of relevant and measurable objectives, performance measurements, and norms. These output measures are used to account to central government.

The central position of the LCP's objectives can also be recognized in the Council's Economical Plan 2002-2006 ("Leeuwarden, city of all trades"). This plan discusses Economic Policy for the city in a comprehensive way, documents the subjects de-

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<sup>100</sup> In Dutch: "Grote Stedenbeleid" or GSB.

<sup>101</sup> To give some examples, the MDP II documents: Economic growth in recent years and expected future growth will lead to an increase of scale of Leeuwarden in terms of space (development, restructures), economic (the employment engine of Fryslân), and social development (increase in inhabitants). Leeuwarden aims to be prepared for its future. Growth is important for the city for performing and improving its functions well for its own citizens, for cities in the area - also in the future. This will enlarge the city's social economic perspective.

This is defined in the following main goals: A vital mid-size city with 100.000 to 125.000 citizens with a balanced composition. (a) the most important city in the north of the Netherlands, next to the city of Groningen, for facilities, employment and living, (b) an urban society, with unemployment and economic development comparable to an average norm, (c) an attractive city with sustainable and high quality residence for businesses and civilians, (d) an easy assessable city, with an effective transport system, (e) a safe and livable city.

fined in LCP (such as business climate, business environment, city's services to businesses) and specific actions.

The Council's Economic Policy is influenced not only by LCP but also by central government current policies. A change of course in economic policy by central government has consequences for local authorities. Central government's regional economic policies reveal a shift away from more generic economic support and compensation for "backward"<sup>102</sup> areas, towards realizing economic potentials and eradicating major national problems<sup>103</sup>. The cabinet's plan names the city of Leeuwarden where centers of excellence for water treatment<sup>104</sup> and life science should be developed as priority.

Economic Policy in the municipality of Leeuwarden is coordinated by the Economic Affairs team. This team is part of the Development, Economics, and Real Estate sector and of the department of City Development and Maintenance. In the past a strong link existed between development and economics. One of the main ways to realize economic growth was to stimulate tailor-made development solutions. For example, by developing top locations for real estate development, and aiming to meet the accommodation requirements of businesses, was (and is) the city capable of attracting new business. The city has to compete with many other cities in the region, and is using Economic Policy to persuade business to choose Leeuwarden. The link between development and economics has become less pronounced in recent years; and the emphasis of Economic Policy is now less on the development of new districts and areas. Economic Policy is now more related to a broad spectrum of municipal services, such as traffic, public transport, employability, and development.

The Economic Affairs team is involved in four activities: services, relation management, policies, and subsidy management. The team size was small; only 3 persons were employed in 2005. The Development, Economics, and Real Estate sector has a staff of about 26 full-time equivalents.

## **Planning and control documents**

Objectives, desired effects and performances relating to Economic Policy have been set out in several planning and control documents, such as the Program Budget 2004 and 2005, the Sector Plan 2004 and 2005, the Annual Report 2004, and the Quarterly Reports in 2004.

Economic Policy is recorded in the Program Budget 2004 as part of the Economics and Tourism program. The strategic objectives of this program partly relate to the City Vision and the MDP II<sup>105</sup>, but include some additional specific objectives<sup>106</sup>. Ac-

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<sup>102</sup> See memo such as: "Integral Governance Plan northern part of the Netherlands", in Dutch "Integral Bestuursplan Noorden des lands", and the "Langman-agreement".

<sup>103</sup> See cabinets memo "Heights in the delta", in Dutch "Pieken in de delta".

<sup>104</sup> Referred to as "Wetsus".

<sup>105</sup> Such as: enlarging the attraction and capability of the city, and to extend the services to businesses.

According to the text of the Program Budget 2004, the objectives and the related measures of Economic Policy are rather specific. The major objectives are documented in Table 17.

Objectives Economic Policy		Reference	2004	2005
A	Increase local employment equal or more than increase on national level (nl).		nl	nl
B	Maintaining current business climate rating	6,4	6,4	
C	Number of new ventures		240	240
D	Increase in employment in retail			+150
E	Number of m2 office space to deliver			37500

**Table 17** Objectives Economic Policy (source: Program Budget 2004, p. 43)

The prime objective is to increase employment opportunities. No specific norm is documented; the aim is to develop in line with national employment trends. The notes for this objective do not reveal a more specific goal, but stress that in 2005 employment in the city was in line with the national trend. The other objectives detail desirable developments in the local business climate, new ventures, retail trade, and office space. Most of the objectives have target values, but for the year 2004 not all targets are available. The Economics and Tourism program provides textual context on the state of progress, both on the objectives and the performances. Two groups of performances are described, incidental and structural. Incidental performances often describe particular development by the municipal organization or in which the organization participates. Structural performances are described in more general terms. Examples of structural performances are:

- acquisition of new ICT-businesses,
- implementation of a new service point for businesses, and a computer system for relation management,
- to visit 80 businesses per year.

In contrast to the relative importance of Economic Policy in the Program Budget, Economics and Tourism are of only minor financial importance. Table 18 shows that the total costs of Economic Policy produce only 7 percent of the total costs of the program (€ 1.6 million of the € 22.6 million). The financial heart of the program is Development and Real Estate<sup>107</sup>.

<sup>106</sup> Such as: supporting retail trade with particular services, enlarging recreation opportunities and facilities.

<sup>107</sup> The total budget of the products Development and Real Estate together makes € 19.3 million, or 85 percent of the total costs of the program Economics and Tourism.

<b>cost and income 2004</b>	<b>costs</b>	<b>income</b>	<b>results</b>
<i>(*€1000)</i>			
<b>Economic Policy</b>	<b>1.664</b>	<b>513-</b>	<b>1.151</b>
Markets	180	161-	18
Markets stands	43	92-	49-
Real estate	6.341	5.605-	736
Development	13.003	14.126-	1.122-
Recreation terrains	827	72-	754
Recreation sailing	79	60-	19
Fairs	42	100-	58-
Tourism	394	99-	295
<i>Total</i>	<i>22.573</i>	<i>-20.829</i>	<i>1.744</i>

**Table 18** Costs and income Program Economics & Tourism (source: Program Budget 2004, p. 51)

The Interim Report 2004 does not forecast any budget shortfalls in Economic Policy.

In the Annual Report 2004 many objectives are not fully evaluated. The main reason given for this is lack of quantitative data. Some data is included, and shows that progress in the development of office locations has almost halted. The progress on incidental performances is mainly valued as below expectation (with a plus/minus or a minus), the progress in the development of office locations is valued with a minus. The progress made towards various structural performances is valued in a more positive way, mainly with a plus. Progress in attracting new ICT-businesses, implementing a service point for businesses, and carrying out business visits seem to meet the pre-set norms.

An overview of the financial performances is documented in Table 19.

<b>Costs and income 2004</b>	<b>costs</b>	<b>income</b>	<b>results</b>
<i>(*€1000)</i>			
Budget 2004	1.664	513-	1.151
Adjusted budget 2004	2.124	919-	1.205
Account 2004	1.666	631-	1.035
<i>result</i>	<i>458</i>	<i>288-</i>	<i>170</i>

**Table 19** Costs and income Economic Policy (source: Annual Report 2004, p. 43)

The Annual Report does not explain the reasons behind the adjustment of the budget. Desk research only revealed that the Council agreed the budget adjustment, but more as an administrative decision. The Annual Report only explains the financial result as a difference between actual costs and adjusted budget.

The Program Budget 2005 completely absorbed the strategic objectives of the MDP II. The indicators to measure these objectives are also used. The organizational objectives in this budget are to a large extent comparable with the objectives of the pre-

vious budget. These objectives are now explained more specifically. To illustrate this, a few examples are documented below.

- employment growth on a national level
- keep the business climate at the current level (rating of 6.4 on a 10-point scale)
- increase in the rating for new ventures (increase from 6.1 to 6.6 in four years, on a 10-point scale)
- 5 new business activities
- optimal use of ICT-functionalities

Achievements are documented, and the measurements of incidental and structural performances are comparable with those in the previous program budget. The Economic Policy budgeted costs for 2005 show a decrease of 6 percent against the 2004 budget<sup>108</sup>.

The objectives and performance measures for Economic Policy, as described in the Program Budget 2005, are also documented in the Sector Plan 2005 of the Development, Economics, and Real Estate sector. This list of performance measures is expanded with more operational activities, performances indicators and target values, and details about internal and external relations. The Sector Plan also contains a list of management activities<sup>109</sup>, an appendix with financial budget details, a financial restructuring target, and an overview of meetings to be held and reports to be produced.

The Quarterly Reports in 2004 are mirrors of the Sector Plan 2004; they report progress made. The Quarterly Reports in 2004 explain the progress mainly by qualitative descriptions of the status. Only progress on financial performances, sick leave, and vacancies are explained in a more quantitative manner.

The sector produced its own Annual Account 2004, separate from the Annual Account for the whole organization. This Sector Annual Account often provides explanations on the year-end situation in the sector, and gives a global and qualitative description of the achieved performances. Reports on the achievements of most of the individual performances are not included. The Sector Annual Account does contain a detailed overview of the financial performances and variances. The figures in this financial review are, however, different from the figures used in the organizational Annual Account. This remarkable fact is explained by the fact that the organizational account was produced after the sector account, but the reason why these differences occurred was not explained.

### **Use of objectives and performance measures**

The use of objectives and performance measures is analyzed in two ways. Insight into their use is documented at three different organizational levels (aldermen, civil

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<sup>108</sup> Costs €1,571,000, income €513,000, delta €1,058,000.

<sup>109</sup> Such as personnel evaluations, sickness leave, vacancies, education and training.

director, and operational manager). Then, with reference to these findings, relevant aspects are discussed.

### Aldermen

Employment is, according to the alderman, one of the most important political focus points. In his view Leeuwarden is a thriving city, a city with sufficient employment. The need to excel in economic terms, and perform better than the other cities in the region, is seen as an important target for politicians.

The alderman described Economic Policy as a subject that is hard to control. He explained that Economic Policy relates to various aspects, and to different sectors of the municipal organization, and mainly delivers results in the long term. The Economic Affairs team's main task, in his view, is to initiate and stimulate actions in other sectors. He associates the tasks of this team with the delivery of high levels of services to private companies, with easily accessible offices and an effective working urban infrastructure. These are the primary responsibilities of the Spatial Development and Traffic and Transportation sector.

He stresses the importance of his personal involvement in this area. Contacts between the top managers of private and public companies and politicians, and support by civil servants for those contacts, are described as critical to an effective Economic Policy.

The alderman perceives and other elected members of the Council perceive the objectives of Economic Policy as clear. For him, a lack of clarity in Economic Policy is the way in which these objectives can be met. He sees many options that could lead to their delivery. The alderman not only expressed uncertainty about the execution of tasks, he also saw the external environment of Economic Policy as uncertain. He emphasized that many external circumstances form risks that can prevent achievement of the Council's objectives in this policy field. In his view Economic Policy is a flexible policy field, which can quickly react to situations and opportunities. The flipside of this is that he finds it hard to keep the Economic Affairs team on a straight and focused course.

### Civil Director

The director perceived the objective related to increased employment as clear, and added that this objective was measurable and could be monitored. He emphasized that this objective must also be met by private companies and not exclusively by the municipality. He expressed his view that the municipality can only support businesses in achieving this objective, and he saw contact management as an important organizational function in this regard. The director added that relation management had limits. In his words: *"You can be out all year, and still not improve the local employment situation"*.

According to the director, Economic Policy can only function well when it is solidly embedded in the activities of other sectors of the municipality. He therefore stresses

the importance of personnel from the Development, Economics, and Real Estate sector being present at meetings on spatial and infrastructural projects.

Members of the Development, Economics, and Real Estate sector have less restriction in their job descriptions. In the words of the director: "*They are the free spirits of the organization*". This role is highly valued by the director. He finds that this freedom can have a significant impact on the municipal organization as a whole and on spatial development in particular.

He illustrates this with an example: Economic Policy has limited influence on the accessibility of businesses in the city, but an easily accessible city is of major importance to the local economy. In his view the policy area of Traffic and Transportation overlaps with Economic Policy. The economic possibilities for Leeuwarden justify extensive road building schemes.

### Operational manager

The operational managers also perceived the objectives of Economic Policy as being clear. They added, in line with the other interviewees, that they perceived the road to achieving these objectives as uncertain. The manager of the sector explained that it was largely unclear to him what his sector should do in order to achieve higher employment in the city. In his own words: "*The objective is a good one, but I don't know which is the right button to press to make it happen*".

Nevertheless, members of the Development, Economics, and Real Estate sector view their involvement in Economic Policy as valuable. Asking them for the reasons for this positive evaluation, they explained that the sector was recently involved in attracting new businesses to the city. On the progress towards employment targets, however, they valued their involvement less positively. In the words of a manager: "*The welfare payment in-trays are still full*".

However, they believe that the municipality will meet the employment objective. National developments indicate a decrease in employment of 1.2 percent, and the current figures in the city are better. They quickly add that this achievement had very little to do with the involvement of their organization, or the city's policies on this field, but more to do with the relatively large number of service organizations within the city's boundaries<sup>110</sup>.

According to operational sector management, Economic Policy is not marked by a consistent, long-term approach. In their opinion it is not easy to use objectives as documented in the Program Budget as a starting point for their operational planning. Operational planning is often based on the activities of previous years, and the organizational objectives are of no value to them in deciding on changes in operational planning.

They see the availability of staff in the sector as very flexible, which allows them to react swiftly to emerging situations.

Managers describe the set of activities related to Economic Policy as complex, mainly because so many have to be performed by other sectors of the municipal or-

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<sup>110</sup> The decrease in employment was mainly caused by the manufacturing sector, and not so much by the service sector.

ganization. Motivating personnel in other sectors and coordinating many activities is no easy job. A few years ago the emphasis on motivation and coordination was not considered to be that important. Economic Policy and Development were then closely related and worked as a unit. But Economic Policy is now linked to many organizational activities, not just to infrastructural projects, but also to things such as city marketing.

### **Aspects of budget use**

The previously described opinions of the alderman, the director, and the operational managers will be used here to analyze relevant aspects against the research framework. The main level of analysis is again organizational, with its focus on the use of objectives and performance measures at the top of the organization. The research framework and its defined aspects will be the focus of the analysis, but if applicable, other aspects are also included.

The evidence is summarized and analyzed by the researcher with reference to desk research and interviews where suitable.

### Design and quality of the accounting information system

The accounting information system of the municipality yields both financial and non-financial performance information. The financial information for Economic Policy is particular to the costs of products of the municipality. Financial information is documented in all planning and control documents, such as the Program Budget, Sector Plan, and Quarterly Report. The financial information for Economic Policy often relates to differences between achieved performances and budgeted annual costs.

In addition, the accounting information system also yields non-financial information. This information links to the objectives and performances of Economic Policy and to several other aspects (such as statistics, reports on economic development, several trends, ad-hoc studies, etc.). Additional information is available, covering a broad range of different subjects, and is often more qualitative in nature.

The quality of the accounting information used is seen in different ways. The quality is perceived as good at an operational level, despite the fact that they cannot get all the information they require. At an organizational level, the information is valued less positively. Accounting information is seen as insufficient to provide the right information. At the same time top management and politicians say that they do not expect that the accounting information system can completely fulfill their requirements for Economic Policy. The majority of their information requirements have, in their view, relationships with new issues and activities. Accounting information has, in their view, more of a systematic character, and delivering ad-hoc information on request is not what they expect from this system.

Interviewees indicated that most of the information is delivered by verbal communication, in face-to-face meetings. This information is viewed as sufficient and delivered on time.



To conclude, the accounting information system in relation to Economic Policy contains both financial and non-financial performance information. Plentiful financial performance information exists, and relates to budgeted values, achieved values, and additional information.

The observations are tentatively quantified into a score<sup>65</sup>. The scope of the accounting information system for Economic Policy is valued by the researcher following the previously-introduced method of assessing the various case findings. Using a 5-point scale, the scope is labeled as “above average”<sup>66</sup>. The quality of the accounting information is valued in the same tentative way as the scope, and is labeled as “average”<sup>67</sup>.

### Applied role

The interviews presented a view of the different ways in which accounting information is used in practice; they presented an insight into the roles of performance measures. This study has defined five different sub-roles or functions by which archetypal roles can be recognized<sup>111</sup>. These five functions and the relating archetypal role (between brackets) are:

- to diagnose, to compare actual and budgeted performance (answering role),
- to learn and to change ways of doing (learning role),
- to unequivocally signal what is important (learning role, ammunition role),
- to influence future budget increase (ammunition role),
- to report and explain on past performance (rationalization role).

*Firstly*, the results of the interviews and desk research are now used to assess whether the use of performance measures is for diagnostic reasons, that is, for comparing financial and non-financial variances in performances.

Budget information is used for operational budgeting and planning (Program Budget and Sector Plan) and to report on the progress made against the financial targets for Economic Policy. The Quarterly Report 2004, sectors’ Annual Account 2004, and the municipal Annual Account can be seen as clear examples of this report function. These reports mainly provide insights into the status of the consolidated financial performances, but do not analyze the variances between achieved and budgeted performances or discuss corrective action that could be taken to influence the achievement of performances in the near future.

Non-financial performance measures are often used in ad-hoc specially made reports and documents. This information relates to a wide range of subjects, and is used to analyze current developments or to justify actions to be taken. This additional information rarely refers to the achieved non-financial performances of the organization, and does not give insight into actual achieved non-financial performances.

The use of budgeted performance measures for diagnostic reasons appears therefore to be limited, and only for financial performances on aggregated figures.

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<sup>111</sup> For more detail on the theoretical definition of the roles and their function see chapter 2, A Theoretical Research Framework.

*Secondly*, the use of performance measures for learning, signaling and influencing future budgets is assessed.

Performance measures are used for signaling, or highlighting important issues in Economic Policy. Not only budgeted information, but also additional information is collected and distributed. This information comes from various sources, is often made for a special purpose, and is used at all organizational levels. This information is used in meetings in which politicians, top management and operational management decide on actions to be taken. Many of these meetings are responses to real opportunities or developments. Information related to Economic Policy is often used to analyze and motivate actions. Swift decision processes and timely actions appear to be important, combined with delivering support to the alderman in a flexible way. Due to the fact that Economic Policy often relates to other policy areas, this ad-hoc information is often used in meetings with other sectors, such as spatial planning, and traffic and transportation. Standard information appears to be used here to a very limited extent. There are indications that this information is used to influence decisions in other policy fields, and to influence budget setting in future budget periods, but specific objective examples are hard to find.

*Thirdly*, a brief assessment of the use of performance measures for reporting and explaining past performances is presented.

The achieved performances are reported to the alderman, the Council, the citizens, and central government (a mandated LCP report). These reports are made after a certain time period, and present an historic overview of developments in the city in the reporting period. The reports to the Council and to the people of the city often refer to specific projects or development areas. This type of information is also used in a city marketing function, advertising the developments in the city to a broad audience.

To conclude, not all five aspects of the archetypal roles are observed.

- Performance measures are only partly used for diagnostic use. Only financial performance measures on aggregated budgets are used in a diagnostic way. In particular non-financial performance measures are often used for operational budgeting, planning and status reporting, but does not relate often to the budgets.
- Performance measures are used to learn, in a way that performance measures are used to decide what actions must be undertaken. Learning to achieve pre-set goals is not clearly observed. The relationship between the objectives, for example employment, and the action to be taken are seen as indirect.
- Performance measures, often additional non-financial measures, are used to signal to all involved people at all levels of the organization.
- Performance measures are not observed to be used for influencing next period budgets, but seem to have some influence on budgets in other policy fields.

- Performance measures are used for reporting the past, and to explain historic achievements.

### Businesslike or political context

As previously discussed a more businesslike context is associated with:

- specific organizational objectives,
- relatively tight budgetary control (low tolerance of intermediate budget variances, detailed analysis of budget variances, intensive communication about budgets, emphasis on meeting the budget),
- integration of strategic objectives and operational performances (formal organizational planning is coupled with operational control).

A more political control context is especially associated with a high level of multiplicity of objectives.

The aspects relating to the two contexts are discussed in detail in the next section.

### *Specificity and integration of objectives*

Objectives appear to be perceived as clear and specific by all involved at all organizational levels (sector, department, and alderman). When interviewees were asked to name the most important objectives, they all referred to the development of employment, and almost all also to objectives relating to business climate, new ventures, and the number of businesses moving to Leeuwarden. These objectives were perceived to be measurable and had objective measurement instruments.

Organizational objectives are mainly documented in organizational documents, such as the Program Budget and Annual Report, used by the Council and available to external parties (citizens, governance bodies etc.). The more operational documents, such as the Sector Plan, only refer to the organizational objectives in general terms. The performances of the Program Budget are integrated at an operational level.

The relationship between organizational objectives and performances are seen by many as indirect. They questioned whether, and to what extent, achievement of performances leads to achievement of objectives. For example, the growth of employment is assumed to be achieved by supporting an internet academy, the implementation of a business service point, and a relations management system. But the actual contribution of these activities is more based on assumptions than on clear evidence.

In spite of the fact that objectives are perceived as clear and specific, they are also viewed by those involved as hardly controllable by the Council. For example, the decrease in employment is not heavily influenced by the Council's Economic Policy.

In general, managers don't believe that the Council's Economic Policy can significantly influence employment developments. However, at the same time all interviewees indicated that the activities of Economic Policy are largely dictated by the objective of employment increase. Actions are not always based on objectives analysis, but are strongly determined by actual situations, they added.

### *Multiplicity*

There are no indications of conflicting pressures on the organizational objectives of Economic Policy. Multiplicity of objectives is therefore considered as low.

### *Tightness of budgetary control*

Budget tightness is limited in Economic Policy. Budgetary control mostly relates to meeting annual budgeted costs. Additional non-financial information is available, but is regarded as of limited relevance to organizational control.

Financial control is performed within the organizational control rules and guidelines<sup>112</sup> and product managers have to comply with these specific rules and procedures. Tightness of budgetary financial control at operational level is therefore considered to be high. Budget responsible managers are not allowed to incur more costs than budgeted, to spend more cash than budgeted, and can only authorize financial obligations up to specific pre-set amounts. However, the financial budget of Economic Policy is rather small<sup>113</sup>, and is not perceived by top management and alderman as an important control factor. Financial budgets are seldom discussed within the organization.

Furthermore, the majority of the costs incurred or related to Economic Policy are not attributed to this policy name, but are part of the budgets of, for example, development or infrastructure projects.

Non-financial budgetary control relates mainly to achieving the organizational objectives and the organizational and operational performances. Despite the perceived clarity and measurability of objectives and performances, it appears that neither are used for organizational control. The perceived limited controllability of the objectives, in particular in the short term, and also the limited availability of timely information on achieved objectives are given as limiting factors. Information on employability and on business climate is only available after a year, and Quarterly Reports and Annual Reports therefore miss control information on actual achievement of the objectives. The control of the more incidental performances often relates to particular projects and actions, performed by the Economy and Real Estate sector, and Quarterly Reports contain progress information on these incidental performances. Status reports are provided on operational tasks<sup>114</sup>, and desired performances levels are documented. These reports also contain management-related indicators, for example on sick leave, vacancies, and number of employees. Differences between norm values and actual achievements are, however, not explained. In the Quarterly Reports reference is also made to regular meetings held to discuss progress and bottlenecks and to decide on actions to be taken.

To conclude, tightness of budgetary control is qualified as limited, due to four findings:

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<sup>112</sup> For more information in financial control, see the section "Planning and control at an organizational level" in this current chapter.

<sup>113</sup> Budget cost of Economic Policy only makes about 7 percent of the total cost of the program Economics and Tourism.

<sup>114</sup> Such as: making of a master plan FEC, visiting businesses, start-up of a city marketing program, and the implementation of a relation management system.

- Intolerance for interim budget variation appears to be limited, particularly for organizational control purposes.
- Detailed budget-item follow-ups appear to be limited.
- Intensity of budget-related discussion is limited; budgets are seldom the subject of discussion for organizational control.
- Emphasis on meeting the budget is considered as limited. Non-financial budgets, in particular the development of employment, are considered as important, but are not used for budget control.

#### *Measuring the political and businesslike context*

The specificity of objectives for Economic Policy is qualified as average<sup>74</sup>. This measure shows that objectives are perceived as clear and relevant, but at the same time does not make clear what activities the organization should be engaged in. Objectives are also not used for decision making on the priority of organizational activities.

Integration between organizational objectives and performances are thus regarded as limited. Integrated organizational objectives and performances are present, integration of organizational and operational performances in particular.

No clear conflicting pressures on objectives surfaced during the research. Multiplicity of objectives is qualified here as low<sup>75</sup>. Tightness of budgetary control is valued as below average<sup>76</sup>.

Referring to these measurements, the context of organizational control in Economic Policy is characterized only to a limited extent by businesslike aspects (specificity of objectives).

#### Routineness of tasks

The activities relating to Economic Policy are described by all interviewees as non-routine in nature. Tasks often differ significantly and are not often repetitive in nature. It is often unclear which tasks should be performed; there seems to be no “known road” to follow for the majority of the relating activities. To conclude, routineness of task is valued as low.

## **Summary Economic Policy case**

Economic Policy is concerned with stimulation of employment opportunities in the city. The Council's main objective is to increase local employment in line with national employment trends.

Judging by the emphasis on Economic Policy in most of the organizational planning and control documents, this policy field is highly important for the Council. Objectives for Economic Policy are rarely disputed, clear, and appear to be generally accepted.

Objectives are however difficult to achieve. Objectives are seen as limitedly controllable; the Council appears only to have limited influence on local employability. Objectives are also hard to make operational; managers and politicians also find it hard to find operational performances that relate to the achievement of the objectives. It is often not clear what particular action should be planned in advance. The link between organizational objectives and operational action is therefore considered as weak; objectives do not give direction for action. Achieving Economic Policy objectives appears to be complex too; it relates to many other organizational activities outside the Economy and Real Estate sector. The focus of Economic Policy is often more on the stimulation, motivation, and coordination of activities outside its own sector, than on the actual performances of operational tasks.

As a result, objectives are seen more as strategic mission statements than as performance related control tools.

Many operational tasks of Economic Policy are seen as routine, and are performed every year, but emerging actions are important to. These operational actions are characterized by flexibility and swiftness, in order to react to emerging opportunities or challenges. These ad-hoc projects and activities are supported by the use of a broad range of additional information, often generated for particular purposes on an ad-hoc basis. This information is used to discuss the importance of Economic Policy and the actions to be taken all round the sector.

Achievement of objectives cannot be monitored and analyzed on time because objective quantitative information on the progress of objectives is only available later. Interviewees indicated that using accounting information for control purposes is not really seen as an option. Performance measures often relate to historical trends or developments, and are often used to motivate emerging actions and to influence future budgets.

A comprehensive overview of the relevant aspects of this case study is documented in Appendix VIII Summary of Aspects.

## **Spatial Planning case study**

*The structure of this section is comparable with the other case study reports. Firstly, the context in which Spatial Planning is carried out will be briefly examined. The most relevant planning and control instruments, with their embedded objectives and performance measure, will also be described. Secondly, their use is described by documenting the opinions of politicians or managers at three different organizational levels: the executive board, the director, and the operational manager. Finally, the points which emerged during research into the planning and control documents will be discussed.*

### **Spatial Planning policies**

According to several memos<sup>115</sup> issued by central government's cabinet, the main goal of Spatial Planning is to support civil developments, not only from an economic perspective but also from a more social and cultural view point. Several governmental organizations are responsible for Spatial Planning in the Netherlands. The main direction and overall policies are determined by central government. The Spatial Planning Act and the Space Memo can be seen as documents describing the current vision of national cabinet on this subject. Spatial Planning policy must ensure strong cities and vibrant rural communities. Government policy must safeguard important national and international treasures like nature, the landscape and cultural history, and increase public safety whilst at the same time allowing "space for development".

More detailed planning and the execution of these plans is the responsibility of local government, and both provincial and municipal governments are involved in these processes. Provincial government is mainly responsible for coordination, in particular with regards to Spatial Planning projects relating to more than one city, and supervises the municipal organizations' Spatial Planning activities. The municipal organizations concentrate on the realization of Spatial Planning within the city borders. Municipalities are held responsible for maintaining Spatial Planning policies, and having operational instruments for the achievement of these planned objectives.

For the city of Leeuwarden Spatial Planning can be divided into three subjects: zone planning, zone development, and strategic vision on development.

A zone plan can be defined as the consolidation of local area planning<sup>116</sup>, which can be redefined or changed<sup>117</sup>. The city has a legal obligation to keep the zone plans up-

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<sup>115</sup> Such as: the 5<sup>e</sup> Spatial Planning Memo and the Space Memo.

<sup>116</sup> In the words of the Dutch ministry of Housing, Spatial Planning and the Environment (source: website <http://international.vrom.nl/>): "A zone plan describes the pre-definition of the development of a specific area of a city. It describes, for example, if a football stadium or a camping site can be developed in a specific area, or where houses of offices are to be built. The zone plan is made for both citizens and the municipal organization. Zone plans do not only define the development of an area, but also describe aspects such as maximum height and width of buildings. Zone plans should be actualized at least every 10 years. In particular situations the zone plan can be modified or changed by the municipal organization.

to-date within a 10 year period, and is accountable for this to the provincial and central government. It is not anticipated that the city of Leeuwarden will comply with this obligation before 2007. In order to increase the progress of the zone plan actualization, the city had allocated extra means to it (in particular extra budget for labor costs). The operational tasks are performed by specialist, legally trained civil servants, and these professionals are often supported by other experts in zone planning<sup>118</sup>. The central government mandate to use digital information systems for zone planning is also regarded as an important factor.

The city offers support and guidance to people and businesses with their applications for formal city approval on zone developments. Specialized civil servants (urban planners) research and evaluate submitted proposals, and help to guide the proposal through the decision-making processes of the municipal organization.

The third part of Spatial Planning relates to the city's ambition to strategically restructure or redefine the available space. This is the field of city development, of ambitious global discussions and agreements on the spatial development of the city<sup>119</sup> and of more local and specific area restructuring plans. Often many different parties are involved in the making of these plans<sup>120</sup>.

Spatial Planning is mainly the responsibility of the Spatial Planning and Development sector. The total number of staff in this sector is equivalent to approximately 55 full time equivalents. The sector is positioned within the City Development and Maintenance department.

### **Planning and control documents**

Objectives, desired effects and performance relating to Spatial Planning have been set out in several planning and control documents, such as the Program Budget 2004 and 2005, the Sector Plan 2004 and 2005, the Annual report 2004 and the Quarterly Report of 2004.

The Program Budget 2004 documents in detail the policies for zone planning and zone development. The strategic objectives that are explained are:

- an up-to-date and adequate regulation of public space,
- digitally recorded and maintained planning,
- improving living standards in city districts.

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<sup>117</sup> The process of changing a zone plan in the Netherlands is generally addressed as an "article 19 procedure", referring to the legal article that defines the formal steps to be taken to change a zone plan. In the words of the Dutch ministry of Housing, Spatial Planning and the Environment: A zone plan describes how a specific area of a city development is determined.

<sup>118</sup> Mainly civil engineers and urban developers.

<sup>119</sup> As documented in the City Vision "Sailing under own flag", the marketing concept "Expedition Leeuwarden", the "Inner City Structural Vision", the covenant with the province of Fryslân, and the LSP covenant with central government.

<sup>120</sup> For example: for the development of an area suitable for the development of a "knowledge campus" (a selected group of high schools), the municipal organization, the related high schools, the provincial government, providers of subsidies and grants, and private banks were involved.



The Program Budget clearly explains the need to keep the zone plans up-to-date, for example by referring to the Spatial Planning Act. This Act mandates local authorities to maintain their zone planning at its current level (using a 10 year period). The city differentiates between preserving zone plans (minor adjustments of existing plans) and more “open” zone plans (describing a new development area). The program Budget 2004 also contains a list of zone plans that are under development. Desirable trends on zone developments are not explained in detail, but the operational objectives of zone development are documented (describing the number of zone plans to make). The Program Budget 2004 also contains a number of performance targets for Spatial Planning. A number of performances relate to the Council’s desire to improve the quality of zone planning or relate to operational activities<sup>121</sup>. The focus of Spatial Planning in the Program Budget is on the process of keeping the zone plans up-to-date, on aspects of the City Vision<sup>122</sup>, and on the extra financial means that are designated for these purposes. The Program Budget 2004 also documents a number of risks; for example the limited controllability of the processing time for formal procedures in other governmental organizations, legal claims incurred by changes in spatial plans, and the increase in contractual obligations to meet pre-set time frames.

Spatial Planning is part of the “Spatial Planning, districts and villages” program, and together with the product “District approaches” dominates the financial budget of this program (see Table 20)

<b>Costs and income 2004</b>	<b>costs</b>	<b>income</b>	<b>results</b>
<i>(*€1000)</i>			
District actions	1.372	338-	1.034
<b>Spatial Planning</b>	<b>1.040</b>	<b>20-</b>	<b>1.020</b>
Geometry	174	98-	76
Registration of public space	15	-	15
Council advice on Spatial policies	101	-	101
<i>Total</i>	<i>2.703</i>	<i>-456</i>	<i>2.247</i>

**Table 20** Costs Program Spatial Planning, Districts and Villages (source: Program Budget 2004, p. 40)

The Interim Report 2004, which was presented to Council members halfway through 2004, does not mention any expectation that the budget for Spatial Planning will not be complied with, financially speaking. The Interim Report explains the progress on the financial performances, highlights some bottlenecks in general terms, and justifies some decisions still to be made by the city’s Council. The Interim Report gives notice of an expected under-spend on depreciation costs, caused by delays in civil projects.

<sup>121</sup> Performance measurements describe, for example, the quality of support by civil servants to the Council, the new organizational function of development supervisor, operational activities such as judging spatial initiatives, or managing projects, settlement of claims, informing citizens.

<sup>122</sup> Relating to the development of the inner city and the FEC-city area.

The Annual Account 2004 documents the achievements made in meeting objectives and preset performance targets in Spatial Planning. It explains that due to missing information on the year end situation, no evaluation is made of the extent to which objectives have been achieved. However, performances are evaluated in more general terms<sup>123</sup>. All other performances are evaluated with a plus. Examples of positively evaluated performances are:

- an up-to-date and adequate regulation of public space, between 1 and 3 plans made,
- procedures performed in time and on quality targets, sufficient number of procedures performed,
- zone planning, 5 plans adjusted.

The Annual Account stated that the costs of Spatial Planning exceeded the financial budget (see Table 21). It is explained that these higher costs were caused by a difference in internal cost allocation of overhead and support costs. Previously, these costs were allocated to an investment project, but due to changed accounting regulations these costs were now allocated to the cost budget of Spatial Planning. This change in regulation appears to have been unforeseen in the Program Budget 2004 and in the Interim Report 2004.

<b>costs and income 2004</b>	<b>costs</b>	<b>income</b>	<b>results</b>
<i>(*€1000)</i>			
Budget 2004	1.040	20-	1.020
Adjusted Budget 2004	1.071	65-	1.006
Account 2004	1.412	142-	1.270
Result	341-	77	264-

**Table 21** Cost and Income Spatial Planning (source: Annual Account 2004, p. 123)

The Program Budget 2005 also documents a number of performance targets. The performance measures are comparable with the 2004 budget. The performance measures are:

- zone plans are up-to-date,
- between 1 and 3 zone development plans are made,
- procedures to change zone plans can be used to speed up internal time consuming procedures,
- consultations on Spatial Planning are provided.

The main focus of Spatial Planning appears to be on the development of the inner city, and the major projects that are situated in the city centre<sup>124</sup>, and in the southern districts of the city, such as the “hook” (a relocation of roads, as part of the city ring) and the related new development of business districts.

The financial performances in 2005 are basically comparable with the 2004 budget (cost budget of about € 1 million). The change in accounting procedures, which re-

<sup>123</sup> The progress on keeping or bringing zone planning up-to-date is for example evaluated with a plus/minus. The detail per explanation however explains that this process is behind schedule, because the complexity of plans appears to be higher than earlier expected.

<sup>124</sup> Projects entitled “Olderhoofsterkerhof”, “Nieuw Zaailand”, and “Provinciehuis”.

sulted in a overspending on the 2004 budget, has not resulted in an increase in the 2005 budget.

The Sector Plan 2004 for the Spatial Planning and Development Sector connects the organizational objectives and performances of the Program Budget with more operational objectives and performances. The organizational objectives and performance of the Program Budget 2004 are fully documented in the Sector Plan, and more operational performances are added. The Sector Plans contain, for example, a list of zone plans and development plans that are expected to be completed in 2004. The Sector Plan also describes which claims should be given extra attention. Furthermore the Sector Plan describes the environment of the sector and the planned organizational changes. It refers to the organizational change project "From bulwark to network". The responsibilities of project and product managers are explained, and project management improvements are described by qualitative aspects. The use of the "project tabling meeting" (a meeting to coordinate projects throughout the organization) and the presence of a new development supervisor is also documented. The Sector Plan also contains a vision of the culture in the sector<sup>125</sup>, and explains that the main concern of the sector should be focussed on the products of the sector; on Spatial Planning.

The Quarterly Reports in 2004 (numbers I, II and III) provide summaries of the financial and non-financial performances achieved. Financial performances are evaluated by comparing achieved and budgeted performances per cost centre. The realised progress of the activities relating to the cost centres is documented by a progress indicator, which indicates the progress of activities as a percentage between 0 (start) and 100 (all finished). The reports also contain a year-end estimate of financial and non-financial achievable performances. For example, the Quarterly Report 2004 II (page 8) reported on the progress of the product "Zone planning" amongst others:

*"€ 227.318 budgeted / € 135.363 realised (59%)*

*The up-to-date process assumes an average cost price of € 45.000 per plan. Because several plans ..... took more time, the budget of these plans is overspent. A year-end estimate will be made in the second half of 2004 ..... in order to evaluate if the total cost will be within budget. The costs and control of zone planning are currently viewed as very complex.....Aiming to improve the insight in cost and time spend, it is proposed to manage zone planning by using more project management methods."*

Non-financial performance measures of the Sector Plan are also analysed in the Quarterly Reports. The Quarterly Reports give many details and explanations about non-financial progress. The reports contain, for example, appendices on the progress of individual zone plans, on claim settlements, and on zone development. Quarterly Report 2004 III documents, in regard to zone planning, for example a list of zone

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<sup>125</sup> A quote (source: sector plan 2004, page 6): "There exist high levels of functional commitment and professionalism, and loyalty to the city council members. Less enthusiasm exists on the management and support processes, and about efficiency of support deliverances, the time spend and the effectiveness of their own products."

plans in progress, and provides an explanation of the progress of each zone plan. The reports also report on management aspects such as sick leave, vacancies, temporary personnel, and progress of the training plan.

The sector has also made a Sector Annual Report. This Sector Annual Report provides detailed overviews on the financial and non-financial achievements, and information on man hours spent, and the growth in the number of staff. The financial information complies with the organizational Annual Report.

### **Use of objectives and performance measures**

The use of objectives and performances is analyzed in two ways. Insight into their use is documented on three different organizational levels (aldermen, civil director, and operational manager). Then, with reference to these findings, relevant aspects are discussed.

#### Aldermen

In the alderman's opinion the objectives and performances of Spatial Planning are important for the fulfillment of its operational activities. She explained that the objectives mainly relate to developing housing and offices and to the process of bringing zone planning up-to-date. She emphasized two areas: zone planning and major projects.

The objective of bringing zone planning up-to-date in 2007 was emphasized. The alderman stresses the importance of having up-to-date zone plans, but explained that at the same time an objective of being 100 percent up-to-date is unrealistic. In the words of the alderman: *"A city cannot operate with outdated zone plans, but is rather foolish to decide on a zone plan now, only to change it within a year by a special article 19 procedure"*.

According to the alderman the process of bringing the zone plans up-to-date is on schedule. She explained that extra money and personnel has been made available for this process, and she was pleased that recently many zone plans had been presented at city Council meetings. She also expressed her concerns. In her view, progress on the preservation of zone plans (with only minor adjustments to existing plans) is mainly on time. Zone planning in less documented, or more dynamic, areas is less controlled and is often faced with unexpected circumstances. Overspending of cost budgets and time planning happens often, she explained. The staff to keep zone planning up-to-date is also not yet available.

An example that can illustrate the complexity of a zone plan is the "Zaailand"<sup>126</sup> project. In this project two Spatial Planning developments meet: the redesigning of the inner city and the redefinition of a zone plan. A brief description of the project: Preparations for the Zaailand project started years ago. The intention at the start was to extend the number of shops around Zaailand Square. In 2000, the city and a national bank (ING-bank) came to an agreement on the main concept of the plan. How-

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<sup>126</sup> "Zaailand" is a big square in the middle of the city.

ever, when the master plan was almost finished, a legacy from a famous citizen became public. Attached to this legacy was a specific clause that had major impact on the Zaailand project. The legacy was to build a new Fries museum at this specific location. As a result of this, the whole plan had to be begun again, but now with many more parties involved (the provincial government, the municipality, the Fries museum, a bank, an insurance company, the local retailers, and the citizens of the city). Also the Council had to ask the citizens their opinion on the new master plan through a referendum. The cost and time schedule for this zone plan are consequently far beyond the first budgets.

In the alderman's opinion it is not possible to manage Spatial Planning just by using the objectives in the Program Budget. Most of these objectives are defined by more general terms. These objectives are, in the words of the alderman, "*can do no harm objectives*". She views these objectives as valuable for monitoring specific operational aspects, but finds this monitoring still an underdeveloped organizational function.

#### Civil Director

The director explained the layers of the objectives of Spatial Planning.

He saw the first layer as the most concrete layer, relating to the process of updating zone planning. The objectives of this process are well known by all involved in the city's organization, according to the director. He perceived the objectives of zone planning as fairly specific and sufficiently measurable. He stressed that the actual handling of zone planning is done by people in the operationally-responsible sector. His responsibilities are mainly related to the effectiveness of the management, coordination, and support processes of Spatial Planning. He emphasized during the interview the importance of coordination and of discussions between the professionals in his department.

The second layer of Spatial Planning objectives is the spatial development of the city. The director said that objectives for spatial development were defined in more general terms. He referred to the mid-term plan "Sailing sharp", which in his view connects the long-term city policies with the particular tasks to be performed in the coming years. He emphasized the general nature of spatial development plans; these plans should leave room for additional detail later on.

According to the director, communication and the coordination of the organizational tasks of Spatial Planning are considered to be important processes. The city uses the "project tabling meeting" for this purpose; a meeting of the project managers for civil projects, chaired by the director himself. This meeting offers an opportunity for the presentation and discussion of all civil project plans by members of the organization with different responsibilities and capabilities. This multifunctional meeting aims to improve the planning and realization of civil projects.

The director explained that the third layer of objectives relates to the city's vision for Spatial Planning, as defined amongst others in the City Vision "Sailing under own

flag". This layer relates to more strategic and generally formulated objectives<sup>127</sup>. He stressed that these objectives are not supposed to describe specific performances and operational tasks; these objectives are to be used as general guidelines for further detailed planning of particular areas later on.

The director admitted that most managers did not perceive the objectives in this third layer as clear, but added that clarity was not the intention here. He saw the purpose of these objectives as the stimulation of dynamic development in the later stages of Spatial Planning, or in his own words: "*Spatial Planning ought to bring movement to the city*".

### Operational manager

Operational managers perceived most of the objectives of Spatial Planning as clear, but added that these objectives were not often used for operational control. They gave some examples.

The objectives of the process of updating zone planning are completely clear to the operational managers, but to them it is largely unclear how they could comply with these objectives. As an example one manager said that the sector did not have enough operational management instruments to plan and control the current process sufficiently. Zone plans are, in his view, mainly standardized processes, executed in an uncertain environment in which unexpected events occur often. Planning all the necessary tasks in advance is therefore not always possible. Thus schedules and the time planning of zone plans are not easy to control.

Another example is the translation of the more generally defined organizational objectives into specific planned operational tasks. Operational managers interpret these objectives as "not yet defined in detail". Although they support this way of defining objectives, and find this method preferable in most situations, they are confronted by some operational complications with this method. The lack of specific targets and norms hinders operational control, they say. Working with generally defined objectives leads to lengthy discussions during the start-up of new developments. Managers said that it was much easier to talk about a specific project than to challenge a generally stated objective, and they feared opportunistic behavior by their colleagues. An area can be sold to a real estate company, for example, before a formal evaluation of the development plans of the realtor have taken place. Managers add that discussions with realtors on the consequences of generally defined objectives are seldom easy, especially after the contract is signed.

According to the sector manager, the objective to include green zones in spatial plans also fuels discussions in the organization. He explains that this objective cannot be used per individual plan; differences in the city areas (densely populated inner city or more suburban areas) cannot be treated equally in this regard. But if an objec-

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<sup>127</sup> The objective that defines city borders is used as an illustration. This objective states that the city should aim for organic borders. This objective is, according to the director, purposely defined in more general terms, which should express the fact that the city is promoting the development of transparent districts with many green zones.

tive is not controllable per project, he finds it even harder to control it at an organizational level. The “Knowledge campus” is used as an example. One of the discussions in this project was the balance between building spaces and green zones, and it appears to have been hard to find the right target ratios to apply on the development of both zones.

An additional problem with the use of objectives for controlling operational activities is, according to the sector managers, the combination of projects and regular activities in the sector. It is often unclear to them whether the costs are to be seen as attributable to projects or regular products. This hinders not only operational budgeting and planning, but also the financial control of his sector.

To conclude, operational managers indicate that they do not make regular use of objectives and performances for operational control. The more quantitative objectives and performances of the Program Budget appear to be limitedly applied for operational control. Even the specific objective of bringing 70 percent of the zone plans up-to-date in 2005 is rarely discussed. There is no regular check on the progress made on achieving this target.

### **Aspects of budget use**

The previously described opinions of the alderman, the director, and the operational managers will be used here to analyze relevant aspects against the research framework. The main level of analysis is again organizational, with its focus on the use of objectives and performance measures at the top of the organization. The research framework and its defined aspects will be the focus of the analysis, but if applicable, other aspects will also be included.

The evidence is summarized and analyzed by the researcher with reference to desk research and interviews where relevant.

### Design and quality of the accounting information system

The accounting information system of the municipality yields both financial and non-financial performance information. The financial information for Spatial Planning is particular to the budgeted, realized, and estimated costs of products and expenses and income of projects. Financial information is documented in all planning and control documents, such as the Program Budget, Sector Plan, and Quarterly Report. The financial information of Spatial Planning often relates to variances between achieved and budgeted costs-related performances and estimated year-end costs.

The non-financial accounting information related not only to budgeted performances but also to additional information. Additional information is often used to explain and detail situations which arise, and relates to both internal management aspects as well as to a wide-scale of more project-related issues.

The quality of accounting information is valued differently by interviewees. At an operational level the quality of information is perceived as insufficient. Operational

managers indicate that the supplied accounting information does not meet their requirements: for them the information is not in the right format, and seldom delivered on time. At a more organizational level the quality of information is perceived as sufficient. Here, information often appears to be delivered for a specific purpose and in specially made formats, and is often provided in a project control setting.

To conclude, the accounting information system of Spatial Planning contains both financial and non-financial performance information. Financial performance information is present in great volume and in detailed format, and relates to budgeted values, achieved values, and additional information. Non-financial information is also present in great volume, and often relates to budgeted values, achieved values, and additional information related to projects.

The observations are quantified into a score<sup>65</sup>. The scope of the accounting information system for Spatial Planning is tentatively valued by the researcher following the previously introduced method of assessing the various case findings. Using a 5-point scale, the scope is labeled as “above average”<sup>66</sup>. The quality of the accounting information is valued in the same tentative way as the scope, and is labeled as “average”<sup>67</sup>.

#### Applied role

The interviews provided a view of the different ways in which accounting information is used in practice; they presented an insight into the roles of performance measures. This study has defined five different sub-roles or functions by which archetypal roles can be recognized<sup>128</sup>. These five functions and the relating archetypal role (between brackets) are:

- to diagnose, to compare actual and budgeted performance (answering role),
- to learn and to change ways of doing (learning role),
- to unequivocally signal what is important (learning role, ammunition role),
- to influence future budget increase (ammunition role), and
- to report and explain on past performance (rationalization role).

*Firstly*, the results of the interviews and desk research are used to assess whether the use of performance measures is for diagnostic reasons, that is, for comparing financial and non-financial variances in performances.

Managers often use performance measures for gaining an insight into the status of Spatial Planning activities. They received monthly information on, for example, the number of hours worked, sick leave, and budget use. However, this information is not used for organizational control, or in the words of a manager: “*currently we do not see it coming*”.

According to managers, it is not possible to make realistic plans in advance, or to properly evaluate the progress achieved on these activities. Every two weeks and

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<sup>128</sup> For more detail on the theoretical definition of the roles and their function see chapter 2, A Theoretical Research Framework.



every month a status report is produced, but these reports are mainly used to discuss the progress on more management related processes (such as work-load of employees, or steps in the discussion making process by the elected member of the Council). Evaluation of the financial performances mainly takes place bi-annually, during the making of the Interim Report and the Annual Report.

Spatial Planning is often realized through projects, and detailed information on the status of projects is often discussed by the members of the project teams. Progress on large or major projects is reported regularly three or four times per year, and these reports are used during project meetings to discuss specific issues, problems, or bottlenecks. These project reports are made-up in a standard format, and document both financial (expense budgets) and non-financial performance measures (for example milestones and duration of activities), and contain explanatory notes on particular items.

Politicians said that when they received information on the status of Spatial Planning projects they had often asked for specific information, but this was often not included in the standard report formats.

*Secondly*, the use of performance measures for learning, signaling and influencing future budgets is assessed.

Performance measures appear to be only limitedly used for learning and signaling purposes. Status reports seldom contain issues unfamiliar to management and alderman, and are used more as status reports than sources of information that can be used for decision making. However, performance measures are used for influencing future budgets. Clear examples of this influencing function are the reports on the progress of zone planning. Operational managers explained that these reports were specially made to explain to the elected members of the Council that achieving the objectives could not be realized within the current budget limits.

*Thirdly*, a brief assessment of the use of performance measures for reporting and explaining past performances is presented.

Performance measures are often used to report on and account for past performances. Quarterly Reports and the Sector Annual Account contain a mass of information. Newsletters are often used to report the progress on projects to people living in the city, and reports are also frequently sent to central government about the progress of specific Spatial Planning projects.

To conclude, performance measures are:

- only partly used in a diagnostic way. Only financial performance measures on aggregated budgets are used in a diagnostic way. Performance measures, in particular non-financial measures, are often used for operational budgeting, planning and status reporting, but are not often used for organizational control of budgeted performances.
- limitedly used for learning and signaling,
- sometimes used for influencing next period budgets,

- used for reporting the past, and to account to external parties.

### Businesslike or political context

As previously discussed a more businesslike context is associated with:

- specific organizational objectives,
- relatively tight budgetary control (low tolerance of intermediate budget variances, detailed analysis of budget variances, intensive communication about budgets, emphasis on meeting the budget),
- integration of strategic objectives and operational performances (formal organizational planning is coupled with operational control).

A more political control context is especially associated with a high level of multiplicity of objectives.

The aspects relating to the two contexts are discussed in detail in the next section.

### *Specificity and integration of objectives*

Objectives relating to bringing zone planning up-to-date are perceived on average as clear and specific at all organizational levels. However, the formal organizational objective to bring all zone planning up-to-date in 2007 is only documented in the Program Budget and the Annual Report. The Sector Plan and the Quarterly Reports appear to focus on particular zone plans in progress. As previously discussed, achieving this objective is perceived by all interviewees as hard. Zone plans often appear to be more complex than earlier expected, and fully up-to-date is seen as practically impossible to achieve. This objective of zone planning is therefore relevant, but not completely clear to participants. Integration between objectives and operational performances appears to be restricted. Objectives also do not determine the priority of the tasks to be performed. The pressure exerted by external parties (provincial and central government) to achieve the formal stated objective is seen as a major driver for speeding up the operational processes and increasing future budgets.

The objectives relating to zone development and strategic development are perceived as less clear, and limitedly integrated with operational performances. These objectives are seen more as strategic, providing general direction, then specific and useable for prioritizing operational tasks.

### *Multiplicity*

There are no indications of conflicting pressures on the objectives of Spatial Planning. The Large City Policy covenant between the Council and central government, and the covenant between the Council and provincial government do not appear to result often in conflicting visions on Spatial Planning. When discussions did occur, they appeared to concentrate on particular projects, often related to the financial aspects of these projects. Conflicts between the elected members of the Council, the board of Burgomaster and aldermen, and the civil servants were not revealed during the desk research and the interviews. Elected members of the Council are intensively involved in operational aspects of Spatial Planning (zone planning and zone developments), but discussed mainly particular projects and seldom the policies behind or the objectives attached to Spatial Planning.

Civil managers do argue about the operational aspects of Spatial Planning, for example on the translation of generally defined objectives into operational and specific aims. Conflicting interpretation of operational aims is registered. The specific objectives attached to the development of an area of the city are often not formally pre-defined, and can lead to discussions later on.

#### *Tightness of budgetary control*

Budget tightness is limited in Spatial Planning. Budgetary control relates to products and projects, and to financial and non-financial control.

Financial control is performed within the organization's rules and guidelines for control<sup>129</sup> and product and project managers have to comply with these specific rules and procedures. Tightness of budgetary financial control at operational level is therefore considered to be high. Budget-responsible managers are not allowed to incur more costs than budgeted, to spend more cash than budgeted, and can only authorize payments up to specific pre-set amounts. These behavioral restrictions do not result automatically in tight budgetary control at an organizational level. For example, overspending on one project budget can be compensated by under spending on other projects. Similar processes are also used to compensate for overspending on product budgets. This compensation mechanism is controlled by internal rules, and demands the formal approval of senior management.

Financial budgetary control at an organizational level is however perceived as limited. Managers saw unclear cost allocation and uncertainty in the execution of operational tasks as the main reasons for this limited control tightness. Operational managers saw financial budgetary control more as an administrative process than a tool for organizational control.

Operational managers often did not comprehend the administrative environment of Spatial Planning. The discussion about administrative classification of cost can be seen as an example. The costs of on-going activities of a sector are booked on the costs budgets, and costs or expenses of projects are booked on project budgets. However, for operational managers it often appears unclear which particular activities are regarded administratively as on-going. The sector also has special funds for covering special costs, for example the costs attached to the extra capacity needed to speed-up the process of zone planning. Operational managers often found it hard to differentiate between these special or regular cost categories, and were frequently involved in discussions on both budgeted costs and actual cost long after a particular budget period was over. Operational budgets appear to be regularly overspent. Operational managers were fully aware of this situation, or in the words of a manager: *"I am allowed to live above standard"*. He added: *"It is not easy. Only the costs for 10 of the 18 staff members can be reasonably forecasted up front, but the coverage of the remaining cost is uncertain to me"*.

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<sup>129</sup> For more information on financial control, see the section "Planning and control at an organizational level" in this current chapter.

It appeared to be difficult to plan all the activities relating to Spatial Planning in advance, and to estimate all the costs that are attached to these activities. Activities often seemed to be unavoidable; they just had to be done. Managers often decided to execute the desired activities and to accept possible budgetary overspending. They used a kind of “alert-system”, when activities of the municipality attracted attention from the elected members of the Council, people of the city, or the local media, these activities are mostly performed first. Managers agreed that this system resulted in neglect of the less externally visible activities.

Finally, the limited interest of operational managers in financial budgetary control appears to be a relevant factor. The professionals at operational levels are described by top managers and politicians as “*artists, in whose opinion accounting is a derivative need*”. Managers and politicians saw financial control of public-private development projects as much higher. In the words of the alderman: “*They do not work faster, better, or more efficiently, but it is remarkable that the quality of financial reports is much higher there. They can manage the whole project almost entirely by these financial reports.*”

Non-financial budgetary control of Spatial Planning is also regarded as limited, even for the more specific zone planning projects. Although zone planning appears to be controlled by a tight project management approach, the actual budgeted target (70% up-to-date in 2005) or objective (100% up-to-date in 2007) is not operational. Both are absent in operational planning, not monitored during the year, and knowledge of how to manage deviations from pre-defined targets appears to be underdeveloped. Controlling zone planning in the city center appears to be even more difficult, and the “Zaailand” project is used as an example.

Non-financial performances that are controlled are mostly related to internal management and support processes, and relate, for example, to hours worked, and meeting legally set time-frames in particular procedures.

To conclude, tightness of budgetary control is qualified as limited, which can be justified by four points:

- Intolerance for interim budget variation appears to be limited, particularly for organizational control purposes.
- Detailed budget-item follow-ups appear to be limited. Detailed follow-ups are applied for operational project control, but this aspect is not of significant importance for organizational control.
- Intensity of budget-related discussion is limited; budgets are seldom the subject of discussion for organizational control.
- Emphasis on meeting the budget is considered as limited.

#### *Measuring the political and businesslike context*

Specificity of objectives within Spatial Planning is qualified as below average<sup>74</sup>. This measurement expresses the finding that these objectives were mostly formulated in general terms, and were hardly applicable for operational budgeting, planning and control, although objectives are perceived as relatively clear and relevant. Multiplicity

of objectives is valued as below average<sup>75</sup>. Only conflicting pressures on the use of objectives by different groups in the municipal organization surfaced during the research. Tightness of budgetary control is valued as below average<sup>76</sup>. Referring to these measurements, the context of organizational control of Spatial Planning is characterized by limited businesslike aspects (limited specificity) and limited political aspects (limited multiplicity).

#### Routineness of tasks

The activities relating to Spatial Planning are described by all interviewees as on average routine in nature. The tasks of employees are seen as repetitive and known. However, in practice employees often have to perform many different and unplanned tasks. It appears to be hard for managers to prepare a plan that can be used over a long period. Tasks are often rearranged during the year. Tasks appear to be well known, but it seems difficult to plan these tasks in advance. To conclude, routineness of task is valued as average.

## **Summary Spatial Planning case**

Spatial Planning covers a wide area of activities, but is mainly concerned with supporting and planning civil developments in the city. Spatial Planning is embedded in national and regional Acts, programs and governance structures. The Council focuses on the more practical side of it; on the practical consequences of Spatial Planning within the city's borders.

The external environment of Spatial Planning is characterized as complex and not easily controllable. Many parties are often involved in Spatial Planning projects (such as Council members, citizens, other governmental and non-profit organizations, and business organizations), and actual developments in society can easily influence objectives and operational tasks.

Spatial Planning operates in an internal environment in which professionalism (especially legal and development), strategy (policy and development of the city), and public administration (coordination of Spatial Planning throughout the government) are relevant.

The objectives of Spatial Planning are often more of a strategic nature than for directing specific operational actions, and are often set in more general terms. Objectives are rarely used for decision-making on specific operational tasks. Even when it was possible to use more specific objectives (for example for keeping zone planning up to date), they were not often used for operational or organizational control. Here objectives were seen as relevant, but were mainly used to justify future budget increases.

Performance measures are used on operational level for budgeting, planning and reporting. The reporting function provides status reports and accounts, and supports the communication of achieved performances to external parties. These reports often provide volumes of additional information.

Spatial Planning is often executed through projects, but achieving Spatial Planning's objectives is often only one of the desirable project results. Developing a new city district is not solely focussed on Spatial Planning, but is often also focussed on aspects of a more economic or social interest.

The Council considers project management an important management method and special attention is given to it. Project control, controlling individual projects by project managers, is well developed. Projects are planned in advance, divided in "go-no go" phases, provided with clear milestones, decision-making processes, and clear division of authorisation. Projects meet detailed planning and report requirements, and appear to function separately from, but not isolated from, the organisational planning and control instruments.

A comprehensive overview of the relevant aspects of this case study is documented in Appendix VIII Summary of Aspects.



## 5. Analysis and Conclusions

*This chapter documents our exploration of the applied role of budgeted performance measures (BPM) in Dutch municipalities. The chapter starts with a brief overview of the framework that was constructed to explain the roles of BPM. This answers the first research sub-question.*

*The actual case study findings are then used to challenge the research framework. Firstly, the four case studies are positioned in the Earl and Hopwood framework and analyzed in more general terms. The general assumptions of the research framework are considered by comparing pre-defined aspects and related empirical findings. Secondly, the four case studies are explored in more detail with the aim of refining the research framework for use in Dutch municipalities. This analysis answers the second and third research questions. The chapter ends with a discussion of the research findings.*

### **Framework to explain the roles of BPM in general**

This study began with an observation about Dutch local governmental organizations: they often applied performance measures in their planning and control systems, but seldom used performance measures rationally for output control. In other words: Dutch municipalities might use performance measures in their organizational and operational plans, budgets, and reports, but what they are used for is far from clear. This study observes and aims to explain the roles of performance measures for organizational control purposes.

The main research question is: *What is the role of budgeted performance measures in the organizational control of Dutch municipalities?*

The main research question is broken down into three more specific sub-questions:

- a) *Which aspects can explain the relationship between different contexts of organizational control (businesslike or political context) and the roles of BPM applied by top management and politicians in Dutch local government?*
- b) *To what extent do the aspects, introduced under a), explain the roles of BPM in Dutch municipalities?*
- c) *Do the applied roles of BPM explain the use of BPM by top management and politicians in Dutch municipalities?*

The first research sub-question (a) directed this study to construct a general framework by which different roles of performance measures for organizational control purposes could be researched. This initial framework of aspects served as a guide and a frame of reference during the case study research, but the explorative nature of this research also allowed other factors to be included during the analysis. Accounting and control literature was used as the main source of information for this framework.



Studying the roles of BPM assesses the relevance of performance measures for organizational control. The suggestion that performance information has no purpose by itself (i.e. that the relevance of accounting information is not determined by those who determine the form which it should take), but that relevance is determined within the context of its use (Burchell e.a., 1980), is adopted in this study as a central theme.

The role of accounting information use, or “accounting in action”, has not been researched in depth, and only general concepts and some specific empirical tested hypotheses can be referred to. The general concepts often refer to more functionalistic pictures of how accounting information facilitates organizational decision-making and control (Hopper and Powell, 1985). These general concepts emphasize various roles of information use, for example: for informing and influencing decision-making, or for attention directing, scorekeeping, and problem solving (e.g. Simon, 1954), for output and behavioral control (e.g. Ouchi, 1979) or for diagnostic control and interactive control (Simons, 1990). The more specific concepts relate to the roles of particular aspects of management control, for example to reasons for budgeting in organizations (e.g. Hansen and Van der Stede, 2004).

General accounting and control concepts can be used to study public sector organizations (e.g. Anthony and Young, 1994), and contingency theory<sup>130</sup> is used to determine relevant aspects of accounting and control in those organizations.

Two different sets of contingent factors are constructed. The first set is labeled as a businesslike control context, and aims to capture a rational use of performance measures for output or results control<sup>131</sup>. Empirical research has found some match between the more technical aspects<sup>132</sup> of specific business organizations and the use of formal controls. A businesslike control context in this study is mainly associated with relatively large organizations, operating in relatively stable environments, in which managers perceive objectives as relatively certain. This study uses the following aspects to indicate a businesslike control context:

- a. certain and integrated objectives and performance measures (measured by the degree of goal specificity),
- b. tight budgetary control (measured by the degree of budget tightness).

The second set of contingent factors is labeled as a political control context, and focuses on the existence of conflicting institutional pressures on setting organizational objectives<sup>133</sup>. It mainly highlights possible uncertainties or disputes about the goals

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<sup>130</sup> Contingency theory assumes that under specified conditions, particular control mechanisms are appropriate. Applying contingency theory in this study, assumes that specific contingent factors in the internal and external environment of an organization can explain differences in the role and use of performance measures.

<sup>131</sup> This context emphasizes formal organizational structures and processes, on rules and routines that serve to bring order and to minimize uncertainty for employees. The private business organization is often portrayed as the stereotypical organization that flourishes in this environment.

<sup>132</sup> Such as: organizational size, organizational strategy, uncertainty of objectives, and task uncertainty.

<sup>133</sup> The presence of multiple conflicting institutionally defined pressures on the organizational objectives of local government is often used to explain why performance related organizational control is not intensively used (i.e. Pollitt and Boukeart, 2000; Modell, 2001).

and objectives of the organization. This study uses the following aspects to indicate a political control context;

- a. ambiguity of objectives (measured by multiplicity of objectives), and
- b. relatively unintegrated objectives and performance measures (measured by goal specificity).

Earl and Hopwood's (1979) traditional framework of roles of information use and contingent factors led this study to define four archetypal roles. One of the appealing features of the model is that it relates archetypal roles to the execution of organizational tasks and to the control context. Task uncertainty (measured by routineness of tasks) is applied as a factor to explain managers' knowledge about the means-end relationships of tasks. Earl and Hopwood's framework relates the "answering" and "ammunition" role to relatively certain tasks, and the "learning" and "rationalizing" role to more uncertain tasks.

Earl and Hopwood's (1979) traditional framework relates also to the control context. Two of these roles (the "answering" and "learning" roles) are assumed to be mainly related to a businesslike control context, and the other two ("ammunition" and "rationalizing" roles) mainly to a political control context. Each of the roles is characterized by a phrase, and is related to one or more indicative key characteristics. This study applies five key characteristics:

- to diagnose, to compare actual and budgeted performance (answering role)
- to learn and to change ways of doing (learning role)
- unequivocally signaling what is important (learning role, ammunition role)
- influencing future budget increase (ammunition role)
- to report and explain on past performances (rationalization role)

Case study findings can provide a more specific insight into the roles, and can challenge the above list of characteristics.

The roles of BPM and the antecedents to the roles (being the control contexts and task uncertainty) are seen as the two main constructs of the research framework<sup>134</sup> (see Figure 3 on page 32). Two remarks are made about the antecedents to the roles.

Firstly, Earl and Hopwood's framework uses uncertainty of objectives as a single factor to differentiate between a more or less rational goal-oriented control context. Applying this rather simple framework, the control context is divided into being more businesslike or more political. However, the research framework in this study offers more variation. It defines businesslike and political contexts separately, and defines both contexts as mutually non-exclusive<sup>135</sup>. Using both frameworks together can thus result in different analyses. To overcome this hurdle, the roles of BPM are analyzed in two sequential phases. In the first phase the simpler Earl and Hopwood framework

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<sup>134</sup> The complete research framework, as documented in chapter 2, consist of three constructs: antecedents of roles, roles of BPM, and BPM use. The last construct, BPM use, is the central subject of the third and last research sub-question, which is documented in one of the following sections.

<sup>135</sup> Both contexts relate mostly to different sets of aspects and measurable factors, offering a fairly open framework in which a businesslike and political control context can occur to some extent simultaneously.

is used to collect empirical information on the archetypal roles. The use of the Earl and Hopwood framework enables the selection of case studies, by focusing on extreme values of aspects. Then the empirical findings can be used to gradually unfold and challenge the more complex research framework, and to merge theory with the complexity and heterogeneity of practice.

Secondly, task uncertainty is seen as an independent factor in both the Earl and Hopwood framework and in the more complex research framework. Task uncertainty is thus regarded as unrelated to uncertainty of objectives or to the control contexts.

In the next sections the different roles of BPM use are analyzed and explored. As a first step, in order to provide a more general analysis, Earl and Hopwood’s framework is used. Then a more interpretive approach is used to challenge the research framework.

**Challenging the Earl and Hopwood framework**

Can Earl and Hopwood’s framework be used to explain the different roles of BPM use and related circumstances in Dutch local government? In order to answer this question, four different case studies were selected. Selection was mainly based on information about the antecedent factors; on uncertainty of objectives and tasks. Information, collected during interviews with civil executive officers of Dutch municipalities<sup>136</sup>, led to the selection of four specific (groups of) organizational functions. However, the interviews did not always deliver clear, contrasting information on the four combinations of antecedent factors. Some cases were selected by choosing the best suitable. Eventually four case studies were selected: Sewerage, Economic Policy, Welfare Payment, and Spatial Planning. Table 22 provides an indicative overview of the selected case studies in the Earl and Hopwood framework.

	<b>certainty of objectives</b>	<b>uncertainty of objectives</b>
<b>low task uncertainty</b>	Sewerage “answering” role	Welfare Payments “ammunition” role
<b>high task uncertainty</b>	Economic Policy “learning” role	Spatial Planning “rationalizing” role

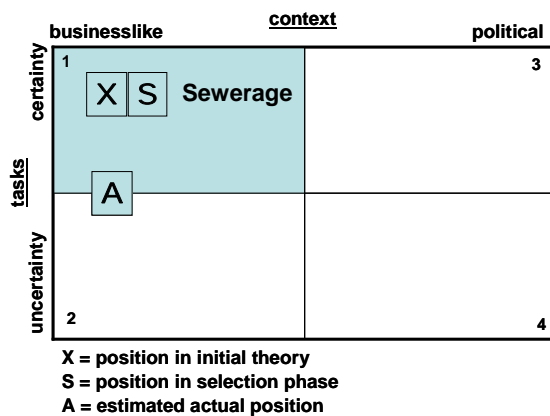
**Table 22** Case studies in the Earl and Hopwood framework

The case studies provided a wide range of findings from one Dutch municipality (the city of Leeuwarden), and delivered a set of more qualitative measures. Measures and findings are used in two different analyzes: a more general analysis and a more detailed exploration. The general analysis aims to explain the roles of BPM by using the traditional Earl and Hopwood framework. Here the focus is on predefined and measured aspects of the antecedents and the roles of BPM. Then a more interpretive approach is used, which allows the case study findings to explain the roles of BPM in more detail.

<sup>136</sup> The selection interviews were not aimed to provide insight into the roles of BPM. Information on actually applied roles was only collected during the case studies.

The next sections document the general analysis of the case studies. Cases are positioned into the framework by using control contexts and routineness of tasks as dimensions. Per case a comparison is made between its originally assumed position, its estimated position during the selection phase, and its actual position during the case research. Then the applied roles per case study are briefly discussed. This section concludes with a general analysis.

## Sewerage



**Figure 4** Position of Sewerage

Initially, the search was for a case study that could represent box 1 in Figure 4; a situation associated with a businesslike control context and relatively certain tasks. In this situation, objectives and tasks are expected to be certain and undisputed and “*algorithms, formulae and rules can be derived to solve the problem by computation*” (Earl and Hopwood, 1979, p 8). The preferred position of a representative case was expected to be near the X-mark in Figure 4.

Interviews during the selection phase suggested selecting Sewerage. Sewerage appeared to be related to clear objectives and to routine tasks. Sewerage was therefore considered as a representative case. The S-mark in Figure 4 symbolizes the position of Sewerage during the selection phase, which is comparable with the preferred position (the X-mark in Figure 4).

The actual position of Sewerage, based on the case study findings, supports the assumption of a businesslike control context and the absence of a political control context to a large extent. Objectives and performance are seen as specific (by clear, relevant, and integrated measures), and conflicting influences on objectives are not found. However, the organizational control of Sewerage is not profound. Sewerage appears to operate largely in isolation from the rest of the organizational control processes, and budgetary tightness is limited. The Sewerage case indicates an average level<sup>137</sup> of routineness, which only to some extent seems to conform to the as-

<sup>137</sup> For more detail on the measured aspects, see Appendix VIII Summary of Aspects.

sumed position in the selection phase. The A-mark in Figure 4 represents the actual position of Sewerage in the framework. This actual position is used to analyze the case study in general terms.

The traditional Earl and Hopwood framework assumes that the role of performance measures at the A-mark is somewhere between providing answers<sup>138</sup> and assisting learning<sup>139</sup>. However, the Sewerage case study findings only partly confirm these assumptions. The use of performance measures for providing answers is only partly observed; performance measures are used as budget targets and for monitoring achieved performances (operational reporting), but the use for variance analysis for organizational control seems to be limited. The use of performance measures for assisting learning is not observed. The rationalizing role<sup>140</sup>, on the other hand, appears to be present in general terms. Table 23 provides an overview of the expected, assumed and observed roles in the Sewerage case study.

roles	answering	learning	ammunition	rationalizing
initially expected				
assumed at actual position				
actually observed	partly			general

Table 23 Roles related to Sewerage

**Economic Policy**

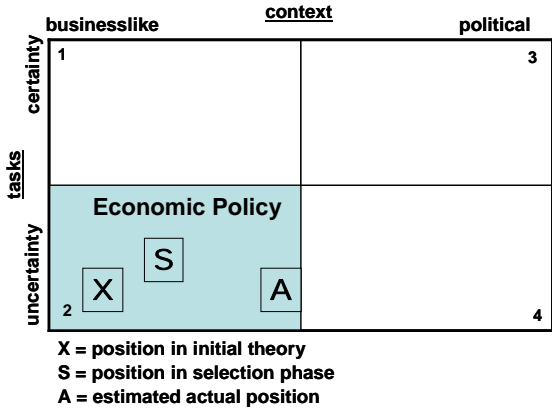


Figure 5 Position of Economic Policy

A case study that was initially supposed to represent box 2 in Figure 5, should relate to a businesslike control context and relative uncertain tasks. In this situation, objectives are expected to be certain and undisputed but tasks are uncertain. “Here MIS can not provide the answer but they can go part of the way, providing assistance” (Earl and Hopwood, 1979, p 8). The preferred position of a representative case was expected to be near the X-mark in.

<sup>138</sup> By emphasizing the variances between planned and achieved performances.

<sup>139</sup> By using performance measures for signaling or for learning-to-do.

<sup>140</sup> Using performance measures for organizational reporting on past performances.

The interviews during the selection phase did not provide strong indications for one particular organizational function. Economic Policy was selected after some consideration. Economic Policy could be associated to some extent with clear objectives, absence of a political context and to uncertainty of tasks (the S-mark in Figure 5).

The actual position of Economic Policy, based on the case study findings, differs from the position in the selection phase. Economic Policy only limitedly supports the assumption of a businesslike control context. Objectives seem to be clear and relevant, but are not perceived as controllable, and could not be easily translated into operational terms. The limited amount of budget tightness indicates also a less businesslike control context. Disputes about organizational objectives, on the other hand, are not observed. This absence of a political control context is seen as a match with the initially expected position. The case observations indicate a low level of routineness, which conforms to the initial preferred position of the case. The A-mark in Figure 5 represents the actual position of Economic Policy. This actual position is used to analyze the case study in general terms.

The traditional Earl and Hopwood framework assumes that the role of performance measures at the A-mark is somewhere between assisting learning<sup>141</sup> and assisting rationalizing<sup>142</sup>. The Economic Policy case study findings, however, do not fully confirm these assumptions. The use of performance measures for assisting learning is only partly observed; signaling is clearly observed, but learning-to-do appears to be absent. The use of performance measures for rationalizing is present in general terms. The answering role is also observed, but only partly and to a limited extent. The ammunition role appears to be present, but only to a limited extent<sup>143</sup>. Table 24 provides a summary of the expected, assumed, and the observed roles.

<b>roles</b>	<b>answering</b>	<b>learning</b>	<b>ammunition</b>	<b>rationalizing</b>
initially expected				
assumed at actual position				
actually observed	limited	partly	limited	general

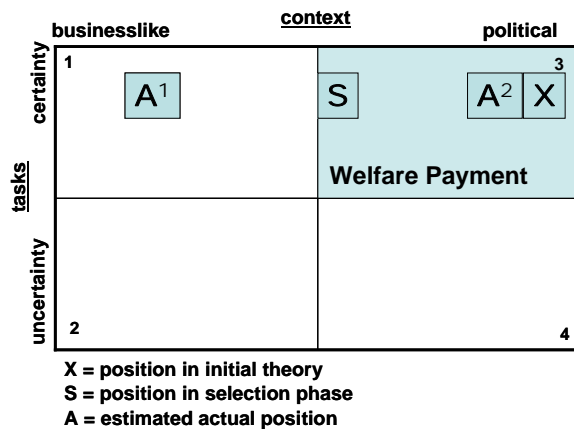
**Table 24** Roles related to Economic Policy

<sup>141</sup> By signaling or for learning-to-do.

<sup>142</sup> By using information for reporting on past performances.

<sup>143</sup> The ammunition role is mainly used to influence future budgets in other departments.

## Welfare Payment



**Figure 6** Position of Welfare Payment

The preferred case study for representing box 3 in Figure 6 should relate to a political control context and relatively certain tasks. Here objectives are expected to be uncertain or disputed but causation is certain, and “*the information systems serve to promote and articulate particular interested positions and values*” (Earl and Hopwood, 1979, p 10). The preferred position of a representative case was expected to be near the X-mark in Figure 6.

Interviews during the selection phase provided some diffuse indications. Welfare Payment was related to low tasks uncertainty, but appears highly associated with both a political and a businesslike control context. Welfare Payment was eventually selected as an example of political control and certainty of tasks (the S-mark in Figure 6 indicates its assumed position).

The actual case findings confirm the diffused analysis of the control context of Welfare Payment during the selection phase. The findings confirm the existence of a political control context clearly (by disputes about financial and non-financial objectives between different institutionally defined groups). At the same time, a businesslike context also appears to be present (objectives and performances are seen as sufficiently clear, mutually integrated and relevant). Using an integrated, single scale for expressing the different control contexts, the position of Welfare should thus be near the S-mark in Figure 6. This however neglects the nuances of the case study findings. Therefore, the actual position of Welfare is now symbolized by two marks. The A-marks in Figure 6 represent the actual position of Welfare Payment in the framework, and express the presence of two different control contexts. These actual positions are used to analyze the case study in general terms.

The traditional Earl and Hopwood framework assumes that the role of performance measures at the A-marks relates to providing answers<sup>144</sup> (the A<sup>1</sup>-mark) and ammuni-

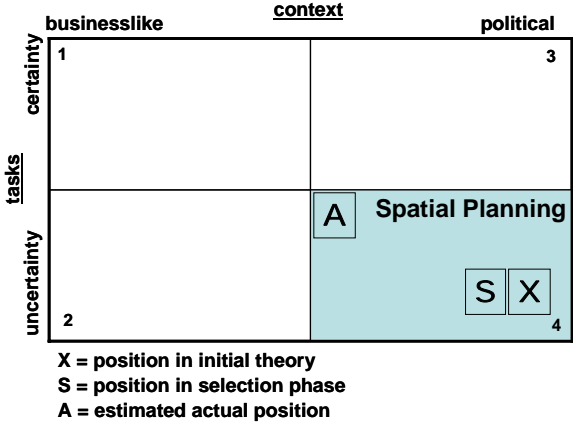
<sup>144</sup> By emphasizing the variances between planned and achieved performances.

tion<sup>145</sup> (the A<sup>2</sup>-mark). The Welfare Payment case study findings, however, do not confirm this assumption completely. The use of performance measures for influencing next period budgets is clearly observed. The answering role is only partly observed; it only relates to the use of performance budget targets and operational reporting but not to the use of variance analysis. However, performance measures are also used for assisting learning and rationalizing. Table 25 provides a summary of the expected and observed roles in the Economic Policy.

roles	answering	learning	ammunition	rationalizing
initially expected				
assumed at actual position				
actually observed	partly	present	present	present

**Table 25** Roles related to Welfare Payment

**Spatial Planning**



**Figure 7** Position of Spatial Planning

Box 4 in Figure 7 relates to a political control context and uncertain tasks. Here objectives and tasks are expected to be uncertain, and information is used to legitimize and justify actions that have been decided upon. The preferred position of a representative case was expected to be near the X-mark in Figure 7.

Interviews during the selection phases suggested selecting Spatial Planning; it was clearly associated with a political context and to uncertain causation. The S-mark in Figure 7 indicates that its assumed position in the selection phase is close to the preferred position.

However, empirical research showed that the Spatial Planning case provides only limited support for the assumption of a political control context (limited conflicting pressures exerted on the objectives). The limited presence of a businesslike control

<sup>145</sup> By influencing future budgets.



context, on the other hand, does conform to initial assumptions<sup>146</sup>. The case findings indicate an intermediate or average level of routineness of tasks. The A-mark in Figure 7 represents the actual position of Spatial Planning. This actual position is used to analyze the case study in general terms.

The traditional Earl and Hopwood framework assumes that the role of performance measures at the A-mark is somewhere between providing answers<sup>147</sup>, assisting learning<sup>148</sup>, providing ammunition<sup>149</sup>, and assisting rationalizing<sup>150</sup>. The Spatial Planning case study findings confirm these roles to some extent. The use of performance measures for rationalizing is clearly observed, and the use for influencing future budgets and status reporting is also present. A limited use of information for signaling purposes is also observed. Table 26 provides a summary of the expected and observed roles of Spatial Planning.

roles	answering	learning	ammunition	rationalizing
initially expected				
assumed at actual position				
actually observed	partly	limited	present	present

**Table 26** Roles related to Spatial Planning

**Combining the case studies**

The next step is to analyze the cases together, based on measured antecedents and roles indicated above (see Figure 8). Analyzing four different case studies (held simultaneously within a single organization) by using a rather simplistic framework can never result in strong conclusion about this framework. This analysis is likely to undervalue the documented richness and variety of the case study findings, and is methodologically unsuited to robustly challenge the framework. Nevertheless, this summarized and general analysis can give some insights and directions that can be used in a more detailed discussion later on.

First, the four cases researched appear to represent less extreme positions than was expected during the selection phase. The aim at the start of the empirical research was to select clear cases, associated with extreme positions with respect to the control context and task uncertainty. This aim builds on the assumption that, by researching an extreme position, the framework could best be challenged. However, the actual positions of the case studies seem to be less obvious. The marked area in Figure 8 is an indicative visualization of the area that is covered by the case study findings in reality. A case with a clear businesslike control context and certain tasks, or with a clear political control context and uncertain tasks, seems to be largely miss-

<sup>146</sup> The relationship with a more businesslike context of control of Spatial Planning is diffuse. Objectives are relevant and in general terms clear, but often not integrated with operational performances, and financial and non-financial performance measures are often not connected or balanced with each other. The tightness of budget control is also considered as limited.

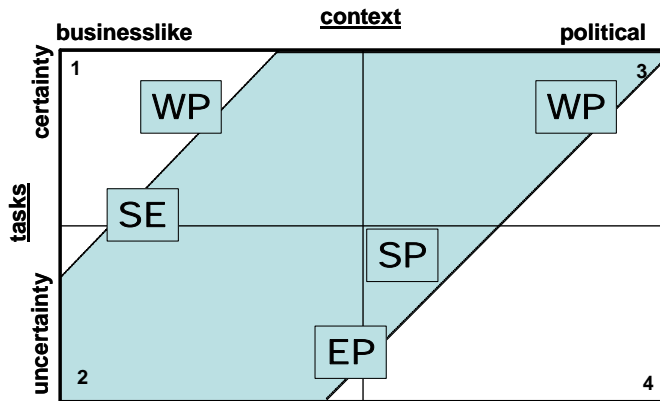
<sup>147</sup> By emphasizing the variances between planned and achieved performance measures.

<sup>148</sup> By signaling or for learning-to-do.

<sup>149</sup> By influencing future budgets.

<sup>150</sup> By using performance measures for reporting on past performances.

ing. This will force this study to be more modest in drawing conclusions on the relationship between the roles of BPM and the control contexts.



SE = Sewerage, EP = Economic Policy, WP = Welfare Payment, SP = Spatial Planning

**Figure 8** Actual positions of cases

More specifically, the use of a dichotomy of control contexts does not lead to obvious results in this research. Welfare Payment relates to both contexts, whereas Economic Policy and Spatial Planning have an intermediate position with respect to the control context. Only Sewerage is recognized as clearly businesslike. Measures of task uncertainty, however, seem to be far more obvious. Causality appears to differentiate the four cases more clearly, and points to Welfare Payment as an example of certainty of tasks, and to Economic Policy as having a high degree of uncertainty of tasks. Concluding, the cases have more clearly contrasting positions only with regard to task uncertainty. The positions with regard to the control contexts (at least as measured in this study) produce mainly confusing or limited variation.

The main reason for applying the traditional Earl and Hopwood framework was its assumed ability to address several roles of BPM use, and to relate specific roles to specific situations. Table 27 gives an overview of the assumed and observed roles per case study.

case study		roles			
		answering	learning	ammunition	rationalizing
<b>Sewerage</b>	assumed				
	observed	partly			general
<b>Economic Policy</b>	assumed				
	observed	limited	partly	limited	present
<b>Welfare Payment</b>	assumed				
	observed	partly	present	present	present
<b>Spatial Planning</b>	assumed				
	observed	partly	limited	present	present

**Table 27** Differences in roles of BPM

Table 27 shows the differences between the assumed and actual observed roles of BPM. Assumed roles are often partly and sometimes only limited observed or absent,

and roles are observed in situation where they were not assumed. These differences suggest that relationship between a particular position in the Earl and Hopwood framework and the various roles of BPM is less straightforward than thought.

Not only are the positions of the cases in the framework puzzling, the empirical research suggests that in practice the various roles of BPM are also not exclusively related to specific situations<sup>151</sup>. Analyzing the roles of BPM by using Earl and Hopwood's assumptions, and four case studies, perhaps provide some answers, but also point to various important questions. The Earl and Hopwood framework offers no clear insights. Perhaps the use of the more complex research framework can take this analysis further. In the following sections the case study findings are used to analyze and explain the roles of BPM-use in Dutch municipalities in more detail.

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<sup>151</sup> Table 27 suggests that actual observed roles differ clearly from (the by the Earl and Hopwood framework) assumed roles. Most of the cases, except Sewerage, can be related to (part of) the four archetypal roles.

## ***Findings that explain the applied roles***

In the previous section, the four cases researched were positioned in the traditional Earl and Hopwood framework and related to archetypal roles of BPM. This section uses the research framework in order to explore the various case study findings systematically and in more depth. Findings for each case are briefly summarized below, and are used to further explore and explain the applied roles of BPM.

### **Summary of case studies**

As previously indicated, the *Welfare Payment case* relates to both a businesslike and a political control context. Organizational objectives and performances are perceived as clear and integrated, with relative certain causation between tasks and objectives, but objectives are at the same time disputed by stakeholders. Members of the Council (adjusting welfare policies), central government (restricting financial contribution), and civil managers (controlling operational processes) exert influence on organizational objectives. This influence can be regarded as institutional pressure, but does not appear to result in ambiguous objectives. Uncertainty within the external environment, instead of ambiguity of objectives, is surfacing as a relevant factor. Politicians and managers perceive objectives as clear, in the sense that they understand their meaning and consequences. However, they lack insight into future external developments.

Politicians and managers made reference to external uncertainties, but often considered them to be uncontrollable. Future developments in the number of clients entitled to welfare and the future financial contribution of central government are in their opinion largely uncontrollable by the municipality. As a result organizational objectives and performances are used more as signals and as points of reference, than as achievable year-end targets. At an operational level a similar situation exists: information about actual developments seems to be more relevant than variance between budgeted and actual performances.

The internal environment of Welfare Payment is seen as standardized and certain. When the number of welfare clients is known, tasks are clear, the expected workload per employee can be estimated, and the financial consequences are clear.

High political risk seems to drive performance measurement use in the Welfare Payment case, rather than the uncontrollability of objectives or the certainty of task execution. Welfare Payment represents a serious risk factor for the executive committee, both in financial terms and in terms of proper execution of the law. Politicians' awareness that future developments in Welfare Payment can seriously harm the municipality (and the Council members), puts Welfare Payment in the spotlight, and drives the need for monitoring actual performances. Adequate monitoring enables the organization not only to learn (by estimating future developments and changing operational tasks), and to influence future budgets (using financial forecasts), but also to report in detail on past performances. Diagnostic use of BPM for organizational control is mainly observed in relation to financial budgets and in general terms.

*Sewerage* operates in a relatively certain political and financial situation. Organizational objectives are clear and integrated with operational performances. Causation of civil technical tasks is high; the regular operational tasks are considered as routine, and projects are fully programmable in a technical sense. The external environment of *Sewerage* is also to a large extent certain. Political interest is limited and politicians do not consider *Sewerage* as politically risky. Objectives and tasks to perform are defined in advance. Conflicting pressures or disputes over organizational objectives are not observed. However, time management of large sewer system projects is seen as uncertain. It appears to be hard to deliver large *Sewerage* projects (new sewer systems or large maintenance projects) on time<sup>152</sup>. The need to combine sewer system project with other infrastructural projects, the difficulties in the coordination of and communication about *Sewerage* projects (both within the organization, and between the municipal organization and external parties) are given as the main reasons for this uncertainty.

Organizational control is rather loose, and is mainly focused on preventing financial underspending (by stimulating coordination and time management of large projects). Financial or non-financial organizational risks are not observed. Financial control at an organizational level appears to be limited (due to a complicated financial scheme). Malfunction of the sewer systems (resulting in unsatisfied citizens) is not observed. At an operational level project control appears to be well organized and tight. The role of BPM use is limited, with some use for operational reporting, but mainly it is used for organizational reporting on past performances. The diagnostic use of BPM for organizational control is mainly observed in relation to financial budgets and in general terms.

The *Economic Policy case study* describes a situation in which objectives are clear and certain, but barely operational. Many involved see the main organizational objective (more employment opportunities) as out of the municipal's control. They felt that external influences mainly determined the growth, and especially the decline, of employment in the city. The objectives are also regarded as non-directive; the link between organizational objectives and operational actions is weak and diffuse. Objectives are seen more as strategic mission statements than as performance related targets. However, *Economic Policy* is a key issue for the municipal council. Aldermen and civil managers are frequently involved in *Economic Policy* related activities, and its objectives are seen in many council documents.

*Economic Policy's* main task is to stimulate employment through influencing other policy fields within the municipal organization or external business organizations. At an operational level, *Economic Policy* is characterized by both routine tasks (e.g. regular co-ordination, participation in internal meetings, business visits, communication, and research) and by non-routine actions (mainly new opportunities and special projects).

Control, both financial and non-financial, is rather loose. At an operational level the financial budgets are relatively small and operational control is not considered very

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<sup>152</sup> *Sewerage* projects appear to be hard to deliver on time, because they often have to be executed in combination with other projects, such as road (re)construction.

important. At an organizational level the focus appears to be more on swift reactions to opportunities than on controlling performances.

The use of performance measures for budgeting or reporting operational status is not emphasized. Performance measures are mainly used to signal to others, to underline the importance of specific actions, to influence future budgets, and to communicate historic facts and past performances. The diagnostic use of BPM for organizational control is mainly seen in relation to financial budgets and in general terms.

The *Spatial Planning case study* describes a situation in which a wide spectrum of tasks is executed in a complex environment. Spatial Planning has both routine tasks (e.g. keeping regulation and zone planning up to date) and non-routine tasks (e.g. new spatial development, or major projects). Its external environment is highly institutionalized (e.g. by national Acts) and often unpredictable (formal objections by citizens or developments in society can easily influence what needs to be done).

Spatial Planning is regarded by politicians as important and municipal politicians often participate in operational decision making. Some particular objectives are clear and integrated with performances, but most of the objectives are deliberately stated in more general terms. Organizational objectives appear to be purposely ambiguous; in this way tasks can be reactive and mapped against these general objectives historically. In this case ambiguity seems not to be a response to conflicting institutional pressures on organizational objectives, but more a strategic choice.

At an operational level, project control appears to be important and many specialists or professionals (e.g. civil engineers and lawyers) are employed. Professionals seem to dominate the operational culture, and are seen as a special group of persons (by politicians and top management, and by themselves). Conflicts between operational and organizational levels are not observed.

Organizational objectives and performances are seldom integrated with operational tasks. Operational project control is emphasized and appears to be loosely coupled with organizational objectives. Financial and non-financial organizational control is characterized as rather loose.

Performance information is used for budgeting and operational reporting, but mainly it is used for operational control purposes. It is also used for influencing future budgets, and also largely for organizational reporting on past performances. The diagnostic use of BPM for organizational control is mainly observed in relation to financial budgets and in general terms.

The empirical findings of the case studies can now be used to challenge and perhaps redesign the research framework. This is conducted in three steps. First, the archetypal roles of BPM are briefly discussed, and broken down into the more specific roles of BPM use. Then the applied roles are discussed, focussing on similarities and differences. Lastly the discussion is summarized, in answer to the second sub-research question: "*To what extent do the aspects, introduced under a), explain the roles of BPM in Dutch municipalities?*"

## **An explanation of the way BPM is used**

The four case studies provided some puzzling and confusing information about the definition of the archetypal roles of BPM use, and on the relationship between these roles and their environment. They were also regarded as suggestions or as a source of inspiration which could help this study to explore the roles of BPM in more detail.

The “answering” role, for example, helped this research to focus on the rational use of information systems<sup>153</sup>. Research findings found but limited use of this “answering” role. Only highly aggregated financial performances are controlled in this way. Politicians and managers seldom rely solely on formal information systems for organizational control purposes. They are often personally involved in aspects of operational decision making, and frequently contact operational managers in order to obtain additional information. BPM are seen as valuable, but seldom provided the complete answer. Researching the “answering” role in more detail was enabled by studying three of its functions or sub-roles: targeting (budgets), monitoring (operational reporting), and variance analyzes. The use of BPM for targeting and monitoring is frequently seen in all the case studies. Targeting appears to provide norms (for budgetary control) and points of references (e.g. for communicating important issues), and monitoring mainly provides information on actual operational developments. Monitoring gives Council members and managers information on actual performances and about the status quo, but provides limited advice on the route to choose<sup>154</sup>.

Applying the “learning” and “ammunition” roles helped this study to articulate the use of performance measures in a more social setting<sup>155</sup>. The research model initially assumed that the “learning” and “ammunition” roles were used under clearly different circumstances. “Learning” was expected to relate to specific objectives and to limited knowledge on how to achieve them, and “ammunition” was expected to relate to uncertain or disputed objectives and certainty in task execution. However, empirical findings cannot separate the two archetypal roles that clearly. In practice, both roles appear to relate to some extent to each other. Welfare Payment in particular is associated with both roles, but both roles are also observed in Economic Policy. In order to explain these observations, the two roles are broken down into three functions or sub-roles: learn-to-do, signalling, and influencing future budgets (budgeting). The three sub-roles appear to be applied under different circumstances, which are discussed later.

Only the archetype “rationalizing” role was researched in its initial form. This role, with its function of legitimizing organizational performances by providing organizational reports on past performances, is not broken down further.

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<sup>153</sup> This role suggested that, under relatively certain conditions, the information system contains all the necessary information to control the organization. Thus managers get their answers merely by using the formal control system.

<sup>154</sup> Discussions with managers and controllers seem to indicate that the difference between knowing where you are and knowing what to do is not often recognized.

<sup>155</sup> These roles were built on the assumption that, under more uncertain circumstances, organizational control is more dependent on social control systems.

In summary, in aiming to explain the roles of BPM in more detail, the roles are defined by several more specific sub-roles. Seven sub-roles of BPM use are included in this research: targeting (budgets), monitoring (operational reporting), variance analyzes, learning-to-do, signalling, influencing future budgets (budgeting), and reporting on past performances (organizational reporting).

### **Explaining the applied (sub-) roles of BPM, some similarities**

As previously discussed, some sub-roles of BPM are documented in all the case studies. The use of BPM for variance analysis, targeting performance budgets, operational reporting, influencing next period budgets, and organizational reporting appears to be used in all policy fields.

The diagnostic use of BPM for variance analysis is observed in all the case studies, mainly for organizational control of highly aggregated financial performance measures<sup>156</sup>. However, this way of using performance measures is seen far less in the control of financial operational budgets. Responsible operational managers mostly comply with strictly defined budget rules. Financial budgeted performances can be altered, or budget overspending can be explicitly or implicitly accepted, so long as the rules are applied properly.

The use of BPM for variance analysis is seldom applied for controlling detailed financial or non-financial performances. This despite the presence of variance analyses information in many documents. Other components of the “answering” role are more frequently observed. Targeting of budgeted performance measures (budgets) and monitoring of actual achievements (operational reporting) are observed in all the case studies. Both sub-roles of information use are more or less comparably applied in the researched cases. Only Welfare Payment uses status reporting comparatively more intensively.

The use of BPM for influencing next period budget (as part of the “ammunition” role) appears to be applied in all the cases, except Sewerage. This function of BPM use relates to the budgeting process<sup>157</sup>. Information on achieved actual and estimated future performances is used for influencing or motivating members of the Council to adjust next years performance budgets in a desirable direction. Influencing next period budget is used most in Welfare Payment, but this function is also documented in Economic Policy and Spatial Planning.

Sewerage seems to be the exception to this rule, but is using a multi-year planning and control cycle. Its yearly budgets are set by a mid-term plan, setting budgets for the next four years or longer. Influencing the next period budget is in this case re-

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<sup>156</sup> By applying this diagnostic control function, politicians are using the accounting information system to ensure that financial organizational performances are (or will be) within some general budgeted targets.

<sup>157</sup> Budgeting is the process of setting budget targets. Budgeting can be approached as top-down (budget targets are in line with pre-set organizational objectives) or as bottom-up (organizational objectives are altered in line with the developments of budget targets). Both approaches are assumed to be functioning together to some extent.



ferred to as influencing the next mid-term plan. At the time of this research the mid-term plan had just been renewed, and therefore influencing the next mid-term plan was not seen.

Organizational reporting is also documented in all the cases, especially Welfare Payment, Economic Policy, and Spatial Planning. In Sewerage this function of rationalizing and legitimizing past performances is used less.

To summarize, the four cases researched suggest that this organization does apply some kind of standard way of using BPM throughout the organization, regardless of the precise technical, political and social task environment. The way BPM is used for organizational control appears to have some kind of a minimum level, related to a restricted set of roles of BPM-use used to a minimum extent. Organizational control is apparently running in the lowest gear here<sup>158</sup>. The case study findings also illustrate situations in which, in addition to this use of standard roles, standard roles of BPM more intensively occur, or are supplemented by other roles of BPM.

This standard use of particular sub-roles of BPM was not initially expected; the research framework did not make any assumptions about it. Adjustment of the framework on this point should be considered.

### **Explaining the applied (sub-) roles of BPM, some striking differences**

Some sub-roles of BPM turn out to vary significantly between the four case studies. Variations seem to be most contrasting regarding the learning-to-do function, but also the use of BPM for signalling<sup>159</sup> appears to vary between the four cases.

The learning-to-do function of BPM appears to be most pronounced in Welfare Payment. The politicians and managers who are responsible for Welfare Payment are confronted with serious financial and political risks and unpredictable circumstances. Enforcing control over future financial performances is for them without doubt a major issue, but compliance with laws and procedures is also important. Performance measures are central. Politicians and managers responsible for Welfare Payment try

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<sup>158</sup> What is driving the content and the extent of use of these standard roles of BPM-use is not investigated in this study, but some suggestions can be made. The content can, for example, be influenced by the nationwide implementation of businesslike planning and control instruments in Dutch municipalities in past decades. This implementation project has had significant impact on the planning and control systems of Dutch city councils, and resulted in similar use of planning and control instruments in many local governmental organizations (Van Helden, 1998; Van Helden and Ter Bogt, 2001; Ter Bogt, 2004). This standard way of using BPM can also be influenced by the more institutional defined rules and regulation, regarding accountability or account given purposes (Pollitt and Bouckear, 2000). An additional remark is made. If organizations rely mainly on this standard role of BPM, they do not differentiate much between different policy fields, and their planning and control systems are less likely to facilitate politicians and managers in their control of operational tasks in more uncertain or unpredictable environments. It is assumable that this standard role of BPM mainly facilitates the control of routine tasks in a stable environment, and less the control of less pre-programmable tasks in a unstable environment.

<sup>159</sup> Signaling is seen as a function of both the archetypal "learning" and "ammunition" role. The difference between both archetypal roles is defined by the presence of "learning to change ways of doing" or "influencing next period budgets". Learning to change ways of doing stresses the intention to change processes, influencing the next period budget stresses the intention to change future budgets.

to react to changes caused by the unpredictable external environment, and use BPM for signalling and learning. They use status reports intensively for monitoring actual operational developments, discuss performance trends, signal emerging changes, and analyze operational processes in order to find alternatives that can bring them closer to their objectives. Two observations are made.

Firstly, process-related performances are perceived as controllable, but results-related performances are not. The municipality sees itself as in control of operational processes, but also as having limited control over the total amount of welfare to be paid and the financial compensation it is to receive. In this environment the use of BPM for learning seems to flourish; it seems to facilitate politicians and civil managers in adjusting objectives or altering operational tasks<sup>160</sup>.

Secondly, managers said that they can predict the results of tasks to be performed in advance. As a result, they can estimate the results of operational changes fairly accurately. For example, an expected change in the number of welfare clients is used to estimate a change in operational costs and expenses for welfare payments. However, according to the research framework, learning-to-do was mainly expected in an environment in which managers are uncertain about the causality between tasks and specific objectives. It therefore seems odd that managers use BPM for learning-to-do, when they seem to know what to do.

What seems to be important in this case is that this learning-to-do does not often lead to significant instant changes. Many operational processes in Welfare Payment are pre-programmed and are often constrained by national rules and protocols or by local policies. Many different organizations are also operationally involved in a chain of welfare-related processes. Changing this kind of process is therefore not easily done. As a result, operational changes seem to be mostly applied to future years; in the following budget period. Continuing this line of reasoning, managers seem to know what to do today, but are learning how to pre-program the future.

Economic Policy, on the other hand, was expected to relate to the learning-to-do function, but case findings did not confirm this function at all. The objectives of Economic Policy are perceived as relevant, clear and undisputed, but nobody knows exactly how the municipality can achieve them, and the achieved performances are only measurable after some time. In this situation, signalling seems to be important. Signalling facilitates the communication and coordination of the operational tasks. Responsible aldermen and civil servants apply signalling to influence (or to motivate or to pursue) others to act according to their plans, of which the exact results are hard to predict<sup>161</sup>.

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<sup>160</sup> This more timely information means the Council is better informed and appears to make organizational control tighter. However, frequent operational monitoring and reporting is not making the unpredictable controllable. More objective information on actual developments is basically making the Council members more aware of the current challenges to resolve, but does not seem to resolve them.

<sup>161</sup> Learning suggests some kind of trial-and-error process. In the Economic policy case, however, it is not always clear which decision will lead to the achievement of the organizational objectives. In a changing environment, this kind of learning can thus also be based on more intuitive or judgmental processes.

Analysing Welfare Payment and Economic Policy together, another observation can be made. Both are described by specific and relevant organizational objectives, and by operational control that is aimed at achieving these specific objectives. Operational control in both policy fields is, however, mainly reliant on process/project and social control mechanisms. Politicians and managers are personally involved in operational and organizational decision-making and control, and seem to enforce integration between operational tasks and organizational output control.

Perhaps one could speculate that this suggestion can be put in more general terms. That is, if unpredictable changes in the external environment or unpredictable consequences of operational tasks are hindering the achievement of precise and relevant organizational objectives, politicians and managers are likely to use BPM for unequivocally signalling what is important and for learning to change ways of doing. Learning is, however, conditional. Further research is necessary to explore this in more depth.

The Spatial Planning case study reveals a different situation. Spatial Planning is characterized by some specific but mostly ambiguous objectives, and by operational tasks that are barely directed or defined by specific organizational objectives.

The majority of the organizational objectives and performances of Spatial Planning are purposefully vague, leaving room for operational activities to be filled in later. Loose coupling between operational and organizational control seems to be an important characteristic here. Not only are operational performances and organizational objectives supporting a loose coupled control system, but also the communication between politicians and Spatial Planning management seems not to achieve tight integration of operational and organizational control. Signalling appears to facilitate the more ad-hoc communication needs of politicians, top management and operational managers. In Spatial Planning, signalling seems to be used predominantly to express various interests and values. This could be caused by the complex and institutionalized external environment of Spatial Planning, but the existence of different organizational cultures (between politicians and operational professionals) could also be an influence. An additional aspect is that politicians are often involved in the more operational aspects of this policy field. Spatial Planning seems to offer politicians opportunities, for example to act, to be informed, to articulate issues, or to communicate with their electorate. Associations with the use of BPM for learning-to-do are however not made.

One remark has to be made on a missing variation in the empirical research. The use of BPM for diagnostic variance analysis was mainly expected in Sewerage. Organizational control in Sewerage is however hardly evidenced; the findings suggest that BPM in Sewerage is not used much for organizational control. This loose organizational control within Sewerage is perhaps attributable to the fact that this policy field is perceived by politicians as peripheral; with limited political ambitions and risks attached to it. The applied complex financial accruals and the civil engineering nature of the sewer system tasks can possibly contribute to explaining this situation also.

## Summary, aspects that explain roles of BPM

The case study findings give support to aspects of the research framework, but also challenge the framework. Some aspects of the framework do seem to explain the way performance information is used for organizational control in Dutch local government. However some other aspects could rather be regarded as a starting point for further exploration.

The indicated archetypal roles were not considered to be fully applicable to this empirical research, and adjustments were necessary. Accounting theory and research findings suggested breaking down the archetypal roles of BPM use into different sub-roles of BPM use. As was indicated before, seven different sub-roles of BPM use are applied:

- performance targeting (budget),
- variance analysis,
- status reporting (operational reporting),
- learning to change ways of doing (learning-to-do),
- unequivocally signaling of what is important (signaling),
- influencing next period budgets (budgeting), and
- reporting on past performances (organizational reporting).

Some of these sub-roles of BPM use are applied limitedly throughout the four case studies. The standard sub-roles of BPM, recognized in this study, are: high level financial variance analysis, budgets, operational reporting, influencing next period budget, and organizational reporting. These sub-roles can be described as standard roles of BPM. This study makes only limited suggestions on the extent to which these sub-roles are used. Additional research can give more detail, and can explain these standard roles of BPM more specifically.

There is no evidence for the diagnostic use of variance analyses in the four cases, except for controlling high level financial performances. This suggests that performances are seldom controlled at arm's length; textbook forms of organizational result or output control are limitedly applied in the four cases<sup>162</sup>. Politicians and managers, controlling their organization, do not often rely solely on the performance information system. Formal task controls (such as process and project control) and informal or social controls (such as personnel and cultural controls) appear to operate together<sup>163</sup>. BPM are often applied as norms in behavioral control systems, or are used for various reasons in the social setting of civil servants, politicians, and civilians.

Aiming to include some more social control oriented sub-roles of BPM use, this study uses learning-to-do, signaling, and influencing next period budgets<sup>164</sup>. These three

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<sup>162</sup> This conforms to the findings of, for example, Bordewijk and Klaassen (2001), Van Helden (2001), Ter Bogt (2005).

<sup>163</sup> See for example Ouchi (1979), Hofstede (1981), Merchant and Van der Stede (2003).

<sup>164</sup> Influencing next period budget is regarded as a standard function of BPM-use, but the extent of use varies between the four case studies.

sub-roles are somehow interrelated, as demonstrated clearly by the Welfare Payment case study findings. This suggests that the Earl and Hopwood's archetypal "learning" and "ammunition" roles are more closely related than was initially assumed<sup>165</sup>. The Welfare Payment and Economic Policy case studies have demonstrated that learning-to-do is conditional; learning-to-do is mainly expected when some kind of feed-back mechanism can evaluate performances by specific objectives, and when organizational tasks can be adjusted accordingly.

Many factors can influence the use and relevance of these three more social control oriented sub-roles of BPM<sup>166</sup>. Case findings suggest that political interest or political risks are surely one of them. Sewerage is an example of a policy field in which politicians have limited interest in using BPM at all. The involvement of politician's in the reduction of Welfare Payment risks, or in stimulating the potential of Economic Policy showed political interest in achieving the main organizational objectives. The Spatial Planning case study pointed both to the specific opportunities this policy field offers to politicians to be personally involved in particular projects or tasks, and to the use of BPM to express specific issues. The findings in this case study suggest that signaling, learning-to-do, and influencing future budgets are not always applied for controlling organizational objectives, but are also used for facilitating specific operational tasks or political actions<sup>167</sup>.

The research framework assumes that the roles of BPM are related to task uncertainty and a context of organizational control. Task uncertainty (expressed as the means-end relationship of tasks) provides explanations of the four case studies. However, the relationship between the case studies and the particular roles of BPM was more diffuse. Consequently, task uncertainty does not appear to clearly explain the roles of BPM in the four cases. The findings also suggest that two factors instead of one single factor explain a means-end relationship. Routineness of tasks expresses the programmability of tasks, but the ability to evaluate operational tasks or performances on their contribution to organizational objectives appears to be important too. This "contribution to objectives" is a new factor, and could be included in a revised research framework.

Further adjustments to the framework could be suggested with regards to the concepts and measures of the different contexts of control. A businesslike control context was intended to express the technical rationale of control, by focusing on certain,

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<sup>165</sup> This shows a resemblance to the concept of interactive controls (Simons, 1995, 2000). Simons defines his interactive controls by the interactive way managers use it. As he put it: "*Interactive debate and dialogue takes places at all levels of the organization as new information is studied and analyzed. This ongoing discussion highlights the need for changing ways of doing things, changing value propositions, or even changing aspects of the business strategy*" (Simons, 2000, p. 217).

<sup>166</sup> For example, measurability of tasks and outputs, political interest in the performance, scale of the organization, street-level discretion and linkage between objectives and performance indicators (Ter Bogt, 2004; Van Dooren, 2005).

<sup>167</sup> The use of BPM is likely to have more functions that defined by only organizational control. This study is however mainly concentrated on organizational control. Further research can explore this in more detail.

specific, and undisputed organizational objectives and integrated performances. Case findings do suggest that specific (measured by the factors: clarity, relevance, and integration) organizational objectives and operational performance measures are important characteristics of a businesslike control environment. Uncertain and undisputed objectives, however, appear to be less applicable in this study. Three remarks can be made. Firstly, uncertainty of objectives and unpredictability or uncontrollability of the external environment seem to overlap and were hard to separate in the four cases. Secondly, certainty of objectives is not clearly related to specific objectives and performance measures. The Welfare Payment case study, for example, shows that an uncertain or unpredictable external environment can even be regarded as stimulating a business rationale of control; the need to achieve unpredictable but specific objectives seems to force the organization to control in a more technical rational way. Thirdly, undisputed organizational objectives do not seem to relate to a businesslike control context (as in the Spatial Planning case).

Using a political control context in this study was far from unproblematic too. The political control context was based on the notion that objectives are disputed and uncertain, conflicting pressures of institutional parties on objectives exist, and on the importance of political processes for organizational control. Welfare Payment particularly illustrates a situation in which objectives are disputed but also unambiguous, and control is characterized as rational and goal-oriented. Spatial Planning illustrates a control context that is more characterized by the presence of ambiguous objectives than by disputed objectives. Therefore, it could possibly be assumed that rather the uncertainty or disputability of objectives, ambiguity of objectives best characterizes a political control context<sup>168</sup>.

Another factor was the potential confusion about the use of the word “political”. The use of the word “political” in “a political control context” and “a political control mechanism” suggests some similarity, which can cause some misunderstanding. In this study a political control context relates mainly to an institutional organizational setting in which achieving specific objectives is not put at a premium. Political control as a mechanism is a social control mechanism that can be applied in any control context<sup>169</sup>. Re-naming the control contexts can thus be of some practical help<sup>170</sup>.

To summarize, this empirical research shows that certainty, predictability, or indisputability of objectives do not clearly relate to the technical rationale of control. Characterizing a businesslike and political control context by using aspects of organizational objectives, as has been applied in this study, appears to explain a businesslike control insufficiently. Findings suggest a more bottom-up relationship; the use of op-

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<sup>168</sup> According to Hofstede (1981, p. 194) ambiguity of objectives is “*the most critical criterion for management control*”. He suggested three reasons for ambiguity: conflicts of perceived interest and values, lack of knowledge about means-end relationships, and environmental turbulence.

<sup>169</sup> Political control mechanisms, as informal control mechanisms, can be applied in a businesslike or a political control context.

<sup>170</sup> For example, by making reference to objective-focused (instead of a businesslike) or task-focused (instead of a political) control context.

erational performances for achieving relevant and specific organizational objectives seems to be particularly important<sup>171</sup>.

The previous reflections bring about various suggestions for adjusting the research framework. Some more specific suggestions for a renewed framework are documented in one of the following sections.

### **Observations with respect to the use of BPM**

Research question c) aims to explain the use of budgeted performance measures through the applied roles of BPM. The research framework had constructed BPM use by the design characteristics and quality of the accounting information system. The design characteristics measure aspects of scope and timeliness. In this study, information on the design of AIS was collected by looking at the use of: (a) financial or non-financial pre-defined quantitative targets (budget), (b) information on actual accomplishments (actual), (c) variance information between actual and budget, and (d) additional information (on past performances, estimates, forecasts, and future events). Information on the quality of AIS was collected by using user satisfaction as a surrogate measure.

Case study findings illustrated the use of different types of performance measures, but the measures of both design and quality of AIS appear to differ only to limited extent. Financial performance measures was used in all researched cases and appeared to be fairly consistent throughout the cases.

Variety in the use of non-financial performance measures appeared to be rather limited. In all the cases an emphasis on actual and budgeted performance measures for organizational control was registered. Only the Economic Policy case study revealed a limited use of actual performances, which conforms to the notion that the actual performance of Economic Policy is hard to measure within a short time-frame. Additional information was included in all cases, except the Sewerage case study.

The cases showed limited variation in the quality of performance measure use. Consequently, no assumptions could be made on the relationship between the quality of and the roles of BPM, but some additional interpretations could be made.

Scope is measured by capturing: financial and non-financial, actual, budget, variance between actual and budgets, and additional information<sup>172</sup>. The scope of performance measure use was valued in all four case studies as average or above, but differences in scope between the cases were limited. All case studies reported the use of financial and non-financial performance measures, and of the use of actual performances. Information on budgets appeared to be more prominently used in the Sewerage and Spatial Planning case than in the Welfare Payment and Economic Policy case stud-

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<sup>171</sup> This is in line with Hofstede's (1981) suggestion that management control should relate to operational activities, and not to different types of organizations.

<sup>172</sup> such as estimates, forecasts, and future events

ies. In the Welfare Payment and Economic Policy studies, the emphasis appeared to be more on actual information. Additional information (such as forecasts, estimates, and other information) was seen in all case studies, except the Sewerage case study. Thus, it seems that scope of performance measure use does not present clear suggestions about the relationship between roles and use of BPM.

### **Towards an adjusted framework**

The findings and explorations of this study produce some indications and suggestions which address the way performance measures are used in Dutch municipalities. The scientific significance of these results could be exaggerated if they are used to make firm assumptions and propositions. The following adjustments are therefore to be regarded merely as suggestions. These suggestions are formulated as hypotheses<sup>173</sup> and need to be robustly tested in the future.

The relevance of objectives and performances<sup>174</sup> for organizational control is likely to be the most important aspect for explaining the way performance measures are used. Objectives and performances must be relevant to the persons who are involved in organizational control. But what defines relevance for organizational control is less straightforward. Case findings suggest that relevance of objectives and performance for organizational control is primarily dependent on the interest of politicians; performances are relevant for organizational control when a policy field is politically sensitive<sup>175</sup>. Objectives and performance measures, related to a politically insensitive policy field, seem to have limited use for organizational control.

Research findings suggest that a policy field is politically sensitive if the tasks or activities of this policy field are perceived by politicians as offering opportunities or causing risks.

If a policy field's tasks offer politicians opportunities, they are likely to offer the possibility of fulfilling their political ambitions. Taking the Spatial Planning case findings as an example, politicians are involved in setting specific objectives and performances (setting a few of them in specific terms, but mostly in more ambiguous terms), are personally involved in some operational tasks, are using specific information about particular issues of political importance to address particular interests and for communication with citizens. But to what extent these opportunities lead to organizational control, is not explicitly documented in this case study. If these opportunities are fuelled by local party political programs or by governance bodies (e.g. by central government), they will probably lead to the setting of objectives and budgeted perform-

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<sup>173</sup> All hypotheses relates to organizational control in Dutch local governmental organizations.

<sup>174</sup> Relevance, as documented in the initial research framework, is measured as a factor of specificity of objectives and by budgetary tightness. Both aspects were assume to indicate the perceived importance of objectives and budgeted performances for organizational control, but provide hardly any contrasting information on this subject.

<sup>175</sup> The relevance of political involvement, sensitiveness or interest for organizational control is also documented in public administration literature, and is often regarded as an aspect that explains performance measurement use (Pollitt and Bouckaert, 2000; Van Dooren, 2005).



ance targets<sup>176</sup>. But politicians can see different opportunities between setting and achieving objectives and performance targets; the interest in setting objectives can differ considerably from the interest in achieving organizational results<sup>177</sup>.

Next to opportunities is the perception of risk surfacing as another cause for a policy field to be regarded as politically sensitive. Taking the Welfare Payment case study as an example, political risk can be related to significant financial deficits, operational malfunction that can lead to interventions by governance bodies, and the possibility of being held accountable for underperformances.

Sewerage appears to be a policy field with limited politically sensitive tasks; politicians see little opportunity or risk attached to them. Two observations were made here: (a) politicians appear to have a limited interest and involvement in the operational tasks, and (b) organizational control is loose; a desire to ensure the achievement of organizational objectives seems to be largely absent.

The Sewerage case findings show that the roles of BPM are restricted to a set of standard roles<sup>178</sup>, which are also observed in the three other cases. However, in these three other cases the use of some standard roles is often more intense (the use of BPM for budgeting and progress reporting) and is supplemented with other roles of BPM.

#### *Hypothesis 1*

*Municipalities apply a set of standard roles of BPM-use throughout their organization, which can be regarded as a minimum set of (sub-) roles used to a minimum extent. Standard roles of BPM-use relate to diagnostically applied bottom-line financial control, to influencing and setting budgeted performance targets, and to reporting performance progress at an operational and organizational level.*

The Sewerage case findings show that the main reliance on the standard roles of BPM-use relates to situation in which organizational control is loose, and the contribution of tasks or performances to organizational objectives is perceived as relatively certain or predictable.

#### *Hypothesis 2*

*If the tasks of a policy field are perceived as politically insensitive, then only the standard roles are being applied, the contribution of operational tasks or performances to organizational objectives is perceived as predictable, and organizational control is loose.*

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<sup>176</sup> In Spatial Planning, for example, specific objectives are set for bringing zone-planning up-to-date, in order to comply with national law.

<sup>177</sup> Organizational decision-making relates to organizational action, but "*it would be naïve to assume that the connection was always a tight one*" (Pollitt, 2001, p. 939). Pollitt (2001, p.940) added "*In public administration, even determined implementation (action) does not necessarily lead to uniform or expected results*".

<sup>178</sup> These (sub) roles relates to the process and result of budgeting (influencing budgets and setting budget targets), to reporting progress (at operational and organizational level), and diagnostic use of highly aggregated financial (bottom-line) performances.

The Spatial Planning and Economic Policy case studies both document examples of political opportunities. In both case studies politicians appear to be more interested and involved in particular operational tasks than in controlling organizational objectives. Organizational objectives appear to play a role, but are mostly used in a more social and political way. For example: objectives and performances are used for signalling unequivocally what is important and for influencing future budgeted performances. Both case studies also illustrate situations in which project control is important for operational control and organizational control is characterized as loose.

### *Hypothesis 3*

*If a policy field offers politicians an opportunity, politicians are interested in particular organizational objectives and operational performances or tasks, and are often personally involved in particular operational tasks. Organizational control is expected to be relatively loose.*

The case study findings provide some comprehensive suggestions on the aspects that can lead to the roles of BPM use in a politically risky situation. At least two concepts seem to be useful: the businesslike control context and the organization's ability to learn.

Initially, the businesslike control context was defined by characterizing organizational objectives. Certainty, low levels of ambiguity, lack of multiplicity, and predictability were aspects used to define or measure this control context. Case study findings, however, suggest that the control context is basically dependent on the contribution of operational tasks or performance to achieving specific organizational objectives<sup>179</sup>. This assumes that objectives give direction or motivation to operational tasks or performances, and the integration of objectives and performances. This suggestion is used to redefine the businesslike control context.

### *Hypothesis 4*

*In a businesslike control context, operational tasks or performances contribute clearly to the achievement of specific objectives.*

This businesslike control context is seen the most clearly in Welfare Payment. Using this case study to characterize the businesslike control context in more detail, the following suggestions can be made: perceived political risks, objectives and performances are specific or unambiguous, organizational and operational objectives and performances are relatively integrated, limited task uncertainty, and organizational control is relatively tight. In this control context, all the documented (sub-) roles of BPM-use are applied.

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<sup>179</sup> The suggestion that, for a meaningful classification from a management control viewpoint, the organization has to be broken down to the level of operational activities is also made by Hofstede (1981).

#### *Hypothesis 5*

*A businesslike control context is mainly expected when a policy field is perceived as politically risky. Here control is tight. The roles of BPM-use relate to more intensively applied standard roles, and to signalling and learning.*

The findings of the Economic Policy case can be used to refine this politically risky situation. In Economic Policy the achievement of organizational objectives is perceived as relevant, however control of achievements is hardly possible. Politicians perceive both the risks of underperformance (although they can not easily be held accountable for it) and the opportunities offered. Here the control context is characterized as businesslike to some extent. Particular operational tasks (e.g. actions and special projects) are important and objectives are mostly used to signal important issues or specific interests. Economic Policy is used as an example of a politically risky policy field in a limited businesslike control context.

#### *Hypothesis 6*

*If tasks are politically risky, but the control context is less businesslike, the emphasis of organizational control is on executing particular operational tasks.*

An additional observation can be made. Economic Policy and Spatial Planning differ on ambiguity of objectives (unambiguous and respectably mostly ambiguous) and on integration of organizational objectives and operational performances. However, they seem to differ far less on control context (intermediate businesslike or respectably political), and both appear to describe situations in which the interest of politicians is on particular operational tasks or performances. The applied (sub-) roles of BPM in both policy fields also show reasonable resemblances.

#### *Hypothesis 7*

*If the emphasis is on particular operational tasks or performances, the roles of BPM relate to the standard roles and to signalling.*

Case study findings show that an organization's ability to learn to change ways of doing is conditional. Learning-to-do is expected when an organization is able to change operational processes as a response to progress evaluation. If achieved performances cannot be monitored and evaluated in time, and when tasks or processes cannot be adjusted in time, learning-to-do does not seem to be possible.

#### *Hypothesis 8*

*Learning will only occur when an organization is able to change operational processes according to performance evaluations.*

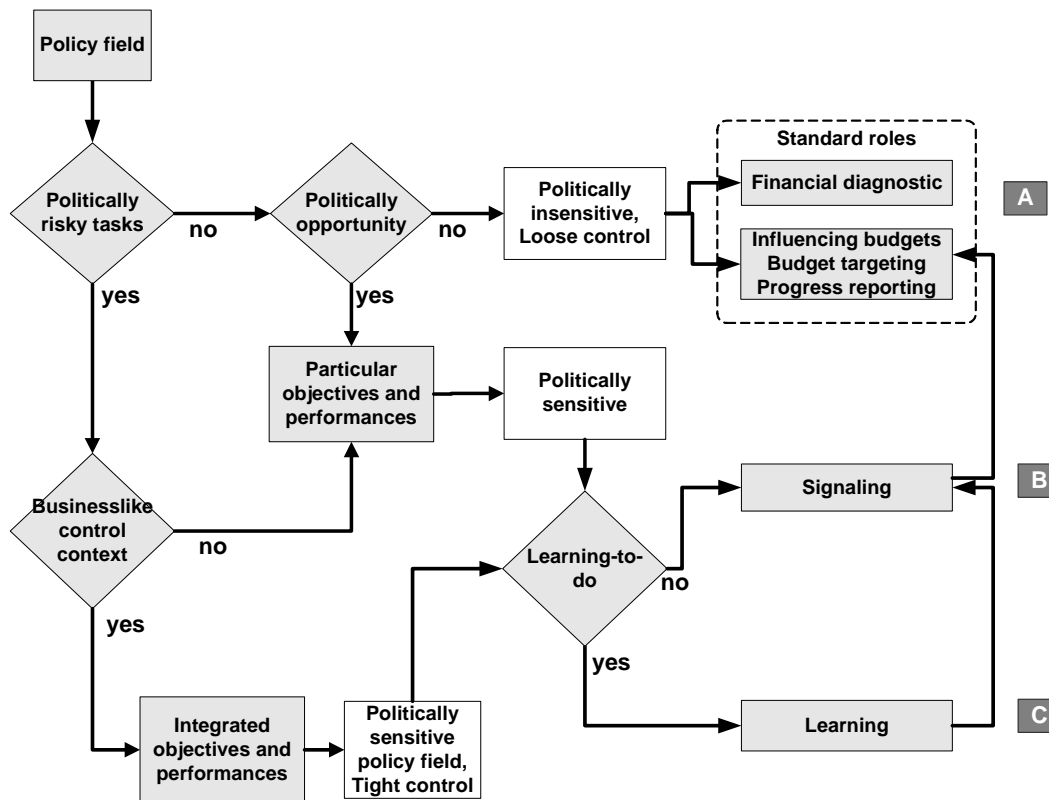


Figure 9 Adjusted research framework

Figure 9 gives an overview of the adjusted framework. The four case studies can be positioned in it.

The tasks in Sewerage appear to be politically insensitive (no political risks or opportunity), and Sewerage is positioned at A. Only the standard roles of BPM are being applied.

The tasks of Economic Policy (some political risks, offering political opportunities) and Spatial Planning (no clear political risks, offering political opportunities) are regarded as politically sensitive, and both case studies are positioned at B. Organizational control is directed to 'involved in' and 'achievement of' particular objectives and performances. Standard roles of BPM are emphasized and signalling is applied.

The tasks of Welfare Payment are seen as politically risky and the control context is businesslike. Organizational control is directed to achieving organizational objectives. This case study is positioned at C. Standard roles of BPM are more intensive (in particular influencing next period budget, budget targeting, and progress reporting) and signalling and learning are applied.

## Discussion

Still little is known about the way performance measurement and control is used in Dutch local government. Even after studying one organization in more detail, as in this study, only a few firm statements can be made. This is no surprise; both the subject and the methodological approach of this study were not expected to deliver robust results. Nevertheless, this exploration of the role of accounting in action, of the way budgeted performance measures contribute to organizational control, has resulted in several conclusions and suggestions that can lead to an increased understanding. It has also addressed several points that should be discussed further. Two additional insights are discussed in the following section: the feed-forward of formal control, and differences in information use.

### Feed forward control

It appears that operational performance reports are often used to evaluate and influence *future* instead of *current* processes and budgets.

Control theory often assumes that status reports are used for the evaluation of the achievements in the current budget period<sup>180</sup>; that they are an intertwined process of influencing operational processes with the purpose of ensuring achievement of organizational objectives and performances. The case study findings indicate that the actual applied control scheme often does not function as a mainly cyclic process, but as a longitudinal process; as a process of evaluating achieved performances for influencing the next period budget and processes<sup>181</sup>.

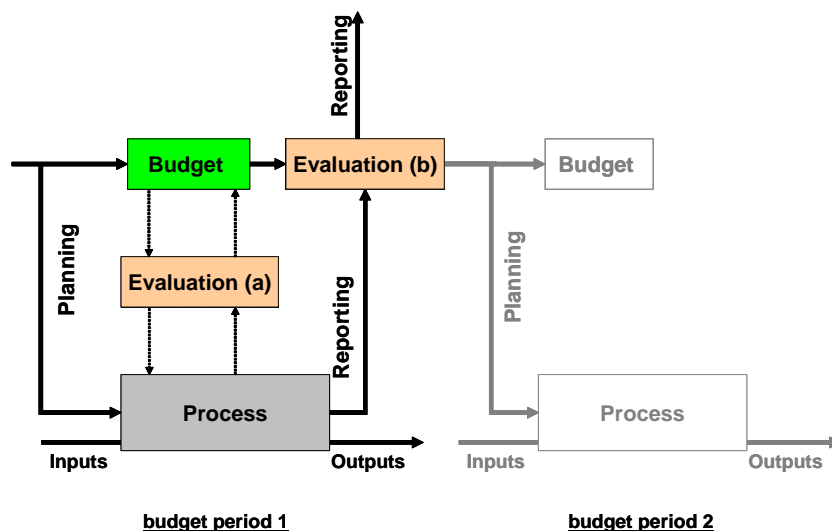


Figure 10 Evaluation of budget and process

<sup>180</sup> Evaluation (a) in Figure 10.

<sup>181</sup> Evaluation (b) in Figure 10.

Figure 10 illustrates this mechanism. Reports on actual performances are often used to evaluate the next period budget and sometimes to change future operational processes. Budgets therefore appear to be based more on previous operational budgets and the forecasted consequences of current achievements, than guided by a top-down process of translating organizational strategy and objectives into action.

Individual case studies reveal more detail on this evaluation process. It appears that evaluation in order to change future processes and budgets is mainly seen in the Welfare Payment and Sewerage case<sup>182</sup>. Both case studies relate to a businesslike context, indicated by specific objectives and low levels of task uncertainty. In a less businesslike control context the control processes appear to differ. In the Economic Policy and Spatial Planning case studies, decisions on (change of) budgets and processes seem to relate more loosely to this evaluation process. Setting performance targets seems to be based less on reports of actual operational achievements<sup>183</sup>. As a consequence, future budgets seem to be mainly based on the evaluation of current budgets. However, this tentative analysis needs to be researched further before firm conclusions could be drawn.

### **Performance information use**

The cases provided some additional insights into the differences in perception of the perceived level of quality of information use between the top of the organization and the operational level. The Welfare Payment and Economic Policy case study, for example, demonstrated situations in which operational managers perceived a higher level of quality than top management and politicians. The Sewerage and the Spatial Planning case studies demonstrated a reverse situation. Here top management and politicians perceived the quality of information higher than operational management. However, often top management and politicians did not seem to use this information. Some more detailed interpretations can be made about this point. The Welfare Payment case, for example, demonstrated the relevance of performance information for organizational control. Process control is emphasized, and process-related information is regarded as important. Operational management is recognized as the driver of the process-related information requirements; they are involved in the process of continuously improving management information. Operational management appeared to be quite satisfied with the available information. Operational performance score cards had been developed and actual performance information was perceived by these managers as being increasingly sufficient, accurate, and timely. Higher in

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<sup>182</sup> Both case studies differ significantly on this subject. In the Welfare payment case study, the evaluation of operational performances (i.e. increase of welfare payments) results in changes in future processes (adjustments in special welfare) and operational and organizational budgets (changes in performance targets). The Sewerage case study documents that evaluation of operational performances mainly relates to changes in future processes (for example to coordination and communication processes) and to operational planning (reschedule of projects).

<sup>183</sup> In the Economic policy case study, operational reports contain sparse information about performance variations. Actual information on achieved performances is often not available, and politicians and civil managers perceive performance targets and operational tasks as not directly related. The Spatial planning case findings illustrate that politicians and managers do not often apply performance targets for operational control.

the organizational hierarchy, however, this information was valued less. Top management and responsible politicians expressed the need for more specific reports; the available standard operational performance information was not perceived as fully meeting their needs. Thus, this case demonstrated a situation in which performance-related information was produced by operational managers mainly for the purpose of operational control. This information was valued by these managers, but their superiors valued the usability of this information less.

The Sewerage and the Spatial Planning case studies documented the reverse situation: a higher perceived quality of management information at the top of the organization. The case study reports did not document specific reasons for this effect, but some interpretations can be made. For example, both cases documented the dominant use of projects for the execution of operational tasks. Two aspects of projects-related organisations, in comparison with product-oriented organisations, can be of importance here.

Firstly, authority of decision making in projects can differ significantly from that for products. Decision making in major projects is often directed to the top of the organisation, resulting in the direct involvement of top management and responsible politicians. This aspect is clearly documented in the Spatial Planning case study. Aldermen, Council members, and civil directors participated actively in many projects, ranging from zone planning to zone development.

Secondly, management information of projects can differ significantly from product-related information. The cases documented standard approaches for planning and reporting of both projects and products at an operational level. At an operational level, products and projects are planned and reported by using pre-defined standards and rules, but on an organizational level, both planning and reporting approaches seem to differ. Products appeared to be regularly planned and reported in an aggregated standard form by applying standard rules, but projects were reported often on a more individual basis. Specific information on major projects was documented in all organizational planning and reporting documents.

Combining these two interpretations, top management and politicians seem to be more directly involved in the management of projects than in that of products, and seem to receive more non-standard information on projects than on products. This could explain the relatively higher level of user satisfaction at the top of the organization in these situations.

On the other hand, operational managers have to manage many individual projects, which often cannot be easily aggregated. The Spatial Planning case study documented this challenge most clearly. Operational managers of Spatial Planning recalled the limited availability of management information for managing large numbers of projects. Information to support the operational management of a portfolio of projects was not well developed, which could explain a lower level of user satisfaction at an operational level.

The above interpretations of the differences in perceived quality in the organization give some additional insight into information use, but do not reveal the relationship between the information use and the roles of BPM, or between the information use and the antecedents of the roles of BPM (the control context and the routineness of tasks).

## Limitations

The interpretations, suggestions and conclusions in this study must be evaluated by taking into account the strengths and limitations of this research.

The main strength of this study is its combination of theoretical foundation and case-based research methods. The theoretical foundation offers a sound basis for conceptualizing management control and accounting information use. The case research approach offers an analysis of both quantitative and qualitative findings, which was helpful in connecting the open research framework with several theories and empirical findings.

This study also has some serious limitations. A more general limitation is related to the subject of this study: the relevance of budgeted performance measures for management control. The domain reached by management control is huge<sup>184</sup>, and formal controls are only a part of the management control devices. But formal controls can not be studied in isolation; they are used by and for people and social and cultural forms of control are always present and relevant in one form or another. And lastly, budgetary control is only one type of formal control and is always operating in socially and politically characterized situations. Researching the relevance of budgeted performance measures for organizational control, and the role of performance measures attached to them, is thus likely to be incomplete or imprecise.

This study is incomplete because of its applied methodology (a more functional explorative case research approach) and focused use of theories (mainly mainstream accounting and organizational theory), and many behavioral scientists will miss the, in their opinion essential, theories (e.g. economics, sociology and psychology) and interpretive analyses. This study is imprecise, among other things, because of its inability to quantify organizational control in general (which is, to my opinion, an omission in management accounting theory), and its choice not to quantify the relative importance of budgetary control in achieving organizational control (which was seen as beyond the scope of this research).

This general limitation is accompanied by some more specific ones. This study has researched one particular organization within a specific timeframe, and composed a static picture of this organization. Limited information is presented on the historical and future developments of the researched organization, and the change in information use through time is not shown. The organization could be going through a process of change, with pertinent influences on this research, without being observed by the researcher. The selection of the organization and the case protocols have paid special attention to this issue, and did rule out major changes, but can not rule out this effect completely.

The study of only four groups of organizational functions researched is another limitation. This has limited this study to some pre-defined important tasks, but leaves many tasks unaddressed. An additional aspect of this selection of one organization, one

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<sup>184</sup> It relates to "all the devices that managers use to ensure that the behavior and decisions of people in the organization are consistent with organization's objectives and strategies" (Merchant, 1998).



timeframe, and four organizational functions is that findings are hard to evaluate objectively. References to other organizations, tasks, and developments in time, are basically missing. Objective calibration of measurement instruments is therefore replaced by subjective interpretation.

## 6. Samenvatting (Nederlands)

### *Inleiding*

Politieke bestuurders van Nederlandse gemeenten (zoals de gemeenteraadsleden, de burgemeester en de wethouders) leggen vaak veel nadruk op prestatie­meting. Zo staat in het collegeprogramma 2006-2010 van de gemeente Rotterdam: *“Het college maakt scherpe keuzes en stelt prioriteiten. De nadruk ligt op de uitvoering. Er worden meetbare doelen gesteld waarover het college achteraf verantwoording aflegt”*. Deze gemeente noemt dit *“de Rotterdam aanpak”*, maar ook bij vele andere gemeenten is al meerdere jaren een dergelijke boodschap te vinden. Collegeprogramma’s, programmabegrotingen, voortgangsrapportages, of andere belangrijke documenten van gemeenten leggen de laatste jaren de nadruk op het realiseren van vooraf vastge­legde meetbare resultaten.

Prestatiemaatstaven beogen doelstellingen en resultaten meetbaar te maken en met prestatie­meting kan de gemeente de beschikking krijgen over concrete en feitelijke prestatie-informatie. De interesse voor meetbare resultaten en prestaties is niet toe­vallig. Overheden zijn al jarenlang bezig om de eigen organisatie op basis hiervan aan te sturen. Niet alleen om hiermee beter te gaan presteren, maar ook om op basis hiervan aan de eigen inwoners beter verantwoording af te leggen. Het bedrijfsleven fungeerde hierbij als rolmodel, waarbij het beeld van het commerciële bedrijf als een efficiënte en effectieve organisatie werd benadrukt (Hood, 1995). Van bedrijven werd namelijk verondersteld dat zij in staat waren om de door de klant gevraagde produc­ten te maken tegen minimale kosten. Immers, de *“tucht van de markt”* zou er voor zorgen dat alleen de succesvolle bedrijven konden overleven.

Overheidsorganisaties moesten dus meer *“bedrijfsmatig”* gaan werken, en de plan­ning en de beheersing van de organisatie (planning en control) moest *“verzakelijken”*. Kijkende naar de Nederlandse gemeenten, kwam de nadruk te liggen op de techni­sche en rationele aspecten van beheersing. Managementinformatie (zoals prestatie­maatstaven) werd gezien als objectieve informatie die gebruikt werd voor rationele besluitvorming (zie bijvoorbeeld Van Helden en Ter Bogt, 2001; Ter Bogt, 2005). Het feit dat bedrijven eveneens uit groepen mensen bestaan, dat de organisatorische beheersing wordt uitgevoerd door mensen en met mensen, en dat politiek en macht ook in het bedrijfsleven belangrijke factoren zijn, leken naar de achtergrond te ver­dwijnen. In de formele beheersing kwam de nadruk te liggen op meetbare *“targets”*, prestatie­meting, het analyseren van de verschillen tussen realisatie en targets, en het waar nodig bijsturen door en *“afrekenen”* van managers.

In de afgelopen jaren is regelmatig onderzoek gedaan naar het gebruik van meetba­re prestaties voor resultaatbeheersing bij gemeenten. Als dan resultaatbeheersing gedefinieerd werd vanuit het hiervoor beschreven technische gezichtpunt, werden vaak somber klinkende conclusies getrokken. Zo bleken prestatie­maatstaven zelden gebruikt te worden bij het motiveren en belonen van managers, en verschillenanaly-

se (vergelijking van gerealiseerde met geplande prestaties) bleek geen grote rol te vervullen bij de organisatorische beheersing. Er werd geconcludeerd dat prestatie-maatstaven hoofdzakelijk een symbolische en rituele functie hadden; resultaatbeheersing was wellicht meer een verhaal dan een feit (zie bijvoorbeeld Bordewijk en Klaassen, 2001; Pollitt, 2001).

Deze conclusie sluit echter niet goed aan bij de mening van menig politicus en ambtelijk manager bij Nederlandse gemeenten. Zij gaven juist aan dat prestatie-informatie nuttig is gebleken bij het verbeteren van de informatievoorziening, en onderstreepten het belang van prestatiemeting voor de beheersing van de organisatie.

Dit onderzoek concentreert zich op de hiervoor omschreven situatie. De onderzoeksvraag luidt: *“Wat verklaart de rol van prestatiemeting bij de organisatorische beheersing van Nederlandse gemeenten?”*

### **Onderzoekmodel**

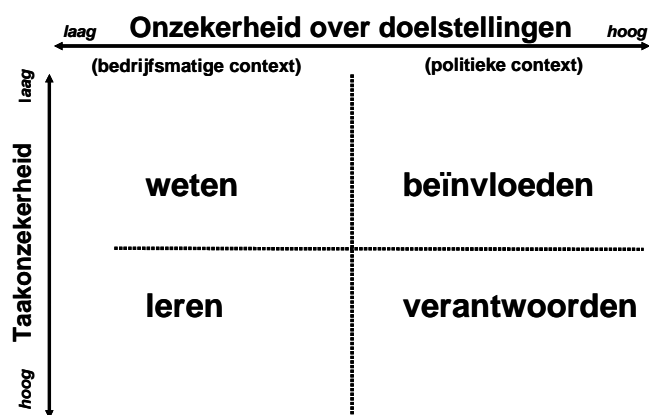
Om deze onderzoeksvraag te beantwoorden is eerst een literatuurstudie uitgevoerd. Het was de bedoeling om theorieën te selecteren die de rol van prestatiemeting in de praktijk konden verklaren. Deze theorieën moesten in staat zijn het gebruik van prestatiemeting in een technische en een meer sociale en politieke context te verklaren. Echter, een voor dit onderzoek goed uitgewerkte theorie was niet voorhanden. Hierdoor heeft dit onderzoek zich geconcentreerd op het opstellen van een theoretisch model en het verkennen van de bruikbaarheid ervan in de praktijk. Het robuust toetsen van het model, bijvoorbeeld met behulp van statistische analyses, is daarmee buiten de kaders van het huidige onderzoek gekomen.

Als startpunt voor het onderzoeksmodel is het traditionele basisraamwerk van Earl en Hopwood (1979) gebruikt. Dit is een weliswaar eenvoudig raamwerk, maar het biedt belangrijke aanknopingspunten voor het onderscheiden van verschillende rollen van prestatie-informatie. Er worden twee contingentievariabelen geïntroduceerd: onzekerheid over doelstellingen en onzekerheid over de uit te voeren taken. Bij twee waarden (“hoog” of “laag”) voor elk van deze contingentievariabelen leidt dat tot vier mogelijke combinaties van rollen van prestatie-informatie. In een matrix uitgezet, worden aldus vier cellen onderscheiden.

In de eerste cel is er zekerheid over de doelstelling en over de taken waarmee de doelstellingen kunnen worden gerealiseerd. In deze situatie wordt verwacht dat het informatiesysteem alle antwoorden levert, en de verwachte rol wordt “weten” genoemd. Organisatorische beheersing is hier gebaseerd op het technisch gebruiken van het informatiesysteem; de te behalen prestaties worden vooraf vastgesteld, en het informatiesysteem geeft alle informatie die nodig is om de organisatie bij te sturen.

Bij de tweede cel zijn doelstellingen zeker, maar zijn de uit te voeren taken onzeker. Nu probeert men te ontdekken of de uit te voeren taken leiden tot het halen van de doelstellingen. De bijbehorende rol wordt hier “leren” genoemd. De “weten”- en “leren”-rol gaan beide uit van een meer technische kijk op sturen en beheersen. Vanuit een overheidsstandpunt kan gezegd worden dat deze rollen toegepast worden in een meer zakelijke of bedrijfsmatige beheerscontext.

De twee overige cellen beschrijven een situatie waarin de onzekerheid over de doelstellingen hoog is (bijvoorbeeld als de doelstellingen niet duidelijk zijn opgeschreven, of als er onenigheid in de organisatie is over de betekenis van de doelstellingen). Nu wordt verwacht dat het informatiesysteem anders gebruikt gaat worden en dat de invloed van politieke processen op de beheersing belangrijker wordt. Deze situatie wordt in dit onderzoek een politieke beheerscontext genoemd. Bij deze context worden twee rollen verwacht: de “beïnvloeden”-rol en de “verantwoorden”-rol. “Beïnvloeden” wordt verwacht als de taakonzekerheid laag is; het informatiesysteem wordt hier gebruikt om invloed uit te oefenen op toekomstige financiële doelstellingen en prestaties. “Verantwoorden” wordt verwacht als er onzekerheid is over zowel de doelstellingen als de taakuitvoering. De verwachting is hier dat het informatiesysteem alleen gebruikt kan worden om aan de omgeving uit te leggen dat de uitgevoerde taken zinvol zijn geweest. Figuur 1 geeft een overzicht van het basisraamwerk.



**Figuur 1** Basisraamwerk

Om dit basisraamwerk geschikt te maken voor verder onderzoek, is het aangepast en uitgewerkt. De belangrijkste aanpassing heeft betrekking op de definitie van een bedrijfsmatige en een politieke beheerscontext. In het basisraamwerk wordt hiervoor één aspect gebruikt: doelonzekerheid. Het gevolg hiervan is dat beide contexten elkaar uitsluiten en dat slechts één aspect een belangrijke rol speelt. Zoals eerder genoemd, is het te verwachten dat het technisch en rationeel gebruik van prestatie meting (hier aangegeven als een bedrijfsmatige beheerscontext) ook voorkomt in een meer politieke omgeving. Het onderzoeksmodel moet dus ruimte laten voor een dergelijke redenering. Om dit mogelijk te maken is de beheerscontext aan de hand van meerdere aspecten gedefinieerd. Een bedrijfsmatige beheerscontext wordt nu gekenmerkt door: zekere en eenduidige doelstellingen, integratie tussen organisatorische doelstellingen en operationele prestaties, en strak budgetbeheer. Een politieke beheerscontext wordt gekenmerkt door onzekere en meerduidige doelstellingen, de aanwezigheid van tegenstrijdige invloeden op deze doelstellingen, weinig integratie tussen organisatorische doelstellingen en operationele prestaties en los budgetbeheer.

Praktijkonderzoek zou kunnen uitwijzen welke factoren in de praktijk van belang zijn, en welke rollen wellicht gelijktijdig aanwezig zijn. Om de verschillende rollen in de praktijk te herkennen, zijn de rollen verder uitgewerkt. Zo is van elke rol een karakter-

ristieke beschrijving gegeven, en zijn aannames gemaakt over het hierbij horende gebruik van prestatie-informatie.

Het hiervoor toegelichte onderzoeksmodel is gebruikt in een onderzoek, met als hoofddoel om de toepasbaarheid van het onderzoeksmodel in de praktijk verder te verkennen. Hiervoor zijn vier casussen binnen één gemeentelijke organisatie geselecteerd. Het streven was om vooral casussen te selecteren die zo goed mogelijk een extreme positie in het basisraamwerk van Earl en Hopwood, en daarmee de vier verschillende, vooraf verwachte rollen zouden vertegenwoordigen. Dit heeft geleid tot het selecteren van vier casussen welke maximaal verschillende waarden zouden hebben voor beheerscontext en taakonzekerheid. De selectie is uitgevoerd aan de hand van interviews met de gemeentesecretarissen van 11 grote Nederlandse gemeenten (met circa 100.000 inwoners en meer). De geselecteerde casussen (en de vooraf verwachte rol) zijn: Riolering (“weten”-rol), Economisch Beleid (“leren”-rol), Bijstandsverlening (“beïnvloeden”-rol), en Ruimtelijk Beleid (“verantwoorden”-rol).

Het praktijkonderzoek vond plaats bij de gemeente Leeuwarden. In het onderzoek stond het gebruik van prestatiemeting voor organisatorische beheersing centraal. Dit is de redenen dat vooral de relatie tussen de top van de organisatie (de wethouders) en de direct ondergeschikte ambtelijke laag (de ambtelijke topmanager) in het onderzoek is betrokken. Om aanvullende informatie te verzamelen is ook de relatie tussen ambtelijke top en de operationeel managers onderzocht. De interviews zijn in 2005 en 2006 gehouden en hebben hoofdzakelijk betrekking gehad op de planning en rapportages behorende bij het begrotingsjaar 2004.

## **Analyse**

De analyses van de casussen zijn op twee niveaus uitgevoerd. Als eerste is een globale analyse uitgevoerd, met als doel om de algemene relaties (zoals verwacht was in het basisraamwerk van Earl en Hopwood) te beoordelen. Daarna zijn de casussen in meer detail geanalyseerd, met als doel om aanvullende informatie en verklaringen te vinden. Hierna worden beide analyses kort samengevat.

De algemene analyse geeft aan dat er drie belangrijke knelpunten in het basisraamwerk blijken te zijn.

Ten eerste blijkt uit de onderzochte casussen dat de relatie tussen de rol van prestatiemeting en de onderkende omgevingsfactoren (de beheerscontext en de taakonzekerheid) niet eenduidig was. Bepaalde rollen, of onderdelen ervan, zijn in alle casussen gedocumenteerd. Zo bleek de verwachte relatie tussen zekerheid over doelstellingen en taakuitvoering en de “weten”-rol (zoals werd verondersteld in het Earl en Hopwood basisraamwerk) niet aanwezig te zijn. Zelfs bij Riolerings, gepositioneerd in een omgeving waarin de “weten”-rol het meest duidelijk aanwezig zou zijn, werd prestatiemeting nauwelijks gebruikt als een belangrijke bron van organisatorische beheersing. Daarnaast overlapt, zoals eerder was verwacht, een bedrijfsmatige en politieke context elkaar. De Bijstandsverlening-casus geeft bijvoorbeeld aan dat tegenstrijdige invloeden op de gemeentelijke doelstelling niet leiden tot meerduidige

of onduidelijke doelstellingen en prestaties. Tegelijkertijd bleek hier dat het gebruik van specifieke doelstellingen en prestaties de onbeheersbaarheid van de doelstellingen niet verminderde, en een stimulans was om de voortgangsrapportages te verbeteren. Uit de Ruimtelijk Beleid-casus komt naar voren dat meerduidige doelstellingen ook in een weinig politieke beheerscontext aanwezig waren, en dat meerduidigheid van doelstellingen een functie had bij het stimuleren of ondersteunen van toekomstige ontwikkelingen.

Dit diffuse beeld kan beïnvloed zijn doordat de casussen in de praktijk niet de eerder verwachte extreme posities in het basisraamwerk bleken in te nemen. De Economisch Beleid en Ruimtelijk Beleid casussen kunnen niet duidelijk aan één van de contexten gerelateerd worden, en de Bijstandsuitkering-casus heeft kenmerken van zowel een bedrijfsmatige (specifieke en geïntegreerde doelstellingen) als een politieke (tegenstrijdige invloeden op de doelstellingen) beheerscontext.

Ten tweede zijn de rollen in de praktijk niet vaak als geheel waargenomen, terwijl delen van rollen (subrollen) vaak wel herkenbaar waren. Als voorbeeld, de “weten”-rol zelf is vrijwel niet geobserveerd. Alleen met betrekking tot beheersing van organisatorisch sterk geaggregeerde financiële prestaties is deze rol aangetroffen, en wel binnen alle casussen. Echter, als de onderdelen van de “weten”-rol (normstelling of budget targeting, voortgangsrapportage, en verschillenanalyse) in de analyse worden betrokken, dan blijkt dat met name verschillenanalyse nauwelijks een functie had bij de organisatorische beheersing. De overige subrollen zijn in alle casussen wel waargenomen. Ook bij de “leren”-rol (op te delen in: signaleren en leren te veranderen) en de “beïnvloeden”-rol (op te delen in: signaleren en beïnvloeding toekomstige budgetten) waren de subrollen in de praktijk beter herkenbaar dan de rol zelf.

Ten derde blijkt uit de casussen dat er weinig variatie was in het gebruik van verschillende soorten prestatie maatstaven, zeker als vooral de planning en control documenten op organisatorisch niveau in beschouwing worden genomen. In alle vier de casussen bleken prestatie maatstaven redelijk vergelijkbaar in soort en gebruik. De informatie over financiële en niet-financiële prestaties, in begrotingen, voortgangsrapportages en verantwoordingsrapportage, was in alle casussen redelijk vergelijkbaar in hoeveelheid en kwaliteit. Een duidelijke relatie tussen de rol van prestatie meting en het gebruik van prestatie maatstaven kwam daarmee niet naar voren.

Wel kwam naar voren dat in sommige gevallen prestatie meting gebruikt werd voor leren en signaleren, en dat deze informatie op een meer interactieve manier werd gebruikt.

Om inzicht te krijgen in het gebruik van prestatie meting om te (signa)leren, is een meer gedetailleerde analyse uitgevoerd.

“Leren” en de onderdelen “signaleren” en “leren te doen” is het meest duidelijk gedocumenteerd in de Bijstandsverlening-case. Verantwoordelijke politici en managers werden hier geconfronteerd met serieuze financiële en politieke risico's en onvoorspelbare omstandigheden. De beheersing van toekomstige financiële prestaties was van groot belang; de gemeente liep grote financiële risico's als gevolg van onzekere

ontwikkeling van het aantal bijstandsgerechtigden en de toekomstige financiële bijdragen van de Rijksoverheid. Maar ook een juiste uitvoering van de wet (Wet Werk en Bijstand) was belangrijk. Politici en managers trachtten te reageren op deze situatie, en bleken prestatiemeting te gebruiken voor signaleren en leren. Prestatiemeting bleek vaak geschikt als signaal, of zoals een wethouder het uitdrukte “prestaties nestelen zich in het collectieve geheugen”. Tegelijkertijd werd er ingezet op het verbeteren van de operationele voortgangrapportage. Een vorm van operationele balanced scorecard werd ontwikkeld, met als doel financiële en niet-financiële prestaties beter meetbaar te maken en in samenhang te rapporteren. Ook werd een maandelijkse rapportage ontwikkeld om zo snel mogelijk geïnformeerd te zijn over de ontwikkeling van de gerealiseerde prestaties. Opvallend was dat deze voortgangsinformatie niet zozeer leidde tot het direct bijsturen van operationele processen of huidige prestatiebudgetten. Een voortgangrapportage werd eerder gebruikt om beslissingen te nemen over toekomstige budgetten en bijbehorende processen. Signaleren, leren te doen, en beïnvloeden van toekomstige budgetten, waren in deze casus dus gelijktijdig aanwezig.

Ook de casussen Economisch Beleid en Ruimtelijk Beleid geven aanvullende inzichten met betrekking tot de “signaleren“-rol. In beide casussen werd prestatiemeting duidelijk gebruikt in de communicatie tussen politici en het operationele management. Bij Economisch Beleid gaf de werkgelegenheidsdoelstelling voor alle betrokkenen duidelijk aan wat het overkoepelende eindresultaat moest zijn (of zoals de gemeente het zelf noemt, gaf het “gewenst effect” aan). De hierbij behorende prestatie-maatstaf gaf echter geen concrete richting aan de uit te voeren werkzaamheden. Het gebruik van prestatiemeting voor het aanpassen van processen, of “leren te doen”, ontbrak hier volledig. Wel bleek de prestatie-maatstaf toegepast te worden als impliciete motivatie in menig beleidsvoorstel. In de Ruimtelijke Beleid-casus bleek prestatiemeting niet zozeer betrekking te hebben op de overkoepelende hoofddoelstelling, maar gaf deze eerder richting aan specifieke projecten binnen dit beleidsveld. Prestatiemaatstaven werden hier gebruikt om het belang van bepaalde beslissingen binnen specifieke projecten te benadrukken. Ook “leren te doen” bleek hier te ontbreken. In beide casussen participeerden politici actief in operationele acties.

## **Reflectie**

Samengevat, laten de vier casussen zien dat bij de organisatorische beheersing van gemeenten, een bepaalde mix van (onderdelen) van rollen van prestatiemeting standaard aanwezig was. Deze standaardrol is een samenstelling is van de volgende onderdelen:

- de gehele “weten“-rol (budget targeting, voortgangrapportage, en verschillenanalyse) met betrekking tot geaggregeerde financiële prestatie-maatstaven;
- delen van de “weten“-rol (budget vaststellen, voortgangrapportage) voor alle overige begrote prestatie-maatstaven;
- een deel van de “beïnvloeden” rol (beïnvloeden van komend budget), voor alle begrote prestatie-maatstaven;
- en de “verantwoorden” rol, voor alle begrote prestatie-maatstaven.

Op basis van dit onderzoek wordt geconcludeerd dat het basisraamwerk van Earl en Hopwood niet zonder meer bruikbaar is om de in de casussen gevonden situaties te verklaren. Een eenduidige relatie tussen de rol van prestatiemeting en contextuele factoren (zoals onzekerheid over doelstellingen en taakuitvoering) is niet aangetoond. In tegendeel, prestatiemeting vervult eerder een standaardrol die in alle situaties aanwezig is.

In aanvulling op deze standaardrol komen leren en signaleren voor, maar alleen in specifieke situaties. De Bijstandsverlening-casus geeft daarbij aan dat leren en signaleren relaties hebben met aspecten van een “bedrijfsmatige” (zoals specifieke en geïntegreerde doelstellingen en prestaties) en een “politieke” (zoals conflicterende invloeden op doelstellingen) beheerscontext. Dit duidt op een zakelijke beheersing in een als politiek gekenschetste beheersomgeving.

Het onderzoek geeft aan dat het gebruik van prestatiemeting voor leren en signaleren gerelateerd is aan het beheersen van politiek gevoelig activiteiten. Politiek gevoelig heeft hier betrekking op de aanwezigheid van politieke risico's (financiële en uitvoeringsrisico's, zie de Bijstandsverlening-casus) of politieke kansen (actieve participatie van politici in operationele activiteiten, zie de casussen Economisch Beleid en Ruimtelijk Beleid). Leren is alleen aangetoond in een situatie waarin organisatorische doelstellingen en prestaties richting geven aan uitvoerende activiteiten (zie de Bijstandsverlening-casus).

Opgemerkt wordt dat deze resultaten gebaseerd zijn op slechts vier verschillende casussen in één organisatie, binnen één tijdperiode. Aanvullend onderzoek zal misschien kunnen aantonen in hoeverre de hier gevonden conclusies houdbaar zijn voor meerdere taken bij meerdere gemeenten.





## 7. Appendixes

### Appendix I Tables

Construct	Aspect	Assumed value	Measures
Businesslike context	Uncertainty of objectives	(Relative) low	Goal specificity
	Ambiguity of objectives	(Relative) low	Multiplicity
	Integrated BPM	(Relative) integrated	Goal specificity
	Tightness of budgetary control	(Relative) tight	Tolerance for deviation Detailed follow-ups Intensity of discussions Emphasis on targets
Political context	Uncertainty of objectives	(Relative) high	
	Ambiguity of objectives	(Relative) high	
	Integrated BPM	(Relative) disintegrated	
	Tightness of budgetary control	(Relative) loose	
Task Uncertainty	Routiness		task analyzability and number of exceptions
BPM roles	Role description		phrase
BPM use	Design of AIS		financial/ non-financial, actual/budget, variance, and additive information.
	Quality of AIS		ease of use, content, accuracy, format, and timeliness

**Table 28** Constructs and aspects

Information\ Roles	Answering role	Learning role	Ammunition role	Rationalizing role
(I) Actual	expected	expected		emphasis
(II) Budget	expected	expected	emphasis	
(III) Variance	emphasis	expected		
(IV) Additive		emphasis		

**Table 29** Information-related aspect of BPM use

high		multiplicity <sup>185</sup>	low
7	<b>Spatial Planning</b>	Child care	0
6	Housing	Social and cultural policies and support	0
4	Public safety	Environmental care	0
3	Roads	District and villages development	0
2	<b>Industry and small businesses</b>	Traffic control	0
2	<b>Welfare Payment and Income provision</b>	Roads	0
2	Spatial development	Housing	0
2	Development and Real estate	Development and Real estate	1
1	Traffic control	Public safety	1
1	Public transport	<b>Spatial Planning</b>	1
1	Sports	<b>Welfare Payment and Income provision</b>	2
1	Social and cultural policies and support	<b>Industry and small businesses</b>	2
1	Environmental care	Public transport	2
0	Primary schools	Waste collection and disposal	3
0	Public libraries	Arts	3
0	Arts	Primary schools	3
0	Child care	Building permits	4
0	Waste collection and disposal	Public libraries	4
0	<b>Sewerage and water disposal</b>	<b>Sewerage and water disposal</b>	4
0	Building permits	Sports	4

**Table 30** Level of multiplicity

high		routineness <sup>185</sup>	low
5	<b>Welfare Payment and Income provision</b>	Child care	0
5	<b>Sewerage and water disposal</b>	Arts	0
4	Building permits	Environmental care	0
3	Roads	Primary schools	0
3	Public transport	Public libraries	0
3	Public libraries	Public transport	0
3	Primary schools	Waste collection and disposal	1
2	Sports	<b>Welfare Payment and Income provision</b>	1
2	Waste collection and disposal	Building permits	1
1	Public safety	<b>Sewerage and water disposal</b>	1
1	Child care	Sports	1
1	Housing	District and villages development	1
0	Traffic control	Development and Real estate	2
0	<b>Industry and small businesses</b>	<b>Industry and small businesses</b>	2
0	Arts	Public safety	2
0	Social and cultural policies and support	Roads	2
0	Environmental care	Housing	2
0	<b>Spatial Planning</b>	Social and cultural policies and support	3
0	District and villages development	Traffic control	3
0	Development and Real estate	<b>Spatial Planning</b>	5

**Table 31** Level of routineness

<sup>185</sup> Number of times selected by interviewees.

C1	Does the system provide the precise information you need?
C2	Does the information content meet your needs?
C3	Does the system provide reports that seem to be exactly about what you need?
C4	Does the system provide sufficient information?
A1	Is the system accurate?
A2	Are you satisfied with the accuracy of the system?
F1	Do you think the output is presented in a useful format?
F2	Is the information clear?
E1	Is the system user friendly?
E2	Is the system easy to use?
T1	Do you get the information you need in time?
T2	Does the system provide up-to-date information?

**Table 32** EUCS instrument questions

<u>City</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>00 - 04</u>
<b>Alkmaar</b>	<b>92.836</b>	<b>93.022</b>	<b>92.992</b>	<b>93.390</b>	<b>94.130</b>	<b>1,4%</b>
Almere	142.765	150.398	158.902	165.106	170.943	19,7%
Amersfoort	126.143	128.035	129.720	131.221	132.955	5,4%
<b>Apeldoorn</b>	<b>153.261</b>	<b>153.683</b>	<b>154.859</b>	<b>155.741</b>	<b>155.979</b>	<b>1,8%</b>
<b>Arnhem</b>	<b>138.154</b>	<b>139.329</b>	<b>140.736</b>	<b>141.528</b>	<b>141.747</b>	<b>2,6%</b>
<b>Breda</b>	<b>160.615</b>	<b>162.308</b>	<b>163.427</b>	<b>164.397</b>	<b>165.831</b>	<b>3,2%</b>
<b>Delft</b>	<b>96.095</b>	<b>96.180</b>	<b>96.936</b>	<b>96.588</b>	<b>95.653</b>	<b>-0,5%</b>
<b>Dordrecht</b>	<b>119.821</b>	<b>120.021</b>	<b>120.222</b>	<b>120.043</b>	<b>119.578</b>	<b>-0,2%</b>
<b>Ede</b>	<b>101.700</b>	<b>102.405</b>	<b>103.708</b>	<b>104.771</b>	<b>105.482</b>	<b>3,7%</b>
<b>Eindhoven</b>	<b>201.728</b>	<b>203.397</b>	<b>204.776</b>	<b>206.118</b>	<b>207.910</b>	<b>3,1%</b>
<b>Emmen</b>	<b>105.972</b>	<b>107.422</b>	<b>108.367</b>	<b>108.198</b>	<b>108.251</b>	<b>2,2%</b>
<b>Enschede</b>	<b>149.505</b>	<b>150.449</b>	<b>151.346</b>	<b>152.321</b>	<b>152.996</b>	<b>2,3%</b>
<b>Groningen</b>	<b>173.139</b>	<b>174.250</b>	<b>175.569</b>	<b>177.172</b>	<b>179.216</b>	<b>3,5%</b>
<b>Haarlem</b>	<b>148.484</b>	<b>148.377</b>	<b>147.831</b>	<b>147.097</b>	<b>146.931</b>	<b>-1,0%</b>
Haarlemmermeer	111.155	113.553	118.553	122.902	127.392	14,6%
<b>Heerlen</b>	<b>95.147</b>	<b>95.149</b>	<b>95.004</b>	<b>93.969</b>	<b>93.451</b>	<b>-1,8%</b>
<b>Leeuwarden</b>	<b>88.887</b>	<b>89.453</b>	<b>90.516</b>	<b>91.284</b>	<b>91.357</b>	<b>2,8%</b>
<b>Leiden</b>	<b>117.191</b>	<b>117.022</b>	<b>117.170</b>	<b>117.689</b>	<b>118.884</b>	<b>1,4%</b>
<b>Maastricht</b>	<b>122.070</b>	<b>122.163</b>	<b>122.005</b>	<b>121.982</b>	<b>122.449</b>	<b>0,3%</b>
<b>Nijmegen</b>	<b>152.200</b>	<b>153.705</b>	<b>154.616</b>	<b>156.198</b>	<b>157.490</b>	<b>3,5%</b>
's-Gravenhage	441.094	442.356	457.726	463.826	469.402	6,4%
<b>'s-Hertogenbosch</b>	<b>129.034</b>	<b>130.477</b>	<b>131.697</b>	<b>132.501</b>	<b>133.628</b>	<b>3,6%</b>
<b>Sittard-Geleen</b>	<b>97.950</b>	<b>97.950</b>	<b>97.953</b>	<b>97.806</b>	<b>97.486</b>	<b>-0,5%</b>
<b>Tilburg</b>	<b>193.116</b>	<b>195.819</b>	<b>197.358</b>	<b>197.917</b>	<b>198.753</b>	<b>2,9%</b>
Venlo	64.864	90.500	91.400	91.780	92.042	41,9%
Utrecht	233.667	256.420	260.625	265.151	270.089	15,6%
<b>Zaanstad</b>	<b>135.762</b>	<b>136.115</b>	<b>137.669</b>	<b>139.464</b>	<b>139.733</b>	<b>2,9%</b>
<b>Zoetermeer</b>	<b>109.941</b>	<b>110.129</b>	<b>110.500</b>	<b>112.594</b>	<b>114.131</b>	<b>3,8%</b>
<b>Zwolle</b>	<b>105.801</b>	<b>107.373</b>	<b>109.000</b>	<b>109.955</b>	<b>110.866</b>	<b>4,8%</b>

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**Table 33** Selection of Dutch Municipalities

## **Appendix II Researched documents**

### **General municipal documents**

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English	Dutch
Executive program 2002-2006	Collegeprogramma 2002-2006
Description of products (Program Budget)	Productomschrijving Programmabegroting
Description of products (Sector plan)	Productomschrijving Sectorplan
Guidelines Annual Report	Richtlijnen Jaarrekening
Quick scan Program Budget	Quick Scan Programmabegroting

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### **Municipal documents 2004 en 2005**

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English	Dutch
Input Pre-budget Report 2004	Input Kaderbrief 2004
Financial Position 2004	Financiële positie 2004
Pre-budget Report 2004	Kaderbrief 2004
Program Budget 2004, key decisions	Beslisdocument Programmabegroting 2004
Program Budget 2004	Programmabegroting 2004
Response to Council's questions on Program Budget 2004	M van Antwoord Programmabegroting 2004
Interim Report 2004	TURAP 2004
Annual Report 2004	Jaarrekening 2004
Response to Council's questions on Annual Report 2004	Memorie van Antwoord Jaarrekening
Executive Program 1002-2006	Collegeprogramma 2002-2006
Description of products (Program Budget)	Productomschrijving Programmabegroting
Description of products (Sector plan)	Productomschrijving Sectorplan
Medium-term objectives 2005-2009	Meerjarenbeleidskader 2005-2009
Input Pre-budget Report 2005	Input Kaderbrief 2005
Financial Position 2005	Financiële positie 2005
Pre-budget Report 2005	Kaderbrief 2005
Program Budget 2005, key decisions	Beslisdocument Programmabegroting 2005
Program Budget 2005	Programma Begroting 2005
Response to Council's questions on Program Budget 2005	M van Antwoord Programmabegroting 2005

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**Operational documents Welfare Payment 2004 en 2005**

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English	Dutch
Sector Plan 2004	Sectorplan 2004
Operational Audit Social Affairs	Operational Audit Sociale Zaken
Operational Report 2004	Verslagen van uitvoering 2004
Sector Plan 2005	Sectorplan 2005
Interim Report 2004-I	Kwartaalrapportage - I

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**Operational documents Sewerage 2004 en 2005**

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English	Dutch
Sector Plan 2004	Sectorplan 2004
Quarterly Report 2004-I	Kwartaalrapportage 2004 - I
Quarterly Report 2004-II	Kwartaalrapportage 2004 - II
Quarterly Report 2004-III	Kwartaalrapportage 2004 - III
Sector Annual Report 2004	Sectorrekening/Sectorrapportage 2004
Sector Plan 2005	Sectorplan 2005
Quarterly Report 2005-I	Kwartaalrapportage 2005 - I

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**Operational documents Economic Policy 2004 en 2005**

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English	Dutch
Sector Plan 2004	Sectorplan 2004
Quarterly Report 2004-I	Kwartaalrapportage 2004 - I
Quarterly Report 2004-II	Kwartaalrapportage 2004 - II
Quarterly Report 2004-III	Kwartaalrapportage 2004 - III
Sector Annual Report 2004	Sectorrekening/Sectorrapportage 2004
Sector Plan 2005	Sectorplan 2005
Quarterly Report 2005-I	Kwartaalrapportage 2005 - I

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**Operational documents Spatial Planning 2004 en 2005**

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English	Dutch
Sector Plan 2004	Sectorplan 2004
Quarterly Report 2004-I	Kwartaalrapportage 2004 - I
Quarterly Report 2004-II	Kwartaalrapportage 2004 - II
Quarterly Report 2004-III	Kwartaalrapportage 2004 - III
Sector Annual Report 2004	Sectorrekening/Sectorrapportage 2004
Sector Plan 2005	Sectorplan 2005
Quarterly Report 2005-I	Kwartaalrapportage 2005 - I

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### ***Appendix III Interviewed persons***

#### concern:

Mr. drs. C.H.J. Brugman  
Mr. drs. D. Tuijtiens  
Mr. W. Koopmans

#### function: (Dutch)

gemeentesecretaris  
concerncontroller  
medewerker concernstaf

#### Welfare Payment:

Mr. T. van Mourik

wethouder cultuur, vastgoed, grondzaken, economische zaken, werkgelegenheid en sociale zaken

Ms. D. Bouma  
Mr. drs. H. Jansen  
Mr. W. J.A. van Rijnsoever  
Ms. mr. drs. J.A. Probst  
Mr. W. de Boer

directeur dienst Welzijn  
controller dienst Welzijn  
sectormanager sociale zaken  
sectormanager werk en inkomen  
teamleider sociale zaken, sociale recherche Fryslân

#### Sewerage

Mr. drs. W.R. Sluiter

wethouder van Volkshuisvesting, Stedelijke Vernieuwing, Wijkcoördinatie, Grote Steden Beleid, Beheer Openbare Ruimte

Mr. drs. ing. H. de Haas  
Ms. M. Vogelesang  
Mr. ing. W. Bosch

directeur dienst Stadsontwikkeling  
sectormanager Wijkzaken  
coördinator ondergrondse infrastructuur en waterhuishouding

Mr. ing. J.C.C.M. Eijssen

teamleider Bedrijfsbureau

#### Economical policies

Mr. T. van Mourik

wethouder cultuur, vastgoed, grondzaken, economische zaken, werkgelegenheid en sociale zaken

Mr. drs. ing. H. de Haas  
Mr. J.W. Doetjes  
Mr. mr. H. Besselse

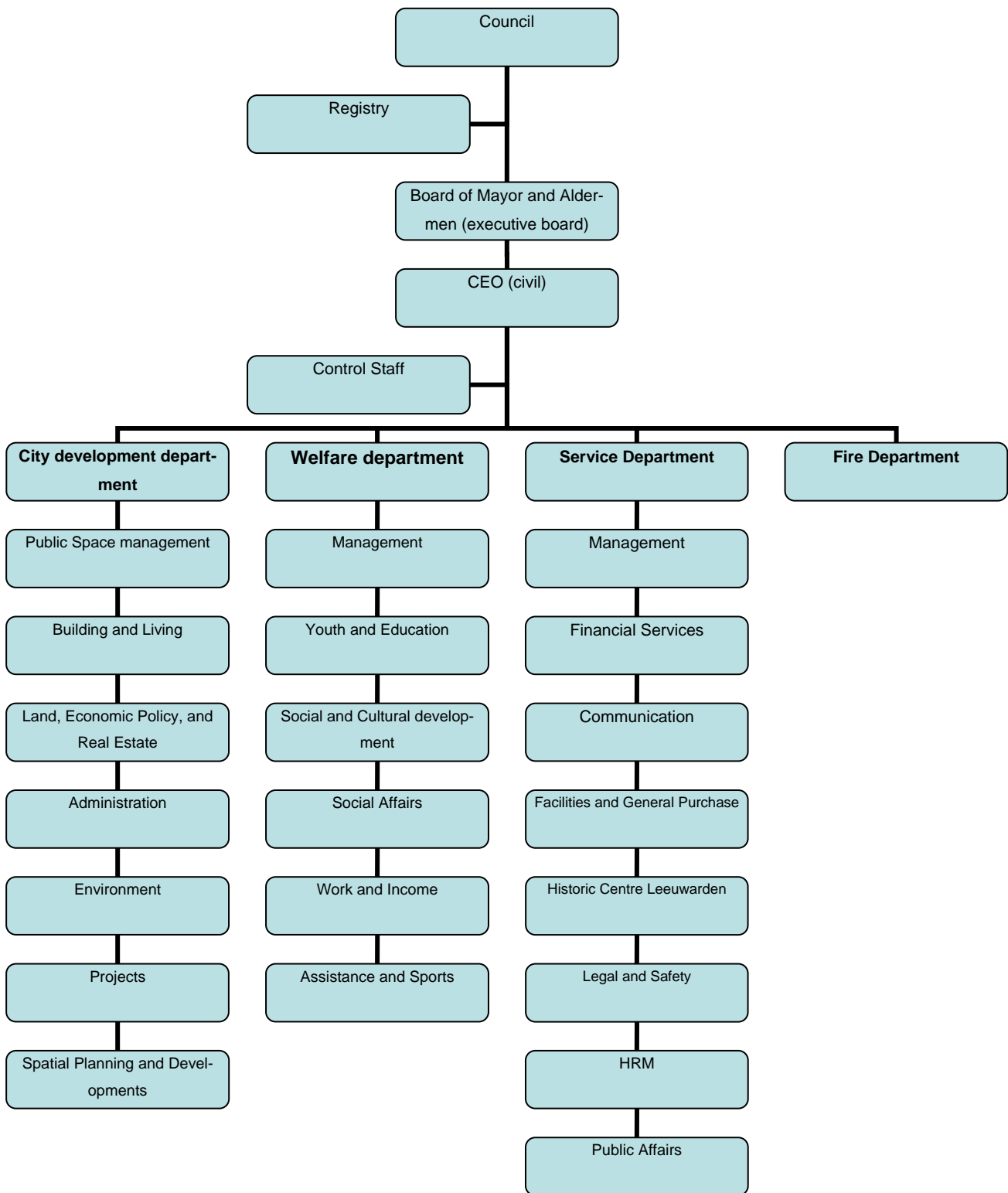
directeur dienst Stadsontwikkeling en -beheer  
sectormanager Grond, Economie, en Vastgoed  
hoofd Economische Zaken

#### Spatial Planning

Ms. M. Waanders  
Mr. drs. ing. H. de Haas  
Mr. ing. G. Hendriksma  
Mr. L. Kappert

wethouder  
directeur dienst Stadsontwikkeling  
teamleider Ruimtelijke Ordening  
sectorhoofd Ruimtelijke Ontwikkeling en Inrichting

## Appendix IV Organizational structure of Leeuwarden





## Appendix V Programs and products

<b>1 Cultuur</b>	Welzijn	<b>8 Publieke dienstverlening</b>	Algemene Zaken (AZ)
Kunst en Cultuur		Persoonsinformatie	
Gemeente archief		Identificerende documenten	
Cultuurhistorisch beheer		Advisering derden anturalisatie,	
Kwaliteit gebouwede omgeving		naamswijziging e.d.	
		Burgerlijke stand	
<b>2 Onderwijs</b>	Welzijn	<b>9 Politiek bestuur</b>	Algemene Zaken
Hoger onderwijs		Politiek bestuur	
Basis- en voortgezet onderwijs		Bestuursondersteuning directeur	
Leerlingenzorg		Secretariaat raadsadviescommissies	
Onderwijs-achterstandbestrijding		Kabinetzaken	
Volwasseneducatie		Verkiezingen	
		Griffe	
<b>3 Economie en Toerisme</b>	SOB	<b>10 Veiligheid, openbare orde en handhaving</b>	AZ
<b>Economisch Beleid</b>		Integraal veiligheidsbeleid	
Bedrijfslocaties		Brandweer	
Markten		Rampenbestrijding	
Standplaatsen		Handhaving openbare orde	
Vastgoedbeheer		Milieuvergunning	
Grondzaken		Bouw- en woningtoezicht	
Recreatiegebieden			
Recreatievaart			
Kermissen			
Toerisme			
<b>4 Zorg en Opvang</b>	Welzijn	<b>11 Sport</b>	Welzijn
Sociale integratie achterstandsgroepen		Sport en ontspanning	
Opvang en zorgverlening		IJswegen	
Maatschappelijke acceptatie			
Bestuurlijke projecten (LSB)			
<b>5 Werk en Inkomen</b>	Welzijn	<b>12 Ruimtelijke ordening, wijken en dorpen</b>	SOB
Minimabeleid		<b>Ruimtelijke ordening</b>	
<b>Inkomensvoorziening Armoedebestrijding</b>		Bestuursadvisering (ROI)	
Arbeidsmarkt en sociale (re)integratie		Geometriebeheer	
Voorwaarden arbeids/sociale participatie		Benaming openbare ruimte	
(kinderopvang)		Wijkaanpak	
<b>6 Wonen</b>	SOB	<b>13 Milieu</b>	SOB
Woningmarktbeleid		Inzameling afval	
Overige huisvesting		<b>Riolering</b>	
Beleid ISV		Milieubeleid	
Volkshuisvestings-regelingen		Begraafplaatsen	
Stadsvernieuwingen		Lijkbezorging	
		Bedrijven	
<b>7 Infrastructuur / Bereikbaarheid</b>	SOB	Bodem en geluid	
Openbaar vervoer		Milieucommunicatie	
Spoorlijnen		Ongedierte bestrijding	
Waterwerken		Voorziening honden	
Verhardingen		Afvoer kadavers	
Kunstwerken			
Verkeersmaatregelen		<b>14 Woon- en leefomgeving</b>	SOB
Verkeer en Vervoer		Straatverlichting	
Parkeren		Reiniging verhardingen	
		Openbaar groen	
		Zwervuil bestrijding	
		Speelplaatsen	
		Buitenreclame	
		<b>15 Algemene dekkingsmiddelen</b>	
		<b>16 Onvoorzien</b>	

## Appendix VI Costs and income of programs

*€1000.000		budget	budget
	<b>Costs of Programs</b>	<b>2004</b>	<b>2005</b>
001	Culture	10,232	10,157
002	Education	39,550	37,360
<b>003</b>	<b>Economy and Tourism</b>	<b>22,573</b>	<b>31,048</b>
004	Care and reception	26,444	25,252
<b>005</b>	<b>Work and Income</b>	<b>105,937</b>	<b>100,886</b>
006	Housing	30,190	28,827
007	Infrastructure	24,238	18,286
008	Public Services	2,317	2,537
009	Council	6,267	6,665
010	Safety, public order	6,059	6,078
011	Sport	5,338	5,492
<b>012</b>	<b>Spatial Planning</b>	<b>2,703</b>	<b>3,187</b>
<b>013</b>	<b>Environment</b>	<b>25,737</b>	<b>26,718</b>
014	Living and environment	8,399	8,507
015	General financial means	25,824	31,565
016	Miscellaneous	0,412	0,308
	<b>Total</b>	<b>342,220</b>	<b>342,873</b>

*€1000.000		budget	budget
	<b>Income of Programs</b>	<b>2004</b>	<b>2005</b>
001	Culture	-0,524	-0,301
002	Education	-26,583	-23,357
<b>003</b>	<b>Economy and Tourism</b>	<b>-20,829</b>	<b>-28,160</b>
004	Care and reception	-11,752	-11,204
<b>005</b>	<b>Work and Income</b>	<b>-86,706</b>	<b>-83,137</b>
006	Housing	-28,228	-26,656
007	Infrastructure	-14,185	-8,097
008	Public Services	-1,212	-1,278
009	Council	-0,540	-0,346
010	Safety, public order	-0,204	-0,169
011	Sport	-0,045	-0,023
<b>012</b>	<b>Spatial Planning</b>	<b>-0,456</b>	<b>-0,484</b>
<b>013</b>	<b>Environment</b>	<b>-13,333</b>	<b>-15,651</b>
014	Living and environment	-0,986	-0,987
015	General financial means	-136,635	-143,026
016	Miscellaneous		
	<b>Total</b>	<b>-342,218</b>	<b>-342,876</b>

(Source: Program Budget 2004, page 187, and Program Budget 2005, page 161)

## Appendix VIII Summary of Aspects

	<u>Welfare Payment</u>	<u>Sewerage</u>	<u>Economical Policy</u>	<u>Spatial Planning</u>
Indication of a:				
- businesslike context	<u>yes</u>	<u>yes</u>	<u>limited</u>	<u>limited</u>
- political context	<u>yes</u>	<u>no</u>	<u>no</u>	<u>limited</u>
<b><u>Specificity of objectives</u></b>	<b><u>above average</u></b>	<b><u>high</u></b>	<b><u>average</u></b>	<b><u>below average</u></b>
a. integration of objectives and performance measures	a. objectives and performances are integrated	a. objectives and performances are integrated	a. objectives and performances are indirectly integrated	a. limited, partly for zone planning
b. relevance	b. objectives and performances are relevant	b. objectives and performances are relevant	b. objectives and performances are relevant	b. objectives are relevant
c. clarity	c. objectives are clear to some extent	c. objectives are clear	c. objectives are clear but hardly operational	c. objectives are clear, but often formulated in general terms
d. priority	d. objectives are not prioritized	d. technical objectives are used for prioritizing projects	d. objectives are not prioritized	d. objectives are not prioritized
<b><u>Multiplicity of objectives</u></b>	<b><u>above average</u></b>	<b><u>low</u></b>	<b><u>low</u></b>	<b><u>below average</u></b>
a. conflicting pressures	a. conflicting pressures exerted from central government, Council, and management	a. no clear conflicting exerted pressures	a. no clear conflicting exerted pressures	a. conflicting pressures exerted from different organisational sectors
<b><u>Tightness of budgetary control</u></b>	<b><u>average</u></b>	<b><u>below average</u></b>	<b><u>below average</u></b>	<b><u>below average</u></b>
a. intolerance for interim budget variations	a. limited	a. limited,	a. limited financial,	a. limited
b. detailed budget-items follow-up	b. average, mainly on non-financial actual performances operational level	b. limited details on organizational level, many details on operational level	b. limited details on organizational level,	b. limited details on organizational level, many details on operational level
c. intensity of budget-related communication	c. average, high intensity on operational level, low on organisational level	c. limited	c. limited	c. limited
d. emphasis on short-term budget targets	d. average, mainly on financial budgets	d. average, mainly on financial budgets	d. limited	d. limited

<b><u>Routineness of tasks analyzability and repetition</u></b>	<b><u>high</u></b> high	<b><u>average</u></b> high routineness of tasks, but many unexpected cir- cumstances during execu- tion of tasks	<b><u>low</u></b> many different tasks, no well known ways of doing things	<b><u>average</u></b> many well defined tasks, but hard to plan in advance
<b><u>Roles/sub-roles of BPM use</u></b>	<b><u>all</u></b>	<b><u>operational planning and status reporting</u></b>	<b><u>signaling and reporting the past</u></b>	<b><u>all except learning and sig- naling</u></b>
a1. operational targets (budgets)	a1. clearly present	a1. clearly present	a1. limited	a1. present
a2. monitoring (operational reporting)	a2. clearly present	a2. present	a2. limited	a2. present
a3. variance analysis	a3. mainly financial	a3. every four years	a3. mainly financial	a3. mainly financial
b. to learn to change ways of doing	b. clearly present	b. limited	b. limited performance- related	b. limited
c. signaling	c. clearly present	c. limitedly present	c. present	c. limited
d. influencing future budgets (budgeting)	d. clearly present	d. not observed	d. limited	d. clearly present
e. to report on past per- formances (organiza- tional reporting)	e. clearly present	e. in general terms	e. clearly present, mainly in general terms	e. clearly present
<b><u>Budget information</u></b>	<b><u>scope and quality above av- erage</u></b>	<b><u>scope and quality average</u></b>	<b><u>scope above average, quality average</u></b>	<b><u>scope above average, quality average</u></b>
a. financial and non- financial	a. both	a. both	a. both	a. both
b. actual, budget, vari- ance, en additional in- formation	b. emphasis on budget, actual and additional information	b. emphasis on budget and actual information	b. emphasis on budget and additional information	b. emphasis on budget, actual, and additional information
c. quality of information	c. above average	c. average	c. average	c. average



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