Accrual-Based Budgeting and Accounting in the Public Sector: The Dutch Experience

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Traditionally, governments used to deploy input-based budgeting systems and cash-based accounting systems. However, these systems do not provide the information that is necessary for a government to operate efficiently and effectively. Therefore, a growing number of countries have already shifted or are planning to shift from cash-based to some form of accrual accounting in the public sector. Usually, the implementation of some accrual-based system is linked to wider financial management reforms including performance management requiring information on cost. This paper focuses on the Dutch experience with the shift from cash-based accounting and budgeting systems to an accrual-based system.

INTRODUCTION

Public management reform is an ongoing and international phenomenon. Successful public management reform is a mixture of opportunity, strategy, and tactics.1 Cross-national comparisons of the reform process have underlined some components of the relevant policies. Generally, Organisation for Economic Co-operation and Development (OECD) countries aimed at improving the public sector’s performance and redefining its role in the economy. These reforms include a greater focus on outputs and results and strengthened accountability and control.2 This paper pays special attention to the Dutch experience with regard to these reforms.


Strengthening accountability has a long history in the Netherlands. From the mid-1980s, a process of reinforcing accountability in the central government sector was set in motion. Under pressure from Parliament, the government of the Netherlands developed major reform plans. One of the results was an integrated commitment-cash accounting system. In the early 1990s, further reforms were developed in the form of agencies as units subject to special rules including accrual accounting. Obviously, the Dutch government valued the experiences of the agencies. In the Budget Memorandum 2001, it announced to introduce, at least in principle, a system of accrual accounting in the entire central government sector. By 2002, 24 agencies had been formed. Although national accounting standards generally do not play a prominent part in government accounting, central government in the Netherlands has adopted the 1995 European System of Accounts (ESA) as a starting point, in particular, for the treatment of expenditure on investments (capital expenditures).

Governments traditionally used input-based budgeting systems and cash-based accounting systems. However, these systems do not provide the information that is necessary for a government to operate efficiently and effectively. Therefore, a growing number of countries have already shifted or are planning to shift from cash-based to some form of accrual accounting. New Zealand, Australia, Canada, and the United States implemented accrual accounting in the 1990s. In Europe, Sweden and the UK followed suit, while other countries are shifting or are planning to shift to an accrual basis. Pina and Torres observe that Anglo-American countries emphasize efficiency, effectiveness, and value for money. They are more likely to introduce market mechanisms and notions of competitiveness and envisage the citizen primarily as a consumer of services. These countries have undertaken initiatives of devolution and they have adapted private sector experience to the public sector. The shift from cash to accrual is clearly illustrated by the fact that half of OECD member countries use some form of accrual accounting in their financial reporting. Only a few use accruals in their budget process, however. Obviously, extending accruals to budgeting is controversial.

6. This system has replaced the European System of Integrated Economic Accounts published in 1970. The ESA’s classification system is to be found at http://europa.eu.int/comm/eurostat/ramon/esa_1995/esa_en.html.
Originally, accrual accounting was developed for private enterprises, which are income-generating entities. A comparison of revenues and cost yields the financial result (profit or loss). In a commercial environment this is a measure to judge efficiency. Government, however, is essentially an income-spending household. It raises tax revenues that it spends on public outlays. It is not so much the financial result that is relevant, but rather the social outcome of public expenditure, while the public budget needs authorization by the legislature. Generally, legislatures grant authorization through appropriations enabling the government to spend money for specific purposes. Moreover, cash budgets are still very important for macroeconomic analyses. The most important reason for the shift toward accrual accounting is that it is expected to lead to more insight into the costs of government resulting in higher cost awareness with bureaucrats, which in turn leads to a more efficient government.\(^9\)

The remainder of this paper is organized as follows: The next section addresses the different international standards. The third main section deals with different budgeting and reporting systems in the public sector. The penultimate section addresses the Dutch experience with budgeting and accounting systems in the public sector. The last section summarizes the main findings.

**INTERNATIONAL STANDARDS**

Governments follow widely diverse financial reporting practices, making international comparisons problematic. At the central government level, there are two accounting systems serving different purposes:

1. At the micro-level: *government accounting.*
   Individual government organizations draw up budgets and financial reports for managing these organizations.
2. At the macro-level: *national accounting.*
   National accounts present statistical, macroeconomic financial data on the national economy.

Different accounting standards have been developed for each type.

*Government Accounting*

The Public Sector Committee (PSC) of the International Federation of Accountants (IFAC) has drawn up International Public Sector Accounting Standards (IPSAS) that are based on international accounting standards.\(^{10}\) The IPSAS are the authoritative

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\(^{10}\) More details can be found at [http://www.ifac.org](http://www.ifac.org).
requirements established by the PSC to improve the quality of financial reporting in the public sector around the world. Several international organizations (the European Union, NATO, and the OECD) and South Africa have explicitly adopted the IPSAS, while it can be expected that a growing number of countries will do so too. So far, the IPSAS only pertain to financial accounts, but the PSC intends to also address budgeting in future.

The International Organisation of Supreme Audit Institutions (INTOSAI) discerns in its 1995 *Accounting Standards Framework* four financial reporting systems:

1. *Full cash accounting*
   This system records a transaction when funds are paid out of an appropriation authority or when funds are received.

2. *Modified cash accounting*
   This system recognizes transactions on a cash basis during the year and the setup of unpaid accounts and/or receivables at year’s end.

3. *Modified accrual accounting*
   This system records expenditures when resources are received and revenues when they are measurable and available within the accounting period or shortly afterward.

4. *Full accrual accounting*
   This system recognizes expenses as incurred, records revenues as earned, and capitalizes fixed assets.

Cash and full accrual represent two end points on a spectrum of possible accounting and financial reporting bases. Between these extremes, numerous variations have been put into practice. Even countries that have adopted accrual accounting show different adaptations or degrees of implementation.\(^{11}\)

In statement four of paragraph 36, INTOSAI states that performance reports and departmental reports should be based on full accrual. General-purpose financial statements should be based on either full accrual or modified accrual depending on a particular government’s circumstances. The INTOSAI Accounting Standards and the IPSAS are largely comparable; both are based on the international accounting standards.\(^{12}\)

**National Accounting**

The ESA is mandatory for European Union member states from 1996. It is consistent with the 1993 System of National Accounts (SNA) that has been developed under the common responsibility of the United Nations (UN), the International Monetary Fund (IMF), the European Commission, the OECD, and the World Bank. The ESA is not

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\(^{11}\) Pina and Torres, 336.

restricted to annual national accounting, but also applies to quarterly accounts and regional accounts. The ESA framework consists of two main sets of tables:

- **Sector accounts**
  They provide, by institutional sector, a systematic description of the different stages of the economic process: production, generation of income, distribution of income, redistribution of income, use of income, and financial and nonfinancial accumulation. The sector accounts also include balance sheets to describe the stocks of assets, liabilities, and net worth at the beginning and the end of the accounting period.

- **Input–output framework and the accounts by industry**
  They describe in more detail the production process (cost structure, income generated, and employment) and the flows of goods and services (output, imports, exports, final consumption, intermediate consumption, and capital formation by product group).

The ESA encompasses concepts of population and employment. These concepts are relevant for both the sector accounts and the input–output framework.

The ESA is not only used for drawing up national accounts but also as a calculation base for the Stability and Growth Pact of the Economic and Monetary Union (EMU) and for European Union accession countries. As the Stability and Growth Pact also makes demands on public budgets, it ostensibly links national accounts and public budgets and public financial statements. However, the government sector in national accounting is not yet based on certified financial statements. Rather, they are taken from noncertified data that are specifically collected as statistical data for national accounts. The ESA is not designed for financial accounts; it only applies to national and regional accounts of each European Union member state.

**Conclusion**

SNA and ESA are the leading standards for national accounting, but they are not designed for government budgets and financial reports. The IPSAS are the leading standards for government accounting. In most countries, national accounting standards do not play any role in government accounting. The Dutch government’s intention to apply the ESA to its budgets and financial reports seems unique from an international perspective, while it implies that the contents of these documents will fail to meet current requirements. Examples of ESA noncurrent requirements are:

- the grouping of main financial reviews;
- the headings of items in these reviews;
- the criteria for capitalization;
- the valuation of assets at market value;
- the non-allowance of provisions.
Given the increasing importance of international harmonization of financial reporting, it seems reasonable to expect that the role of the IPSAS will gain significance in budgeting and financial reporting in the public sector. Currently, however, it is unclear whether the two leading international standards, IPSAS and ESA, will be harmonized and if so, how.

**BUDGETING AND REPORTING SYSTEMS**

There is a distinction between budgeting and financial reporting.¹³ Budgets are future-oriented financial plans for allocating resources among alternative uses. Financial reports retrospectively describe the results of an organization’s financial transactions and events in terms of its financial position and performance. In the private sector, budgets are targets rather than plans, while budgets reflect what the organization hopes to achieve rather than what it actually brings about. Companies and other private organizations are not obliged to draw up a budget even though they usually do. However, they rarely publish their budgets. For governments it is not only mandatory to draw up budgets but also to publish them. Governments must allocate resources both within the public sector and between the public sector and the rest of the economy. Australia, New Zealand, and Sweden use accruals both in financial reporting and in the budget. Canada, France, and the UK have plans for more extensive use of accruals in the near future, while the European Union decided in 2002 to implement accruals from 2005.¹⁴

As to budgeting, appropriations can be based on different systems. Most widespread are cash-based appropriations giving the government rights to make cash payments over a limited period of time. Commitment-based appropriations give the government authority to make commitments and make cash payments according to these commitments without a predetermined time limit. Accrual-based appropriations cover the full costs of the operations of the government and increases in liabilities or decreases in assets. This kind of appropriations requires special mechanisms for controlling cash. Notably, accrual accounting does not require the abolition of cash-based appropriations. Some critics point out that an accrual budgeting system cannot be the system for a government for two reasons. First, budgetary laws often require the legislature to authorize cash payments. Second, an accrual system is tailored to income formation: it matches revenues and cost. In the public sector, however, it is impossible to match tax revenues with production cost.¹⁵

In addition, the adoption of the ESA as a starting point has been criticized in the Netherlands, as it implies that all governments have to value their assets at market value.

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13. Matheson, 44.
and include them in their balance sheets. Municipalities, for example, will have to value their roads, bridges, tunnels, etc., at market value, even though market values for these assets do not exist. Making an inventory of all these assets as well as the valuation is a costly process. The costs have been estimated at €20 million.\(^\text{16}\)

There is a wide spectrum of possible accounting bases ranging from cash to full accrual. Cash-based accounting measures the flow of cash resources and recognizes transactions and events only when cash is received or paid. Accrual accounting recognizes stocks and flows. Stocks refer to the holdings of assets and liabilities. Assets can be financial (such as cash), physical (such as property), or intangible (such as copyrights). The difference between the total value of assets and the total value of liabilities is the net worth. Flows reflect the creation, transformation, exchange, or transfer of economic value and, thus, either an increase or a decrease in net worth. Revenues increase net worth, whereas expenses decrease net worth. In practice, many countries’ systems are a mixture of both extremes. Insofar as accrual accounting systems are used, they differ across countries.

Usually, the implementation of some accrual-based system is linked to wider financial management reforms including performance management requiring information on costs.\(^\text{17}\) Those countries that shifted to an accrual-based system have, to a large extent, common goals:

- complementing performance management;
- facilitating better financial management;
- improving understanding of program costs;
- expanding and improving information for resource allocation;
- improving financial reporting;
- facilitating improved asset and cash management.

Most countries require the preparation of at least four statements:\(^\text{18}\)

- an operating statement reflecting revenues and expenses;
- a statement of assets and liabilities of the entity;
- a cash flow statement related to operating, investment, and financing activities;
- a statement presenting additional information on a disaggregated basis.

Differences continue to exist, however, as to the way countries have designed and implemented the accrual-based system. First, some countries value fixed assets at their historic cost, other countries value them at their historic cost less accumulated...

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16. Ministry of Finance, *Eigentijds Begroten* (The Hague: Ministry of Finance, 2001), 52. The estimate is based on the assumption that four persons for two years are involved in this process. However, at certain ministries the costs will be higher, so the estimate of €20 million seems an absolute minimum.


depreciation, and yet other countries revalue their fixed assets periodically.\textsuperscript{19} Second, some countries apply a charge for the use of capital, whereas other countries do not apply any capital charge. Third, countries account differently for the consumption of fixed assets by applying either a linear depreciation method or a free one.

**BUDGETING AND ACCOUNTING IN THE CENTRAL GOVERNMENT SECTOR OF THE NETHERLANDS**

The Dutch central government mainly uses a mixed cash/commitments system, but in 1994 it introduced the possibility for certain central government organizations to obtain the status of agency, implying that they have to apply an accrual accounting system. It followed up in 1997, by publishing a note entitled *From Expenditure to Cost* weighing advantages and drawbacks of an accrual accounting system.\textsuperscript{20} Accounting on an accrual basis was considered to have additional merits. However, the economic and political conditions did not permit to make a comprehensive move to a new accounting system. Standardization of public spending on the basis of costs implies that cash expenditure can vary. Although costs may be equal to cash spending, this is not true in the case of investments.\textsuperscript{21} A cash-based system recognizes investment at the date of spending, whereas an accrual-based system spreads the costs of investments over time (in the form of depreciation of assets). Given the 1997 deficit it seemed possible that fluctuations in cash expenditure could result in a deficit exceeding the EMU accession criterion of three percent of GDP, which later on became one of the requirements of the EMU’s Stability and Growth Pact. By the early 2000s, however, the deficit had been considerably reduced, thereby mitigating the risk of exceeding the EMU’s public deficit criterion.

In 1999, the Dutch government announced the introduction of policy accounting in a document entitled *From Policy Budget to Accounting for Policy*.\textsuperscript{22} This process is usually referred to as VBTB after the document’s acronym in Dutch. Effective from 2001, the government made an accrual accounting system possible—although conditionally—for other central government organizations than agencies. As a result, a growing part of the public sector applied an accrual accounting system, whereas the rest of the central government sector applied a cash/commitment system. The fact that the central government sector applied two different accounting systems was confusing and, therefore, it has been criticized.

\textsuperscript{19} The IPSAS requires items to be valued at historic cost (the cost as at the date an item is acquired). However, where an asset is acquired at no or nominal cost, the IPSAS determine its cost as its fair value (the amount for which an asset could be exchanged or a liability settled).


\textsuperscript{21} In the Netherlands, 97 percent of central government’s cash outlays equal costs (Ministry of Finance, *Eigentijds Begroten*, 22).

In 2000, the Dutch government announced that within several years an accrual-based accounting system would be implemented in the whole central government sector. The government considered the move to an accrual basis an important step toward a more result-oriented government, as the policy budget links means, instruments, and performance. However, in June 2003, the Dutch finance minister announced a reconsideration of the government’s development plan regarding the budgeting and accounting system. He seemed to back away from the planned integral implementation of an accrual system and to advocate a partial implementation. This was confirmed in September 2003, when the finance minister informed Parliament that the government had reconsidered its decision indeed. On second thoughts the government has decided to implement an accrual system on a case-by-case basis by expanding the number of agencies. It expects that in 2007, approximately 80–85 percent of central government employees will work for an agency.

The VBTB system implies a switch from financial accounting to policy accounting; note the fact that the system focuses on the following three budgeting questions:

- What do we want to achieve?
- What will we do to achieve it?
- How much would it cost?

In particular, the third question calls for an accrual accounting system, as it focuses on the cost of policy implementation. A cash/commitments system does not produce full information about the cost of policy implementation if certain expenditures yield benefits over a number of years, such as investment expenditure. An accrual-based system does produce this information and can therefore contribute to a more result-oriented management.

The reform has also changed the viewpoint of the financial report. Departmental accounts now seek to make the achievement of policy goals more visible and transparent by focusing on the following three accounting questions:

- What did we achieve?
- Did we do what we thought we would do?
- Did it cost what we thought it would cost?

Thus, the VBTB system is based on a measurable formulation of policy objectives, preferably in terms of social effects. The budget starts with general goals, which are subsequently operationalized in terms of products and services or, if this is not possible, in terms of activities. It goes without saying that the implementation of the new-style budgets is a learning process that can only gradually proceed. This process started in

1999 with the publication of the VBTB document, whereas the government aims at completing this process in several years. As a result, the budget for 2006 should be a full-fledged VBTB budget.

The Budget Memorandum 2001 included additional policy intensifications, which are in fact additional appropriations that come on top of the multiyear budgetary estimates that the cabinet had already agreed upon. The Dutch General Accounting Office (GAO) looked at the transparency of the budgeting and accounting information. They identified 203 additional policy intensifications in the departmental budgets for 2001. GAO tried to identify for each intensification a general objective as well as an operationalized goal (see Illustration 1 for an example). Based on budgets, in 20 percent of the cases, it appears impossible to identify a general objective in the budget, whereas in 30 percent of the cases it is not possible to identify a concomitant operationalized goal. Based on accounts the result is poorer. In over 40 percent of the intensifications the accounts do not refer to a general objective, while in nearly 40 percent they do not refer to an operationalized goal. As to the means, it is possible to ascertain the amount involved in 90 percent of the cases. The departmental accounts, however, often do not include these amounts separately, but rather as part of a larger amount. As a result, in 70 percent of the cases departmental accounts do not offer insight into the spending of the additional budgetary means. As to the instruments, in 75 percent of the cases budgets pay attention to the instruments to be used, but accounts do so to a much lesser extent. As to performance it is possible to ascertain the budgeted performance in nearly 50 percent of the intensifications. However, only 20 percent of the accounts make mention of the performance that has been realized.

Following the general elections of 2002 a new cabinet was formed on the basis of a new coalition agreement. However, this cabinet was already overthrown after 87 days. In early 2003, GAO published a study of the coalition agreement of 2002 similar to that of the additional intensifications agreed upon by the previous coalition government. Again, the study was based on the premise that it can only be determined whether or not an objective has been realized if goals, performance, and budgets have clearly been defined beforehand. GAO looked at 107 of the 299 general policy plans, all 24 policy

28. The term intensification seems typical for the Dutch context. It refers to additional funds spent on some program that has a special meaning. In the context of this article the word additional means additional relative to the coalition agreement of the cabinet that was formed in 1998. However, the definition of policy intensifications is ambiguous and can vary in different budgetary documents, in particular, the (general) Budget Memorandum and the (specific) amplifications in departmental budgets.
intensifications, 27 of the policy extensifications,\textsuperscript{32} and the way the cabinet gave concrete form to central governmentwide goals with regard to efficiency, volume, subsidies, and hiring of external personnel. They concluded that 79 percent of the policy intensifications gave sufficient or good answers to the three budgeting questions. In addition, 73 percent of the policy extensifications show to a sufficient or good extent the effects and performance aimed at. However, a smaller fraction of the general policy plans (56 percent) appeared to have been elaborated sufficiently or well. Finally, only 9 percent of the central governmentwide goals appear to have been elaborated sufficiently.

A few months later GAO looked at the progress of the VBTB process on the basis of plans for improvements that had been announced in the departmental budgets for 2002.\textsuperscript{33} Figure 1 shows the results. Of the total number of improvement plans, 40 percent\textsuperscript{34} appears to have been realized after one year, whereas 20 percent appears to have been presented again as plans in the budget for 2003. It is unclear as to why 21 percent of the plans were not presented again although they have not yet been realized. Of the 223 plans related to the 2003 budget, 123 have been realized (55 percent or 24 percent of the total number of improvement plans). In addition, 80 of the 289 plans that had been scheduled for implementation after 2003 (28 percent or 16 percent of the total) appears to have already been realized in 2003.

GAO also looked at how departments addressed the budgeting questions in their budgets. The first budgeting question is, “What do we want to achieve?” It appears that

\textsuperscript{32} Like intensification, extensification also seems a term typically used in Dutch politics. An extensification is the opposite of an intensification and can be defined as a slim-down referring to a decline of projected spending levels (van der Hoek, 288).


\textsuperscript{34} This is the sum of 24 percent of the plans related to the 2003 budget and 16 percent related to a post-2003 budget or an unclear time schedule.
FIGURE 1
Improvement Plans in 2002 Budget


nearly three-quarters of the budget articles fail to address this question adequately. Only 29 percent offer a sufficient or good insight into what ministries aim to achieve, 47 percent provide a limited insight, and 24 percent do not offer any insight at all. The second budgeting question is, “What will we do to achieve it?” Generally, departments answer this question better than the first budgeting question regarding the expected achievements. Over half (56 percent) of the budget articles offer a sufficient or good insight into the activities that ministries plan to undertake and the instruments they plan to deploy, whereas 38 percent provide only a limited insight. The third budgeting question is, “How much would it cost?” Over two-thirds (69 percent) of the budget articles provide a sufficient or good insight into the cost of the activities that departments plan to undertake and the instruments they plan to deploy. Further improvements are possible by specifying the relationships of expenditures and performance. Summarizing:

- It is insufficiently clear what ministries want to achieve as many effect indicators are lacking.

35. The following qualifications have been used:

- No insight: the objective is not or hardly defined in terms of effect indicators.
- Limited insight: the objective is partly defined by one or several effect indicators and/or target figures are absent.
- Sufficient insight: the objective is largely defined in terms of effect indicators with target figures.
- Good insight: the objective is defined in clearly recognizable effect indicators and target figures.
It is insufficiently clear which performance departments want to achieve because many performance indicators with target figures are lacking.

It is insufficiently clear what relationship exists between goals and performance on the one hand and expenditures on the other.

Departmental budgets give some insight into the plans for improvements that should lead to achieving the goal of full-fledged VBTB budgets in 2006. GAO found 437 improvement points. Figure 2 specifies the number of points to be improved and the number of plans to implement improvements. In 70 percent of the cases there is no improvement plan, while in 9 percent improvement plans are not formulated in concrete terms. Thus, in 79 percent of the cases there is no prospect of improvement for the 2006 budget. Departments did put forward improvement plans for 30 percent of the cases, but they did not phrase all of these plans in concrete terms. As a result, in only 21 percent of the cases there is a prospect of improvement for the 2006 budget. Given the results for the 2002 budget, however, it seems unlikely that this will be fully achieved. Therefore, it can be expected that less than a fifth will actually be improved in the 2006 budget.

Summarizing, the 2003 budget clearly shows that the budgeting questions are not yet fully addressed. Departmental budgets provide insufficient insight into policy effects that ministries aim at and activities that they want to undertake. Moreover, the relationship between expenditures on the one hand, and goals, performance, and financial means on the other, is insufficiently clear because expenditures are not elucidated in terms of performance data. An important reason for the shortcomings is that the objectives are not yet formulated in a measurable way in terms of effect indicators and target figures. It seems unlikely that the objective of a full-fledged VBTB budget in 2006 will be realized.


SUMMARY

Input-based budgeting systems and cash-based accounting systems do not provide information that governments need to operate efficiently and effectively. Among governments of industrialized countries, a growing trend to shift from cash-based to accrual counting can be observed. Half of OECD member countries use some form of accrual accounting in their financial reporting, although only few also use accruals in their budgeting process. The 1993 SNA and the ESA are the leading standards for national accounting, but they are not designed for government budgets and financial reports. The IPSAS are the authoritative requirements established by the PSC of the IFAC to improve the quality of financial reporting in the public sector around the world. So far, the IPSAS only pertain to financial accounts, but the PSC also intends to address budgeting in future.

Budgets are future-oriented financial plans for allocating resources among alternative uses. Financial reports retrospectively describe the results of an organization’s financial transactions and events in terms of its financial position and performance. Cash-based appropriations giving government rights to make cash payments over a limited period of time are most widespread in budgets. In accounting, however, there is a wide spectrum of bases ranging from cash to full accrual. Usually, the implementation of some accrual-based system is linked to wider financial management reforms including performance management requiring information on cost. Countries that shifted to an accrual-based system have, to a large extent, common goals, but show differences as to the way they have designed and implemented the new system.

Accrual-based budgeting and accounting systems are widely used in the Netherlands. Local, provincial, and single-purpose governments have been using it for a long time, while it is being implemented—both in budgeting and accounting—in a large part of the central government sector covering 80–85 percent of central government employment. The government’s goal is to finish this process by 2006. Although some progress has been made, it seems unlikely that this goal will be fully achieved in 2006. Currently, departmental budgets still provide insufficient insight into policy effects that ministries aim at and into activities they want to undertake, whereas the relationship between expenditures and goals, performance, and means is insufficiently clear. An important reason for these shortcomings is that policy objectives are not yet formulated in a measurable way in terms of effect indicators and target figures.