Result-responsibility and integral information processes

J. Heijnsdijk, J.A.M. Oonincx

1. Introduction

In recent research and discussions both authors have shown that choosing a management concept is only one side of the coin, and that implementing it is quite another. The way of handling information plays an essential role in this. It can be said that many commanders of result-responsible units within the defence organization struggle with the question of what constitutes the most suitable information design for internal management. But also the executive and commanding level above the result-responsible units is searching for an optimal information provision from and about these units. Finally, there is much intensive study into the most adequate information provision from the Secretary and Minister of defence via the so-called TOP-report.

In this contribution the question of internal and external information provision within and about result-responsible units in the framework of the BBD 2000 management philosophy is considered in more detail, from the angle of integral responsibility.

After a general description of the concept of information provision (section 1) the following topics will be dealt with in this contribution:

- The importance of and requirements for information provision (sections 2 and 3);
- The TOP-report of the MoD (section 4);
- Information provision within and about result-responsible units and empirical research (section 5).

2. General

As a result of a number of calamities and serious incidents the former Minister of Defence, J. Voorhoeve, tasked J.A. van Kemenade to conduct an investigation into the truth-finding with regard to the Srebrenica affair. In his report of 28 September 1998 Van Kemenade states that the integrity of the armed forces is not under debate. There is no indication of a conscious obstruction, hindering or restriction of the truth-finding process by any persons in the defence organization. The report, however, does uncover a number of serious shortcomings and instances of carelessness that have occurred in the defence organization over the past years in the process of information gathering and information processing. Incidentally, these shortcomings can be explained by the radical change processes and the great time pressure under which people had to work.

Van Kemenade concludes that:

- 1. in the past years not all persons responsible were timely and adequately informed and that consequently the internal communication was seriously flawed;
- 2. information often has to be assessed under great time pressure, with modest resources and (too) few personnel;
- 3. information gathering and information processing have become increasingly complex in peace operations, involving several ministries and departments within the defence organization;
- 4. defence personnel sometimes dealt with the information in a cramped manner;
- 5. there is a tendency to label information on defence matters too quickly as secret.

Van Kemenade explains these shortcomings as stemming from the fear among defence personnel that reporting problems and incidents might harm one's own career, unit or service. Often, important information is mistakenly seen as an exclusive matter for the own unit or service. It goes without saying that the Ministry of Defence (MoD) is learning from these experiences (lessons learned), and the recommendations made in the Van Kemenade report have been implemented. Subsequently, measures have been taken to improve the situation with regard to the management information provision.

Information provision has the undivided attention of the MoD and any further measures yet to be taken may not have an ad hoc character, but must be based on the requirements and principles of adequate information provision during calamities and serious incidents. The implementation of the management philosophy, *the Defence Management Policy 2000* (BBD 2000), too, will lead to a considerable improvement of the information provision both within and about the defence organization. Within the organization there is a clear recognition and conviction that the adequate deployment of ICT will be at least a relevant, if not determining, factor for the success of its functioning. This applies to the military management, the command and control, the generating of combat strength and to national and international deployment in case of war and conflict containment. Fortunately, it is recognized within the organization that ICT determines striking power; that it has become the heart of the management, that it is the determining factor in the running of primary processes and that it forms the most important component of weapons and command systems.

3. Requirements for information provision

What does the MoD, but also Parliament want to know about the defence organization?

- a. In any case there should be an insight into the performance indicators of the armed forces and the result-responsible units inside the organization by means of the annual reports.
- b. Furthermore, it is extremely relevant to be informed about the operational readiness and availability of the services.
- c. It should be possible to determine whether the targets have been reached.

If the target of information provision is to be reached, then well known requirements, such as relevance (meeting the information demand), completeness, accessibility, organization and consistency will have to be met. These requirements have been sufficiently documented in the standard literature, and therefore they will not be dealt with here. However, six requirements that are at present of crucial importance will be discussed below.

The information necessary for the organizational control as well as for the accountability has to be *transparent*. This transparency is attained through adequate implementation and TOP-reports. In the implementation report the (sub-)commander indicates whether the targets have been reached and at the same time account is given of the resources used. The reports are analyzed and, subsequently, targets or improvements are formulated. If necessary, corrections are made. In this manner the policy and implementation of the activities within the services and their result-responsible units are made transparent.

A second requirement is that the information provision meets the demands of the receiver with regard to *form* and *content* and it is preferably realized in good mutual understanding between the provider and the receiver of the information. The information provider, however, will be given a say in what is deemed relevant information about his result-responsible unit. The discussion about the report will reveal whether this corresponds fully with the needs of the receiver. The defence practice has been different for many years, when all too often the same rules, regulations and uniform report formats were applied, irrespective of the type of

result-responsible unit and the level in the hierarchy. It goes without saying that the receiver makes his information needs known to the authors of the reports in advance.

The third requirement concerns the *selectivity*. It should be prevented that everything that happens is reported, as too much and too detailed information usually gets in the way of the intended target. The information provision will mainly have to be directed at supplying mission-critical points of the unit, something that does not happen enough at the moment. Suitable indicators can play an important role in this.

Inside the defence organization *security* begins to play an increasingly prominent role. It concerns the security of persons, material, information and information systems. More and more the defence organization becomes dependent on the information systems used, and the systems are increasingly becoming vulnerable to all sorts of infringements. The dependency on continuous availability and trustworthiness of ICT has become so great that the collapse will be total is the systems go down. The security of the information systems has to reduce the vulnerability to acceptable proportions and to that end information security plans are set up for the vital systems.

The fifth requirement is that of *integration*. Until the present moment, there has been little integration between the accountancy, the management and the operational information systems. The complete separation of information systems for peacetime management and the operational battlefield information systems is not a felicitous one anymore at the beginning of the 21st century. It makes it extremely difficult and costly to get the necessary information, as, in new types of deployment, internal management and command and control are two sides of the same coin and operational and effectiveness aspects deserve equal attention. The commander cannot any longer rely exclusively on information from only one system, as this will confront him with a serious information problem in his decision making. Naturally, war and peace enforcement necessitate specific information about the adversary, the weather and terrain. The information itself on all relevant aspects has become an integrating factor in the decision making.

The last requirement is *interoperability*. In peacetime as well as crisis situations and operational actions the information systems should be able to communicate with each other. Interoperability, therefore, has become a crucial success factor for the future of information provision. ICT is only effective and efficient if it can be used by all the partners in an international mission.

These requirements are contributory to the future information provision in the armed forces. In the following section we will discuss the way in which the MoD tries to realize them in the so-called TOP-reports, by means of an analysis of a number of reports presented so far.

Subsequently, we have tried to describe the use of the information. The extent to which the information acquired was actually used to reach the objectives described in BBD 2000 is an indication of the quality of the information provided (section 5).

4. TOP-reports

The first quarter of 1999 saw the advent of the TOP-report - integrated cyclical reports about past activities and present state of affairs in the business units, the definite form of which will be developed over a period of several years. The TOP-reports are written by the Chief of the Defence Staff, the CinCs of the four Services (Navy, Army, Air Force and Military Constabulary), the Chief of the Defence Interservice Command, as well as the Deputy Permanent Under-Secretary, and is presented to the Minister and the Secretary of Defence by the Chief of the Defence Staff and the Permanent Under-Secretary.

4.1 Content of TOP-reports

The TOP-report is intended to give an insight into the relation between the targets, activities and resources. In this way it is possible to realize the task and change objectives of the Defence Memorandum 2000. The result of this reporting on the policy areas of the inner department may be an adjustment of the targets, activities and resources. In order to be able to do this the TOP-report contains information on:

- the implementation of primary tasks
- important management aspects
- resource management

In the report use is made of so-called *indicators*. In the Royal Netherlands Army (RNLA) the most important of these are gathered in the *dashboard* of the Commander in Chief (CinC), and together they form his management tools. This procedure guarantees transparency and, as far as the RNLA is concerned, also integration of information.

In the reports of the Royal Netherlands Navy (RNLN) the realization of the primary product (deployable units) is described by means of tables and indicators. Here, too, there is a division into primary tasks, management aspects and resource management. Because of the orientation on output there is a selectivity of information, which satisfies the needs of the receiver (form and content).

In the Royal Netherlands Air Force (RNLAF) report information is given about reorganizations and personnel and of course about the three areas indicated above. As for the primary task, this involves operations and activities that took place under the responsibility of the CinC, exercises and preparation programmes and tasking targets of operational readiness. As to management aspects, it concerns information about the following: improved management project, workload and work pressure, reorganization, planning and control, audits, targets of the CinC for special projects, maintenance and progress reports on major materiel projects, the productivity of supporting units, training and education of personnel, safety, occupational health and environment.

Resource management in the Air Force involves personnel as well as financial resources and any bottlenecks in the three major areas will be reported. Possible solutions will be indicated and have to be accompanied by estimates of their effectiveness and efficiency. Because the focus of attention is on bottlenecks there is also selectivity of information and transparency. This selectivity allows the Air Force commanders to use management by exception. It should be possible to use an adequate TOP-reports an integral management tool in the assessment and possible adjustment of the strategy and policy. This also involves taking the necessary actions and translating them into measurable and checkable agreements. Of course the reports can never be complete without a prognosis about the future.

4.2 Information about the primary tasks

On the level of the Services primary tasks involve the units' or individual serviceman or woman's readiness for carrying out the tasks in the various operational areas and national tasks in the short or long run. It concerns information about missions abroad, logistic support, the degree of training and all other matters that determine operational readiness.

At the same time bottlenecks are reported. It is no secret that the quantitative and qualitative appointment of personnel gets much attention at this moment. Shortages of logistic, supply, ICT, maintenance and technical personnel as well as drastic reorganizations have a great impact on the possibility to send out units and individual service personnel on humanitarian and peace missions. The provision of information is in part intended to propose ways to remove these bottlenecks. With respect to personnel this can be done by further improving labour conditions and fringe benefits, increasing recruitment activities, reducing wastage during training, etc. Much used indicators in the RNLA are:

- level of practice in comparison to planning
- service personnel sent out
- support
- appreciation by society
- satisfaction of personnel.

In case an expectation is not (fully) realized, every indicator is accompanied by an explanatory analysis, which lends transparency and selectivity to the information.

In the case of the RNLN, information is given about the readiness term for the various business units. It shows how many days are needed to have frigates, ships, planes, battalions, platoons, etc. ready for deployment. The RNLAF works with tables showing the period of deployment in operations as well as the practice periods, specifying the name of the operation or exercise, units, number of personnel and other particulars. For both the RNLN and the RNLAF there is management control and information provision, directed at benchmarks with regard to previously specified indicators. This will guarantee transparency, selectivity and a suitable form and content of the reports.

4.3 Information about management

Under this heading information is given about the implementation progress of the *Defence Management Policy 2000* (BBD 2000) for the four Services. Many of the measures for improvement derived from the implementation targets are directed at increased transparency of the management of the Services. Possible topics in the information provision are authorization, transparency of targets and target attainment, integral management budgeting, cost insight, audit plans, integral quality management, information architecture, and the replacement of information systems.

Authorization implies that in the course of 2000 all units at result-responsible level will have the authority and resources (materiel, personnel and budgetary) to enable their commanders to bear integral responsibility (and with it, unequivocal accountability) for the implementation of their tasks. To this end all requirements and criteria for decentralization and management at arm's length will have to be met. In the last two years extra emphasis has been given to financial control, of which the orderliness, controllability and effectiveness must be guaranteed. Indicators use by the RNLA are:

- trained personnel
- pass rates
- targets of the Commander in Chief
- progress of BBD 2000.

In the RNLN this part of the report gives information about targets for change, productivity of support units and personnel. To every target for change (for instance, increase of percentage of female personnel in the RNLN, implementation of BBD 2000, the introduction of the Euro, and improvement of financial control) an indicator is attached with three positions: realization runs according to schedule, realization runs behind schedule, realization runs ahead of schedule. The action meter also indicates progress in the previous quarter, the present quarter and expected progress in the coming quarter. The productivity of support units mainly concerns information about maintenance, major materiel projects (running behind or on schedule) and personnel (actual strength, influx, flow-through, outflow). The information on management in the RNLAF is mainly of a descriptive nature.

4.4 Information on resource management

The information on resource management mainly concerns the influx and realization of financial (budgets), materiel (materiel projects) and personnel resources (appointments). Indicators used by the RNLA are:

- cash realization
- budget realization
- appointment realization of short-term or long-term personnel
- progress of major materiel projects.

In the RNLN resource management mainly concerns financial budgets, subsidy and investment realization. Here, too, the information provision clearly seems to show transparency and selectivity.

In the RNLAF especially bottlenecks in supporting materiel and personnel, infrastructure and spare parts are given attention to. Besides, figures and facts are supplied about personnel, such as level of recruitment (level of occupancy), reduction of civilian staff, recruitment of military personnel, influx and outflow, sickness absence, etc. The financial information concerns budget realization and cash prognosis of expenditures and receipts.

In conclusion it can be said that the most recent developments within the framework of TOPreports have led to more transparency and a better form and content of the information provision. By working with indicators (amongst others, for the benefit of the 'dashboard') selectivity has improved; the information provision has been adapted as far as possible to the demands of the decision makers (the top of the defence organization). Integration and interoperability requirements still deserve attention. The interaction between information systems (management, command and control, international adjustment) remains vital for attaining integral management on all levels of the defence organization.

5. Information provision within and about the result-responsible unit

In this section the information provision within the result-responsible unit will be dealt with. In doing so, the characteristics befitting an integral manager commander in an organization where the management is reasonably decentralized, will be described. The results of empirical research are also subject of discussion here, and commanders (and up to a certain extent also their controllers and accountants) will indicate in how far they are of the opinion that the information provision does indeed meet the requirements of the integral manager.

First of all in 5.1 the use of information by commanders is discussed and it will be seen to what extent commanders use information for the benefit of strategy and policy, accountability to the higher level and other interested parties. After that the criteria for the information of the commanders will be dealt with: legitimacy, efficiency, effectiveness and quality (5.2). The subject of 5.3 is the extent to which commanders make use of financial, operational and management audits. Finally, in 5.4, (modern) management techniques used by commanders in managing their units will be discussed: indicators, balanced score card, SWOT-analysis and scenario planning.

5.1 Use of information by result-responsible units

The information provision in the TOP-reports is based on the information received from the commanders of the result-responsible units. In such a result-responsible unit information is gathered in order to manage the unit and to give account about this management. Since its introduction in 1993 the application of a decentralized integral management concept with authorized competence, also for the financial function, has been at the heart of management. The commander bears integral responsibility within this decentralized management concept for the realization of the output as agreed upon in the management contract or covenant. A commander may be explicitly held accountable as he is not only responsible for the results, but also for the financial control and the financial consequences of his actions within the apportioned budgets. This implies that the information for the benefit of the commander is not only directed at the accountability to a higher echelon, but also towards the strategy and

policy of the result-responsible unit and the internal process control within the framework of the management. The commanders and controllers were asked to indicate for what purpose they used the information gathered, allowing them a choice from among the following possibilities:

- strategy and policy
- process control
- accountability to the higher level
- accountability to other interested parties.

'Strategy and policy' and 'accountability to other interested parties', in particular, are elements that belong to the integral manager in the armed forces. In Table 1 the answers of the commanders and their controllers are presented.

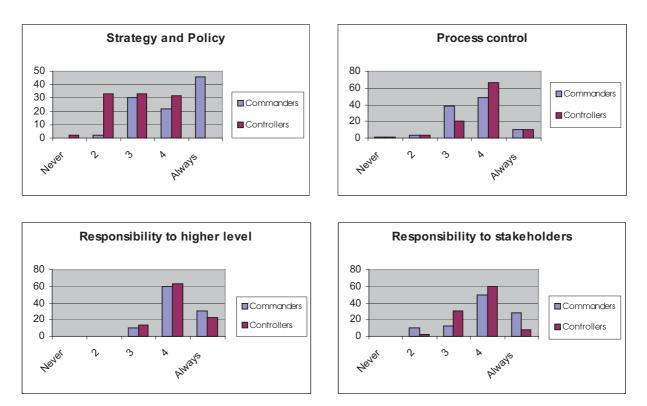


Table 1: The use of information

It clearly indicates that commanders to a large extent (67%) use information for formulating the strategy and policy within their unit; controllers, incidentally, score considerably lower in this respect. This means that the commanders do indeed involve themselves in strategy and policy matters and do not limit themselves to waiting for assignments from a higher level and in doing so, they use the information to give form and substance to their own strategy and policy.

In the opinion of the commanders (90%) and controllers (82%) information plays an important role where the accountability to the higher echelon is concerned. The score for 'other interested parties' is also high, which indicates that the commanders interpret their responsibility to be wider than only to the next higher level.

5.2 What does a result-responsible unit commander use his information for?

For the commander integral management within the context of result orientation implies that he will have to answer a number of main questions for his result-responsible unit, such as:

- what targets is my management directed at?
- what do I want my commander to steer me on in my unit?
- what are the consequences of this for the organization of my unit?

In order to be able to answer these questions the commander needs information and information systems. As not all commanders have an equally well developed sense of financial administration, information systems, economic control and budgeting, it is likely that a controller or an information expert will be employed in this. Integral management is not possible without adequate management reports and ICT takes up an important position in this. The management will have to be supported by adequately analyzed and documented figures. This brings us to integral information provision, management information provision, the application of management accounting, use of indicators, administrative organization and internal control. Every result-responsible unit, therefore, faces the challenge of developing a system of internal and external information provision. This implies the designing or purchasing of suitable management information systems, amongst others, a cost information system, which can give the commander cost information to be used in answering the question whether good products are delivered at the lowest possible cost. Important criteria to assess the functioning of a unit are:

- legitimacy of expenditure (this has always been important for the controller)
- efficiency in the form of the relation between planned and realized cost
- effectiveness as an indicator of the extent to which the targets have been reached
- quality (of all processes).

The latter three criteria, in conjunction with the integral responsibility of commanders, have become increasingly important over the past few years. Simultaneously, the role of the controller has expanded. Apart from legitimacy, the commander and his controller have to see to efficiency (cost reductions), effectiveness (output management) and quality (at the moment formulated in terms of the INK model Netherlands Quality Institute). The extent to which commanders, controller and accountants use information in order to assess units on these aspects is shown in Table 2 (next page).

It is clear that the commanders of units have a high score for each of the criteria for information gathering – legitimacy 63%, efficiency 74%, effectiveness 79% and quality 67%. This proves that the military commanders keep a good eye on each of these criteria when doing justice to their integral responsibility. The commander who is only interested in 'funken, fahren and schiessen' appears to have become obsolete. Indeed, in managing their units the majority of commanders clearly bear the quality and efficiency of the management process in mind.

For the controllers of the units the scores for 'legitimacy' and 'efficiency' compare to those of their commanders, whereas they score considerably lower for 'effectiveness' and 'quality', As is to be expected, accountants score very high for 'legitimacy' (100%), but, compared to commanders and controllers, considerably less for the other three criteria. It appears that, except for legitimacy, accountants in the armed forces (still) have insufficient means to assess units on the above-mentioned management criteria.

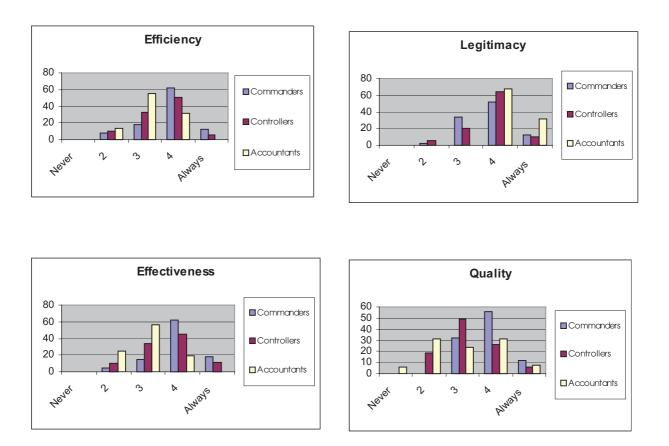


Table 2: What is the information used for?

5.3 What role do audits play in the information gathering of commanders and controllers?

In the 1993 and 2000 BBD audits form an important aid to measure the criteria of efficiency, effectiveness and quality. There are three types:

- financial audits, which concern the quality of the financial policy and control in a unit
- operational audits, directed at the quality of the management processes
- management audits, lending a certain value to the quality of the organization and the management of the result-responsible unit.

It can be expected of an integral manager that he will gather information with the help of these audits. After all, he manages the processes in his units (operational audits), he has to attend to efficiency (financial audits) and the quality of his organization (management audits).

Table 3 (on the next page) shows that many commanders make use of financial audits (56%), operational audits (59%) and management audits (44%). Operational and management audits are used considerably less by controllers of units and by accountants in the armed forces. These scores indicate that many commanders are not only interested in operational affairs, but most certainly also in the costs (efficiency) and, to a somewhat lesser degree, the quality of the organization (management audit). It confirms the impression that a large number of commanders are developing into the direction of integral manager.

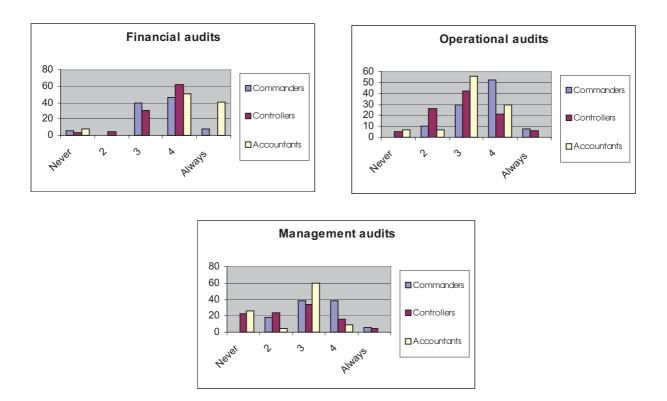


Table 3: Use of audits by commanders

5.4 Management methods and techniques used by commanders

Information about the performance of a result-responsible unit is essential. In a number of situations this is a problem in that this performance must be measured. In particular in operational units this has not sufficiently been solved yet. The designing of measurement and assessment norms is not always easy either, which may cause an information hiatus. The use of indicators as information providers is emerging strongly. When they are used as a means of obtaining information the principle of the selectivity of indicators is violated more often than once in the armed forces. On the basis of the critical success factors in a unit it is usually possible to determine the essential indicators. Making long lists containing lots of indicators is, generally speaking, not useful at all. Nor is it sufficient only to use financial indicators.

Other performance norms will have to be developed as part of the strategy, especially with a view to measuring effectiveness, a factor in the management process ('balanced score card'). Using this card yields a coherent set of performance norms particularly directed at financial, economic, internal, customer and other development perspectives. When filling out the card the manager is forced to concentrate on the essence of the strategic policy and the ensuing targets for improvement. The commander can also use the balanced score card in the information section of his report as an instrument for giving account of the implementation of the management contract. Of course the information provision can also be realized by means of other models. In the armed forces the INK model is also being studied or even used as a medium for reporting. In our empirical research we have asked the commanders to what extent they make use of:

- indicators
- balanced score cards
- SWOT-analysis
- scenario planning: a means to prepare a result-responsible unit for possible alternative expectations for the future.

These techniques are mentioned in BBD 2000 and earlier policy document with regard to modern management forms within the armed forces. Table 4 gives a survey of the results.

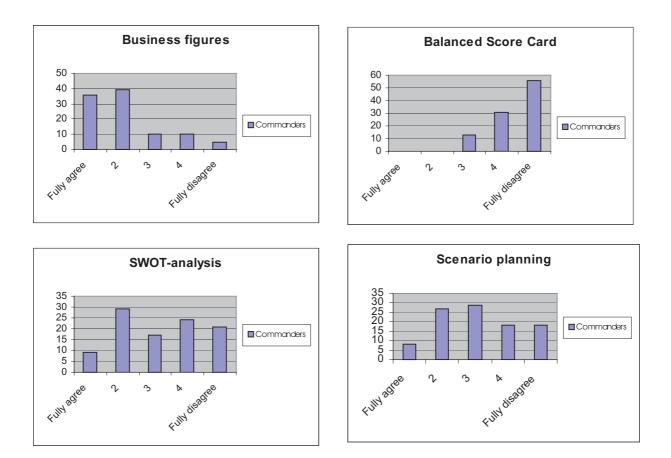


 Table 4: Use of modern management tools

Many commanders (78%) make use of indicators. For scenario planning and SWOT analysis this lies just below 40%, while the balanced score card is hardly used. It is clear from these figures that modern methods and techniques to support and foster integral management are only used by an as yet limited number of commanders.

6. Conclusions

It is possible to draw a number of conclusions from the following data. First of all, managers do not only assess the legitimacy of management processes, but also the efficiency, effectiveness and quality on the basis of the information they obtain. Secondly, apart from using the information for process control and accountability to higher echelons, the commanders also use it for their strategy, policy and accountability to other interested parties. Finally, next to operational audits the commanders make use of financial and, to a lesser extent, management audits.

These findings justify the conclusion that many commanders are developing into integral managers and are learning to pay attention to multiple aspects that determine the effectiveness of their units. Form, content and transparency of the information allow the top managers and commanders of the result-responsible units to manage their units. The simultaneous use of indicators, in particular, ensures a high degree of selectivity of the information provision. The

linking of the information from management information systems and command and control systems (integration) in non-peace situations, still causes considerable problems. Solving them can lead to an integral approach to management problems within the result-responsible units (especially in peace situation), which would realize a major target of the defence management policy.

References

- Heijnsdijk J. (1999), Resultaatverantwoordelijke Eenheden: papier of werkelijkheid? [Result-responsible units: paper or reality?], in: *Militaire Spectator*, 168, 9: 494-500
- Heijnsdijk J. (1998), *RVE binnen defensie; stilstand of vooruitgang?* [RVE within the armed forces; standstill or progress?], KMA, Breda, Research Paper FMB 98-46
- Heijnsdijk J. (1998), Beleid Bedrijfsvoering Defensie; Transparant en integraal management in de defensietop? [Defence Management Policy: Transparent and integral management at the top of the MoD?], in: *Militaire Spectator*, 167, 11: 468-472
- Heijnsdijk J. (1999), Sturingsconcept BLS: einde van het RVE tijdperk [Management concept of CiC Land Forces: the end of the Result-responsible unit-era] in: *Parade*, 20, 3: 43-48
- Heijnsdijk J. (2000), De rol van de financiële functie in de bedrijfsvoering van defensie; een empirisch onderzoek onder RVE-commandanten, controllers en accountants [The role of the financial function in defence management; an empirical survey (etc.)] in: J.A.M. Oonincx (ed.), *Militaire Accountancy & Control*: 3-43 Dutch University Press, Tilburg
- Kemenade J.A. van (1998), *Omtrent Srebrenica; een rapport over de verzameling en verwerking van informatie door de defensie-organisatie over de gebeurtenissen rond de val van de enclave Srebrenica* [About Srebrenica; a report on the processing by the MoD of information about the fall of the Srebrenica enclave] Ministerie van Defensie, Den Haag
- Oonincx J.A.M. (1997), Commandant, bedrijfsvoering, RVE en VEB [Commander, management, Result-responsible unit and Improved Economic Control] in: *Militaire Spectator*, Vol. 166, 7: 310-316
- Oonincx J.A.M. (1998a), Informatie-adviseur: toch maar niet [Information consultant; I think not], in: *Komma*, 20, 1: 24-28
- Oonincx J.A.M. (1998b), IT in de krijgsmacht: evolutie of revolutie? [IT in the armed forces: evolution of revolution?], in: *Militaire Spectator*, 167, 10: 506-513
- Oonincx J.A.M. (1999), Controller, control en informatievoorziening [Controller, control and information provision], in: *Militaire Spectator*, 168, 9: 486-493