

Chapter 32

National Defence

Defence Support Productivity:
A Progress Report

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National Defence

Defence Support Productivity: A Progress Report

Main Points

32.1 National Defence's efforts since 1994 to transform itself to a more entrepreneurial organization and to maintain military capabilities in the face of declining financial and human resources have yet to be completed. Efforts to reform the services we examined in 1996 that provide support to the ships, land force brigades and air squadrons of the Canadian Forces remain a work-in-progress.

32.2 In 1996 we reported that the productivity of the base/wing support functions of vehicle maintenance, supply and transportation had either fallen or was less than that of similar service providers. This year we found that, because of massive organizational and process changes, we could no longer measure productivity; nor could the base/wing managers tell us if they were more or less productive than they were in 1996.

32.3 Although the number of training days delivered per Canadian Forces school employee has declined since 1996, 14 schools may be unable to deliver the quantity of individual training required in the future.

32.4 National Defence's efforts to improve aircraft maintenance productivity have been relatively successful, although the introduction of AF 9000 Plus, a quality management system, has stalled.

32.5 The Department has achieved limited success in its efforts to shift to a more businesslike environment in those renewal efforts we examined.

- Business plans, although helpful in rationing declining resources, still lack performance measures. Managers continue to express concerns about the adequacy of cost information. As a result, it is difficult for managers to determine whether productivity is improving or declining.
- The devolution of operating budgets to the lowest level of the organization has led to confusion over roles and responsibilities. Managers do not have the knowledge and experience to carry out their new responsibilities. The Department has not provided adequate training on new information systems, and the complexity of the systems has complicated rather than simplified re-engineering and devolution initiatives. The Department has undertaken a number of initiatives to address these issues.
- The Department's efforts to transform its organizational culture continue; however, culture change priorities have yet to be identified.
- As might be expected, the two major alternative service delivery programs most closely associated with defence support productivity are meeting strong internal resistance from potentially affected employees. The Department expects to realize savings beginning in 2004.

32.6 We found that the lack of measurable progress in improving support productivity can be attributed to a number of factors, including:

- the relatively low priority of improving defence support productivity among the Department's competing programs;
- the need to cope with continuing personnel and budget reductions throughout the renewal period; and
- the lack of a strategic plan to guide the Department's reform efforts through its five-year renewal period (1994–1999).

Background and other observations

32.7 The operational ships, land force brigades and air squadrons are sustained by a support system that provides such things as personnel administration, food, fuel, equipment, maintenance and training. In a force of about 60,000, approximately 36,000 are dedicated to operations and training at any given time, with the remainder focussed mainly on continuing support. In dollar terms, support services consume approximately 45 percent of the \$11 billion budget of National Defence. In this audit, we reviewed the progress made by the Department in improving productivity in support functions that we audited in 1996. These functions represent only part of the resources consumed by support services. Measuring and improving defence support productivity is important to ensure that only minimal resources are consumed by support functions so that maximum resources can be dedicated to operations.

32.8 In 1994, in response to the government's 1994 Defence White Paper, National Defence embarked on a five-year renewal program to devote maximum resources to the Canadian Force's combat capability by decreasing the cost of support activities. Between 1994 and 1999, the Canadian Forces were reduced from 76,000 to about 60,000 members. The civilian work force was reduced from 32,000 to about 20,000 employees. During this period of rapid personnel reductions, National Defence completed a number of significant overseas and domestic deployments.

The National Defence response is included in this chapter (paragraph 32.126). The Department stresses that it has faced many challenges and competing priorities that have reduced its ability to improve support productivity. Officials told us that business planning has resulted in greater awareness of the need for efficiency and that their Strategy for 2020 document will provide an overall framework for change.

National Defence acknowledges that the development of activity-based costing information has been slow, but says that its decision-making process has not suffered. The Department is still working on a performance measurement framework.

Introduction

Findings of the 1996 Defence support productivity audit

32.9 The operational ships, land force brigades and air squadrons of the Canadian Forces are sustained by a national support system that provides personnel support, equipment, food, fuel, maintenance and training. The overall support system consists of a number of systems and processes such as procurement, supply, maintenance, finance and transportation. These support services are delivered in part through the 23 Canadian Forces bases and wings where operational units are stationed, and through national and formation headquarters that provide general management of the individual support functions (see Exhibit 32.1).

32.10 In November 1996, we reported on the general state of the productivity of Defence support. We defined productivity as the rate at which resources are used to produce or deliver a given quantity and quality of products. The more productive a support operation is, the fewer the resources it will consume to provide the same quantity of output; and hence, the more resources can be devoted to combat and combat service support units. We concluded:

- National Defence had begun its management renewal process but had by necessity been forced to concentrate its efforts on implementing personnel and budget cuts mandated in the 1995 and 1996 federal budgets.
- Major re-engineering initiatives appeared to be on track, but were only then entering the implementation stage and were therefore difficult to assess.
- Business planning and operating budgets were only slowly coming into effect and would likely take additional time to affect management behaviour.

- Senior management had identified the need to change values and beliefs from a focus on following bureaucratic rules to one of independent initiative and cost consciousness.

- Employee surveys done by the Department had indicated that a great gap existed between the current culture and the one required if the Department was to benefit from business planning and the use of operating budgets.

- The Department's productivity, where it could be compared with outside providers, was lower because budget cuts and downsizing had reduced the need for support services faster than the Department had reduced the number of staff providing these services.

- Management lacked the information to detect decreases in productivity and was often constrained in its ability to act; it lacked incentives and had been preoccupied with implementing budget reductions.

- The Department had built its renewal strategy around freeing up middle management and encouraging initiatives that would improve productivity; chief among these were the introduction of business planning and operating budgets.

- At the time of our 1996 audit, which was after the introduction of business planning and operating budgets, it was evident that managers still lacked cost and performance data to make business cases for change.

Focus of the audit

32.11 The objectives of this audit were to report to Parliament on whether recommendations and observations raised in the 1996 Report had been addressed by National Defence; to determine whether management action taken would likely correct the deficiencies; to re-audit support productivity in the areas of individual training, base commercial vehicle maintenance and base

In 1996 we reported that Defence support productivity was falling in those areas we examined, despite departmental initiatives.

Exhibit 32.1

Canadian Forces
Bases and Wings



The operational units of the Canadian Forces, including the personnel, ships, army equipment and aircraft fleets, are located across the country. The personnel on the bases and wings provide support services to the operational units. Such support services include the maintenance of equipment, the provision of supplies, transportation of personnel and cargo and numerous other services to ensure that operational units are prepared for duty. We audited the 23 bases and wings identified in the exhibit.

* 5th Area Support Group includes Canadian Forces Base/Area Support Unit (ASU) Valcartier, ASU St-Jean, ASU Montreal.

transportation and report to Parliament on the changes; and to determine the reasons for delays in implementing the 1996 recommendations to improve defence support productivity. The Appendix provides an overview of the progress made with respect to each recommendation.

32.12 At the strategic level, we reviewed business plans, operating budgets, culture, and the change co-ordination function. Each of these areas had been selected for audit in 1996 because of their significance to the Department's five-year renewal program. For this audit, we added two projects from the Department's alternative service delivery program that had just begun at the time of completing our 1996 audit. At the corporate level, as in 1996, we looked at individual training and aircraft maintenance, each of which had been chosen because of their high cost. Finally, we reviewed the same support services delivered at bases and wings, namely the base maintenance, supply and transportation functions. As in 1996, these services were chosen because of their importance and the significant number of support personnel involved in their delivery. Further details on the audit are in **About the Audit** at the end of the chapter.

Observations and Recommendations

Business Planning

32.13 A key part of the Department's reform strategy was to delegate objectives and resources to each level of management and charge local managers with improving efficiency in their individual areas of responsibility. Business planning has been the key tool to accomplish goal setting and delegation.

32.14 National Defence defines business planning as an accountability-

based process that links the Department's program sub-activities to performance through the establishment of a contract between superior and subordinate commands. The contract identifies the tasks or functions to be performed, the resources assigned and the expected results.

32.15 In 1996, the business planning process, for the most part, extended only to the top level of the Department — the Navy, Army, Air Force and Headquarters groups. Since that time, the Department has extended the process to subordinate commands and bases/wings. In 1996 we observed that although activities and objectives had been defined, the top-level plans did not include cost and performance data, thereby limiting the usefulness of the plans as tools to improve productivity. During the current audit, we still found that business plans at the base and wing levels lacked the cost and performance data necessary to serve as tools to improve productivity.

32.16 The Department has continued to face budget reductions throughout the period 1996 to 1999. Because of this, business planning has become more a process through which all levels of the Department decide what activities can't be carried out to support operational capabilities from the resources allocated. In general, the business planning process rationalizes the elimination or reduction of activities that have the least impact on the delivery of those capabilities called for in the 1994 Defence White Paper.

Cost information is still lacking

32.17 To maximize productivity, resource managers at the base and wing level need sufficient detailed cost information. This enables them to make businesslike decisions to ensure that resources are used in the most cost-effective manner. We noted several concerns with the tools and training in this area.

Resource reductions have focussed business planning more on rationalization of activities than on improvement of productivity.

32.18 We surveyed all 23 commanders of bases and wings. Of the 21 who responded to our business planning information request, 16 believed they could project impacts on resources and deliverables in a timely manner using the tools they had available. Nevertheless, most expressed concerns about either a lack of appropriate costing tools or a lack of training on costing tools, or both. Specifically, base and wing commanders expressed concerns about such tools as activity-based costing (ABC), the Air Force's Cost Centre Management (CCM) tool, and the current limitations of the Department's principal financial accounting system, the Financial and Managerial Accounting System (FMAS). Four of the base/wing commanders identified problems with manpower shortages, two identified problems with staff turnover, and three were concerned about the reduction in rank of those personnel occupying supervisory positions in the resource management function.

32.19 The majority of base and wing commanders responded positively when asked if linkages were sufficient through current costing capabilities to project impacts on resources and deliverables. Thus, we believe that National Defence has established an adequate foundation for the costing function. However, based on the concerns expressed by these same base and wing commanders, more remains to be done.

32.20 Base and wing organizations providing support services such as supply, transportation and commercial vehicle maintenance voiced similar concerns. Slightly more than half of the support service managers believed that they had the necessary cost information to ensure that the resources allocated to them were sufficient to fund the deliverables specified in their business plans. However, about 40 percent responded that their current costing capabilities were insufficient to project the impact on deliverables of reductions in resources or

increases in activity rates. Similar concerns were expressed by the 31 Air Force squadrons who responded to our information request. Senior departmental officials maintain that the tools to support an adequate costing capability are available to base, wing and squadron level personnel but that not all managers are aware of this. They told us they expect their comptrollership initiative to increase managers' knowledge.

32.21 A significant number of base level officials thought better training was needed on the Department's Financial and Managerial Accounting System, the Air Force's Cost Centre Management tool and the many variants of activity-based costing used throughout the bases and wings.

32.22 We found that 22 of the 33 Air Force squadrons contacted had not fully implemented the Cost Centre Management model as a tool to support costing activities and related decision making. Air Force officials have explained that they are implementing a plan to revitalize the model.

Efforts to develop an activity-based costing capability have been delayed

32.23 The chronology of the evolution of activity-based costing, the Cost Centre Management model and the Department's Financial and Managerial Accounting System is summarized in Exhibit 32.2. The exhibit depicts the series of initiatives aimed at improving the costing capabilities of resource managers throughout the Department. Internal audit conservatively estimated that the cost of these efforts was about \$11 million by the end of 1997.

32.24 Internal audit identified as a significant issue the lack of an overarching framework to guide the development of the Department's activity-based costing capability. Many organizations have invested considerable resources in developing costing tools; however, with few exceptions, progress

toward providing better cost information through the introduction of activity-based costing below the top level of management has been delayed.

32.25 The way ahead for the development and use of these tools is currently unclear. As well, many officials expressed concerns that they have neither the manpower nor the resources to keep any of these costing models up-to-date and usable.

Base/wing level staff are frustrated with the business planning process

32.26 We found that base and wing commanders and their immediate subordinates (those directly responsible for delivering such support services as

supply, transportation and commercial vehicle maintenance) are frustrated with the business planning process and resulting plans.

32.27 Six of the 21 base and wing commanders we contacted expressed frustration with the lack of funding accompanying the devolution of activities within the Department. The Air Force headquarters responsible for reviewing all wing level business plans states that the plans are replete with examples of activities being “dumped and/or devolved.” This appears to have happened with limited stakeholder participation and little or no transfer of associated funds. As a result, business planners must fund these activities from their original resource

Exhibit 32.2

A Chronology of the Evolution of Activity-Based Costing Initiatives

| Costing Initiative | 1992 | 1996 | 1998 | 2000 |
|---|-------------|-------------|-------------|-------------|
| The Air Force launches its Cost Centre Management (CCM) tool to improve costing capability. | √ | | | |
| The Navy, Army and Assistant Deputy Minister (Human Resources – Military) contribute funding to CCM development (1994–1996). | | √ | | |
| The Department informs the Auditor General that activity-based costing (ABC) may be implemented Department-wide by June 1998 as a component of the Financial and Management Accounting System (FMAS). | | √ | | |
| The Army, faced with looming critical cash shortfall, chooses a process-oriented approach and invests in a network version of ABC. | | √ | | |
| Environments and Groups concurrently develop ABC models (1996–1998) while attempting to minimize the risk of proceeding in a direction not aligned with the Department-wide FMAS solution. | | | √ | |
| The FMAS is implemented Department-wide without ABC. | | | √ | |
| Environments and Groups continue to develop ABC models but find new data sources such as FMAS and PeopleSoft have yet to be stabilized. | | | √ | √ |
| The Department informs the Auditor General that ABC at the national level will not be implemented prior to the successful implementation of accrual accounting. | | | | √ |
| The Air Force informs the Auditor General that it anticipates completing the implementation of CCM at the operational and strategic levels over the next two years. | | | | √ |
| The Department informs the Auditor General that clearer direction on the national level ABC initiative will be given about mid-July 2000. | | | | √ |

Few supply, transportation and maintenance support organizations at the base and wing level have developed performance measures in the last four years.

allocations, which have been significantly reduced over the last few years. A level of frustration is not surprising given that devolution was taking place simultaneously with budget reductions.

32.28 Aside from the frustration with the lack of training and tools, the responses we received from the base and wing level indicate that the business planning process is seen as a paper exercise and not as a usable management tool. However, participants do see the process as useful in allowing them to play a role in the allocation of resources. Most said that wide participation increases the visibility of resources and activities at all levels within the base and wing organizations and allows them to set priorities.

Status of performance measurement

32.29 The Navy, Army, Air Force, Assistant Deputy Minister (Human Resources – Military) and the Assistant Deputy Minister (Materiel) cumulatively spend approximately 75 percent of the funding allocated to National Defence. These organizations differ in their mandate, organizational structure, operations and support services provided to operations.

32.30 In 1996 we examined three common support services delivered by support sections at the base and wing level to the Navy, Army and Air Force — namely, supply, transportation and commercial vehicle maintenance services. This year we found that the organizations delivering these services have undergone significant change. Although they are working on performance measurement systems, very few are actually using performance information as part of a performance management system to improve support productivity.

32.31 What is clear is that business plans at the base and wing level do not integrate performance information from prior years to identify targets for

improvements to the productivity of support operations.

Operating Budgets

What is an operating budget?

32.32 National Defence defines operating budgets as those dollars devolved directly to the Environmental Chiefs of Staff and other level one managers within the Department. Operating budgets primarily consist of funding for operations and maintenance, civilian salaries, and minor capital items. They are devolved to each level of the organization from Headquarters down to the base/wing and unit/squadron levels. The intent behind operating budgets is to allow local managers, particularly at the base/wing and unit/squadron levels, to make their operations more efficient by making their own spending choices among minor capital items, personnel and operational activity while delivering on the commitments in their business plans.

32.33 In our 1996 audit, we concluded that operating budgets were indeed a useful tool but that their full utility had not yet been realized at the local level. Furthermore, managers should know how to use them and should be provided with the incentive to do so.

Impact of the devolution of operating budgets

32.34 The devolution of operating budgets to the lowest levels of the organization has resulted in a significant number of problems. While departmental officials informed us that they were aware of some of these consequences earlier, an internal audit published in September 1999 highlighted four critical problem areas: roles and responsibilities, training, communication and complexity of the new information systems.

32.35 The audit indicated that the devolution of operating budgets, many aspects of procurement, human resource management and other functions had led

to considerable confusion about the roles and responsibilities of local resource managers. Many resource and business managers did not have the knowledge and experience they needed to do their work; and without a co-ordinated training strategy, the benefits from business planning may not be realized. Because re-engineering, devolution and downsizing had fundamentally changed relationships, roles and responsibilities, central functional staff could not effectively communicate policy and procedures to resource managers in a timely way. In addition, the complexity of the new information systems had complicated, rather than simplified, their work. To address these issues, the Department has developed and issued new financial direction and policy, financial and materiel management guides for resource managers, and specialized training courses, all of which identify roles and responsibilities for both resource and financial managers.

32.36 Our audit work confirmed the internal findings. Of the 22 base and wing commanders who responded to our information request on operating budgets, 12 said that the training their staff received on operating budgets was inadequate, and 14 expressed concerns about operating budgets and information systems. Nine commanders felt there were problems with roles and responsibilities, including not having enough staff, and seven described lack of skills as a problem.

Efforts to address problems associated with devolution of operating budgets

32.37 As one of the pilot departments for Treasury Board's Modernization of Comptrollership initiative, National Defence conducted a Capacity Check in the fall of 1999. The Capacity Check consisted of a departmental self-assessment that identified 13 areas of opportunity for improvement. As part of its action plan to advance modern

management, the Department has identified three primary thrusts that will address the 13 areas; these are the Integrated Defence Management Framework, the Integrated Information Environment and the Department's Financial Information Strategy (FIS).

32.38 Departmental officials explained that this action plan, *Toward a Modern Management Agenda*, will address a range of problems associated with the devolution of operating budgets. These include breakdowns in internal control processes, basic departmental practices and the functional support chains.

32.39 According to officials, the action plan will be published later this year and is scheduled to be implemented over the five-year period 2000–2005. Given the size and complexity of National Defence and the Canadian Forces, the level of effort required to fully implement this action plan will be enormous.

Culture Change

Efforts to reform culture lack a blueprint for change

32.40 In 1996 we reported that the change in values and beliefs held by departmental staff had just begun and that changing culture would likely be a long and difficult process. Departmental officials believed that a change in culture would be required to move from a centralized, hierarchical and risk-adverse environment to one that would be decentralized, and where resource custodians would become resource managers.

32.41 Efforts to bring about this culture change have fallen short. The Department has published *Strategy 2020*, which articulates both long-term objectives and short-term targets that should facilitate the identification of culture change priorities. However, the Department has not yet established a clear blueprint to move the organization's culture in the desired direction. Instead, it has chosen an

The Department said that a change in culture was the key to improving productivity but did not develop an overall plan.

indirect approach, relying on the introduction of new management systems such as business planning to bring about the desired change. Further, we noted that the Defence Management Committee has given the Environmental Chiefs of Staff and Group Principals the responsibility of leading the culture change without first establishing clear priorities. We do not believe that the Department's approach will be sufficient to bring about the desired culture change.

32.42 In 1996 we recommended that National Defence continue to monitor the employee beliefs and values on which its new management system would depend. In response, the Department conducted a cultural survey in 1999, the results of which were compared with two similar surveys done in the mid-nineties. We assessed the reasonableness of the survey methodology but did not audit the reliability and validity of the survey results.

32.43 The respondents to the 1999 survey expressed significantly more positive views on new practices, openness to workplace innovation, optimum contribution of personnel, wise use of resources, teamwork and integration, general management climate, and renewal and change. In contrast, respondents expressed significantly more negative views on planning procedures, media reports, personal and public perceptions, stress, organizational support and downsizing.

32.44 National Defence employees also participated in the Public Service Employee Survey that the Treasury Board conducted in 1999. The survey results indicated few differences between National Defence employees and the rest of the federal public service. However, on the positive side, National Defence employees rated themselves higher in their likelihood to take initiative in the workplace. On the negative side, more Defence employees than public service

employees believed that organizational instability caused the quality of their work to suffer.

32.45 The 1999 internal survey suggests some positive change in the workplace culture; however, with a lack of priorities, it is difficult to assess if these changes were the most critical. Officials in the newly created Directorate of Strategic Change, whose mandate we explain in paragraph 32.50, have an action plan to improve the workplace culture. Some elements of the action plan involve defining culture change priorities, identifying the gap between the current and desired culture, and implementing initiatives to address this gap. An implementation schedule for the action plan was not available.

Co-ordination of Change

32.46 In 1996, National Defence was entering the second year of its five-year renewal program. It was still in the relatively early stages of major change, which was intended to take place during the period 1994 to 1999. The Department claimed that positive results from the monumental re-engineering and restructuring were only beginning to be realized. By January 1995, the Department had decided to adopt a single co-ordinator for the massive re-engineering efforts under way — the Management Command and Control Re-engineering Team (MCCRT). This team consisted of 110 employees devoted to re-engineering activities in all major sectors of the Department. The team ceased its 30-month effort in June 1997.

32.47 In our 1996 audit, we recommended that National Defence ensure that it maintain a centre for the co-ordination of change, to track the activities of major initiatives, address common problem areas and report to senior management. The Department accepted our recommendation but replied that it did not intend to create or promote centralized control of change initiatives. It

believed that this work was the responsibility of those in the chain of command. The Department rejected central co-ordination of renewal programs, and it did not follow up on individual efforts for several years.

32.48 We found that the mandate to co-ordinate, track and report to senior management on the major change initiatives under way at that time was never fulfilled. Although the Defence Management Committee gave the Chief of Management Renewal Services the mandate to co-ordinate change initiatives that crossed organizational boundaries, this organization was itself reorganized. In addition, the Director General of Management Renewal Services quickly became fully occupied with the Alternative Service Delivery program and did not co-ordinate the major renewal initiatives. Departmental officials informed us that in March 1999 the Directorate of Strategic Change was created as the centre for co-ordinating change within the Department. They claim that the Directorate is taking a decentralized approach to co-ordination where the chain of command and the operators are key to the success of implementing the change initiatives. In addition, the Directorate will assist the chain of command in implementing the initiatives by playing the role of catalyst, change integrator and change co-ordinator among the various organizations.

32.49 Defence officials further informed us that some time prior to the formation of the Directorate of Strategic Change, the Department had turned to business plans as a means of tracking and monitoring significant issues. In 1998, internal audit reviewed all business plans to determine how well they were addressing change. The review found that business planning had not matured enough to capture all cross-functional issues and that it was not successful in tracking change initiatives.

32.50 In its role as co-ordinator of change initiatives within the Department, the Directorate of Strategic Change is to:

- develop the strategy and lead the implementation of major departmental change initiatives;
- develop a continuous improvement plan for National Defence;
- co-ordinate the implementation of the Integrated Defence Management System initiative;
- promote the integration of the modern management agenda, including modern comptrollership concepts, into National Defence by establishing a centre of excellence for change to help the Department adopt more progressive management practices; and
- promote alternative service delivery to provide more cost-effective delivery of non-core activities and provide associated policies, procedures and support.

32.51 We also reviewed an internal audit report published by the Department in May 1999 entitled NDHQ 99: Review of Restructuring and Re-engineering. This review evolved from concerns that change efforts in National Defence Headquarters would lose momentum unless some form of measurement was put in place, especially after the MCCRT was discontinued. The report concludes, “re-engineering has taken place, to varying degrees, within virtually all NDHQ processes, although many of those interviewed believe that more needs to be done in the personnel and materiel fields. There is a also a general belief that re-engineering that crosses organizational boundaries has been limited...and that the centre does not have a corporate view of the extent and progress of re-engineering and its impact on outputs and people.”

32.52 Departmental officials told us that it is now too late to monitor MCCRT initiatives in a useful manner. However, they intend to track future significant change initiatives through business

planning, performance measurement mechanisms and the new Directorate of Strategic Change. They further state that several MCCRT initiatives were monitored, particularly Headquarters personnel reductions and the initiative to rationalize Headquarters accommodations.

32.53 We remain concerned about the management of change within National Defence for several reasons. First, we noted that the Department lacked an overall change management strategy from the time of our last audit in 1996 until 1999. For much of this period, there was no staff centre responsible for overall co-ordination of change management. However, beginning in 1999, senior departmental planning guidance has identified a number of change objectives that, taken together, appear to address the management of change through the business planning process.

32.54 Second, we noted a deep sense of frustration and what might be termed “change fatigue” on behalf of many of the military and civilian staff we interviewed. Although many said that fewer renewal projects were under way than in recent years, they expressed the concern that they no longer had the time or staff to deal with managerial issues such as increasing support productivity. The institutional change model described later in this chapter suggests that confusion, fatigue and counter-productivity are normal during a period of monumental change. Accordingly, the concerns about staffing shortages expressed are understandable, given that the Department reduced Headquarters personnel by over one third.

Alternative Service Delivery

Two major alternative service delivery projects are expected to deliver savings beginning in 2004

32.55 We reported on the Alternative Service Delivery (ASD) program at National Defence in November 1999. At

that time, we concluded that the program had resulted in some limited success, although we were unable to verify the savings claimed by the Department. Of the Department’s 16 currently active ASD projects, 2 have large potential savings and are closely connected to the delivery of defence support services.

32.56 The first, the Supply Chain Project, originated in late 1997. The mandate of this project is to review all supply and distribution functions in National Defence, end to end, from suppliers in industry to the soldiers in the field. According to the June 1999 business case analysis, which we did not audit, the annual forecast cost of that portion of the supply chain targeted for contracting out is \$366 million. The Department is currently selecting a contractor. Once the selection is made, National Defence plans to work collaboratively with the contractor to jointly define the contract requirements. Collaborative work may take up to one year, whereupon the final value proposition, including estimates of final savings, will be tabled for the government’s consideration.

32.57 A May 2000 internal briefing to departmental senior management by the Supply Chain Project staff identifies cumulative savings of \$569 million over a 10-year period. The costing model indicates transition costs of \$70 million over the first three years, with actual savings forecast to begin in the fourth year. The tentative schedule for implementation, when the selected contractor assumes the role of contracted service provider, is some time in 2001.

32.58 During our audit, we noted strong internal resistance to the Supply Chain Project. As might be expected, both military and civilian staff are concerned that despite all the effort made to improve base/wing supply productivity, their jobs may be lost or the nature of their work may significantly change.

32.59 The second major alternative service delivery project with large

potential savings is the Site Support Services Project, which also had its origin in 1997. This project has expanded from its six original Army sites to at least 19 locations. Site services include such functions as realty management, technical services, support to operations, administration, finance and comptrollership. The departmental management framework for conducting site reviews of these services was issued in June 2000. The Environmental Chiefs of Staff and Group Principals will be responsible for performing the individual site reviews, including the development of business case analyses and the conduct of competition with private sector bidders, if that option is chosen. The Department has directed that all site support service reviews be completed by 31 March 2004.

32.60 Both of these projects were initially to have been completed by the end of 1999. Officials explained that in the case of the Supply Chain Project, the original milestones were only a rough estimate that has since been revised. In the case of the Site Support Services Project, delays have been encountered for a number of reasons. Foremost has been the necessity to revise the competitive tendering process to account for the decision to allow in-house organizations the following opportunities: first, to meet alternative service delivery review objectives, and second, to develop a set of Canadian Forces common service standards to ensure national consistency in the level of support services under review. The Environmental Chiefs of Staff and Group Principals are scheduled to provide the Vice Chief of the Defence Staff with their plans for conducting the site service reviews in the fall of 2000.

32.61 In 1996 we examined support functions that bases and wings provided and also two large corporately driven support functions — individual training and aircraft maintenance. We chose these functions in 1996 because of the

significant resources devoted to each; this is still the case, and we discuss our review of each function here.

Corporate Productivity — Individual Training

National Defence has a large training system

32.62 Individual training is provided by the Canadian Forces to ensure that its personnel acquire necessary military and technical knowledge and skills. A 1998 review conducted for the Department estimated that individual training and education cost about \$2 billion a year. This estimate included costs for personnel, students, operations and maintenance, capital and support. Personnel accounted for 24 percent (\$479.7 million) of the estimate. We therefore consider that the productivity measure we established in 1996, training days per school employee, is both relevant and significant in terms of cost. It is not, however, a complete or comprehensive measure since personnel costs are only a portion of training resource inputs.

32.63 At the time of this audit, the Department had 51 schools that provided individual training. During the 1996 audit, we examined 47 schools to determine how productivity had changed since 1990–91. To continue the trend analysis, our current audit reports on 37 schools; due to amalgamations and divisions of schools, these represent 43 of the 47 schools examined in 1996.

32.64 The schools we audited currently employ more than 4,800 people and produce about 1,000,000 training days annually. These schools vary greatly in physical size and each employs anywhere from about 10 to 300 employees. Responsibility for individual training has been devolved from a central staff unit to four managing authorities: one for each of the environments — Land, Sea and Air,

Two major alternative service delivery projects related to support productivity are expected to deliver savings beginning in 2004.

Labour productivity in the Canadian Forces schools has decreased a further seven percent since our 1996 audit.

and a departmental authority who is also the managing authority for any training that spans two or more environments.

Performance measures have not been implemented

32.65 No one performance measurement system is being used consistently across Forces schools to measure productivity in individual training. The Department has suggested comparing Canadian military schools with those of other countries; however, it does not currently do this and therefore no data were available. Although individual managing authorities have identified various performance measures, half of the schools we audited responded that they do not measure productivity; the remaining schools use various measures that cannot be summed up to obtain a system view. The departmental authority for individual training, in conjunction with the managing authorities, has developed a national verification system that provides performance measures and indicators; however, it is still in its early stages of implementation. The measure we have

therefore used to assess productivity, although not comprehensive, is the only one for which data were available and also covers a material aspect of individual training.

Labour productivity in schools appears to have decreased

32.66 In our 1996 audit, we compared the number of staff with the number of training days delivered by the Canadian Forces and National Defence schools. We reported that labour productivity in the schools had decreased by 40 percent since 1990–91. This appeared to have occurred because the Canadian Forces had been downsized, but the schools had not reduced their staff proportionately. In our 2000 audit, we found that labour productivity had decreased a further seven percent since our 1996 audit, when compared with the 1990–91 baseline. Since 1994–95, a decrease in labour productivity has occurred in 21 of the 37 schools and across all four managing authorities.

32.67 Exhibit 32.3 illustrates the total reduction in labour productivity that has occurred in the 37 schools. The 1990–91

Labour productivity in Canadian Forces schools continues to decline (see paragraph 32.66).



and 1994–95 fiscal years are used as baselines, as these are the first and last years used in the analysis for the 1996 audit.

32.68 In 14 of the 37 schools, there has been a steady decline in labour productivity since 1990–91. Only two schools have steadily increased labour productivity. An additional 14 schools show a decline in productivity between 1990–91 and 1994–95, but have since increased their labour productivity levels — four of these to above their respective 1990–91 levels. The remaining seven schools increased productivity between 1990–91 and 1994–95, but have since dropped below their 1990–91 levels. According to departmental officials, our analysis suggests that the effects of downsizing, and in particular the Force Reduction Program, continue to affect school labour productivity. Our analysis also indicates that there have been difficulties in forecasting changes to staffing requirements.

Forecasting production requirements has presented a challenge

32.69 Departmental officials told us that the size of the Canadian Forces training establishments is based on the Canadian Forces production requirements. An individual training production requirement is the number of graduates required to address an operational or departmental need. The Canadian Forces

have had significant difficulties in establishing production requirements; however, departmental officials believe that modelling and review procedures recently put in place should enhance forecasting of production requirements in the future.

32.70 Although the number of training days delivered per Canadian Forces school employee has declined since 1996, 14 schools may be unable to deliver the quantity of individual training required in the future. The main reason identified for these difficulties is lack of staff, particularly qualified instructors. It is clear that personnel reductions have seldom been made in the appropriate places and not many staff levels have been adjusted to meet actual needs. Some schools are now already overburdened and unable to meet requirements, while others anticipate problems meeting expected increases in requirements. This is especially a problem in basic training. It appears that staff reductions were made based on the requirements at the time of the downsizing, when there was little training taking place. Now that training requirements are increasing for many of the schools, the Department needs to review staffing levels at all schools and adjust them to meet these new needs.

32.71 When it was implemented, the business planning process required training establishments to forecast their budgetary requirements prior to the training demand being established. As a

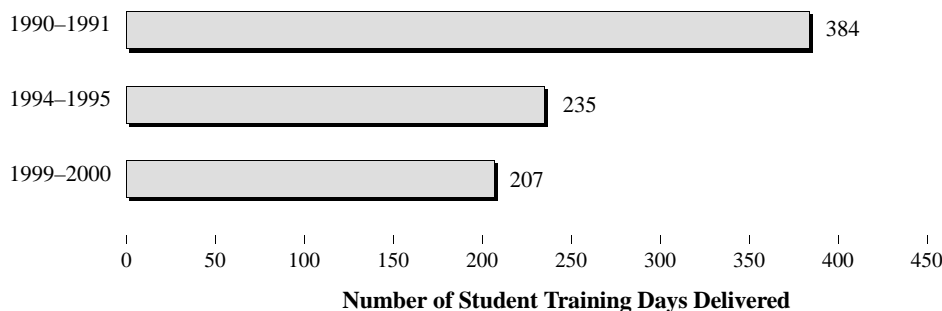


Exhibit 32.3

Training Days Delivered Per School Employee

Source: Office of the Auditor General survey data

result, individual training was scheduled and conducted to meet as much of the demand as possible within the allocated budget that was established in the prior year. In recent years, the result has been an unforecasted demand much greater than the allocated budget. It is therefore difficult to ensure that the appropriate level of resources, including staff, is in place to deliver the required quantity of training. The Department has developed a draft business process model to address this problem, but has yet to implement it due to a lack of both information technology support and stakeholder input.

Strategic guidance to training staff has been weak

32.72 The first edition of the Strategic Human Resource Planning Guidance (SHRPG) was distributed in the fall of 1997 to supplement the departmental senior strategic guidance for 1998. It stated that specific human resource guidance is essential to fully develop the human resource portion of the business plan. Despite this statement, the SHRPG for 1999 was released only in draft form and the 2000 version was not distributed until January 2000, which is after business plans were to have been submitted. The 2001 document was released in June 2000, despite the statement in the 2001 departmental senior strategic guidance that the SHRPG would be published in April each year. These delays mean that business planners do not have timely access to training priorities and change restrictions, which the human resource guidance is intended to provide.

32.73 New Defence Administrative Orders and Directives were to be released in the summer of 2000 to replace the 1994 Instruction on Individual Training and Professional Development (IT/PD) Management Framework, which is the current directive for individual training. However, there are now delays due to changes in the military staff members

responsible for this policy. The Department hired a contractor for nine months beginning in June 2000 to set up a co-ordination cell responsible for facilitating future production of the Defence Administrative Orders and Directives.

32.74 Continuity in leadership, especially in the position of the departmental authority, has been a problem. There have been four incumbents in this position since 1996. Continuity in strategic leadership is essential during times of change.

The goal for validation of individual training has yet to be met

32.75 Validation is the process of confirming that the appropriate training is being delivered. It prevents over or undertraining by surveying graduates of the various courses and their supervisors to determine whether the training was required and is being used. The national verification system and the Strategic Human Resource Planning Guidance identify a goal of validating approximately 20 percent of active courses per year, resulting in all courses being evaluated over a five-year period. To date, this goal has not been met.

Problems with the training management system exist

32.76 The Individual Training Management Information System (ITMIS) was designed to be a demand-driven system. In theory, courses should not be scheduled until a training requirement and student availability have been established. Yet most of the Canadian Forces schools we surveyed have cancelled scheduled courses due to a shortage of either students or staff.

32.77 The in-service Defence Human Resources Management System (HRMS), based on a PeopleSoft product, is

scheduled to replace ITMIS in 2002. A gap analysis between the requirements of the Canadian Forces Individual Training and Education System (CFITES) and what HRMS could provide was completed in February 2000. The report concluded that given the size of the gap and the number of important unresolved issues, successful implementation of HRMS support for individual training and education could present significant challenges, including meeting the project schedule and cost and dealing with product constraints. Managing authorities are concerned that, without significant further development, the proposed system will not be able to provide as much management support as the ITMIS currently does.

32.78 The original lack of acceptance of ITMIS, the considerable costs of its implementation, and the inability to use some of the planned features have created problems. Unless the concerns of managing authorities are addressed, similar problems appear likely with the transition to the HRMS. As well, funding for improvements and training on the ITMIS have been reduced due to the upcoming change of systems, even though this change is not scheduled to take place for another two years.

Costing of individual training is inconsistent

32.79 Although the Individual Training Management Information System was designed with a limited costing feature, it is not being used. Schools use different models, which include military staff, infrastructure and base support costs to varying degrees. This leads to difficulties in establishing the exact cost of individual training in the Canadian Forces. Although a new position has recently been created to review the costing of individual training, it is impossible at this time to determine on a system-wide basis whether this training is being conducted in a cost-efficient manner.

Corporate Productivity — Aircraft Maintenance

32.80 During 1999–2000, National Defence spent about \$428 million on maintaining its fleets of aircraft. Aircraft maintenance is conducted in part by industry and in part by the some 4,700 National Defence employees who work in this area. Our audit addressed the maintenance services provided directly by National Defence employees in the aircraft maintenance units located on the wings.

32.81 In 1996 we audited aircraft maintenance and found that productivity was improving. Specifically, we found that the Air Maintenance Squadron at Cold Lake, Alberta, which services CF-18 Fighter aircraft, had carried out a number of initiatives that had improved productivity. However, we also found that costing data to manage the maintenance support functions were not sufficient to aid responsibility centre managers in making well-informed cost/benefit judgments.

32.82 During our most recent audit, we wanted to determine the extent to which the lessons learned at Cold Lake had been disseminated across the Air Force. We wanted to re-evaluate the success of some of the improvements identified in our 1996 chapter and to determine whether the availability of adequate cost information had improved.

32.83 The lessons learned from Cold Lake that we followed up in this audit related to the reduction of the number of approvals in the maintenance processes, the devolution of budget control to responsibility centre managers and the introduction of AF 9000 Plus, a quality management system initiative.

32.84 We found that all 33 squadrons had received guidance from their headquarters to reduce the number of approvals required in the maintenance processes and all but three had complied.

A key initiative to train maintenance staff in multiple skills needs to be amended.

Devolution of budgetary control has been a mixed success

32.85 The principle behind devolving budgetary control was to give managers more resource flexibility to meet their priorities and objectives. In 1996, we reported that this process provided the incentive to responsibility centre managers to spend less, thereby allowing the proceeds from underutilized budgets to be spent on buying small pieces of equipment to improve the work. In this audit, we found that 28 of 33 squadrons had received devolved budgetary control. However, 10 of the 28 felt they had not benefited by having control over their budget; 7 of 10 stated that they were not able to use the money they had saved.

Determining cost savings remains a problem

32.86 When asked about specific cost savings initiatives, 24 of 33 squadrons indicated that they had been encouraged to adopt such initiatives. However, of this number, only five squadrons were able to provide estimates of cost savings — between \$8,000 and \$500,000. The

remainder of the squadrons did not estimate the cost savings.

Implementation of maintenance quality system was delayed

32.87 The final lesson learned from Cold Lake that we felt worthy of dissemination across the Air Force involved the adoption of a quality management system. Since our 1996 audit, the Air Force has introduced AF 9000 Plus, a quality management system that follows the ISO 9001 standard and adds unique Air Force requirements. The Air Force has accepted AF 9000 Plus as a standard for implementation in all areas of engineering and maintenance. Although 48 organizations within National Defence, including squadrons and Headquarters directorates, have set dates for achieving AF 9000 Plus registration, only one squadron has achieved registered status. Planned registration dates for most organizations continue to be deferred.

Efforts to train aircraft maintenance technicians for multiple skills failed

32.88 One of the success stories we reported in 1996, the reduction of the

Efforts to improve aircraft maintenance productivity have been relatively successful (see paragraphs 32.84–86).



number of aircraft technicians occupations from 12 to 3, has turned out to be problematic. The intent behind the reduction in occupations was in part to meet personnel reductions and in part to increase productivity by “multi-skilling” aircraft technicians. The theory was that fewer people with more skills could thereby be employed.

32.89 However, the attempt to multi-skill technicians has encountered major setbacks in one of the three aircraft maintenance technician occupations. Some groups of technicians lacked the background and basic skills required. Ground staff told us that they were still relying on old qualifications to ensure that staff were adequately trained to repair aircraft. One of the three occupations is particularly problematic; the training for technicians is not sufficient to give them an acceptable level of understanding of all aspects of their new trade, including electrical theory, schematic reading and weapons safety procedures. Essentially, the occupation is so broad that technicians are incapable of becoming proficient in all required areas. The Department is currently analyzing the three occupations and states that the review may result in the creation of new occupations. This may reduce the level of savings achieved by the initiative, as more specialists may be required to do the work.

Base/Wing Supply

32.90 Where we were able to make a direct comparison between personnel currently employed in base/wing supply sections and those employed in 1996, we found that staff had been reduced by 540 or 24 percent. According to the 1999 Supply Chain Project business case, the total cost of operating the static portion of the supply chain (warehousing, distribution, inventory management and receipt and dispatch) is estimated at \$366 million for fiscal year 1999–2000. We found significant changes in the nature

and conduct of the work now being carried out in base/wing supply sections.

32.91 When we measured labour productivity in our 1996 audit, we found that in spite of some major improvement initiatives, productivity in the base/wing supply function had declined 10 percent from 1992–93 to 1995–96. This was because the level of activity fell more rapidly than the level of supply personnel. We recommended that National Defence monitor transaction costs and volumes per employee as indicators of performance, and that such performance information be readily available to managers.

Performance information remains limited

32.92 Improvements in the availability of performance information meant to assist base/wing level staff in measuring performance remain limited. For example, only a few of the bases and wings reported that they were using performance information such as transaction costs and volume per employee.

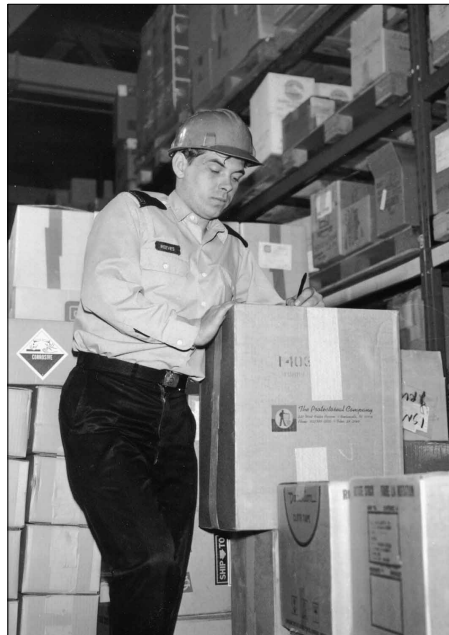
32.93 Ten of the 16 bases and wings felt they had insufficient or limited cost, performance or productivity information and one half noted specific deficiencies with the current information available. Nevertheless, 10 bases and wings reported notable improvements in the performance data available, while 6 either reported no significant improvements or did not identify any.

32.94 The most common reasons cited as impediments to the measurement and monitoring of supply productivity by base/wing supply organizations centred around four themes: lack of information systems and tools, information gathering and measurement practices that are too labour-intensive, lack of human resources needed to obtain and track information, and procedures for measuring and monitoring of productivity that are not mission-essential.

Interim information system capabilities to measure supply management productivity remain limited.

32.95 The Base Materiel Information Management System (BMIMS) was introduced over a three-year period ending in December 1999 to aid users in coping with downsizing and changes in business processes. It is serving as an interim tool pending implementation of the Canadian Forces Supply System Upgrade scheduled for the spring of 2001. While the BMIMS has some tracking capability, departmental officials state that its use as a performance measurement tool is limited.

32.96 One notable exception to the general lack of performance information within the overall supply chain is the Canadian Forces Supply Depot in Montreal (25 CFSD). Here we found that management is using performance information for management purposes. Departmental officials told us that similar performance management information is being used by the 202 Workshop, an equipment repair depot, and by the Canadian Forces Supply Depot in Edmonton.



Base/wing supply organizations do not know whether their performance has improved or declined (see paragraph 32.98).

Massive organizational, operational and process changes have occurred

32.97 The period since our previous audit in 1996 has been tumultuous for base/wing supply organizations. All 16 bases and wings who responded to our information request indicated significant changes in the structure of their supply organizations. More than half reported at least four or more significant changes. The bases and wings also reported numerous operational and process changes over the past four years. Some of these changes were made in response to budget and personnel reductions, while others were required as a result of the devolution of responsibilities previously carried out by other departmental organizations.

32.98 We found that there is a lack of clear consensus across bases and wings on whether the performance of base/wing supply has improved or declined as a result of all the recent changes. Finally, and most important, National Defence cannot measure the overall impact of all these changes on supply performance at the base/wing level. Exhibit 32.4 presents the operational and process changes that have occurred in base/wing supply organizations over the last few years.

Base/Wing Commercial Vehicle Maintenance

32.99 The light commercial vehicle fleet currently consists of about 5,100 vehicles, with a replacement value of \$132 million. The base/wing vehicle maintenance sections included in our review currently employ 1,250 people.

32.100 In 1996 we audited the Department's light commercial fleet of cars and trucks and recommended that the Department review and manage the impact of its aging vehicle fleet on overall vehicle maintenance productivity. We also recommended that the Department assess the results of the vehicle disposal pilot projects under way and conduct negotiations with the Treasury Board to

reach the most cost-effective solution; this should include determining the incentives that should be built into the overall system. We further recommended that the Department maximize the use of the vehicle warranties that it had purchased.

Information on productivity and warranty use is unknown

32.101 National Defence acquired a maintenance management software program to automate a paper-based control system in land equipment maintenance organizations at Canadian Forces bases and units. Installation of this product was completed in 1999. However, as a result of the Department’s implementation problems, including inadequate instruction on how to record data in the system, the Department has introduced a recovery plan. The plan indicates that the accuracy of the data on productivity and warranty use entered into the new program throughout 1999 is questionable. As of January 2000, the recovery plan was estimated to cost \$650,000, which includes three full-time personnel on contract.

32.102 The information requests we sent to vehicle maintenance staff at bases and wings confirmed the implementation problems with the new software program. Only 10 of 17 bases and wings indicated that they could extract information from the program. Eight of the 10 reported various problems, including incomplete, inaccurate data that could not be used for maintenance planning or tracking warranty use. As we were unable to obtain 1999–2000 performance data on either vehicle maintenance or warranty use, we were unable to assess productivity trends since our last audit. Nevertheless, all of the bases and wings that responded to our information request stated that they encouraged warranty use when feasible.

Progress has been made in the vehicle disposal process

32.103 Partly as a result of a successful pilot project developed and conducted by National Defence in 1996, Public Works and Government Services Canada has issued two National Master standing offers for remarketing. These standing offers currently authorize National Defence and 25 other federal departments to dispose of

The initial implementation of a maintenance management system for vehicles has failed to meet objectives.

| Operational and Process Changes by Type | Number of Bases/Wings Reporting Change |
|---|--|
| Procurement and Local Purchasing | 14 |
| Customer Assistance or Service | 14 |
| Warehousing | 13 |
| Invoice/Accounts Verification | 11 |
| Receipts and Issues (including packaging) | 10 |
| Inventory Control/Stocktaking | 9 |
| Training and Education | 9 |
| Unit Materiel Control (Distribution Accounts, entitlements) | 9 |
| General Administration and Management | 9 |
| Transportation and Delivery | 8 |
| Cross-docking | 7 |
| Special Items (hazardous materiel, weapons) | 7 |

Exhibit 32.4

Operational and Process Changes in Base/Wing Supply Organizations

Source: Office of the Auditor General survey data

Better vehicle disposal management saved \$750,000 in the first year of the program.

vehicles through two private auction companies that have recently been amalgamated.

32.104 Departmental officials claim that the commissions for disposal previously charged by the Crown Assets Disposal Corporation have been reduced from 30 percent of the purchase price of each vehicle to 4.45 percent. In 1999, the first year that the new disposal process was adopted across the Department, the cost savings amounted to \$750,000. We found that 14 bases and wings have used the process and half of them have received the proceeds from the sale of the vehicles to reinvest in their fleets. Departmental policy now provides for the proceeds from the sale of locally managed materiel, which includes vehicles, to be returned to an organization that has the budget to purchase that type of asset. This policy provides an incentive that previously did not exist in the vehicle fleet management process.

32.105 With the help of the new disposal process and the potential for returning proceeds back to the fleet manager, the

Department is now able to make better life cycle decisions with the aim of reducing the age of the fleet. Departmental officials have briefed many fleet managers and maintainers on the state of the fleet and how a new reduced life cycle should be implemented. Seven fleet managers have already started to renew their fleets with the objective of reducing the impact of their age.

Base/Wing Transportation

32.106 Base/wing transportation sections provide local transport for passengers and cargo. They also operate special-purpose vehicles such as forklifts and snowploughs. In 1996 the Department had over 9,200 civilian pattern vehicles in its fleet, while in 2000 this number has increased to approximately 10,000. Base/wing transportation sections currently employ approximately 1,300 people.

Availability of performance information has improved significantly

32.107 With the introduction of the vehicle Fleet Management System to all

Better information is needed for vehicle maintenance and warranty use (see paragraph 32.102).



bases and wings in 1998–99, transportation managers now have access to much improved performance management data. We reviewed the documentation pertaining to the Fleet Management System and found that the system includes a variety of data on transportation activities, drivers and vehicles, as well as pertinent performance information and indicators.

32.108 Nearly all of the base/wing transportation staff who responded to our information request confirmed that the introduction of the Fleet Management System has improved their capability to obtain relevant performance information in managing their vehicle fleets.

Gaining full benefit from the new system will require further effort

32.109 Although the availability of data has improved significantly, we believe that additional effort will be required to ensure that management and performance information is effectively used and integrated with management processes and decisions. About half of the respondents to our information request concur.

32.110 Respondents told us that there are a number of impediments to improving the use of productivity information for management purposes. These impediments include the lack of training for the Fleet Management System, lack of resources to properly analyze and use the improved performance data, and weaknesses in the interface of the Fleet Management System with other system applications. Departmental officials informed us that efforts are now under way to address training deficiencies, including the use of performance measures now available through the Fleet Management System.

32.111 We are concerned that even with improved training and use of appropriate performance information, certain aspects of the overall management of the

transportation function remain beyond the control of base/wing transportation staff. For instance, should sufficient funding not be available to acquire new vehicles at the optimal time, appropriate decisions based on the best performance information system cannot be made. Although tradeoffs in funding are always part of the management process, it is important to ensure that the motivation to make appropriate cost-effective decisions is not lost.

The change in productivity of base/wing transportation operations is unknown

32.112 Base/wing transportation operations have not been immune to the massive change affecting the Canadian Forces across the country. However, there is no consensus on whether the changes within the base/wing transportation organizations have led to an increase or decrease in productivity.

32.113 Nine of the 16 bases and wings we contacted reported four or more significant changes involving light commercial vehicle transportation operations, processes or functions in the past four years. Like other support operations, there has been confusion surrounding the devolution of responsibilities, accountabilities and operating budgets to the base/wing levels. Given the degree of change, and the lack of management information on productivity, we have been unable to determine whether there has been a change in base/wing transportation productivity.

32.114 Probably the largest change made by base/wing transportation sections across the Canadian Forces has been the increased use of the user-driver concept. At the time of our 1996 audit, professional drivers employed by the transportation sections drove the majority of cars and light trucks; now, those that need transportation drive themselves, thereby eliminating the need for a professional driver. The remaining professional drivers,

The Department has made significant changes to transportation services, but has not measured whether productivity has increased or decreased.

for the most part, now drive heavier equipment and special purpose vehicles. Although the number of professional drivers has decreased, the number of vehicles required has increased. Departmental officials could not provide an analysis to confirm whether the increased use of the user-driver concept has led to an increase or decrease in productivity.

Information to Parliament

There are two main reports to Parliament

32.115 External reporting requirements for federal departments focus primarily on two annual reports to Parliament — the Report on Plans and Priorities and the Departmental Performance Report. These documents require a focus on intended results, strategies for achieving them and measurements of these achievements.

32.116 The government's Expenditure Management System (EMS) is a cyclical process by which the government establishes broad national priorities and a budget strategy, arrives at a national budget decision and issues subsequent direction from which federal departments create their business plans. The Planning, Reporting and Accountability Structure (PRAS) outlines how departments will implement a business approach to planning, how they will report achievements against agreed business lines, and how they will be held accountable for delivering identified outcomes.

There is still no performance measurement system in place

32.117 Although National Defence and the Canadian Forces have made attempts to develop performance measurement systems for over two decades, their efforts have fluctuated with the priorities of management and the issues of the day. While the Department's senior strategic

guidance for 2000 stated that performance measures and indicators would be included in the guidance for the following year, the guidance for 2001 in fact contains only brief mentions of the measures, with no details and no indicators. As well, the three-year time frame for the implementation of the new measures has been removed.

32.118 There have been a number of false starts and little continuity of leadership in efforts to improve performance measurement. Environmental Chiefs of Staff and Group Principals recognize the need for further effort to integrate their own performance measurement systems with the departmental reporting system.

32.119 To comply with the Treasury Board Secretariat's guidelines, the Department needs to improve its reporting in important areas. Better linkages are required between activities/accomplishments and results/outcomes. As well, the Department needs more balanced reporting that identifies performance shortfalls, opportunities for improvement, and corrective measures taken to improve future performance. Without adequate performance measures in place, it is not possible to measure achievements against desired outcomes, nor to determine the extent of any shortfalls.

32.120 In our 1996 audit, we recommended that National Defence develop meaningful measures of its support activities and include the most significant ones in its reporting to Parliament. This has yet to be done.

Limited Progress in Renewal Efforts

32.121 Although the Department's five-year renewal program is well under way, more work remains. While some Defence officials explain that the Department is now in a "continuous improvement mode," we believe it is

important to determine the root causes of the apparent lack of progress on implementing the recommendations included in our 1996 Report. We therefore adopted a model that categorizes possible factors impeding institutional renewal. Exhibit 32.5 describes the four factors considered in the model. The results of our analysis are portrayed in Exhibit 32.6.

32.122 Competing pressures are the most powerful factor that has impeded the progress in implementing our 1996 recommendations. This suggests defence support productivity has had a low priority among the Department’s other competing objectives. There can be no doubt that National Defence has experienced significant personnel and budget reductions and faced significant other priorities during the five-year renewal period.

32.123 Transitional problems are identified as the second most likely factor

that has impeded progress. This suggests that trying to do too much at once, without having a clear strategic plan including the training and tools in place to affect the desired change, contributed to the lack of progress. We found that the Department had encountered difficulties trying to manage the massive renewal efforts without a clear corporate vision and a strategic plan supporting this vision. In many instances, we noted a breakdown in communications and lack of training and tools to implement changes. However, in terms of strategic planning, the Department has recently produced a document entitled *Shaping the Future of the Canadian Forces: A Strategy for 2020*. The strategy embodied in the document articulates National Defence’s vision, overall long-term objectives and short-term targets for the future, but does not deal with the specifics of its renewal plans.

| State of the Organization | Characteristics |
|------------------------------|---|
| Normal | <ul style="list-style-type: none"> • There is no evident dysfunction. Confusion, fatigue and counter-productivity are normal during a period of monumental change; there remains a willingness to pursue change. |
| Competing Pressures | <ul style="list-style-type: none"> • Rupture between official statements and concrete efforts is evident; concerns are of low (if any) priority among other issues. • Attention is being paid to other priorities; no resources (time, money, support) are left; people are left alone with their problems. • Timing is unrealistic. |
| Ideological Problems | <ul style="list-style-type: none"> • The objectives are not suitable (wrong medication); they are incompatible with the needs or the architecture (base/wing concept); impacts are underestimated. • There is open resistance to the nature of the change and evident dysfunction. |
| Transitional Problems | <ul style="list-style-type: none"> • The medication is right (objectives are appropriate) but dosage is wrong (administration problem); not enough support/training/communication. Deficiencies exist in the reallocation of resources, passive resistance is unchallenged, and negative leadership is not counterbalanced by affirmative actions. • Problems are not content-related but are associated with implementation. |

Exhibit 32.5

Institutional Reform Model

Source: Managing Change, June 1994

32.124 Departmental officials told us that the next step is to design an action plan including targets, priorities, communication plans, and training programs, which will support Strategy 2020 but also guide its actions during the transition period. This action plan is currently under development in the Directorate of Strategic Change and will support Strategy 2020 while reflecting the new reality of National Defence and the Canadian Forces. However, the Department has yet to provide a date for implementation of the action plan.

32.125 Many people we interviewed indicated that they were experiencing confusion and change fatigue, which is a normal state in an institution undergoing massive renewal. However, they remained willing to pursue change.

32.126 National Defence should continue to develop and implement its action plan “Toward a Modern Management Agenda”. It should place priority on giving staff who are managing support activities the performance measurement tools and cost information necessary to ensure that cost-effective support is delivered to operational units. Wherever possible, the Department should provide these staff with appropriate incentives, such as the recently introduced policy on a unit’s authority to retain the savings from the disposal of surplus assets.

National Defence’s response: The Department continues to face many challenges and competing priorities that impede its ability to increase defence support productivity. Notwithstanding the massive organizational, financial,

Exhibit 32.6

Analysis of Lack of Progress in Implementing 1996 Recommendations

| 1996 Recommendation Reform Audit Area | Model Category that Best Describes Lack of Progress | | | |
|---------------------------------------|---|---------------------|----------------------|-----------------------|
| | Normal | Competing Pressures | Ideological Problems | Transitional Problems |
| Business Planning | | 1 | | 2 |
| Operating Budgets | | 2 | | 1 |
| Culture | | 1 | Y | |
| Change Co-ordination | | 1 | | 2 |
| Alternative Service Delivery | | | 1(X) | 2 |
| Individual Training | | 1 | | 2 |
| Aircraft Maintenance | | 1(Y) | | 2 |
| Base Supply | | 1 | | 2 |
| Base Vehicle Maintenance | | 1 | | 2 |
| Base Transportation | | 1 | | 2 |

Source: Office of the Auditor General analysis

Legend:

1 – Indicates the model category “most applicable”.

2 – Indicates the model category “next most applicable”.

(X) The two major alternative service delivery projects we reviewed may result in job losses or significant employment changes for the Department’s civilian employees and the military members of the Canadian Forces.

(Y) There has been some positive progress toward improving aircraft maintenance productivity, but efforts to implement a quality management system are low on the list of the Air Force’s priorities.

doctrinal and cultural changes that this Department has been undergoing, some substantial improvements have already been made. For example, the business planning process has resulted in a greater awareness of the need to consider the resource impacts in defence decision making at all levels. It has been a significant tool in helping all levels cope with the implementation of reduced budgets by fostering fundamental change as opposed to arbitrary budget reductions and non-prioritized change programs. Another significant achievement has been the Department's recently introduced strategic plan entitled, "Shaping the Future of the Canadian Forces: A Strategy for 2020". This document will provide the overarching guidance necessary to manage change in the future.

As one of twelve pilot departments, National Defence is committed to the development of a Modern Comptrollership Action Plan that will move it toward a modern management agenda. This Action Plan is founded on a baseline study that identified priority areas for improvement. In light of high workloads identified in the Public Service survey and the Department's own D2000 survey, the Department has decided to build upon four key management initiatives already under way rather than launching new projects to address all priority areas. These key management initiatives form the pillars of the Modern Management Action Plan, the Financial Information Strategy, the Integrated Defence Management Framework, the Information Management Strategy, and Human Resources initiatives. A key commitment has been made to managing the integration of the four pillars of modern management through a governance structure led by the Deputy Minister.

The Department acknowledges that its progress with respect to some of its costing

objectives has been less than hoped. However, this slow progress pertains principally to the fully integrated implementation of activity-based costing. Preparing for Y2K and responding to other governmental priorities such as the Financial Information Strategy and the implementation of accrual accounting have resulted in largely unavoidable delays in integrating activity-based costing throughout the Department. Regardless of the challenge we still face in terms of achieving a fully integrated activity-based costing capability, the Department's decision-making process has not suffered in the interim. Decision makers have access to a considerable amount of information, particularly at the strategic level. In fact, very few public sector organizations produce as much costing information and guidance as does National Defence. Despite this success, the Department has plans to further develop both cost and performance information. The comprehensive evaluation of information needs for management at all levels is being conducted through the development of the Integrated Defence Management Framework. With respect to performance measurement, the development of the Department's performance measurement framework is an iterative process that will continue to be refined. An important milestone in this development is the inclusion of performance measurement targets for 2001.

The Department will continue to implement change activities that will have a positive impact on defence support productivity. That said, the business planning process rationalizes the decision process to ensure that those activities that have the highest impacts on delivery of the capabilities called for in the 1994 White Paper are carried out while reducing or eliminating lower-priority activities.

Management renewal efforts remain a work-in-progress largely because of the lack of resources to properly complete them and the lack of an overall plan against which efforts can be assessed.

Conclusion

32.127 Overall, the Department's five-year renewal program remains a work-in-progress. The base/wing defence support organizations have undergone significant organizational, operational and process changes. Neither we nor the base/wing resource managers can determine whether these changes have increased or decreased the productivity of vehicle maintenance, supply and transport operations.

32.128 The key tools introduced as part of the renewal program, namely business plans and operating budgets, continue to evolve as management tools.

32.129 Departmental business plans at all levels do not address the measurement of productivity through use of any target performance information. Most base/wing level organizations are attempting to identify the data sources from which to develop performance information.

32.130 There have been significant unintended consequences from the introduction of operating budgets. The Department has recognized this and is in

the process of developing action plans to address the situation.

32.131 The failure to track and report the results of the major re-engineering exercise at National Defence Headquarters, which finished in June 1997, leaves a significant gap in what has really been achieved by those having the responsibility to implement the plans. The Department's efforts to change its culture to a more businesslike environment also remain a work-in-progress. The newly created Directorate of Strategic Change has responsibility for addressing the various change initiatives and the cultural reform initiative.

32.132 Efforts to improve the productivity of aircraft maintenance appear to have been successful, although the introduction of a management program for maintenance of quality has been delayed.

32.133 We can only conclude that much remains to be done before the productivity of defence support functions can be measured and the results used in making such functions more cost-effective.



About the Audit

Objectives

The objectives of the audit were:

- to report to Parliament on whether recommendations and observations raised in our 1996 chapter had been addressed by National Defence;
- to determine whether management action taken would likely correct deficiencies;
- to re-audit support productivity in the areas of individual training, base commercial vehicle maintenance and base transportation for the four intervening years (1996 to 2000), and report to Parliament on the changes; and
- to determine the reasons for delays in implementing our 1996 recommendations to improve defence support productivity.

Scope

We examined each of the recommendations made in our 1996 chapter. For review purposes, we classified each of the recommendations into one of two groups.

For the first group of recommendations, we performed a re-audit and attempted to re-measure the progress toward improving support productivity. This group included the base/wing commercial vehicle maintenance and transport support functions and the individual training function at the schools and managing authority level. We were only able to re-measure the individual training function because of massive organizational and process changes in the other support areas.

For the second group of recommendations, we conducted interviews with officials at the national, regional and base/wing levels. We also gathered and analyzed documentation to support the Department's contentions on management action taken. This group included business planning, operating budgets, culture, change co-ordination, two alternative service delivery projects, aircraft maintenance, base/wing supply operations and information to Parliament.

In particular, we drew review data on business planning, operating budgets and other information from a set of information requests sent to 23 bases/wings and 33 squadrons. In addition, we gathered information on issues related to individual training by sending information requests to 42 schools and the four managing authorities that oversee the schools.

Criteria

To assess the progress made on implementing our recommendations, we used the goals specified by the Department in its initial response to the 1996 chapter. Where applicable, we also reviewed trends over time and management action taken or about to be undertaken to address the deficiencies identified in 1996.

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Appendix

Departmental Progress Made Against 1996 Recommendations of the Auditor General

| Recommendations | Assessment of Progress | | |
|---|------------------------|---------------|---------|
| | Fully met | Partially met | Not met |
| National Defence should ensure that it maintains a centre for the co-ordination of change. The centre should continue to track the activities of major initiatives, address common problem areas, and report to senior management. In addition, it should continue to ensure that procedures are in place to communicate information on best practices and bring any delays or conflicts to the attention of senior management (paragraph 34.32). | | | √ |
| National Defence should continue to monitor those employee beliefs and values on which its new management system depends. It should strengthen measures to ensure that management systems support the desired culture (34.41). | | | |
| National Defence should develop and make available cost and performance data to support business planning. It should establish dates by which such data are to be available at each planning level (34.47). | | √ | |
| National Defence should ensure that managers know how to use operating budgets and should provide them with incentives to do so (34.54). | | √ | |
| National Defence should move as quickly as possible to communicate information throughout the entire Department on the improvements achieved by the three most successful bases (34.68). | | √ | |
| National Defence should monitor transaction costs and volumes per employee as indicators of performance. Performance data should be readily available to managers (34.69). | | | √ |
| National Defence should install productivity measurement in all base transportation sections. It should set a date by which measures will be in place and set goals for raising the productivity of below-average units (34.78). | | √ | |
| The Department should monitor the productivity of personnel in base transportation operations and adjust the number of personnel according to needs (34.79). | | | √ |
| National Defence should review and manage the impact of the age of its vehicle fleet on overall vehicle maintenance productivity and make whatever changes are necessary to increase productivity (34.85). | | √ | |
| The Department should assess the results of the disposal pilot projects and conduct such negotiations with the Treasury Board as are necessary to reach the most cost-effective solution, including determining what incentives should be built into the overall system (34.86). | √ | | |

| Recommendations | Assessment of Progress | | |
|--|------------------------|---------------|---------|
| | Fully met | Partially met | Not met |
| The Department should maximize its use of the vehicle warranties it has purchased (34.87). | | √ | |
| Air Command should apply the lessons learned at Cold Lake at all bases possible (34.99). | | √ | |
| Air Command should provide unit managers with reliable cost information at the earliest possible date in order to improve decision making and accountability (34.100). | | √ | |
| National Defence should assess its need for any instructors and support staff above the 1990 level per student as soon as possible and adjust staff levels on a continuing basis thereafter to meet actual needs (34.108). | | | √ |
| National Defence should develop meaningful measures of its support activities and should include the most significant ones in its reporting to Parliament (34.111). | | | √ |

Source: Report of the Auditor General of Canada, Chapter 34, National Defence – Support Productivity, 1996.