

Chapter 27

National Defence

Alternative Service Delivery

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National Defence

Alternative Service Delivery

Main Points

27.1 The Alternative Service Delivery (ASD) program at National Defence — a search for new and better ways of providing government services — is still in its early stages and has made gains at a slower rate than the Department had initially expected. Unconfirmed departmental estimates suggest that savings are currently about \$68 million. Given the Department's \$3.5 billion annual expenditures on support services, considerable scope for savings remains. In 1996 it projected that annual savings would reach \$200 million by 1999. Based on results to date, however, the Department has revised this projection to \$175 million a year by 2004.

27.2 Many of the business case analyses for the 14 projects we audited were poorly done. Options were not always adequately assessed or the best option chosen. Personnel appeared to lack the necessary skills to undertake analyses. The Department has taken steps to improve its management of more recent ASD projects and believes it has corrected the earlier shortcomings.

27.3 The government lacks an adequate policy framework for “partnering” with the private sector and contracting out large service programs. In particular, the \$2.8 billion NATO Flying Training in Canada contract:

- was let without competition, contrary to government contracting policy and regulations, thus forgoing the benefits of price competition; and
- did not follow Public Works and Government Services Canada's profit policy and guidelines for sole-source contracts, and profit markups were not supported by adequate analyses.

27.4 Inflexible contract arrangements resulted in payments for unused training capacity. For example:

- The Meaford Area Training Centre is operated under a \$40 million five-year fixed-price contract. However, it was used at only 43 percent capacity in 1998.
- The Canadian Aviation Training Centre, Portage-la-Prairie operates a flying training program under a \$165 million contract; it was substantially underutilized during the first six years.

Background and other observations

27.5 According to National Defence, the aim of its ASD program is to provide a framework for departmental managers to pursue best value for the defence dollar in non-core activities. Through the program, it hopes to identify and use the most cost-effective ways of delivering support services, which constitute about one third of the Department's \$10.3 billion budget. We noted that many of the activities being considered for the ASD program have already achieved savings through downsizing and re-engineering.

27.6 When the Department launched the ASD program in 1995, it set a goal of saving \$200 million a year by 1999 and \$350 million a year by 2001. We audited 14 of its 40 active ASD projects. We audited only government actions and our observations imply no criticism of any third party supplying services to the government.

The responses of National Defence, the Treasury Board Secretariat and Public Works and Government Services Canada are included in this chapter. National Defence is taking action to address all our recommendations. In particular, the Department is devoting a higher level of management attention to ASD projects and ensuring that staff are adequately trained.

With respect to our concern about the lack of an adequate policy framework for “partnering” with the private sector, the Treasury Board Secretariat and Public Works and Government Services Canada are currently participating in an interdepartmental initiative to reform procurement that will include, among other matters, work on guidance for large, multi-year service contracts.

National Defence believes that the NATO Flying Training in Canada program is innovative and will provide good-quality pilot training at a lower cost than the current training system or any other training option in the foreseeable future.

Introduction

The 1994 Defence White Paper called for major cuts in defence spending

27.7 In 1994 the government issued a revised defence policy that directed National Defence to operate with fewer resources, fewer people and less infrastructure. The policy also called for the Department to adopt better business practices and continue seeking new ways to support the operational forces. In-house support activities were to be transferred entirely to Canadian industry if business case analyses demonstrated a potential for increased cost effectiveness, or shared with private industry under various partnership arrangements.

27.8 To implement the 1994 policy direction, National Defence developed a comprehensive five-year renewal plan containing five key elements: downsizing, infrastructure rationalization, management renewal, better use of information technology, and alternative service delivery (ASD).

27.9 Alternative service delivery is a term that refers to a systematic search for new and better ways of providing government services. The government-wide policy on ASD is contained in a Treasury Board Secretariat guidance document issued in 1995, entitled *Framework for Alternative Program Delivery*. That document sets out basic principles and criteria for assessing whether and how the delivery of government programs, activities, services and functions could be changed to better meet government objectives or provide better value. Departments are expected to deliver programs and services as efficiently as possible, whether with in-house staff and resources or through an external supplier. This approach needs to be based on a good understanding of outputs, levels of service and costs of delivery. According to the Treasury Board policy, alternative means of program

delivery should cost not more and preferably less than traditional methods.

27.10 The aim of the National Defence ASD program is to provide the framework within which the Department's managers pursue best value for the defence dollar in non-core activities. Best value is determined through business case analyses of available delivery options.

Alternative service delivery policy and program structure

27.11 In November 1996, the Department issued a guide to applying the ASD methodology in order to assist managers in selecting the best ways to conduct non-core activities and deliver internal services.

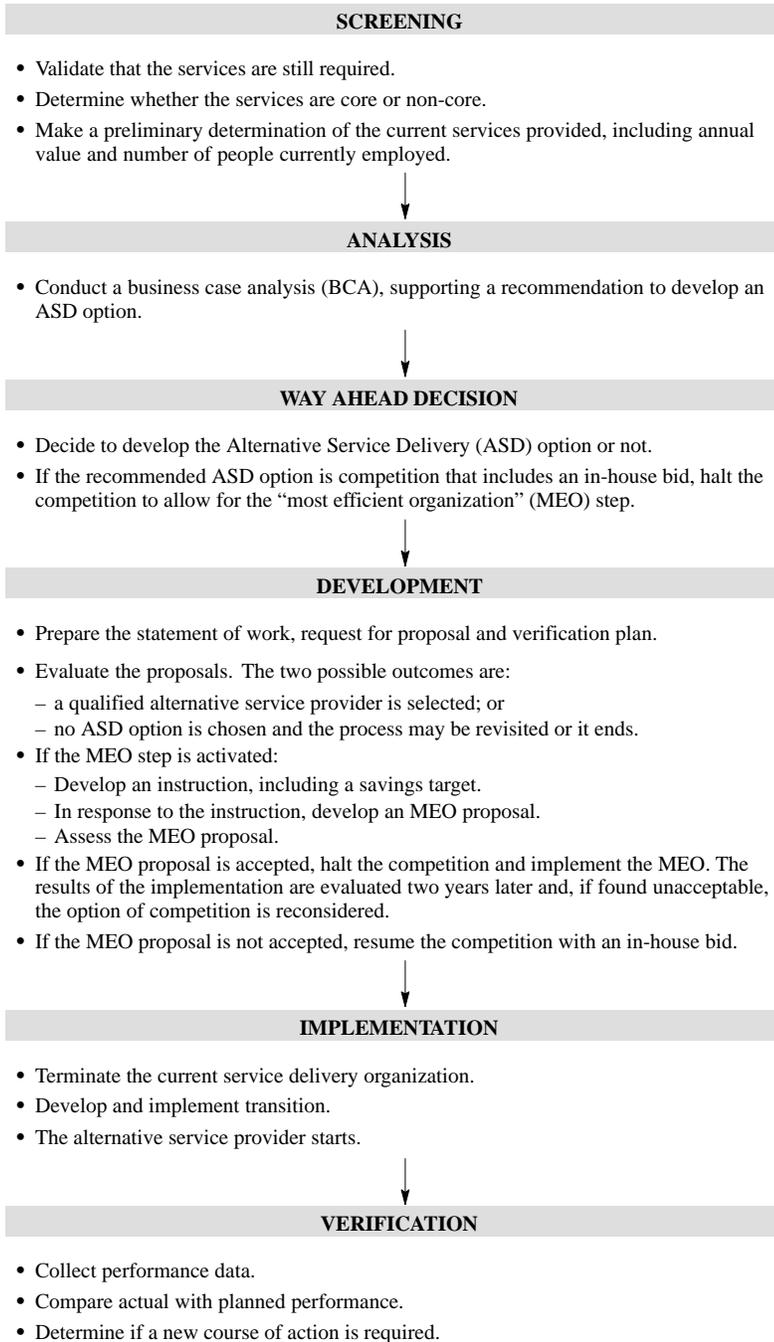
27.12 Centrally managed ASD projects are under the executive authority of the Deputy Minister and the Chief of Defence Staff. Other ASD projects are under the executive authority of commanders and group principals. The Vice Chief of the Defence Staff (VCDS) oversees the ASD program and the centrally managed projects, supported by a steering committee at the assistant deputy minister level with membership from unions, Treasury Board Secretariat, Public Works and Government Services Canada and independent brokers. Other steering committees support commanders and group principals for specific projects under their executive authority. An ASD directorate under the VCDS and the Director General Management Renewal Services provides central policy direction and guidance, develops methodologies and processes, co-ordinates the identification of ASD projects, provides facilitation services to commands and groups and monitors and reports on the progress of ASD activities.

27.13 Moreover, commanders and group principals each have an ASD co-ordinator for the ASD reviews in their areas. These co-ordinators are the primary points of contact for information about individual ASD reviews. Each ASD

The Alternative Service Delivery (ASD) program provides the framework within which the Department's managers pursue best value for the defence dollar in non-core activities.

Exhibit 27.1

Overview of the Alternative Service Delivery (ASD) Process



review is managed and implemented by its own project team, reporting to the executive authority through a steering committee.

27.14 The Department’s ASD review process (see Exhibit 27.1) is consistent with the Treasury Board Secretariat’s *Framework for Alternative Program Delivery*. The ASD program is integrated with the Department’s business planning process. Service chiefs of staff and group principals are responsible for identifying for ASD review their non-core activities that meet criteria established by the Defence Management Committee. These include:

- activities with a minimum annual value of \$5 million to \$10 million;
- department-wide support activities such as supply distribution, finance, information management systems and technology;
- multi-activity packages, for example, base and unit support services;
- cross-organizational activities; and
- discrete (stand-alone) activities.

Focus of the audit

27.15 The objective of our audit was to determine how well National Defence is managing its Alternative Service Delivery program and the extent to which it has progressed toward ensuring that non-core support services (which consume approximately one third of the Department’s \$10.3 billion annual budget) are delivered to core defence activities in the most cost-effective way.

27.16 We audited 14 completed projects initiated between 1994 and 1996 that represent a broad cross-section of departmental support services. Although five of the projects had begun before the ASD program was initiated, they have the characteristics of ASD projects. The other nine projects were selected from the 40 reviews of support service activities that National Defence has undertaken since

introducing the ASD program in 1995. Exhibit 27.2 lists the projects selected for audit; a brief description of each is provided in the Appendix to this chapter.

27.17 We audited the following aspects of the ASD program:

- the strategic framework;
- the analytical framework (business case analysis);
- human resource management; and
- contracting.

Further information on our objectives, scope and criteria can be found in the section **About the Audit**.

Observations and Recommendations

Achievement of Savings Slower Than Expected

27.18 In our 1996 audit of support productivity in National Defence, we noted that the Minister's goal was to produce the defence capabilities described in the 1994 Defence White Paper with 25 percent fewer resources. We reported that to meet this goal, the Department needed to improve the productivity of its support services. The ASD program and the Department's re-engineering initiative are part of its efforts to improve support

Exhibit 27.2

Alternative Service Delivery Projects Audited

ASD Project Name	External Contract	Service Agreements	Retained Current Arrangement	Annual Budget (\$ millions)
Project Genesis*				700.0
NATO Flying Training in Canada (NFTC)*	X			140.0
Fleet Maintenance Facilities – East and West			X	85.0
Canadian Aviation Training Centre*	X			33.0
Military Pay*			X	33.0
Goose Bay Support Services	X			27.0
Auxiliary Fleet Operations and Manning – East and West			X	14.0
Meaford Area Training Centre*	X			13.4
Automated Test Equipment CF-18	X			12.0
Aerospace Engineering Test Establishment			X	11.0
Munitions Experimental Test Center – Nicolet	X			11.0
Food Services Trenton		X		3.4
National Defence Headquarters Facilities Management		X		2.6
Publications Depot		X		2.5
Total				1,087.9

* These projects were initiated prior to the promulgation of the ASD policy and the release of the ASD methodology.

National Defence estimates that projects so far have resulted in approximately \$68 million in annual savings, far short of the \$200 million originally expected by 1999.

service productivity and increase cost effectiveness.

27.19 This audit focussed primarily on the ASD program, although in many cases re-engineering is an essential element of the ASD process — particularly when in-house teams are bidding for a contract to provide services. Our 1996 audit indicated that while re-engineering had been under way for several years, productivity had actually declined in some areas. In testimony before the Public Accounts Committee, senior departmental officials stated that implanting cost-consciousness and a more businesslike approach in National Defence would require a cultural change and would take a considerable period of time. Our current audit found that the needed change is not yet complete.

27.20 The Canadian Forces are sustained by a national support system that provides personnel support, equipment, food, fuel, maintenance and training. Since 1994, National Defence has been pursuing a comprehensive renewal effort in order to allocate more of its resources to defence operations and less to support functions. The ASD program is an important element of this renewal effort. In May 1996, the Defence Management Committee (DMC) estimated that the ASD program would result in annual savings of \$200 million by 1999, increasing to \$350 million by 2001.

27.21 Due to delays in implementing the initial list of 18 ASD initiatives and a slower-than-expected pace in identifying additional ASD projects, the Department has revised its projection of ASD savings to \$175 million a year by end of the planning period 1999–2004.

27.22 We were unable to verify the actual savings achieved in any of the ASD projects we audited. Most have not been established long enough to measure cost savings. Further, baseline costs had not been established for a number of the projects, and, in a number of others, we

could not satisfy ourselves that the estimates of baseline costs were comprehensive and accurate.

27.23 The 40 ASD reviews begun to date cover support activities that employ over 16,000 civilian and military personnel. The annual budget for these activities is about \$1.3 billion, less than half the total value of all non-core support services that were or could be potential candidates for ASD reviews.

27.24 By June 1999 the Department had completed 18 ASD reviews of support services whose annual budgets total about \$202 million. Defence officials now estimate that alternative delivery of those services will realize recurring annual savings of about \$68 million. This is approximately 30 percent of the \$200 million target for 1999, established when the ASD program was initiated in 1995.

Other defence organizations are also having difficulty achieving savings targets

27.25 We compared the Department's experience in implementing its ASD program with experience in the United States, the United Kingdom and Australia, where defence departments are implementing similar programs. We found that these countries are also encountering delays in implementing their contracting-out programs and are having difficulty achieving their initial savings targets.

27.26 United States. The U.S. Department of Defense has conducted studies of public/private competitive sourcing for commercial activities that affect over 200,000 military and civilian positions. Based on the results, it established an ambitious savings target of approximately \$11 billion between fiscal years 1997 and 2005. However, recent studies by the General Accounting Office have questioned whether the projected cost savings could be achieved by outsourcing. U.S. Defense officials have

also indicated that budget reductions and downsizing of civilian personnel in recent years could make its savings projections difficult to achieve.

27.27 Australia. The Australian Department of Defence implemented its Commercial Support Program (CSP) in mid-1991. The CSP identifies non-core activities and exposes them to competitive tendering. It offers industry the opportunity to compete for some work previously done exclusively by military and defence civilian personnel. Early estimates indicated that savings from CSP could be in the region of \$350 million a year. In 1996, after five years of the program, the Australian Minister of Defence indicated that progress had been far too slow and that the program had achieved annual savings of \$121 million a year. In July 1998, the Australian National Audit Office reported that the Department of Defence was claiming annual savings of \$155 million — about half the initial estimate. The report also noted that actual savings were difficult to determine because the Department's financial systems lacked the ability to track savings.

27.28 The United Kingdom. The United Kingdom Ministry of Defence, which has been operating the Competing for Quality Program since 1992, is reporting estimated savings of £366 million a year. This is equivalent to some 22 percent of the previous total annual operating cost of these activities, although no figures on actual savings are available. The Ministry of Defence sought to maximize the benefits of Competing for Quality through tighter arrangements for profit sharing and pricing, changes in workload, and better management of inventories. A 1996 study conducted by the Cabinet Office's efficiency unit looked at the program across the government and analyzed the first three years, 1992–93 to 1994–95 inclusive. It estimated net savings (taking into account the estimated costs of the Competing for Quality process) at between 13 and 15 percent,

although no figures on actual savings were available.

27.29 Based on experience in other countries, it appears that National Defence's initial projections of savings may have been overstated. Caution should be exercised in making estimates about the overall savings the program can achieve.

Business Case Analyses

27.30 As part of the methodology for conducting ASD reviews, the Department's ASD policy requires that business case analyses be prepared to support all ASD decisions. The business case is to contain a broad range of information that must be considered before the decision is made to outsource the delivery of a non-core support activity or retain it in-house.

27.31 While we audited several projects that predate the ASD policy, the requirements for business case analysis are basic and represent due diligence in the expenditure of government funds. We therefore expected that projects undertaken before the policy was issued would demonstrate the same level of care as the others in our sample.

27.32 We found that business case analyses had been conducted in 8 of the 14 projects selected for our audit, and not conducted at all in 4 projects. We were unable to audit business case analyses for the 2 remaining projects because the information was not available.

27.33 We assessed the business case analyses using the following criteria contained in the Department's *Costing Handbook*:

- the aim of the business case analysis, the key assumptions and constraints should be established, understood and articulated;
- the level of service should be sufficiently defined;

Business case analyses were completed in only 8 of the 14 projects we audited.

- the baseline costs of the support service activity should be established;
- critical success factors should be established in advance to measure the extent to which feasible options meet desired objectives;
- each feasible option developed should be assessed against the capability and willingness of the marketplace to provide the service, including the

existence of competition in the marketplace;

- feasible options should be subjected to detailed cost and risk analyses; and
- the best option should be determined based on an analysis of quality, risk and cost effectiveness.

Exhibit 27.3 provides a summary of our findings on the 14 projects we audited.

Exhibit 27.3

Overview of Business Case Analyses

Project	Aim	Level of Service	Baseline Costs	Success Factors	Feasibility of options	Adequacy of options analysis	Selection of best option
<i>Contract service out to industry</i>							
NATO Flying Training in Canada (NFTC)*							
Goose Bay Support Services (GB)							
Automated Test Equipment CF-18 (ATE CF-18)							
Munitions Experimental Test Centre (METC) – Nicolet		N/A					
Meaford Area Training Centre*							
<i>Contract awarded to in-house bid</i>							
Food Services Trenton							
Publications Depot – CF (Pubs Depot)							
<i>Retain current arrangement</i>							
Fleet Maintenance Facilities (FMF) – MARPAC/MARLANT							
Military Pay*							
Auxiliary Fleet Operations and Manning – MARPAC/MARLANT							N/A
Aerospace Engineering Test Establishment (AETE)							
Project Genesis*					N/A	N/A	N/A

Not met Mostly not met Mostly met Fully Met

* These projects were initiated prior to the promulgation of the ASD policy and the release of the ASD methodology.

Canadian Aviation Training Centre and NDHQ Facilities Management are not shown here because we were unable to conduct an analysis due to unavailability of data.

The aim was clear in most cases

27.34 In the project files that contained a formal business case analysis, a clearly stated aim was included. However, we could not find a formal analysis for Goose Bay Support Services, the Meaford Area Training Centre, the Aerospace Engineering Test Establishment or the NDHQ Facilities Management project. We found a number of associated studies, some of which partially addressed our audit criteria; however, none was comprehensive enough to constitute a business case analysis.

The existing levels of service were unspecified

27.35 Comparing present service delivery with an alternative form requires knowledge of the quantities, qualities and costs of existing service levels. We found that existing service levels had been known in only three projects. For the others, analysts had to develop the information using historical data. This task consumed significant internal staff time and funds for external consultants.

27.36 In the case of the Fleet Maintenance Facilities, the decision was to retain the current method of service delivery until fundamental issues of capability and capacity are resolved.

27.37 Neither the Aerospace Engineering Test Establishment nor the Meaford Area Training Centre had established service levels before the ASD reviews.

27.38 In the Auxiliary Fleet Services, neither the East nor the West Coast unit had established service levels. However, as part of the business case analysis, the analysts did develop past levels of service from historical records and data. Both East and West Coasts are still in the process of establishing service levels for tug operations.

27.39 At the Department's request, we reviewed Project Genesis, an Air Force

multi-project effort to preserve a viable fighter force by making force reductions and reducing support costs. We found that costs had been reduced substantially by various means, the greatest portion by reducing the size of the fighter fleet and the North Warning System. However, we are concerned that the air force did not — and still does not — have adequate measures of readiness and sustainment to ensure that reductions in flying hours will not reduce air force capabilities below the required levels. This means that the full impact of these changes cannot be determined.

Establishing baseline costs for existing support services proved difficult

27.40 We found that some project teams had difficulty developing baseline costs. Support service activities are almost always funded by more than one budget; for instance, the Fleet Maintenance Facilities use funds from the budgets of the Assistant Deputy Minister (Materiel), Maritime Forces Atlantic and about eight other units of Canadian Forces Base Halifax. The use of numerous funding authorities inevitably makes it difficult to develop baseline costs.

27.41 In the Goose Bay project, the decision to contract out support services was not based on a sound analysis of in-house costs. In order to evaluate all feasible alternatives, ASD methodology requires that baseline costs be established in advance. We found that baseline costs were rigorously established only after the decision had been made to submit support services to competition.

27.42 Departmental publications claim that the operation of the Meaford Area Training Centre, opened in July 1995, has been an ASD success story. The changes to Meaford originated in a departmental program that predated the ASD program. Although we did find a study that predated the opening of the Centre, it did not adequately define the baseline cost as derived from similar training operations.

Service levels and baseline costs continue to be difficult to establish. The full impact of change cannot be determined.

Two separate costing studies on Meaford highlight the difficulties in developing accurate baseline information when there have been significant changes in service delivery levels. Studies by both departmental staff and external consultants found it difficult to determine whether savings had been achieved. A study completed in May 1999 contained estimates ranging from annual savings of \$800,000 to a loss of \$300,000, depending on the assumptions made. Officials agreed that the training centre is larger than required, but estimates of the costs of unused capacity varied widely.

27.43 For the NDHQ Facilities Management project, it would appear from the very limited information provided to us that baseline costs were incomplete. This will make it difficult to determine cost savings.

Success factors were defined for most projects

27.44 The success objectives of the ASD initiative were to be clearly defined and were to include one or more of the following goals: increased efficiency; increased cost-effectiveness; improved quality of service; and improved work environment.

27.45 For most projects we examined, the business case did define the critical success factors against which feasible options were compared. However, we did not find any predefined success factors for the Meaford Area Training Centre and Goose Bay projects.

The feasibility of options was not always assessed

27.46 The capability and willingness of the marketplace to compete for a service contract must be assessed to determine if it is sufficient to warrant a change to alternative service delivery. While the market was assessed in many of the projects, in some it was not.

27.47 The \$2.8 billion NATO Flying Training in Canada project was initiated when National Defence received an unsolicited proposal in late 1994 from a private sector firm to provide a NATO flying training program. This proposal eventually became the preferred option. Options for the future Canadian Forces pilot training system had been defined in the spring of 1994 for further study, and informal discussions with the contractor had taken place for at least seven months before the unsolicited proposal was received. NFTC was added to the options in May 1995. Once it had reviewed the NFTC proposal, National Defence did not explore the level of competition that existed in the marketplace. In October 1997, the Treasury Board approved a submission by Public Works and Government Services Canada on behalf of National Defence for a non-competitive contract with Bombardier Inc. to deliver the program. Although there was probably insufficient time between the unsolicited proposal and NATO's deadline for the government to tender the project, we have concerns about the decision to sole-source, which are outlined in the case study on page 27–15.

27.48 The ASD process for the Aerospace Engineering Test Establishment proceeded to competition even though a 1995 market feasibility study had concluded that there was limited market demand for the use of the facilities involved. The negative implications of the market feasibility report were not properly reflected in subsequent decision making. This is significant, given that the ability of a contractor to successfully market spare range capacity was an essential component of the deal put forward by National Defence.

The options analyses for some projects were inadequate or incomplete

27.49 We expected to find that each feasible option identified would be assessed for its qualitative strengths and weaknesses, costs and risks. We found that

(continued on page 27–18)

Case Study – NATO Flying Training in Canada

Background

The NATO Flying Training in Canada (NFTC) program is an undergraduate and postgraduate military pilot training program offered by the Government of Canada, in co-operation with industry, to NATO and other nations seeking affordable military flying training solutions. NFTC is viewed by National Defence as a co-operative approach to training military jet pilots, based on a partnering between government and industry. Canadian and NATO air force pilots will provide the flying instruction. The industry team, led by Bombardier Inc. Defence Systems Division, will provide the aircraft, training simulators, training material, airfield and site support services, aircraft maintenance services and other services. Under the terms of the contract, the military fighter pilot training program will be made available to the Canadian Forces as well as to the military air forces of other nations who choose to participate. Since the NFTC project was initiated prior to the implementation of the ASD program, it is not being managed under the ASD management framework.

In addition to the primary objective of developing a cost-effective pilot training program, NFTC is supposed to achieve a number of other benefits. These are:

- creating employment;
- keeping the base at Moose Jaw open;
- demonstrating the capabilities of Canada's aerospace industry; and
- making a significant contribution to NATO.

Officials also informed us that National Defence had insufficient capital funds to renew its training aircraft fleets. One of the ways to combat the "rust out" of the existing fleet was to implement a service contract that required annual installment payments.

In 1996, National Defence obtained Cabinet approval to enter into a 20-year, \$2.8 billion sole-source contract with Bombardier Inc. to provide support to the NFTC. The legal relationships underlying this arrangement are complex and interdependent. The flight training will take place at Canadian Forces Base Moose Jaw and the base in Cold Lake. The government has licensed the use of these bases to Milit-Air Inc., an independent

non-profit organization incorporated for the sole purposes of the flight-training program. The organization is not subject to control by either Canada or Bombardier Inc. Milit-Air Inc. will purchase the planes, flight simulators and other equipment with the proceeds of a \$720 million bond offering. Bombardier Inc. has been appointed Milit-Air Inc.'s agent for the negotiation and purchase of the equipment. In addition, Milit-Air Inc. has granted Bombardier Inc. the right to use the facilities at the bases for flight training. By way of a separate agreement, Milit-Air Inc. has leased the equipment to Bombardier Inc. Under the Canada Services Agreement, Bombardier Inc. provides certain ground-based training and maintains the planes, equipment and base facilities; Canada pays tuition fees.

The tuition fees payable by Canada comprise several components: transition fees, firm fixed fees, firm fees (covering maintenance of aircraft and administration of premises), variable fees (covering life-sensitive spares, consumable spares and engine overhauls) and reimbursable costs (oxygen and petroleum). The firm fixed fees are payable semi-annually for 20 years, whether or not Canada trains the full number of pilots it is entitled to under the agreement. However, the agreement allows Canada to sell some of its unused pilot training to other countries. The firm fixed fees are sufficient to cover the semi-annual payments of principal and interest that Milit-Air Inc. is required to make to its bondholders. Bombardier Inc. has assigned its right to receive the tuition fees to a Collection Trustee. Once the Collection Trustee receives the tuition fees from Canada, the rental payments owed by Bombardier Inc. to Milit-Air Inc. for the planes and equipment are deemed to have been paid. The Trustee then pays to the Bondholders' Trustee the portion of the firm fixed fees equal to the principal and interest due on the bonds. The remainder of the firm fixed fees is held for the benefit of Milit-Air Inc. to cover its reasonable normal operating expenses. The other components of the tuition fees are paid to Bombardier Inc. for services rendered under the Canada Services Agreement.

If the Canada Services Agreement is terminated, Canada is obliged to assume

Bombardier Inc.'s rights and obligations under the lease agreement for the planes and equipment and to continue the rental payments for the equipment. These payments will, in turn, continue to provide the means for Milit-Air Inc. to meet its obligations to the bondholders.

Most of the training will take place at Canadian Forces Base Moose Jaw, Saskatchewan and some will occur at the base in Cold Lake, Alberta. According to the Department, the role of the Canadian military will consist mostly of conducting the flying training, overseeing the contractor support, managing the training content and standards, running the air traffic control and providing site services at Cold Lake. Bombardier Inc. will be responsible for the provision and support of aircraft and simulators, ground school training, classroom training systems and site maintenance services at Moose Jaw. This commercial option is similar to a number of others under the ASD program, which was developed to move various internally provided support services to the private sector when it makes business sense to do so.

About \$1.3 billion of the contract funds will be used to acquire flight simulators and a new fleet of 42 military training aircraft to replace National Defence's existing fleet of Tutor aircraft that, according to departmental studies, could have been refurbished and made to last until the year 2015. The remaining \$1.5 billion will be used by the Bombardier-led industry team to maintain the aircraft and the simulators, manage the base in Moose Jaw, and provide ground school instructors. National Defence will provide the overall management of the NFTC program as well as the flight instructors. The first flight instructors were to start training in the third quarter of 1999.

We reviewed the NFTC contracting process, using the following criteria:

- the contract awarding process should meet the requirements of the government contracting policies and regulations for integrity, openness and fairness;
- the pricing methods should provide best value; and
- the financing and contracting arrangements should be appropriate.

The contract was awarded without competition

We reviewed the rationale for awarding the contract without competition and the events leading to the contract award, to determine if National Defence and Public Works and Government Services Canada had complied with the government's contracting policy and regulations. We found that the decision to award the contract without following the normal bid solicitation process for government contracting was not adequately justified.

Our review of NFTC contract files indicated that the sole-source decision was based on the following factors:

- The Bombardier Inc.-led team included all of the companies that had bid as prime contractors on a 1991 contract to supply pilot training services at Portage-la-Prairie. Bombardier Inc. was awarded that contract because it was the lowest bidder.
- The proposed industry team was the only one that indicated a "committed interest" in the NFTC program.
- The deadline imposed by NATO for submission of a proposal precluded a competitive tendering.
- The availability of a competing pilot training program in the United States, and concern among NATO nations about the costs of contracted-out pilot training compared with their domestic costs, created incentives for Bombardier Inc. to keep training costs down.

Those reasons for awarding the contract without soliciting competitive bids do not meet the conditions specified in the Government Contracts Regulations. In the fall of 1994, Bombardier Inc. proposed the idea of a National Defence/industry collaboration to establish a NATO flying training program. This led to the submission of an unsolicited proposal containing a business case in December 1994. The NATO deadline for the submission of offers to host flying training was 1 February 1995, which was later revised to 1 May 1995. The deadline for submitting a fully costed proposal was June 1996. While it is probably true that the time between the receipt of the unsolicited proposal and NATO's deadline was insufficient for the government to

tender the project, "making a deal" does not match the definition of urgency in contract regulations.

During the course of our audit, officials told us that the benefits to be gained by the deal meant that competitive tendering was not in the "public interest". This does not conform to the criteria that define "public interest" in contracting policy.

Officials also told us that because they were satisfied that all Canadian companies qualified to bid were already part of the Bombardier-led consortium, a non-competitive contract was equitable. In addition, they pointed out that the government's intention to pursue NATO participation through a sole-source contract was highly publicized and that no other company came forward. A document we examined did indicate that another firm had expressed some interest.

We remain concerned about the equity of these practices. It cannot be stated with certainty that no other competitor would have come forward, possibly as part of a consortium including a foreign firm. In addition, publicity may discourage competition by making it appear that the government has made its decision.

Finally, officials argue that because Cabinet directed that a sole-source contract be let, no compliance problem exists. However, a directed sole-source contract of this nature must comply with the regulations. If it does not fall within the permitted exceptions, an order-in-council is needed to authorize the transaction. No such order-in-council was sought or obtained.

In public statements, National Defence has stated that "partnering" is a good strategy for a contract of this nature, involving a large, complex project. However, the Government Contracts Regulations make no provision for partnering, and the terms of this contract do not indicate that it is a partnership in a legal sense. Moreover, the term "partnering" is an elusive term now being used as a catch-all to describe almost any activity involving government and non-government organizations. We found that there are no clear policies or guidelines on how such arrangements should be set up and managed.

The profit markup in the NFTC contract is not consistent with current guidelines or supported by adequate analysis of contractor's risks

In the event of a sole-source contract, Public Works and Government Services Canada's profit policy and guidelines are supposed to establish the level of profit awarded to a contractor. The NFTC contract includes a profit markup of about \$200 million over 20 years. This markup was arrived at through direct negotiations between Public Works and Government Services Canada and Bombardier Inc. Public Works and Government Services Canada officials told us that the profit policy and guidelines are not designed for a project of this magnitude, complexity and period of performance, nor for a complex financing arrangement of this nature. They also stated that the profit markup that was negotiated with Bombardier was justified by the "material" and "substantial" risks assumed by the contractor. However, they could not provide us with the detailed calculations and risk assessments they used to arrive at the profit markup included in the contract. According to officials of both departments, the NFTC program will provide the government with valuable benefits through the transfer of significant risks to the contractor over the next 20 years. Although departmental documents show the departments' estimate of contractor risk to be between \$360 million and \$460 million, they had no calculations to support this. They estimate that the risk exposure to the contractor relates to the following:

- the quantity and adequacy of the aircraft required for the program;
- future increases in aircraft and infrastructure operating costs;
- failure to obtain the expected number of foreign participants; and
- environmental risks.

We expected that the two departments would comprehensively assess the risks being transferred to the contractor and estimate the value to the Crown of that risk transfer. We were unable to establish that this had been done.

Public Works and Government Services Canada informed us that it hired an outside consultant to review the risk elements in this program. We note that the external consultant could not perform a comprehensive review of all the risks involved in the NFTC program since, at the time of his review, the agreements had not been finalized. Therefore, in our opinion the review was not sufficient to provide assurance that there is an equitable sharing of risks under the contract. Public Works and Government Services officials indicated to us that the risks of poor performance by the contractor were sufficiently moderated and managed by the provisions contained in the Canada Services Agreement. Nevertheless, the payment by Canada of \$1.3 billion in firm fixed fees is unconditional and irrevocable under the terms of this agreement, even if the contractor fails to perform. However, if Bombardier is replaced there is a provision in the contract that guarantees access to and use of the equipment for the period of the contract.

In response to our audit, National Defence officials prepared a risk summary in late September 1999 that attempted to quantify the value of the risks transferred to the contractor. While this summary clearly identified the major risks, it did not assess their probability of occurrence and their overall financial impact. As a result, it is not possible to establish the correlation between the value of the risks and the profit markup that was negotiated in the NFTC contract.

According to information provided to us by National Defence officials, Bombardier Inc. faced the risk of not recovering \$103 million of its costs if Canada were to be the only participant in the program. Based on current commitments by foreign countries, this amount has now been reduced to between \$15 million and \$30 million. Moreover, Bombardier maintains that it will earn its forecast profits only if the full, expanded program is achieved.

It would therefore appear that the risk associated with insufficient foreign participation has now been mitigated. However, the other risks mentioned above remain.

It should be noted that if the NFTC program expands beyond its current level and National Defence agrees to such an expansion, the Department is committed to paying for the additional aircraft and equipment that will be required. These costs would be recovered from the additional revenues from foreign participants. According to National Defence officials, if the program were to expand beyond its current capacity there would be significant financial benefits to both the Crown and the contractor, because the fixed costs of the program would be shared among a greater number of participants.

The chosen financing arrangements increase some risks

The NFTC program is the first example of "innovative" financing for a major National Defence capital project. This financing arrangement requires the contractor to supply most of the equipment and capital needed to provide support services. However, the Department is irrevocably committed to making the required payments to acquire the aircraft, simulators and other related assets.

The Department of Finance had suggested in late May 1997 that the Department consider purchasing the equipment directly and supplying it to the contractor as government-supplied equipment. In response, National Defence prepared an analysis of industry financing compared with government financing of the NFTC assets. We found that this analysis was not complete and that it was performed at a point when it was impractical to make any changes to the financing arrangements, since there would not have been enough lead time to purchase the

equipment and have it in place by the end of 1999,

The financing structure also posed additional risks to the government. Officials took steps to reduce the risks by including certain safeguards in the agreements with Bombardier Inc. and Milit-Air Inc. but not all risks could be circumvented. The main risk identified by Public Works and Government Services Canada is that if Milit-Air Inc. were ever to become insolvent, National Defence would face the drastic consequence of losing its access to the planes while continuing to pay the firm fixed fees. Therefore, should Milit-Air Inc. incur an expense of a type that the Department was not obligated to reimburse, National Defence would nevertheless, as a practical measure, be forced to inject the necessary funds into Milit-Air Inc. to keep it solvent. Public Works and Government Services Canada has assessed the likelihood of the occurrence of such expenses as very small. It notes, however, that their impact could be high. Officials told us that they have taken action to mitigate this risk.

The unique financing arrangements are also causing problems with the acquisition of the Raytheon T6-A aircraft and related technical data. The U.S. Department of State has serious concerns about a private company, Milit-Air Inc., owning military aircraft. It is concerned about Canada's ability to control the transfer of information and the use and resale of aircraft owned by Milit-Air Inc. The two governments have been working on a solution, and it is expected that the Canadian government will be providing the necessary assurances shortly. However, the issue is not yet completely resolved.

The fact that these additional risks are present leads us to believe that a more rigorous assessment of alternatives for acquiring the assets ought to have been prepared, and earlier in the process.

(continued from page 27–14)

Of nine projects that have gone to contract, three may not have selected the best option.

five of the projects we reviewed, including the NATO Flying Training in Canada program, did not meet our audit criteria in various respects.

27.50 The NATO Flying Training in Canada program assessed three options:

- extend the life of a portion of the Tutor fleet, close a base and use additional CF-18 flying to complete jet pilot specialty training;
- retire the Tutor fleet and purchase jet training offshore; and
- buy services from a contractor.

We found that the risk analyses associated with each option lacked quantification in numerous areas.

27.51 For the Goose Bay Support Services project, the study provided to us in lieu of a business case analysis did not analyze the contracting-out option in detail. Further, this study did not adequately define and cost the services to be provided. Nor could we find any evidence that a risk assessment had been undertaken.

27.52 We could not find a formal business case analysis or any other supporting evidence to justify the ASD contract at Meaford Area Training Centre. The limited documentation provided to us did not indicate that any other options were considered. The business case for the Aerospace Engineering Test Establishment project did not meet our audit criteria.

27.53 In the Automated Test Equipment project, the Department analyzed two internal options and one external option for providing services and purchasing equipment and spares. In the external option, the cost of the assets was based on the contractor's proposal to sell equipment and lifetime spares as a package. In the internal options, it was assumed that the Department would purchase the equipment and spares separately, which

would cost more. Our analysis indicates that if the same assumptions had been used for all three options, one of the internal options could have cost at least \$60 million less over 20 years than the estimated \$400 million cost of the external option chosen. However, the external option's ability to deal with short-term obsolescence was a qualitative factor that strongly influenced the decision.

The options chosen were not necessarily the best

27.54 Our audit criteria specified that the best option would be determined by ranking all options on the basis of qualitative issues and risks combined with the results of the cost analysis. Further, the best option would respond best to the issue or business requirement that had been defined early in the business case analysis.

27.55 In 9 of the 14 projects we audited, services have been contracted to industry, to an in-house team or to another government department. We are concerned that in 3 of the 9, including the NATO Flying Training in Canada project, the option chosen was not always supported by sufficient analysis.

27.56 In the case of the NATO Flying Training in Canada project, we have concerns about the cost effectiveness of the chosen option. We found that not all of the suggested options were adequately considered. For instance, the Department of Finance had indicated that it would be more economical for National Defence to buy the training aircraft itself instead of having the contractor purchase them. We found that although an analysis of financing the purchase of the training aircraft was performed, it was completed too late in the process, after a sole-source procurement strategy had been adopted. Also, the risk analysis was not quantified in several areas and lacked sufficient data to support the risk rating scale used to rank the options.

27.57 The Goose Bay Support Services and Meaford Area Training Centre projects lacked a business case analysis that included an analysis of options.

The Department has put improvements in place

27.58 As already noted, in 1997 the Department became concerned about the slow progress of its ASD projects. At the same time, it recognized that improvements were needed in the management of its ASD projects. It therefore took the following measures:

- An ASD Steering Committee at the assistant deputy minister level was created to oversee projects and to increase the sense of corporate urgency. The minutes of this committee indicate that new projects are subjected to a higher level of challenge and review than the projects we audited.
- The Department concentrated its efforts on four large projects: the Supply Chain, the Site Support Services project, Military Pay and Research and Development Branch.
- It made several improvements in the way business cases are developed. In the Supply Chain project, for instance, levels of service were more fully defined than in most of the projects we audited; baseline costs were established and then audited by an outside firm engaged by internal audit; and a recognized risk assessment technique was used to analyze the project.

27.59 We did not audit any of these new projects, except Military Pay, as they had not advanced far enough during the period covered by our examination. The generally favourable results of the Military Pay project indicate that management's efforts may be effective in addressing the deficiencies of earlier projects. We remain concerned that process improvements may not yet be resulting in substantive change. We intend

to review the newer projects when we undertake our follow-up to this audit.

General assessment of the business case analyses

27.60 Some elements of the business case analyses that we audited were well done: the aim was clear in most cases and success factors were defined. However, this does not compensate for failure to identify service levels, establish baseline costs or adequately assess options. The Department has already taken steps that, if followed through, should address the major deficiencies we found.

27.61 As it continues to devote a high level of senior management attention to Alternative Service Delivery projects, the Department should ensure that business case analyses:

- identify levels of service and baseline costs; and
- include adequate analysis of options.

Department's response: The Department will apply the same rigour to business case analyses for future ASD projects as it has for recent initiatives such as the Supply Chain. As new lessons are learned from the current initiatives under way, changes will be made to the ASD framework where needed.

Human Resource Management

27.62 A complete management framework is required to support an Alternative Service Delivery program. Human resource planning for ASD is an important part of this framework. Our audit examined key components of good human resource management, including training, a core/non-core assessment of military personnel, a human resources plan, a compensation plan, and a staff relations plan.

27.63 We expected to find a department-wide classification of core/non-core activities, core and

The Department has already acted to improve its business case analysis and overall management of ASD projects. It is too early to assess whether results have also improved.

National Defence still needs to provide additional guidance on determining core and non-core personnel and activities in the remaining ASD projects.

non-core personnel, and a strategy developed with the help of human resource specialists to ease the transition into ASD. We also expected work force adjustment costs to be considered in the ASD cost analyses. Finally, we expected to find communication with unions throughout the ASD process and a plan to treat employees fairly during the ASD transition, including provision of employment opportunities, continuity of employment and compensation supplements.

Gaps in training are evident

27.64 To successfully implement the ASD program there has to be a clear, easily understood methodology, and staff with the necessary skills to apply it. One major challenge facing National Defence is to ensure that staff who conduct ASD reviews have the skills to collect, assemble and analyze the information required for the business case analyses and to prepare in-house bids. The Department has developed an ASD methodology and costing guidelines; however, our audit found that training was deficient.

27.65 We found that although many of the staff were very dedicated and hard-working, in many cases they had not been trained to prepare the business cases, the detailed statements of work and the analyses needed to make ASD decisions. This lack of training was cited as a cause for concern in the 1998 Quality of Life Report prepared by the Standing Committee on National Defence and Veterans Affairs. The report noted that employees who had participated in the ASD process expressed concern that they had to prepare their ASD in-house bid submissions on their own time — after hours and on weekends — and that they entered the process as complete amateurs. In our review of business case analyses, we found wide differences in quality. The Department has recently developed ASD practitioner workshops and conducted a

number of courses in the application of ASD methodology.

Core/non-core assessments have not been timely

27.66 A core/non-core assessment includes two main components that are required for proper business case analysis: the determination of core personnel and the determination of core activities. These should be the first steps of the ASD process. Failure to complete these steps will delay ASD projects and forgo potential savings.

27.67 In 1997 the Department conducted a Combatant Capability Study that was related to determining core activities. The results of this study were presented to the Defence Management Committee in October 1997 and were among the key inputs to the Department's major corporate ASD initiatives. We found that the Department is conducting Military Occupational Structure reviews, which relate to core personnel, on a periodic basis. During our audit, we noted that some projects have had to wait for up-to-date information on occupational structures.

Human resource plans need to be finalized

27.68 If a non-core activity becomes the subject of ASD, change ensues and the jobs of individuals are affected. A human resource plan needs to be developed with the help of human resource specialists to ensure that affected employees will be treated fairly. Failure to consider human resource factors in the planning of ASD could disrupt the successful implementation of ASD projects.

27.69 Our audit findings at Goose Bay are an example of the problems that can arise when human resource factors are not properly considered. In addition to buyouts and voluntary departures, the Goose Bay initiative involved wage cuts for many employees, loss of allowances

and subsidized housing, transfer of employees to the contractor and offers of blue-collar jobs to white-collar workers. The Department underestimated the human resource impact of these changes. This resulted in extreme dissatisfaction, requiring the Minister to intervene to resolve matters. The lessons learned from the Goose Bay project have resulted in changes to the ASD policy. For example, since May 1998 a new directive has required that any new ASD initiatives that lend themselves to in-house competitive bids will first be tested for savings through a “most efficient organization” to determine if they should proceed to competition with the private sector. This step involves reviewing the in-house activity and taking the necessary steps to ensure that it is conducted in an efficient and cost-effective way. Departmental officials informed us that human resource strategies have now been developed and are awaiting final approval.

Compensation management problems appear to have been resolved

27.70 Government compensation policies, labour code provisions and work force adjustment costs must be considered when determining the costs of proposed ASD initiatives. The Work Force Adjustment Directive is a federal government policy that attempts to maximize job opportunities for public servants and ensure continuity of employment. It provides for compensation to employees who are adversely affected by ASD. The labour code includes a provision for successor rights that, under certain conditions, requires successor employers to honour existing collective agreements until they expire. This means that a contractor may be required to continue paying employees their present salaries even if they are higher than the prevailing market wage. Failure to properly include work force adjustment costs and to consider successor rights in an ASD analysis could mean that ASD initiatives are pursued that are not

cost-effective. The proper inclusion of these costs may change the relative ranking of the options being considered.

27.71 Any ASD project considering the contracting-out option is affected by government compensation policies, under which the Treasury Board currently pays salary benefits (pensions, employment insurance, etc.) equivalent to approximately 20 percent of each employee’s salary. Under a contracting-out scenario, National Defence would be responsible for paying these benefits. This means that any ASD option considered by the Department must save at least 20 percent of the salary costs of departmental staff if the Department’s budget is to receive any direct benefit from the change. A contracting-out option could offer the service at a lower overall cost to the government and still be rejected as not cost-effective for the Department. In some ASD projects we examined, it was not clear that salary benefits and costs of work force adjustment had been properly taken into account in calculating ASD costs. If they were not, the savings from these projects will be lower than expected. The Treasury Board recently indicated that it will now pay National Defence 20 percent of salary savings on future ASD projects, provided that the Department has met its targeted military and civilian personnel reductions.

27.72 The Goose Bay ASD initiative is an example of a project that did not properly consider the labour code provisions for successor rights. The Department did not obtain a timely legal opinion on the possible application of successor rights. Potential bidders were advised, during the PWGSC-sponsored bidders’ conference at a Goose Bay site visit in May 1997, that federal successor rights would not apply. In June 1997, specific questions dealing with the issue of successor rights were raised by one of the bidders. Public Works and Government Services Canada subsequently provided responses to these

Failure to co-ordinate government compensation policy created an impediment to contracting out. This now appears to have been resolved.

questions that were distributed to all potential bidders. The bidders were advised, “The final determination on the applicability of successor rights under provincial and federal legislation can only be made by the labour board of the jurisdiction to which the function is transferred. The parties to that determination are the new employer, the unions and the board. Therefore, as bidders you are strongly urged to pursue, as expeditiously as possible, the applicability of successor rights with those parties.” The Department agreed to pay the costs that would result from a subsequent decision if successor rights were found to apply. Costs associated with the potential application of successor rights were excluded from the bids. In November 1998, the Canadian Labour Relations Board issued a decision certifying that successor rights would apply at Goose Bay. The total cost that the government will have to pay as a result of the application of successor rights has yet to be finalized. Government officials told us that the cost of applying successor rights could be over \$30 million for the five-year period of the contract. The Goose Bay experience illustrates that the potential application of successor rights is an important risk factor to be considered in the planning phase of any ASD project. The application of successor rights can considerably reduce the forecast savings.

Employees were adequately consulted

27.73 Staff relations are also a very important aspect of ASD initiatives. According to the Treasury Board Secretariat, one of the key human resource factors in the success of an ASD initiative is “free-flowing communications with employees and their representatives to reduce uncertainty and ease the transition process.” If the staff relations framework is not appropriate — for example, if it fails to adequately involve the unions in the process — then ASD initiatives are less likely to succeed.

27.74 Our findings show that the unions were participants in all of the Department’s ASD projects. The minutes and letters show that they participated in meetings, but they question their level of influence on ASD decisions.

General assessment of ASD human resource management

27.75 The most serious gap we identified in the human resource aspect of the ASD program was in staff training. Adequate business case analyses are unlikely to improve until staff are trained. We also noted that progress has been made in developing human resource strategies. Additional guidance on core/non-core assessment still needs to be provided for the remaining ASD projects. At the same time, the most significant disincentive to contracting out — the issue between Treasury Board Secretariat and the Department over the payment of benefits — appears to have been resolved. We also found that there have been consultations with employees.

27.76 The Department should ensure that its Military Occupational Structure (MOS) reviews provide the guidance on core/non-core assessment required for Alternative Service Delivery projects.

Department’s response: As the military situation changes, the Department will continue to conduct periodic MOS reviews to ensure that occupational structures meet military missions as directed by the government. Pertinent information resulting from these reviews will be made available to ASD projects.

27.77 The Department should ensure that people are trained to evaluate and implement Alternative Service Delivery projects and that appropriate human resource management plans are in place.

Department’s response: With recent ASD initiatives, the Department has taken steps to ensure that the staff involved in the development of the business case analyses

were properly trained and, where gaps could not be filled in-house, that adequate expertise from outside the Department was brought in to supplement this deficiency. The Department will pursue this approach with any future ASD initiatives.

In the same vein, the Department has introduced corporate human resource strategies for employment continuity in all ASD situations both for military and civilians; consultative mechanisms with all unions both at the corporate and project levels; early involvement of human resource management specialists in ASD project teams; more frequent and direct communication with all employees; and awareness and training workshops on an as-required basis. The Department will continue to monitor results and incorporate appropriate adjustments.

Contracting

The competitive process was not always followed in the awarding of contracts

27.78 The government procurement process is based on the principles of probity, openness, transparency and the ability to withstand public scrutiny, equal access, competition and fairness. According to National Defence, the ASD program is based on a philosophy of fair and open competition. We expected to find that the normal bid solicitation process for government procurement would be used when opening non-core support services to competition under the ASD program. The Government Contracts Regulations permit sole-source contracts under certain conditions — namely, when the need is one of pressing emergency in which delay would be injurious to the public interest, the nature of the work is such that it would not be in the public interest to solicit bids, only one person or firm is capable of performing the contract, or the estimated expenditure does not exceed \$25,000.

27.79 Our audit of ASD contracts raised a number of concerns about value for money and the equity and fairness of the contracting process. The existence of sole-source contracts reduces the potential for ensuring that the Department is obtaining the required services at the most economical price. Five of the nine ASD contracts we audited, including the \$2.8 billion NATO Flying Training in Canada contract, were awarded without competition. We have concerns about two contracts, one that was awarded without competition and one that is about to be extended for a three-year period.

27.80 NATO Flying Training in Canada. We reviewed the rationale for awarding the contract without competition and the events leading to the contract award, to determine if National Defence and Public Works and Government Services Canada had complied with the government's contracting policy and regulations. We found that the decision to award the contract without following the government's normal bid solicitation process was not adequately justified. The case study on page 27–15 provides additional details.

27.81 Canadian Aviation Training Centre (CATC) — (Portage-la-Prairie). This contract with Bombardier Inc., which deals with primary flying training, basic helicopter training and multi-engine training, expired in August 1999 and is currently being renegotiated for a three-year renewal, without competition. While this contract amendment worth about \$100 million does not contravene government contracting policy, we are still concerned about the principle of competition. Departmental officials told us that in order to have a new contract in place by 1999, it would have had to issue a request for proposal in 1996. At that time, the decision to proceed with the NFTC project had not yet been made and National Defence was not in a position to

Both the government contracting process and the ASD program are based on the principles of fair and open competition. We found that some projects did not follow these principles.

The army's Meaford Area Training Centre is being operated by a contractor with a five-year, fixed-price contract of \$40 million. Only 43 percent of the Centre's capacity was used in 1998.

The government lacks an appropriate contracting framework for complex alternative service delivery arrangements. Until one is in place, compliance will be undermined and the benefits of competition forgone.

define its future flying training requirements.

Public Works and Government Services Canada profit policy and guidelines were not followed

27.82 Public Works and Government Services Canada has developed a profit policy and guidelines for determining fair and reasonable profit allowable under a sole-source contract. These guidelines indicate that the profit levels will vary to recognize the levels of general business and contractual risk assumed by the contractor and the cost of money associated with capital used by the contractor in performance of the contract. In the case of the NATO Flying Training in Canada program, the profit policy and guidelines were not followed and the analysis to justify the profit markup was inadequate (see case study on page 27–15).

The Department has purchased unused training capacity

27.83 National Defence has difficulty forecasting the level of training required and, as a result, it is paying for services and capacity it is not using. Our audit found examples of this in two of the ASD projects we examined.

27.84 Meaford Area Training Centre. The Meaford Area Training Centre is a modernized army training facility located in central Ontario that was opened in July 1995. Initially tasked to provide and maintain firing ranges, training areas, facilities and equipment for approximately 10,000 Reserve soldiers in the Ontario area, it has a total training capacity of 384,000 student-days per year. The contractor estimates that the actual utilization rate for Meaford in 1998 was approximately 43 percent of total capacity. The facility includes 44 separate buildings and structures, some 400 military and commercial style vehicles and various items of support

equipment, water and sewage facilities, refuelling and maintenance facilities, several kilometres of roads and an extensive training area. It is currently operated by a private contractor under a five-year, fixed-price contract valued at \$40 million.

27.85 Canadian Aviation Training Centre, Portage-la-Prairie. The \$165 million contract signed in 1991 with Bombardier Inc. to operate the Canadian Aviation Training Centre at Portage-la-Prairie is another, largely fixed-price, contract to operate a facility that National Defence has consistently underutilized. This is primarily due to the difficulty of forecasting future pilot training needs. The Department estimates that in the first six years of the contract, payments for unused capacity of about 20 percent amounted to a maximum of approximately \$11 million.

General assessment of adherence to government contracting policy

27.86 The government's contracting policy framework does not provide adequate guidance to departments for entering into complex alternative service delivery arrangements such as the NATO Flying Training in Canada contract. This gap needs to be filled, particularly if the government plans to retain the principles of fairness and competition when awarding large long-term contracts that involve partnering between government and industry and require complex financial arrangements.

27.87 The government's contracting policies and regulations were not followed in several of the ASD projects we examined. In particular, the NATO Flying Training in Canada contract was awarded without competition and the profit markup is not consistent with Public Works and Government Services Canada's profit policy and guidelines. The pricing of some contracts did not result in value for money, because National Defence did not need all of the services it was paying for

and there was no provision for reducing the fixed payments established under the contracts.

27.88 The Treasury Board Secretariat should include, in its continuing work on procurement reform, guidelines and training for large multi-year service contracts. The guidelines and training should address the key issues of how competition is to be addressed in situations where long-term “partnering” would be beneficial to the government.

Treasury Board Secretariat’s response:

This audit focussed on the resource management principles of ASD and how these specifically apply to contracting-out initiatives. ASD also includes other types of initiatives, including restructuring within the federal public service and partnering with others. In addition to cost effectiveness, ASD is generally expected to improve services to clients, increase management flexibility and reduce risk.

This report contains several useful practices to consider in future ASD initiatives. These will be reflected in the ASD Practice Guide and Database that is currently being developed by TBS. This tool will pull together the collective experience on ASD to guide the evolution of ASD throughout the federal public service.

With regard to the recommendation in paragraph 27.88, the Treasury Board Secretariat is currently taking the lead on an interdepartmental initiative to reform procurement. We aim to modernize procurement, addressing policy considerations that govern the full procurement lifecycle. The objective of the initiative is to help departments better serve the public through cost-effective procurement strategies while still maintaining appropriate opportunities for Canadian suppliers to compete and to uphold the integrity of the federal procurement system. This initiative should include, among other matters, work on

guidance for large, multi-year service contracts. As well, as part of procurement reform, we are committed to developing a program of training and certification for procurement specialists in departments.

Public Works and Government Services Canada’s response: *Public Works and Government Services Canada is supportive of continuing work on improving the guidelines and training for large multi-year service contracts and will be working with Treasury Board Secretariat in this regard.*

Conclusion

27.89 Overall, the ASD program has resulted in some limited success for the Department. Although we could not verify that the savings claimed by the Department have been realized, some projects appear to have been successful. Since the Department has completed only 18 projects with annual budgets totalling \$202 million, if it can resolve implementation problems there is still a potential for significant additional savings from ASD projects currently under way. These cover activities with annual costs totalling over \$1.2 billion.

27.90 The Department currently has an adequate framework to manage alternative service delivery. This framework had not yet been put into practice for many of the projects we audited. We found that improvements have been made that appear likely to address problems in the future. At the strategic level, the savings projection for the program appears to have been set arbitrarily and may not have been realistic. At the project level, business case analyses varied widely in quality. Managers appear to lack the necessary tools and training.

27.91 Our results indicate that the federal government has much to do before realizing the full advantage of service contracting. The existing government contracting policy is based on competition and assumes that a marketplace exists

from which the federal government can solicit bids. This may not always be the case, especially for large contracts where there may be only a single Canadian firm available. It appears that the government needs to consider exactly what it means by “partnering”, under what circumstances it would be advantageous, and how competition should be used to keep costs in check. Until this is done, officials will be unable to exploit commercial possibilities and will also be in danger of contravening existing regulations.

27.92 Finally, it is apparent that there is a need for the Department to exercise better business judgment. Contracts may well offer theoretical savings, but these are easily negated by poor business deals. The case of Meaford is an outstanding example of contracting for services that were not required. Public Works and Government Services Canada also needs to ensure that the profit markup on negotiated contracts is supported by an adequate analysis of the risks transferred to contractors.

***National Defence’s comment:** As a strategy to carry out the 1994 Defence White Paper operational requirements, the Department remains firmly committed to divesting itself from delivering non-core activities where it is cost-effective and practical.*

The Department acknowledges that results in terms of cost efficiencies for the ASD program as a whole have been lower than those expected for the 1999 timeframe. However, despite the difficulties inherent

in the implementation of such innovative initiatives in Canada and in other countries, our own experience in DND since 1995 demonstrates clearly that our expectations in percentage of savings at the individual project level are realistic.

The objectives underlying the ASD program are of a long-term nature. Difficulties in the implementation of the 14 early ASD initiatives that are part of this audit are not an indication that these objectives must be modified. Rather, they indicate the need to have the appropriate framework in place to support our level of commitment. The Department has learned a lot from these difficulties and, as the audit has pointed out, it has incorporated these improvements into a more effective framework, particularly for business case analyses and training. We will continue to review the framework and make necessary adjustments where needed.

It is also worth noting that, despite this audit’s focus on contracting out, the DND ASD program includes initiatives that made use of other ASD options such as departmental agencies.

As a final point, the Department believes that the NATO Flying Training in Canada program is innovative and provides good-quality pilot training at a cost lower than the current training system or any foreseeable training option in the future. In the Department’s view, the fact that the program is on schedule, on budget and sold out is indicative of the viability of the concept.



About the Audit

Objectives

The objectives of this audit were to determine whether:

- National Defence is realizing savings and other expected benefits from alternative service delivery (ASD) initiatives;
- National Defence has an adequate management framework to support the implementation of the ASD program, particularly in the areas of human resource management, business case analysis, costing and contracting; and
- contracts awarded under the ASD program met the integrity, openness and fairness requirements of the government contracting policies and regulations and that they adequately reflected requirements, have followed appropriate pricing methods, had appropriate financing arrangements and were properly monitored.

Scope

We selected 14 projects covering non-core support services that the Department had reviewed to determine whether they should be retained in-house or contracted out. Our sample was selected on the basis of judgment and included projects from each of the three commands — navy, army and air force — and from various headquarters groups. Five projects were not formally part of the ASD program, but involved major contracting for service initiatives and were therefore included in the audit.

Our audit was limited to actions taken by the government. We did not audit the firms providing services or bidding on contracts and imply no criticism of any third party supplying services to the government.

We reviewed departmental project files and interviewed National Defence officials, including headquarters and regional staff responsible for conducting the ASD reviews and implementing ASD projects. We also interviewed Public Works and Government Services Canada contracting officials and staff at the Treasury Board Secretariat. In addition, we conducted a literature review to determine the lessons learned by other countries that have implemented similar initiatives.

Criteria

In assessing the ASD program, we used the audit criteria contained in the Office of the Auditor General's guide, *Auditing the Contracting Process in Government Departments and Agencies*, as well as National Defence's publication, *Guide to ASD Methodology*.

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Appendix

Descriptions of the Audited Alternative Service Delivery Projects

NATO Flying Training in Canada (NFTC) – Moose Jaw *

Based on initiatives from Bombardier Inc., Defence Systems Division, Canada and an industry team led by Bombardier have established a military fighter pilot training program for the Canadian Forces as well as the military air forces of other nations who choose to participate. The industry team, which includes Frontec Corporation of Edmonton, CAE Aviation Limited of Edmonton and CAE Electronics of Montreal, will provide fully serviced aircraft, training material, flight simulators, airfield and site support services and other services.

The contract was signed in May 1998 and is valued at \$2.8 billion. It covers over 20 years of flying training and will end in December 2021. Although this project was initiated before National Defence announced its formal ASD program, it does incorporate many ASD principles.

Canadian Aviation Training Centre (formerly CFB Portage-la-Prairie)*

As a result of the 1989 federal Budget, the Minister of National Defence directed that Canadian Forces Base Portage La Prairie be closed by July 1992. This resulted in the decision to contract out four elements of the Canadian Forces pilot training system — Primary Flying Training, Basic Helicopter Training, Multi-Engine Training and Continuation Flying Training. The site was sold to a non-profit development corporation for \$1, resulting in the creation of Southport Aerospace Centre Inc. (SACI). SACI's fundamental concern is the creation of employment.

The initial five-year contract was awarded in 1991 to an industry team led by Bombardier Inc., Canadair Defence Systems Division. Under the contract, Bombardier Inc. provides primary flying training using industry-provided aircraft; the multi-engine training aircraft are contractor-owned; the helicopters are owned by National Defence and loaned to the contractor. Bombardier Inc. also provides facilities such as classrooms and offices. Finally, under an agreement with SACI, Bombardier Inc. operates the airfield, provides air traffic control and attends to student housing and feeding.

The initial contract, which ended 31 August 1997, included an irrevocable option to extend the contract for two additional years. The option has been exercised and the contract now ends 31 August 1999. A decision has been made to further extend this contract for a three-year term ending in August 2002. The full value of the contract extended until 31 August 1999 is \$236 million. The three-year extension is estimated at \$100 million.

Munitions Experimental Test Centre (METC)

An ASD study conducted in 1996-97 examined the activities of the Proof and Experimental Test Establishment (PETE) at Nicolet and the Defence Research Establishment Valcartier (DREV) South at Val Bélair. The study identified sufficient similarities in technological capabilities and strategic direction to recommend that a combined entity would be a highly feasible option that should yield savings through the rationalization of staff, facilities and equipment.

The study also recommended that National Defence cease to provide contract compliance (quality assurance) testing of ammunition, which would be assumed by the manufacturer, SNC Industrial Technologies (SNC IT). This work will be performed by the manufacturer on the Nicolet site. As a result, starting on 1 April 1998, the current contract with SNC IT was increased by about \$3.9 million per year to include compliance testing.

The research activities have been combined at the Val Bélair site. The total annual budgeted amount for the revised combined entity referred to as the METC is estimated at \$9.5 million, which includes the \$3.9 million contract amount.

* These projects were initiated prior to the promulgation of the ASD policy and the release of the ASD methodology.

CF-18 Automated Test Equipment Avionics Support

Canadian Forces avionics technicians use software-driven Automatic Test Equipment (ATE) to test and repair both the black boxes and their circuit cards for CF-18s. This work as well as maintenance of the related software and equipment was identified for ASD. As a result of this ASD initiative, the Department started discussions with Harris Corporation in 1996 on the possibility of industry working with the Department to find ways to reduce ATE support costs for the CF-18 aircraft.

A group of companies led by Harris Corporation has been actively pursuing this potential business venture. During the period August to November 1996, this group briefed various members of the Department on its concept of CF-18 ATE operations and maintenance. The formal proposal submitted by the industry team recommended that a joint Consolidated ATE Facility (CATEF) be established in Calgary and operated by a contractor with an option of assigning military personnel to maintain currency in hands-on testing. This proposal also recognized the problem of obsolescence with the older static ATEs and recommended the purchase of portable ATE equipment (PAT). After evaluating the internal and the commercial options, National Defence decided to contract out with Harris Corporation to operate the CATEF and to purchase up to six PATS to deal with obsolescence.

A 10-year contract was signed 16 June 1999 and includes \$65 million for the purchase of equipment and \$85 million for the purchase of services and spare parts.

Ottawa Publications Depot (in-house bid)

The Ottawa Publications Depot was identified as a candidate for ASD in February 1996. It provides warehousing, printing and distribution services for DND's publications and audio-visual materials. Its customers include National Defence, other government departments and individuals. The in-house team competed against a private sector firm and won with its proposal to reduce costs by 34 percent. The depot will operate under a three-year Service Level Agreement (SLA) with a value of \$9.2 million.

Project Genesis*

Project Genesis was chartered on 7 February 1995. The project commissioned a small core team to begin re-engineering in the Air Force organizations. The project focusses on the Fighter Force. Its goal is to reduce enterprise costs of the Fighter Force by at least 25 percent of 1993-94 costs.

The total 1993-94 costs (in 1994-95 dollars) for the Fighter Force were \$1 billion for personnel, operations and maintenance, and \$264 million for capital. The Department estimates that it has achieved a cost reduction of \$310.6 million or 31.6 percent.

This is not an ASD project, although some of the smaller projects involved under Project Genesis are.

Meaford Area Training Centre*

The Meaford Area Training Centre is tasked to provide and maintain ranges, training areas, facilities and equipment for approximately 10,000 Reserve soldiers in the Ontario area. It has a total capacity of 384,000 student-days per year. The centre opened in July 1995.

All support services were contracted out from the day it opened. National Defence considered this to be an initial ASD pilot project that could serve as a model for implementing the ASD program. A \$40 million contract is in place for the period of October 1995 to November 2000.

Goose Bay Support Services

The Goose Bay base is primarily used for flight training by European Allied Forces. A 10-year agreement between National Defence and the participating ministries of defence was established in 1986 and renewed in 1996. It provided for approximately \$80 million in annual payments for the use of Goose Bay for flight training. In 1995, this represented approximately 68 percent of the base's total expenditures of \$118 million.

* These projects were initiated prior to the promulgation of the ASD policy and the release of the ASD methodology.

The Goose Bay base was not directly supporting a Canadian Forces operational role, so its services were prime candidates for ASD. In 1995, the Vice Chief of the Defence Staff approved a recommendation that a request for proposal be issued to the private sector for Alternative Service Delivery at Goose Bay. In April 1997 a request for proposal was issued for the management and delivery of non-core services in support of the Allied low-level flying training program, civil aviation and other third-party users.

In April 1998, a five-year contract was awarded to Serco to provide base support services. The \$135 million contract covers the period from 1 April 1998 to 31 March 2003. Under this contract, the Department expects that the costs at CFB Goose Bay will be reduced from \$44 million to about \$22 million annually.

Trenton Food Services

Canadian Forces Base Trenton is Canada's largest air transport base. The base consists of a full-sized airport that handles all types of military and commercial aircraft. It also functions as a significant training facility, providing a diverse range of training and development programs for the military.

The food services requirements at the base include entitlement meals, flight meals, and food service supply procurement. The service had an annual cost of \$4.2 million. In 1994, an ASD project was initiated to determine if food services could be obtained at a lower cost by having a competition between the in-house team and private sector firms. The in-house team won the competition and has been the food provider at CFB Trenton since 1 April 1998.

Military Pay *

Military Pay Service (MPS) is controlled by three major stakeholders, none of which can be considered its single owner. MPS processes payments for the Regular and the Reserve forces, comprising approximately 60,000 and 30,000 members respectively. The pay system also ensures payment of deployed personnel, manages financial arrangements for the families of deployed staff, processes personnel information and accepts input from military staff at various bases. The purpose of the Military Pay project was to provide the same levels of service at a lower cost.

In 1994, the cost of delivering Regular Force military pay services was \$55 million. An internal study determined that \$15 million in costs could be avoided if the pay system became a "most efficient organization" (MEO). This saving has already been achieved through downsizing and re-engineering efforts that have reduced the cost of this activity to \$31 million, as reported in 1997. It is expected that this cost can be further reduced by the implementation of additional departmental initiatives in this area.

The ASD process has been deferred for the time being and the Department retains the current MPS arrangement. Several factors are responsible for the deferral of ASD. First, there is disagreement among the stakeholders about the funding for a contract. Second, the MPS study indicates that internal re-engineering should be completed before contracting out is considered. Third, it is questioned whether contracting out would actually save money.

Auxiliary Fleet Operations – Esquimalt and Halifax Fleets

The auxiliary fleets in Halifax and Esquimalt, otherwise known as the Queen's Harbour Master (QHM), are autonomous line units. The QHMs are responsible for operational support to the naval fleet, associated bases, fleet maintenance facilities (FMFs), defence research establishments and other government departments. They are also responsible for the management and operation of the Canadian fleet of auxiliary vessels.

Using the limited data available, the total program cost was estimated at \$15.4 million for the Halifax fleet and \$11.8 million for the Esquimalt fleet. The purpose of the Auxiliary Fleet Operations project was to determine which of the 91 activities in the fleet support program qualified as candidates for ASD. The program identified activities that could be contracted out. Efforts are continuing to implement some measures that will increase cost effectiveness.

* These projects were initiated prior to the promulgation of the ASD policy and the release of the ASD methodology.

National Defence Headquarters (NDHQ) Facilities Management

NDHQ Facilities Management (FM) is a service that costs approximately \$1.4 million and includes such responsibilities as space management, space layout and design, parking administration and conference room management. The FM project was to determine if the service could be contracted out at less cost than it could be provided internally.

A Facilities Management Agreement was signed in 1997 requiring Public Works and Government Services Canada (PWGSC) to deliver the FM service for two years, starting 4 September 1997. National Defence estimates savings of \$403,000 in the first year and \$281,000 in the second. In April 1998, the agreement was expanded and construction engineering services were transferred to PWGSC.

Aerospace Engineering Test Establishment (AETE)

AETE is located at CFB Cold Lake in Medley, Alberta. It provides flight test service to the Canadian Forces (CF) as well as flight and technical evaluations of aircraft and aerospace equipment. Moreover, AETE maintains expertise in flight test and aircraft maintenance for a widely varied fleet that includes some unique equipment. Further, a large engineering and technical staff is required to plan and conduct tests, collect and analyze data, and provide conclusions and recommendations following each aircraft and system evaluation.

AETE was identified as a candidate for ASD in July 1995. The ASD process was initiated to market the excess capacity of the facilities to the private sector and foreign militaries, to capture technological advantages of private sector firms and obtain private sector funding. In March 1998 a decision was made to retain current arrangements.

Fleet Maintenance Facilities

The Fleet Maintenance Facilities at Halifax (Cape Scott) and Victoria (Cape Breton) provide engineering and maintenance services to Canada's Navy. The full cost of operating the production divisions of these facilities during 1996 were estimated at \$75 million and \$54 million respectively.

The May 1996 ASD analysis report concluded that delivering ship repair and maintenance services by alternative means would not result in improved cost effectiveness at that time. The report recommended that the production divisions of these facilities continue to seek the most effective mixture of public and private provision of repair work in a manner that would support the needs of both National Defence and the shipbuilding industry. The initial target date set for achievement of a "most efficient organization" (MEO) is December 1999.

* These projects were initiated prior to the promulgation of the ASD policy and the release of the ASD methodology.