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Report of the
**Auditor General
of Canada**
to the House of Commons

FALL

Chapter 5
Acquiring Military Vehicles for Use in Afghanistan



Office of the Auditor General of Canada

The Fall 2009 Report of the Auditor General of Canada comprises Matters of Special Importance—2009, Main Points—Chapters 1 to 8, Appendices, and eight chapters. The main table of contents for the Report is found at the end of this publication.

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Chapter

5

Acquiring Military Vehicles for Use
in Afghanistan

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Acquiring Military Vehicles for Use in Afghanistan

Main Points

What we examined

Canada's military role in Afghanistan has been to contribute to international security and, in particular, to contribute to the stability of the area. National Defence has had to acquire new equipment urgently needed by the Canadian Forces to carry out their operations effectively and protect their personnel.

We examined four urgent projects, each costing over \$100 million, to acquire military vehicles that would improve operational capability and the protection of soldiers in Afghanistan. The projects involved replacement tanks, armoured patrol vehicles, armoured heavy support vehicles, and light armoured vehicles with remote weapon stations.

We examined how National Defence managed the projects to ensure that the acquisitions met government policies related to project management and that the vehicles it was purchasing would meet the Canadian Forces' urgent operational needs. We also examined how National Defence and Public Works and Government Services Canada (PWGSC) worked together to ensure that the contracting for the projects complied with government policies.

In addition, we looked at the analysis and challenge role played by the Treasury Board of Canada Secretariat when project and contract proposals were submitted for Treasury Board approval.

Audit work for this chapter was substantially completed on 29 May 2009.

Why it's important

The Canadian Forces' current deployment to Kandahar, Afghanistan has increased the risk to military and civilian personnel caused by threats such as improvised explosive devices. Failure to respond adequately and rapidly to these threats can have serious consequences—for example, it could leave the troops at greater risk or force Canada to adjust the scope of its military operations in Afghanistan.

The ability to acquire new equipment rapidly is essential to help reduce the risks to personnel without compromising mission success.

What we found

- In three of the four projects we examined, National Defence and PWGSC provided the Canadian Forces in Afghanistan with urgently needed vehicles that National Defence determined met the operational needs. The quick procurement and delivery of these protective vehicles, in the opinion of National Defence, contributed to the safeguarding of Canadian soldiers in Afghanistan. National Defence and PWGSC successfully implemented some strategies to fast-track these three contracting processes, which potentially could be applied to streamlining non-urgent acquisitions. For the two competitive contracting processes that we examined, we found that both processes were managed in compliance with applicable contracting policies. However, we found some problems with roles and responsibilities and information provided to senior officials.
- The four projects we examined were not managed in accordance with National Defence's project approval guide. Nor did the Department have a separate process in place, based for instance on the guide, to manage urgent acquisitions to ensure that the projects complied with government policies. Most of the required documentation was either not prepared or, if prepared, was deficient or prepared after the fact. Therefore, the documentation was of little value in helping to manage the projects or showing that the projects complied with government policies.
- While the Treasury Board of Canada Secretariat reviewed and challenged documents submitted by National Defence when it sought approval for the projects, some important issues were left unchallenged. For example, had officials asked why the required risk management strategies were not submitted, they would have learned that the strategies had not been prepared—a signal that the project management policies may not have been followed. For its part, National Defence did not disclose some important information needed for informed decision making, which made it difficult for the Secretariat to fulfill its challenge function. For instance, National Defence did not state that there was a high risk that it would not be able to replace all the old tanks in Afghanistan with the new Leopard 2 tanks, which was one of the project's goals.

The entities have responded. The entities agree with all of our recommendations. Their detailed responses follow the recommendations throughout the chapter.

Introduction

Canada's mission in Afghanistan

5.1 In July 2003, under the auspices of the United Nations, Canada assumed command of the International Security Assistance Force (ISAF) in Kabul, Afghanistan. Its main focus during the first year of command was helping the Afghan Transitional Authority maintain a safe and secure environment in Kabul while the country developed and ratified a constitution. ISAF became a North Atlantic Treaty Organization (NATO) mission in August 2003.

5.2 In the fall of 2005, the Canadian Forces moved its main contingent from Kabul to Kandahar so it could begin operations in Kandahar region in March 2006. In doing so, Canada assumed responsibility—along with its coalition and Afghan partners—for stabilization and security of a larger area. Canada has committed to its current role in Afghanistan until 2011.

5.3 The Canadian Forces recognized that, when it deployed to the Kandahar region, its greatest threat would be from land mines and improvised explosive devices (IEDs). To counter these threats, the Canadian Forces has used increasingly heavily-armoured and blast-resistant equipment with the goal of providing better protection against IEDs.

Military acquisitions for use in Afghanistan

5.4 National Defence has acquired a number of military vehicles on an urgently required basis for use in Afghanistan. This is normal as no military can acquire equipment to meet all its possible needs. As well, the military has to make trade-offs to stay within budgets. Making urgent acquisitions can be challenging because military equipment may need to be manufactured or, when acquired, modified. In times of conflict, allied forces' demands for similar items may limit availability and have an effect on wait times. As a result, windows of opportunity are important in deciding what equipment to acquire.

5.5 In 2005, the Canadian Forces planned to acquire equipment to prepare for its operations in Kandahar region as of March 2006. Since then, many more projects to acquire a wide range of equipment were launched. The equipment has included new protected vehicles, improved protection for current vehicles, helicopters, drone aircraft, and other systems to improve the safety of soldiers and reduce the threat posed by IEDs.

5.6 So serious is the threat from IEDs that in 2008 when the House of Commons passed a motion calling for an extension of the Canadian military presence in Kandahar to July 2011, several conditions were attached, including the acquisition of medium-lift helicopters and drone aircraft in order to better protect Canadian troops from IEDs.

Project management policies and guidelines

5.7 The Treasury Board's Policy on the Management of Projects requires all federal departments to have sound internal policies, guidelines, and practices for the identification, planning, definition, approval, and implementation of projects. Departments are to ensure that projects follow standard project management principles, such as those set out in the Treasury Board's policies and the Project Management Institute's *A Guide to the Project Management Body of Knowledge* (PMBOK® Guide).

5.8 National Defence has established its own project management framework that includes a Project Approval Guide. This Guide provides policy and procedural guidance on the approval process for projects, activities, and initiatives that require resource funding—including the acquisition of military equipment. The main focus of the Guide is to detail the internal decision-making processes to be followed and the project management practices to be employed to manage the project within approved resources.

Roles and responsibilities for buying equipment

5.9 Major defence equipment acquisition projects involve several departments. Exhibit 5.1 describes the roles of all the players involved.

Exhibit 5.1 The roles and responsibilities of federal organizations in acquiring equipment for National Defence

Organization	Roles and responsibilities
Cabinet	Ministers' forum for discussion and decision making. May provide policy approval in principle for some major Crown projects.
Privy Council Office	Provides advice on proposals to Cabinet. Assists departments in preparing proposals to Cabinet.
Treasury Board	As a statutory committee of Cabinet, approves policies in areas such as project management and contracting. Decides whether a project should be deemed a Major Crown Project. When a project is likely to exceed ministerial expenditure authority limits, approves such projects, allows the departments to enter into contracts, and may allow exemptions from Treasury Board policies.

Exhibit 5.1 The roles and responsibilities of federal organizations in acquiring equipment for National Defence (cont'd)

Organization	Roles and responsibilities
Treasury Board of Canada Secretariat	<p>As the Treasury Board's administrative arm, develops policies and guidance for the federal government on topics such as project management and contracting.</p> <p>Assists departments in preparing submissions to the Treasury Board.</p> <p>Analyzes and challenges departmental submissions.</p> <p>Provides recommendations and advice to the Treasury Board on project proposals.</p>
National Defence	<p>Initiates and manages acquisition projects.</p> <p>Defines project requirements.</p> <p>Analyzes and recommends options.</p> <p>Proposes a procurement strategy.</p> <p>Prepares statements of work and technical bid evaluation plans.</p> <p>Performs quality assurance, receives goods, and authorizes payments.</p>
Public Works and Government Services Canada	<p>Manages the contracting process.</p> <p>Conducts market analyses.</p> <p>Develops final procurement strategies.</p> <p>Prepares bid documents and conducts tendering processes.</p> <p>Awards contracts.</p>
Industry Canada	<p>Administers the Industrial Regional Benefit Policy, which provides a framework for linking federal defence procurement to long-term industrial and regional development in Canada. This is intended to ensure that socio-economic objectives are considered when a major defence acquisition is made.</p>

Source: Adapted from various Government of Canada documents

Focus of the audit

5.10 We conducted the audit to determine whether National Defence could demonstrate that the acquisition of four types of military vehicles for use in Afghanistan met operational needs, and that the vehicles were acquired in a timely manner. We also examined whether the contracting processes used by Public Works and Government Services Canada and National Defence complied with federal government contracting laws and regulations—and with Treasury Board policies—while meeting the unique time pressures linked to the purchases.

5.11 In conducting this audit, we recognize that the Canadian Forces in Afghanistan is endangered by IEDs and other threats. We understand that the acquisitions we have audited were needed as quickly as possible to carry out operations and to enhance protection of Canadian personnel in Afghanistan. We took these facts into account in our assessments of what we found.

5.12 The audit was limited to four vehicle acquisition projects that each cost more than \$100 million. Each project was deemed urgent by National Defence for the reasons mentioned above. Exhibit 5.2 describes these four vehicle projects. The audit did not examine Industrial and Regional Benefits.

5.13 More details on the audit objectives, scope, approach, and criteria are in **About the Audit** at the end of this chapter.

Observations and Recommendations

Project management

National Defence's project management framework is consistent with Treasury Board policies

5.14 Each of the four acquisition projects we examined was to be managed in accordance with the Treasury Board's policies and guidelines on capital plans, projects, and procurement. While the proposals linked to these purchases clearly conveyed the urgent nature of the projects, no exemptions from the Treasury Board's project management policies were sought or provided.

5.15 The Treasury Board's project management policies require departments to establish sound internal policies, guidelines, and practices. As recommended by these policies, the practices contained in the Project Management Institute's *A Guide to the Project Management Body of Knowledge* (PMBOK® Guide) have been adopted by National Defence as its standard for project management.

5.16 National Defence has established its Project Approval Guide (the Guide) as the principal source for policies and procedures on the approval process for projects. The Guide describes in detail the program decision documents that staff must prepare to obtain project approvals. It also provides some guidance on the practices to be employed for managing projects.

5.17 We reviewed the contents of the Guide against the requirements contained in the Treasury Board's project management policies and found that they were consistent. We found that there was no separate process in the Guide to deal with urgent operational requirements (known as UORs), nor is there a specific project management framework for UORs. As a result, the Guide was the only source of criteria available to us in auditing these urgent projects. Based on this, we expected the Department, for each of the projects we audited, to have complied with the requirements of the Guide or to have senior management approve and document specific deviations.

Exhibit 5.2 Four types of vehicle acquisitions were audited

<p>Armoured Patrol Vehicle (RG-31)</p>	<p>Light Armoured Vehicle Remote Weapon Station (LAV RWS)</p>	<p>Armoured Heavy Support Vehicle System (AHSVS)</p>	<p>Leopard 2 Tank</p>
 <p>RG-31s in a convoy in Afghanistan</p> <p>Date of project approval: October 2005</p> <p>Approved cost: \$175 million</p> <p>The purpose of this purchase was to provide the Canadian Forces with a better-protected patrol vehicle when it began operations in Kandahar region in February 2006. At the time, this purchase was the top priority of the Canadian Forces.</p> <p>One of National Defence’s stated reasons for the project was to replace the G-Wagon—a small patrol vehicle that did not provide enough protection to personnel in Afghanistan. Another was to replace the Bison, a larger vehicle used to transport personnel.</p> <p>In buying the RG-31, the Department got a vehicle that includes a remote weapon station (RWS). This allows an operator to fire weapons from within the vehicle—using a monitor and joystick—while remaining protected.</p> <p>The Department bought 75 RG-31s under contract with General Dynamics Land Systems Canada (GDLS-Canada). They have been used in Afghanistan and for training in Canada.</p>	 <p>LAV RWS</p> <p>Dates of project approval: October 2006, March 2007, and April 2007</p> <p>Approved cost: \$118 million</p> <p>The purpose of this purchase was to produce a variation of the Canadian Forces’ Light Armoured Vehicle III (LAV III) that would provide better protection against mines and IEDs. The LAV RWS would be used in the same manner as the existing LAV Infantry Section Carrier.</p> <p>Two key features of the new vehicle are a remote weapon station (RWS) and custom armour protection. Instead of the turret mounted on the standard LAV, the RWS reduces the vehicle’s weight by several thousand pounds, which allows additional armour to be installed. Never-used chassis from the original LAVs are being used as the basis for producing 33 of the LAV with RWS.</p> <p>Under contracts with General Dynamics Land Systems Canada (GDLS-Canada) and Armatec, the vehicles are currently being produced for delivery in 2009.</p>	 <p>AHSVS transporting a damaged tank</p> <p>Date of project approval: October 2006</p> <p>Approved cost: \$169 million</p> <p>The purpose of this purchase was to replace the Heavy Logistic Wheeled Vehicle that was being used in Afghanistan with a vehicle better protected against the threat of improvised explosive devices (IEDs). It is mainly used to transport supplies and equipment.</p> <p>Ninety-five vehicles of various types, and related equipment, have been acquired under contract with DaimlerChrysler AG. These are currently used for operations in Afghanistan and for training in Canada. Two additional vehicles are still to be received as compensation for delivery delays.</p>	 <p>Leopard 2 Tank</p> <p>Date of project approval: March 2007</p> <p>Approved cost: \$650 million</p> <p>The first goal was to lease 20 Leopard 2 tanks and two special-purpose armoured vehicles from Germany in order to meet the urgent need to replace the Leopard 1 tanks that had been deployed to Afghanistan.</p> <p>The second goal was to purchase 100 Leopard 2 tanks, including special-purpose armoured vehicles from the Netherlands, to provide immediate training vehicles for troops in Canada and a longer-term tank capability.</p> <p>Twenty tanks were borrowed (not leased as originally approved by the government) from Germany. These arrived in Afghanistan, for the most part, in late 2007.</p> <p>One hundred tanks were purchased. Under a separate authority, National Defence purchased an additional 15 used tanks that it intends to use for spare parts. The project is still in progress.</p>

Source: Department of National Defence

5.18 National Defence’s Guide requires projects to be managed in phases, with key decision points along the way. Compliance with the Guide requires that many steps and key documents—meeting both Treasury Board requirements and National Defence’s internal decision-making needs—be completed. Projects at National Defence begin with a clear statement and agreement by senior management on the capability deficiency to be resolved. Once this is clearly understood, options are to be identified and analyzed, and an informed decision made. Based on this decision, the project is supposed to be planned in detail before it is implemented.

National Defence did not meet its own project approval guidelines for these acquisitions

5.19 As outlined in Exhibit 5.3, we found that for the four projects we audited, most of the required documents were not prepared or, if prepared, they were either deficient or prepared after the fact and thus of little value in helping to manage the projects or in showing that project management met Treasury Board requirements. In such cases, National Defence did not document why the required documentation was not prepared.

Exhibit 5.3 National Defence did not meet most requirements of its Project Approval Guide when it acquired urgently needed equipment

Required Document	Purpose	Armoured Patrol Vehicle (RG-31)	Armoured Heavy Support Vehicle System (AHSVS)	Light Armoured Vehicle Remote Weapon Station (LAV RWS)	Leopard 2 Tank
Identification Phase					
Capability Deficiency	Provides a clear and agreed-upon statement of the capability deficiency to be resolved by the project.	◐	●	○	◐
Broad Options Analysis	Identifies a broad range of potential solutions.	○	●	○	●
Identification Phase Approval	Gives internal approval to proceed with planning and provides the total anticipated project cost.	N/A	○	○	●
Options Analysis Phase					
Project Charter	A mandatory project document to be completed as early as possible, the charter establishes the mandate for how the project will be organized.	◐	○	◐	○

Exhibit 5.3 National Defence did not meet most requirements of its Project Approval Guide when it acquired urgently needed equipment (cont'd)

Required Document	Purpose	Armoured Patrol Vehicle (RG-31)	Armoured Heavy Support Vehicle System (AHSVS)	Light Armoured Vehicle Remote Weapon Station (LAV RWS)	Leopard 2 Tank
Options Analysis	Provides a detailed comparison including costs of alternatives.	◐	◐	○	○
Project Profile and Risk Assessment	Outlines the risks associated with a project and the management strategies to deal with them. It is to be provided to the Treasury Board of Canada Secretariat in advance of making submissions.	○	○	○	○
Preliminary Project Approval	Allows the Department to obtain internal approval in principle for the preferred option at the estimated cost and to proceed to the next phase.	N/A	N/A	N/A	○
Definition Phase					
Statement of Operational Requirement	Creates a statement of the characteristics that must be delivered for the project to satisfy the capability deficiency.	◐	◐	○	◐
Substantive Cost Estimate	This is a quality cost estimate that takes into account all project objectives and deliverables.	○	◐	○	○
Project Management Plan	Defines how the project is to be executed, monitored, controlled, and closed.	○	○	○	○
Effective Project Approval	Grants internal approval for the selected option and allows the project to proceed to the next phase.	◐	○	○	○
Implementation Phase					
Initial Operational Capability Certificate	Shows attainment of the minimum ability to effectively employ a capability.	◐	○	N/A	○
Full Operational Capability Certificate	Shows full attainment of the ability to effectively employ a capability.	●	N/A	N/A	N/A
Input into the Capability Investment Database	Throughout the project, key information is to be entered into this database.	◐	◐	○	●

● Met the Guide's requirements

◐ Met some of the Guide's requirements

○ Required document was not prepared or had significant deficiencies

N/A—Does not apply or is not yet required

Source: The list of documents required and their purpose was adapted from the Project Approval Guide, Department of National Defence. The assessments were prepared by the Office of the Auditor General of Canada.

5.20 The problem National Defence faced is that its Guide is geared to projects that develop over time, in phases. The four projects we examined simply did not progress in clear stages. Instead, their phases tended to be completed all at once or were compressed into a short period of time. Because the planning of these projects was done so quickly, officials told us that they could simply not prepare all the documentation required by the Guide and also get the job done. In the absence of a framework for dealing with UORs, they were left to decide on their own what documents to prepare.

5.21 The Department has recognized the need to focus on UORs and, in 2008, it established a UOR policy. However, that policy only describes who is responsible for identifying these needs within National Defence. It does not set out a specific project management framework for UORs. Such a framework is important for the following reasons:

- First, a framework will ensure that National Defence is able to demonstrate managerial oversight and decision making. In our audit work, we found that key advisory and decision-making bodies like the Senior Review Board and the Program Management Board either did not provide advice and make decisions as required under the Guide or made them much later, after the key decisions had been made. In addition, we found instances where the internal document used to inform decision makers, known as the synopsis sheet, was either not prepared or lacked important information for decision making. While it is clear that decisions were made and that, based on those decisions, actions were taken, the Department had not documented the decisions and its rationale in the expected manner. The Department informed us that, since the time of these projects, it has made changes to how such decision-making documents are prepared, with the goal of using a common document for both internal decisions and Treasury Board submissions, as much as possible.
- Second, a framework will help ensure that sound project management principles are applied and that Treasury Board policies are followed. For example, with the tank replacement project, plans were prepared on the basis that the Leopard 2 tanks to be purchased would be fitted with important implements such as mine ploughs and bulldozer blades. No research was done to find out if these implements could actually be fitted on the tanks. Later, it was determined that it would be more difficult and time-consuming than originally expected to install them on the purchased tanks. As a result, National Defence has now transferred this requirement into a related project—the Force

Mobility Enhancement Project. This project, estimated at \$376 million, will also provide special-purpose Leopard 2 armoured vehicles that National Defence could not afford within the funding approved for the Tank Replacement Project.

- Finally, a framework will help National Defence demonstrate that it has chosen the right piece of equipment to address the capability gap it is trying to fill. The Guide and Treasury Board policies require all projects to conduct an options analysis with a thorough analysis of the preferred option. This allows for informed decision making. It also allows those who are making decisions to consider trade-offs among features such as performance, complexity to implement, and cost. We found deficiencies of varying degrees in the options analysis for all four projects.

5.22 Recommendation. National Defence, in consultation with the Treasury Board of Canada Secretariat, should examine its Project Approval Guide to determine how the Department can manage the process of acquiring urgently needed equipment in a timely manner while respecting sound project management principles and Treasury Board policies.

National Defence's response. Agreed. National Defence will review the current project approval guidance with a view to align the present documentation requirements for procurement greater than \$1 million with the project approval framework as outlined in the Project Approval Guide. The Treasury Board of Canada Secretariat and other stakeholders will be consulted in order to achieve the correct balance between urgency and appropriate levels of documentation to support decision-making rationale. The National Defence group responsible for materiel will be consulted to ensure that coordination of the Guide and Project Management Manual meets the requirements.

Contracting

The contracting processes we examined complied with government policies

5.23 The purchase of military equipment must be carried out in compliance with all laws, regulations, and Treasury Board policies that apply to government purchases. Public Works and Government Services Canada (PWGSC) maintains what is known as the Supply Manual, which describes and guides such activities. It contains relevant laws and regulations, as well as government and department policies.

5.24 While PWGSC is the contracting authority, it shares responsibility for some aspects of the acquisition process with National Defence. The way responsibilities are divided is set out in a

memorandum of understanding (MOU) between the two departments and published in the Supply Manual.

5.25 Compliance with contracting laws, regulations, and policies is essential. It helps ensure that acquisitions meet real needs, provide the best value for money, promote competition (with some exceptions), ensure fair and equal treatment of potential suppliers, and maintain the accountability and integrity of the contracting process. While a number of acquisition strategies are available under government policies, a competitive process is deemed to be the best way to achieve these goals.

5.26 Our audit examined the Armoured Patrol Vehicle (RG-31) and the Armoured Heavy Support Vehicle System (AHSVS) acquisitions, both managed as competitive projects, to determine whether PWGSC and National Defence had managed them in compliance with applicable contracting policies. To determine this, we reviewed PWGSC acquisition files and National Defence project files. We also conducted interviews with department officials and some company representatives.

5.27 While we found a few problems with the contracting processes for these vehicles, overall both processes were managed in a way that complied with the applicable contracting policies. As well, the contracting processes were completed in a timely manner.

Roles and responsibilities related to contracting for the Armoured Patrol Vehicle (RG-31) were not followed

5.28 During the summer of 2005, to prepare for the start of operations in the Kandahar region as of February 2006, National Defence assembled a list of critical equipment it needed to buy. The most important item on this list was an Armoured Patrol Vehicle (RG-31) to carry out operations while protecting troops against improvised explosive devices (IEDs) and land mines. Analysis prepared by the Canadian Forces showed that without this vehicle, the lives of Canadian soldiers would be at extreme risk or the scope of operations would need to be adjusted.

5.29 In August 2005, National Defence began to contact companies to obtain technical specifications, price, and delivery times of vehicles on the market. We found that National Defence informed one potential supplier, which responded to the survey, that its product would not meet the Department's need. The supplier complained that if National Defence had clearly stated its requirements, it would not have spent time and effort to provide National Defence with information about its product.

5.30 Based on the MOU between National Defence and PWGSC (described in paragraph 5.24), this type of survey is not National Defence's responsibility. Even though National Defence contacted PWGSC in mid-August, it nonetheless continued to conduct its survey.

5.31 In early September 2005, National Defence decided it wanted to sole-source the purchase of 50 vehicles called the RG-31. The Department believed that the RG-31 would meet its needs and that, based on the information it had collected, only one company could meet its essential technical requirements and deliver quickly.

5.32 According to Department documents, in September 2005, the supplier of the RG-31 advised National Defence that it had held a place for a Canadian order and could begin delivery in March 2006 but the contract had to be signed by late October 2005. After that date, according to these documents, the company told the Department that the RG-31 might not be available within this time frame due to orders from other militaries. National Defence informed PWGSC of these facts. It also informed PWGSC that it preferred to use a sole-source contract for this acquisition. PWGSC believed that a competitive process could fulfill National Defence's urgent requirement. Nonetheless, it asked National Defence to present its reasons for requesting an exception. Under the federal government's contracting regulations, competitive bids must be sought before a contract is entered into, unless the project meets one of the reasons for an exemption set out in the regulations (Exhibit 5.4). Although National Defence was concerned that a competitive process might cause it to lose a chance to acquire a suitable vehicle that the supplier could begin delivering as early as March 2006, the beginning of operations in Kandahar, it did not provide the rationale for a sole-source contract.

Exhibit 5.4 General reasons for exceptions to competitive processes

Before any contract is entered into, the contracting authority shall solicit bids. However, a contracting authority may enter into a sole-source contract without soliciting bids where any one of the following criteria is met:

- The need is one of pressing emergency in which delay would be injurious to the public interest.
- The estimated expenditure does not exceed certain limits depending on the type of acquisition.
- The nature of the work is such that it would not be in the public interest to solicit bids.
- Only one company is capable of performing the contract.

Source: *Government Contracts Regulations*

5.33 Before it could decide on the type of contracting strategy to pursue, PWGSC needed to assess the competitive environment for armoured patrol vehicles. It could not rely on the informal price and availability survey completed by National Defence, so it invited interested suppliers to respond to its own price and availability request. Among other things, it asked suppliers if they could meet the stated requirement of delivering the first 25 vehicles within seven months after the placement of orders—which we calculate would be May 2006, at the earliest. Based on its assessment, PWGSC found that three firms would be able to meet the technical requirements set out by National Defence and that a competitive environment existed. However, the ability of suppliers to meet the seven-month delivery requirement was not taken into account at this stage. Our review of PWGSC's documentation found that only one supplier showed that it could meet the required delivery schedule. In our opinion, because the purchase was urgently needed, the ability of potential suppliers to deliver vehicles to Afghanistan in accordance with this key requirement should have been taken into account at that stage.

5.34 At the beginning of October 2005, the government granted PWGSC advance authority to contract for 50 armoured patrol vehicles. This authority did not specify whether the contract had to be competitive or sole-sourced.

5.35 The three companies that PWGSC assessed as meeting the technical requirements set out in the price and availability request were invited to prepare bids. PWGSC developed a compressed competitive procurement schedule showing that a contract with the successful bidder be awarded at the end of October 2005. This was done to meet National Defence's goal that an order be placed for armoured patrol vehicles, by late October 2005 so that it would not miss the opportunity to purchase the RG-31, should it be determined the best vehicle.

5.36 Due to the compressed schedule, PWGSC was unable to prepare many of the required documents before it issued the request for proposal (RFP). PWGSC notified the bidders that these documents would be provided in phases and finalized them during the bidding period. In fact, some changes were still being made a few days before the end of the bidding period, based on new information National Defence was giving PWGSC. Normally, this documentation is ready before the competition begins. All of this had an impact. For example, the weighting related to the requirements was provided to the companies midway in the bidding process. At that point, the companies learned that the weighting for delivery favoured delivery beginning in

February 2006. The two companies that did not bid expressed concerns about changes made during the competitive process, although one of them only communicated its concerns on the day of bid closing. One of the companies stated that since the weighting favoured earlier delivery, it would not be able to compete. It felt that this weighting did not reflect its understanding that according to PWGSC's price and availability request, delivery of vehicles would not be required to begin until seven months after receipt of order.

5.37 At the end of the bidding process, only the vendor of the RG-31 submitted a bid. However, PWGSC and National Defence determined that the bid was non-compliant. Based on PWGSC policies, when no compliant bids are received, the competition should be cancelled and re-tendered.

5.38 PWGSC cancelled the competitive process but did not consider re-tendering to be an option because, according to documents, it would have caused an unacceptable delay that might have compromised mission success and personnel safety. PWGSC and National Defence conducted a clarification process with the bidder and concluded that the proposal met all the requirements to their satisfaction. As a result, PWGSC decided to sign the contract based on government contracting regulations, which state that when the need is "one of pressing emergency in which delay would be injurious to the public interest" (Exhibit 5.4), it can issue a sole-source contract. The contract was signed on 31 October 2005.

5.39 This process successfully provided National Defence with the vehicle it sought, in a timely manner. However, time was wasted when National Defence failed to involve PWGSC early in the process and PWGSC had to conduct another price and availability request. Although PWGSC promoted competition throughout the acquisition process, an exception under the government's contracting regulations had to be used to finalize it.

5.40 Recommendation. For urgent operational requirements, National Defence should involve Public Works and Government Services Canada (PWGSC) early, in accordance with agreed upon roles and responsibilities, so that effective procurement strategies can be implemented to meet operational objectives.

National Defence's response. Agreed. Lessons learned from recent procurements, and opportunities for making process and other improvements, are being explored in some depth as part of a number of ongoing government reviews of defence procurement. Measures to

further improve the already close collaboration between National Defence and PWGSC, while respecting the statutory responsibilities of the respective departments, are being examined as part of these reviews.

In addition, PWGSC Acquisitions Branch now has full membership in several standing and ad hoc National Defence bodies that oversee the planning of future acquisitions, both routine and urgent.

Incomplete information was provided to senior officials on the AHSVS contracting

5.41 In October 2006, based on a competitive procurement strategy, the government granted the Minister of Public Works and Government Services Canada (PWGSC) advance authority to enter into a contract to buy 82 armoured heavy support vehicle systems (AHSVS) of various types, as well as related support and an option to acquire additional vehicles and equipment, for a total cost of \$169 million. The contract was signed approximately six months later on 30 March 2007.

5.42 PWGSC published a notice that the Government of Canada had a requirement for AHSVSs and companies could obtain a copy of the price and availability request. The price and availability requests that were completed by interested companies helped National Defence set its requirements and helped PWGSC develop and issue a solicitation of interest and qualification (SOIQ). According to the procurement strategy outlined in PWGSC's request to government asking for advance authority to enter into a contract, only suppliers prequalified using the SOIQ were to be sent a formal RFP. PWGSC informed us that the SOIQ was intended to evaluate potential suppliers against a set of 63 high-level mandatory protection and performance requirements whereas the RFP would include the full set of requirements. However, none of the participating companies demonstrated that they could meet the SOIQ requirements. At this point, the original procurement plan could not be followed. This was a very serious situation because PWGSC would not be able to proceed with the purchase of vehicles that National Defence said it urgently needed to protect its troops in Afghanistan against IEDs. According to PWGSC's supply manual, when there is a significant change in the procurement strategy, the procurement plan should be revised and approved at the Assistant Deputy Minister (ADM) level. In our opinion, at this point the plan should have been revised. However, PWGSC maintains that the result of the SOIQ did not represent a change in the competitive procurement strategy approved by the government, and therefore ADM-level approval of a revised procurement plan was not required, since a competitive process was still conducted.

5.43 Instead, PWGSC and National Defence officials visited all of the suppliers who had responded to the SOIQ, and some that had not. The visits were conducted, with a view, among other things, to reassessing the requirements for the vehicles based on vehicles the companies could actually supply. The mandatory requirements of the SOIQ were modified and a total of 172 were set out in the RFP. National Defence informed us that changes to the mandatory requirements were partially based on information it had collected during its visits with companies, and that it believed these requirements could be met. However, we were unable to identify what changes were made to the requirements as a result of the field visits because National Defence did not prepare detailed records of the visits. PWGSC issued an RFP to six companies. Although three of them submitted complete proposals, only one was able to meet all the requirements. According to PWGSC's evaluation documents, the two other bidders did not demonstrate that they could meet a significant number of the mandatory requirements.

5.44 When the Minister of Public Works and Government Services Canada was asked to authorize the issuance of the contract to the winner of this competition, the memorandum outlined, among other things, highlights of the contracting process. It clearly stated that "the award is in accordance with the strategy outlined in the submission" that was approved by the government. In our opinion, this memorandum, rather than stating that the award was in accordance with the procurement strategy, should have informed the Minister that there had been a significant departure from the strategy when no companies qualified during the SOIQ phase. PWGSC has acknowledged that it could have provided more details in the memorandum but, in its opinion, it complied with the overall procurement strategy, which was to have a competitive procurement process.

5.45 In addition, the government required PWGSC to report to the Treasury Board of Canada Secretariat after the contract was awarded. This report was to contain information that included confirmation that the acquisition was carried out in accordance with the procurement strategy as outlined in government documents. We found that PWGSC did not specifically state whether or not the acquisition was carried out in accordance with the procurement strategy and did not disclose that the procurement strategy was modified when none of the companies was found compliant with the SOIQ's requirements. In our opinion, PWGSC should have disclosed this information. PWGSC informed us that more detailed information could have been provided in its report.

5.46 We also found some problems with the way these contracts were administered. We found that National Defence accepted delivery of a truck not included in the original contract. This should not have happened until the contract was amended in writing. Doing so was not in accordance with the government's contracting policy. We also found that National Defence paid twice for the same vehicle and that this error was not discovered until two months later when the supplier notified the Department of this fact. National Defence has informed us that the amount paid in error has since been credited to the Department's account with the vendor.

PWGSC and National Defence worked together to meet urgent needs

5.47 We expected National Defence and PWGSC to work together to ensure effective contracting as they are responsible for the procurement process. We found that PWGSC and National Defence formed integrated teams dedicated to administering the contracting process. Documents presented to government were prepared jointly. Our review of files showed that the two departments worked quickly and together to resolve problems when procurement strategies were not proceeding as planned. They cooperated to ensure that the allocation of PWGSC's limited staff reflected the priorities of National Defence. We believe that there are some positive lessons to be learned from the way in which the two departments worked together that could be applied to the regular contracting process.

5.48 Recommendation. Public Works and Government Services Canada (PWGSC) and National Defence should examine lessons learned in contracting for urgent operational requirements that could be applied to help speed up the regular procurement process.

National Defence's response. Agreed. National Defence continues to work with PWGSC and other key partners to develop a whole-of-government approach to improve and accelerate military procurement. Lessons learned from recent projects related to urgent operational requirements are being evaluated and contributing to these ongoing efforts. In particular, National Defence is working with PWGSC to develop a comprehensive defence procurement process model that will help optimize the process for both routine and urgent military acquisitions. To this end, National Defence has largely completed the initial mapping of its current internal processes and plans to have the full National Defence model completed by 31 March 2010.

PWGSC's response. Agreed. The observations noted in the chapter regarding the implementation of strategies to fast track the procurement and delivery of the urgently required military vehicles, while respecting government contracting policies and objectives, reflect the success of these PWGSC military procurement initiatives.

PWGSC will conduct a lessons-learned exercise to review the procurement activities undertaken during the urgent acquisition of the four types of military vehicles destined for Afghanistan, examined during this audit. The lessons learned will highlight the steps, activities, actions, and processes that led to the quick and timely acquisition of these vehicles.

The lessons learned will be completed by the end of October 2009 and, where applicable, effective practices identified through the lessons-learned exercises would be considered for implementation as part of the Department's existing initiative aimed at improving the efficiency of major military and other Government of Canada procurements.

Meeting operational needs

5.49 We examined whether National Defence could demonstrate that the four types of vehicles that were subjects of our audit

- adequately addressed the capability deficiencies identified by the Department,
- met the Department's performance expectations, and
- could be properly maintained in Afghanistan.

The armoured patrol vehicles (RG-31s) are meeting operational needs

5.50 National Defence's reasons for purchasing the Armoured Patrol Vehicle (RG-31) focused on solving two problems:

- replacing the G-Wagon because it was inadequately protected against the threats that soldiers faced in Afghanistan, and
- providing protected transport for personnel.

5.51 Based on National Defence's assessments, the mine-resistant vehicle it bought (the RG-31) is saving lives. When the vehicle was first deployed in Afghanistan, it had mechanical problems and a shortage of spare parts that affected its availability. We found that these problems had been resolved. In February 2008, the Chief of Land Staff certified that the project met its full operational capability, with the exception of some related equipment that was yet to be purchased.

5.52 Normally, equipment is tested before it is used on deployments. But due to National Defence's urgent need, the RG-31s were delivered directly to Afghanistan without normal testing. The mission quickly found several safety and performance shortfalls and the Department corrected these problems.

5.53 We also found that the initial purchase of 50 RG-31s provided National Defence with fewer vehicles than it needed for operations. When we compared the number of RG-31s that it bought to the detailed military analysis of the number needed—including those needed for training—we found that the number needed was more than the number the Department purchased. None of the departmental decision documents we reviewed explained the reasons for this difference. However, we were informed that this difference was due to funding limits.

5.54 The contract included an option to buy 25 more vehicles, based on National Defence's estimate of potential future losses. In May 2006, the Department exercised this option and these vehicles were immediately placed into operations. The total number of vehicles was still less than the number shown as required in the original military analysis. In addition, RG-31 losses are not being replaced.

5.55 We found that the RG-31s were delivered to Afghanistan before the target date contained in the Department's documents to the government. Even though the acquisition was made quickly, it was not possible to have full delivery in Kandahar before the start of operations in March 2006. Consequently, National Defence considered short-term options, including borrowing RG-31s from Canada's allies. National Defence decided to continue using its G-Wagons with additional armour protection as an interim measure.

5.56 Even though the RG-31 has had a few problems, National Defence has concluded that the vehicle met the early operational needs of the mission.

The AHSVS is meeting operational needs

Serviceability—The number of pieces of equipment ready to be used for their intended purpose from among those available. An item is not serviceable if it needs maintenance or repair. For example, if 10 trucks were available, of which 7 could be put into service and 3 were undergoing repair, the serviceability rate would be 70 percent.

5.57 The Armoured Heavy Support Vehicle System (AHSVS) has successfully met the Department's goal of replacing its heavy logistic wheeled vehicles. The Commander of Task Force Afghanistan reported internally that the AHSVS has been well received. Our analysis of data found that the AHSVS has had a high **serviceability** rate—higher than the vehicle it replaced.

5.58 We found that the AHSVS project delivered vehicles to Afghanistan about six months later than the original target date. A number of factors contributed to this delay. First, the contract was entered into two months later than planned because the procurement strategy took longer than expected. Second, the negotiated delivery schedule in the contract was not aligned with the original planned schedule. Third, production was delayed because a sub-contractor that produced the armoured cab portion of the truck encountered a shortage of steel. To compensate for this production delay, the supplier will provide National Defence with two additional vehicles. Our audit did not identify any significant impact on operations as a result of these delays.

5.59 The Canadian Forces informed us that the AHSVS project has achieved its overall intent of replacing almost all of the heavy logistic wheeled vehicles used outside the protection of the military bases in Afghanistan.

5.60 While not a stated capability deficiency that the AHSVS project was expected to resolve, National Defence acquired passenger-carrying modules for the AHSVS to help resolve a long-standing need to transport personnel in Afghanistan using protected vehicles. These were requested a month after the original contract was signed, by exercising an option in the contract. However, the availability of the passenger modules was limited at first by serviceability issues. The Department informed us that these issues are now resolved.

5.61 The transportation of personnel between sites was not a new issue. The Department had sought government approval three times to resolve the problem. It should have been addressed by the Armoured Patrol Vehicle (RG-31) project. Based on a document from National Defence to government, the issue was also supposed to be addressed by the Light Armoured Vehicle Remote Weapon Station (LAV RWS) project rather than the AHSVS project, which ultimately acquired passenger-carrying modules. Finally, the Army now plans to use vehicles bought as part of another project to provide troop transport. In fact, none of the projects examined in this audit entirely fulfilled this capability gap as expected.

The Tank Replacement Project did not meet all of the most urgent needs

5.62 The Tank Replacement Project consists of two parts. The first part was the most urgent. It was to borrow 20 Leopard 2 tanks and 2 armoured special purpose vehicles from Germany to replace all the old Leopard 1 tanks being used by the Canadian Forces in

Afghanistan. The second part was intended to equip the Army with a fleet of up to 82 Leopard 2 tanks and 18 special purpose armoured vehicles. The Leopard 2 is a modern tank that provides the Canadian Forces in Afghanistan with a high level of protection from land mines and improvised explosive devices (IEDs). It also has a powerful direct fire capability.

5.63 Based on the Department's assessments, the borrowed Leopard 2 tanks have been deployed to Afghanistan and are saving lives. However, we found that the tanks have not replaced all of the older Leopard 1 tanks in Afghanistan because the Leopard 2 tanks cannot be fitted with the Department's land mine ploughs, bulldozer blades, and mine rollers. These implements are essential to overcome obstacles and mitigate the threat posed by IEDs. As a result, the mission in Afghanistan continues to use several of the Leopard 1 tanks.

5.64 In early 2008, the Department began work to find a way of fitting mine rollers to the borrowed Leopard 2 tanks. We were informed that work on this issue is ongoing.

5.65 Our audit found that soon after deployment, a portion of the new tank fleet could not be used due to equipment failure. This problem was compounded by a shortage of parts. While normally considered a last resort, Task Force Afghanistan almost immediately began taking parts from tanks on site in Afghanistan and from tanks that National Defence had bought for troop training in Canada in order to make the necessary repairs. Despite these challenges, the Canadian Expeditionary Command informed us that it is satisfied with the level of serviceability of this equipment.

5.66 The stated goal of the tank replacement project was to have all the borrowed tanks ready for use in Afghanistan by the end of July 2007. We found that National Defence was unable to meet this goal and it was not until the end of August 2007 that the first four tanks and two special-purpose armoured vehicles were delivered to Afghanistan. Not until mid-October 2007 was the Canadian Expeditionary Command satisfied that everything was in place to permit their use. Most of the remaining tanks became available for operations in Afghanistan by the end of December 2007. The Canadian Expeditionary Command informed us that, despite the urgent need to have the tanks available by July 2007, it was not aware of any negative impact on operations when this goal was not met. One of the reasons for this was that the operation was able to continue using the old Leopard 1 tanks.

5.67 It should be noted that while there had been slippages in the project, senior officials recognized from the outset that the schedule was ambitious and acknowledged that an extraordinary amount of work had been accomplished in a short period of time by all involved.

5.68 One of the reasons National Defence used in support of its bid to purchase 100 Leopard 2 tanks from the Netherlands was to have 20 of these tanks immediately available to train soldiers in Canada, as they were similar to the borrowed tanks being used by the Canadian Forces in Afghanistan. However, these training tanks will remain in Europe to be swapped for the borrowed German tanks that would otherwise have been taken from Afghanistan and returned to Germany by September 2009. These tanks will need to be modified to the same specifications as the borrowed tanks and since these have been cannibalized for spare parts, those parts will need to be replaced while the modifications are taking place. These actions will provide Canada with Leopard 2 tanks for use in operations until the recently purchased tanks are upgraded. However, as a result, Canadian soldiers are being sent to train with the German army, creating additional costs and inefficiencies. In addition, because of the cap on funding for upgrading the Leopard 2 tanks, National Defence will not be able to upgrade all the tanks to the desired level. The result is that the training fleet will consist of a different model of tank than the deployment fleet—a situation that the Canadian Forces considers less than ideal.

5.69 We found that National Defence now expects to be able to fully employ the purchased tanks almost two years later than originally planned. This is due to, among other things, delays in conducting a feasibility study to help plan the upgrades to the new tanks. Documentation that we obtained from Public Works and Government Services Canada (PWGSC) shows that it issued and then cancelled a request for proposal (RFP), thus preventing National Defence from entering into a contract with the Original Equipment Manufacturer (OEM) to gather the information required for planning the modifications. The reason documented by PWGSC was that this would prevent the OEM from gaining any advantage in subsequent contracting processes related to the tanks. National Defence also informed us that PWGSC prevented it from contacting the OEM. As noted earlier, the project will not be installing implements on the tanks. A new project has begun, which will include the requirement to deliver this capability.

The LAV RWS project planning underestimated training requirements

5.70 When the LAV RWS project was approved, National Defence did not know the number of vehicles that would ultimately be available for operations in Afghanistan, as training requirements had not been adequately taken into account. Project planning documents show that the Department initially believed that because the new vehicle was so similar to the LAV III, troops would need only minimal additional training to use the new vehicle. The planning documents did not indicate how many LAV RWS, if any, would be required for training. Two years later it became clear to the Department that a higher degree of training was needed. Consequently, of the 33 vehicles being built, 15 will be kept in Canada for training.

5.71 The original project schedule stated that the vehicles would be ready for use in Afghanistan by February 2008. However, there have been delays. Compared to the three other projects we audited, this project is taking the longest to deliver (Exhibit 5.5). As of June 2009, this project has yet to provide vehicles to Afghanistan. The Department now plans to field the vehicles sometime later in 2009. We found that the delay is the result of the complexity of this project. This has had an impact on the Canadian Forces' training plans and armoured vehicle fleet management for the mission in Afghanistan.

Exhibit 5.5 Project timelines have varied considerably

Type of Vehicle	Time from government approval to date first vehicle was available for use in Afghanistan
Armoured Patrol Vehicle (RG-31)	5 months
Leopard 2 Tank	7 months
Armoured Heavy Support Vehicle System (AHSVS)	16 months
Light Armoured Vehicle Remote Weapon Station (LAV RWS)	32 months as of June 2009 (yet to be fielded)

Source: Department of National Defence

5.72 Recommendation. When National Defence plans urgent acquisitions, it should rigorously assess training requirements to ensure that there are a sufficient number of vehicles to meet training needs without reducing the number dedicated for operations.

National Defence's response. Agreed. In an effort to mitigate the risks associated with the aggressive processing of an unforecasted operational requirement, the Land Staff has embraced a revised strategy

across two broad fronts designed to more effectively address key project linkages such as training. First, abbreviated Capability Development assessments better define what is required to build, generate, employ, and sustain any given capability. With respect to training, the Directorate of Army Training, as well as Corps Schools/Centres of Excellence, play an increasing role in ascertaining what is required to train personnel for an emerging capability. On the second front, Army staffs closely shepherd training stocks once an unforecasted operational requirement capability is fielded. This typically involves a synchronized cycle whereby equipment and/or personnel are moved to facilitate the enhanced training of a unit or units for increased readiness in preparation for operations.

Oversight by the Treasury Board of Canada Secretariat

The government approval process depends on good information

5.73 When approving projects, the government makes decisions based on the information contained in documents it receives from government departments. The quality of this information is important for informed decision making, and departments are responsible for the content of these documents, including their accuracy. The Treasury Board of Canada Secretariat plays an oversight role in this decision-making process by performing a challenge and quality assurance function on draft documents and providing recommendations to government. This includes a review of the documents for consistency with government policy and department authorities. The Secretariat also provides feedback and advice to departments on draft documents.

5.74 Our audit examined the challenge and quality assurance roles played by the Secretariat for the projects we audited. We interviewed its officials and reviewed files that the Secretariat provided to us.

5.75 Officials at the Secretariat told us that the challenge function is largely an oral process with little written documentation. The quality assurance role is based mainly on the information presented in the documentation itself, and, therefore, in our view, it has its limits. The analysts at the Secretariat exercise due diligence by challenging the contents of draft documents based on compliance with Treasury Board policy and department authorities. In doing so, they use their judgment and knowledge of the department and their perception of risk. They also help departments write clear and concise documents to government.

5.76 Documentation we collected during the audit shows that the Secretariat reviewed and challenged submissions. We found that its officials met with department officials to discuss their draft government

documents and to be briefed on topics at hand. Questions were asked and clarification sought. For instance, we found that the Secretariat asked National Defence to provide justification for including an option to purchase 25 more vehicles in the RG-31 contract. The Secretariat also challenged National Defence on whether it fully understood the long-term cost implications of the tank replacement project. However, we found that with respect to these four projects, some important issues were not challenged by the Secretariat, and National Defence did not disclose all known relevant information.

5.77 For two of these urgent projects, we examined whether the Secretariat had considered whether the projects could actually be managed in a manner that would respect the Treasury Board's project management policies. We found that it had not.

5.78 We also found that National Defence did not submit risk management strategies, known as the Project Profile and Risk Assessment (PPRA), to the Secretariat for two of the projects in our audit. This document is supposed to be provided to the Secretariat before draft submissions are prepared. Its purpose is to show that the Department has anticipated the possible risks related to the project and has put in place mitigation strategies to deal with them. If the Secretariat had asked about the missing PPRA's, it would have learned that they had not been prepared for two of the projects. This would have given the Secretariat an indication that normal project management practices were not being followed.

5.79 For the Light Armoured Vehicle Remote Weapon Station (LAV RWS) project, when National Defence informed the Secretariat that there would be delays and when it sought a second project approval for an additional \$55 million, thus doubling the total cost of the vehicles to more than \$100 million, the Secretariat did not challenge the Department as to whether this project remained the best option to deliver the needed capabilities and could still be considered urgent.

National Defence did not disclose all relevant information

5.80 Departments are expected to disclose all relevant information related to their submissions to government. Without this full disclosure, it is difficult for the Secretariat to fulfill its responsibilities to the government. We found that National Defence did not disclose all relevant information when it sought approval to lease 20 Leopard 2 tanks. The Department stated that all its old Leopard 1 tanks being used in Afghanistan had to be replaced. We found that National Defence was aware, but did not disclose, that there was a significant risk that it would not be able to replace the entire Leopard 1 tank fleet

in Afghanistan because it would not be able to equip the new tanks with the land mine ploughs and bulldozer blades needed for operations there. National Defence's project budget, as submitted to and approved by the government in spring 2007, included \$2.4 million for ploughs and bulldozer blades. Subsequently, several of the Leopard 1 tanks had to remain in Afghanistan to provide this capability.

5.81 The LAV RWS project is another case where, in our opinion, National Defence did not provide in its documents to the Secretariat and the government all the relevant information for informed decision making (Exhibit 5.6).

Exhibit 5.6 National Defence gave inadequate information to the government during the LAV RWS project

The purpose of the project was to acquire 33 vehicles called the Light Armoured Vehicle Remote Weapon Station (LAV RWS), a variant of the Department's existing fleet of Light Armoured Vehicles (LAV III). The project was to equip 33 LAV III chassis, already owned by National Defence, with a remote weapon system (RWS), instead of a turret, thereby reducing its weight by several thousand pounds and allowing for more armour protection.

In October 2006, the government approved the purchase of 33 LAV RWS vehicles at a cost of \$55 million.

We found that the Department did not inform the government that it would later return for additional funding for custom armour kits. National Defence told us that the entire amount and scope of the project was not included in the first proposal because the details were not sufficiently developed at that time. In March 2007, the government approved \$55 million more for custom armour kits and in April 2007 an additional \$8 million for add-on armour.

During the audit, we found that the reason National Defence decided to proceed with this project was different from what it told the government. National Defence told government that it needed to replace two vehicles: the inadequately protected G-Wagon and the Bison vehicle used for the administrative transport of troops. However, documents from National Defence senior management meetings consistently show that the project was approved in order to build a better LAV, starting with development of a prototype.

National Defence also told the government that an options analysis showed that the LAV RWS was the best option to replace the G-Wagon and the Bison vehicles. However, we found that this was not the case. The Canadian Force's options analysis for the Bison replacement recommended several options and the LAV RWS was not one of the preferred options. Furthermore, no analysis of the G-Wagon replacement had been prepared at that time.

When National Defence requested an additional \$55 million in the spring of 2007, it did not disclose the total cost, which would now be in excess of \$100 million. It also failed to inform the government of the status of the project in relation to the money approved in October 2006.

At the time of this second government decision, little progress had been made on the project, which was supposed to be fully complete by February 2008. Now, it appears that the vehicles will be available in Afghanistan only sometime in 2009. National Defence informed us that the original project plans were unrealistic and did not adequately consider how complex the project was.

5.82 The Secretariat performs an important function in terms of ensuring that what is presented to government is accurate, complete, and supports the decisions that the government is being asked to make. We found that while the Secretariat has challenged the Department on some important issues, the challenge function has its limits. We found that for the projects we audited, the Secretariat did not question or challenge some important issues. The completeness and accuracy of submissions are the responsibility of the sponsoring Minister who presents them to the Treasury Board for consideration. We found instances where National Defence did not provide important information to the government that was needed for informed decision making.

5.83 Recommendation. National Defence should review its processes to ensure that all relevant information is included in its requests to the Treasury Board for project approvals.

National Defence's response. Agreed. As noted in this report, National Defence's project approval process is consistent with Treasury Board direction and policy. That being said, the process is being reviewed to ensure that it can better accommodate the possible need to deal with urgent operational requirements. National Defence will be carefully examining lessons learned from the projects included in this report, in conjunction with an analysis of the current project approval guidance, to ensure that relevant information is not excluded when project approvals are being fast-tracked for urgent projects.

Conclusion

5.84 Our audit examined four urgent vehicle acquisitions for use in Afghanistan. We found that the three vehicles that have been deployed to Afghanistan, according to National Defence, have met operational needs. However, not all the projects have delivered all the required capabilities and National Defence has had to make adjustments.

5.85 Unlike non-urgent acquisitions, the Armoured Patrol Vehicle (RG-31), the Leopard 2 Tank replacement project, and the Armoured Heavy Support Vehicle System (AHSVS) project were procured and delivered quickly and, in the opinion of National Defence, have contributed to the safeguarding of Canadian soldiers in Afghanistan. However, the Light Armoured Vehicle Remote Weapon System (LAV RWS) project is nearly two years behind the original schedule and will cost at least double what the government was first told.

5.86 The two competitive processes that we audited were successful in contracting the needed vehicles in a timely manner and in complying with all rules that apply to contracting. However, we did find some problems with contracting roles and responsibilities, information given to senior officials, and contract administration. Given the urgent operational requirements of National Defence, the problems we saw in the competitive processes were somewhat understandable.

5.87 National Defence should examine its Project Approval Guide to determine how acquisitions can be managed so that urgently needed equipment can be acquired in a timely manner while respecting accepted project management principles. We found that the documentation required for these urgent projects was not produced in a manner that complies with the Department's own Guide.

5.88 In order to use new equipment, there must be adequate training. In one project, the Department underestimated the need for vehicles that could be used for training. This means that the number of vehicles available for operations will be significantly reduced.

5.89 While our audit found that three projects slipped behind schedule, we recognize that the timelines were ambitious. We found that some projects, such as the RG-31, which was in production, can be quickly delivered to where they are needed. Other projects, such as the LAV RWS that involve development work, require more time to plan. When this need for planning time is not respected, the project may fall short in meeting operational needs and also suffer cost overruns. In our opinion, given the significant development work in the LAV RWS project, it should have been managed more rigorously in accordance with National Defence's Project Approval Guide.

5.90 It is important that Treasury Board ministers have the information they need to make good decisions. While we found that the Treasury Board of Canada Secretariat exercised its challenge function, we also found that it missed some important issues related to these projects. As well, National Defence did not disclose all relevant information.

About the Audit

All of the audit work in this chapter was conducted in accordance with the standards for assurance engagements set by The Canadian Institute of Chartered Accountants. While the Office adopts these standards as the minimum requirement for our audits, we also draw upon the standards and practices of other disciplines.

Objectives

The objectives of the audit were to determine whether

- National Defence can demonstrate that the purchase of selected military vehicles used in Afghanistan met operational needs and were acquired in a timely manner; and
- Public Works and Government Services Canada and National Defence purchased these selected military vehicles in compliance with applicable contracting legislation, regulations, and policies and acquired them in a timely manner.

Scope and approach

Our audit focused on four vehicle acquisitions undertaken by National Defence for use in Afghanistan. We selected these four projects based on the following:

- **Mission critical.** The vehicles were urgently needed to help save soldiers' lives and to carry out military operations in Afghanistan.
- **Cost.** The cost of the project was at least \$100 million.

Acquisitions made by the Canadian Special Operations Forces Command have been excluded from our audit scope. As well, the audit did not examine Industrial and Regional Benefits.

The majority of the audit work was conducted at the offices of National Defence located in the National Capital Region. This mostly involved file reviews and interviews with officials involved in the selected projects. We obtained information from many commands within National Defence, including the Assistant Deputy Minister of Materiel, Army, Canadian Operational Support Command, Canadian Expeditionary Force Command, and Vice Chief of the Defence Staff.

The audit also included a review and analysis of various internal reports generated by Joint Task Force Afghanistan, including commanders' reports, equipment status reports, logistic reports, and IED incident reports.

We conducted procurement file reviews and interviews with staff at Public Works and Government Service Canada located in the National Capital Region and in London, Ontario.

We also reviewed files held by the Treasury Board of Canada Secretariat in connection with Treasury Board submissions and interviewed current and former analysts.

We conducted limited interviews with company officials.

Criteria

Listed below are the criteria that were used to conduct this audit and their sources.

Criteria	Sources
<p>We expected that when acquiring selected military vehicles for Afghanistan, National Defence would have complied with its Project Approval Guide.</p> <p>We expected National Defence to have:</p> <ul style="list-style-type: none"> • identified a capability deficiency • completed an options analysis • defined the project • implemented the purchase • completed a close-out <p>We expected that National Defence could demonstrate that the projects delivered a solution to the problem outlined in the statement of capability deficiency.</p> <p>Timeliness was an implied criterion, given that these were urgent projects required for operations in Afghanistan.</p>	<ul style="list-style-type: none"> • Treasury Board of Canada, Project Approval Policy • Treasury Board of Canada, Project Management Policy • Department of National Defence, Project Approval Guide
<p>We expected that the Treasury Board of Canada Secretariat would have provided a challenge function by ensuring that submissions to the Treasury Board of Canada were thoroughly analyzed and properly prepared.</p>	<ul style="list-style-type: none"> • Treasury Board of Canada Secretariat, Guide to Preparing Treasury Board Submissions (2007)
<p>We expected that Public Works and Government Services Canada (PWGSC) and National Defence would have carried out the acquisitions in compliance with all laws, regulations, and policies that apply.</p>	<ul style="list-style-type: none"> • Treasury Board of Canada, Contracting Policy • <i>Financial Administration Act</i>, sections 32, 33, and 34 • <i>Government Contracts Regulations</i> • Public Works and Government Services Canada, Supply Manual
<p>We expected that PWGSC and National Defence would have worked together to complete the acquisitions in a timely manner.</p>	<ul style="list-style-type: none"> • Public Works and Government Services Canada, Supply Manual

Management reviewed and accepted the suitability of the criteria used in the audit.

Period covered by the audit

The audited activities occurred between June 2005 and May 2009 inclusively.

Audit work for this chapter was substantially completed on 29 May 2009.

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Appendix List of recommendations

The following is a list of recommendations found in Chapter 5. The number in front of the recommendation indicates the paragraph where it appears in the chapter. The numbers in parentheses indicate the paragraphs where the topic is discussed.

Recommendation	Response
Project management	
<p>5.22 National Defence, in consultation with the Treasury Board of Canada Secretariat, should examine its Project Approval Guide to determine how the Department can manage the process of acquiring urgently needed equipment in a timely manner while respecting sound project management principles and Treasury Board policies. (5.14–5.21)</p>	<p>Agreed. National Defence will review the current project approval guidance with a view to align the present documentation requirements for procurement greater than \$1 million with the project approval framework as outlined in the Project Approval Guide. The Treasury Board of Canada Secretariat and other stakeholders will be consulted in order to achieve the correct balance between urgency and appropriate levels of documentation to support decision-making rationale. The National Defence group responsible for materiel will be consulted to ensure that coordination of the Guide and Project Management Manual meets the requirements.</p>
Contracting	
<p>5.40 For urgent operational requirements, National Defence should involve Public Works and Government Services Canada (PWGSC) early, in accordance with agreed upon roles and responsibilities, so that effective procurement strategies can be implemented to meet operational objectives. (5.23–5.39)</p>	<p>Agreed. Lessons learned from recent procurements, and opportunities for making process and other improvements, are being explored in some depth as part of a number of ongoing government reviews of defence procurement. Measures to further improve the already close collaboration between National Defence and PWGSC, while respecting the statutory responsibilities of the respective departments, are being examined as part of these reviews.</p> <p>In addition, PWGSC Acquisitions Branch now has full membership in several standing and ad hoc National Defence bodies that oversee the planning of future acquisitions, both routine and urgent.</p>

Recommendation	Response
<p>5.48 Public Works and Government Services Canada (PWGSC) and National Defence should examine lessons learned in contracting for urgent operational requirements that could be applied to help speed up the regular procurement process. (5.41–5.47)</p>	<p>Department of National Defence’s response. Agreed. National Defence continues to work with PWGSC and other key partners to develop a whole-of-government approach to improve and accelerate military procurement. Lessons learned from recent projects related to urgent operational requirements are being evaluated and contributing to these ongoing efforts. In particular, National Defence is working with PWGSC to develop a comprehensive defence procurement process model that will help optimize the process for both routine and urgent military acquisitions. To this end, National Defence has largely completed the initial mapping of its current internal processes and plans to have the full National Defence model completed by 31 March 2010.</p> <p>PWGSC’s response. Agreed. The observations noted in the chapter regarding the implementation of strategies to fast track the procurement and delivery of the urgently required military vehicles, while respecting government contracting policies and objectives, reflect the success of these PWGSC military procurement initiatives.</p> <p>PWGSC will conduct a lessons-learned exercise to review the procurement activities undertaken during the urgent acquisition of the four types of military vehicles destined for Afghanistan, examined during this audit. The lessons learned will highlight the steps, activities, actions, and processes that led to the quick and timely acquisition of these vehicles.</p> <p>The lessons learned will be completed by the end of October 2009 and, where applicable, effective practices identified through the lessons-learned exercises would be considered for implementation as part of the Department’s existing initiative aimed at improving the efficiency of major military and other Government of Canada procurements.</p>

Recommendation	Response
<p>Meeting operational needs</p> <p>5.72 When National Defence plans urgent acquisitions, it should rigorously assess training requirements to ensure that there are a sufficient number of vehicles to meet training needs without reducing the number dedicated for operations. (5.49–5.71)</p>	<p>Agreed. In an effort to mitigate the risks associated with the aggressive processing of an unforecasted operational requirement, the Land Staff has embraced a revised strategy across two broad fronts designed to more effectively address key project linkages such as training. First, abbreviated Capability Development assessments better define what is required to build, generate, employ, and sustain any given capability. With respect to training, the Directorate of Army Training, as well as Corps Schools/Centres of Excellence, play an increasing role in ascertaining what is required to train personnel for an emerging capability. On the second front, Army staffs closely shepherd training stocks once an unforecasted operational requirement capability is fielded. This typically involves a synchronized cycle whereby equipment and/or personnel are moved to facilitate the enhanced training of a unit or units for increased readiness in preparation for operations.</p>
<p>Oversight by the Treasury Board of Canada Secretariat</p> <p>5.83 National Defence should review its processes to ensure that all relevant information is included in its requests to the Treasury Board for project approvals. (5.73–5.82)</p>	<p>Agreed. As noted in this report, National Defence’s project approval process is consistent with Treasury Board direction and policy. That being said, the process is being reviewed to ensure that it can better accommodate the possible need to deal with urgent operational requirements. National Defence will be carefully examining lessons learned from the projects included in this report, in conjunction with an analysis of the current project approval guidance, to ensure that relevant information is not excluded when project approvals are being fast-tracked for urgent projects.</p>

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