Frigate Life Extension (FELEX)

Description: The FELEX project is primarily a risk mitigation project to ensure that the modernization of the HALIFAX Class is achieved in a timely, efficient, effective and coordinated manner. FELEX will manage to varying degrees, from total project responsibility to installation responsibility only, all work elements in the Halifax Class Modernization (HCM). As the Design Integration Authority for the HCM, FELEX is responsible for the ship level design integration of all elements of the HCM including any unique/specific engineering changes required to address integration requirements. Effective risk mitigation will be achieved through the following specific activities: scope management, design integration engineering, integrated risk management across all elements of the HCM, schedule coordination, and implementation/installation management.

Project Phase: Definition

Leading and Participating Departments and Agencies

Lead Department	Department of National Defence
Contracting Authority	Public Works & Government Services Canada
Participating Departments and Agencies	Industry Canada and its regional agencies

Prime and Major Sub-Contractors

Prime Contractor	Fleetway Incorporated, Halifax, NS

Major Milestones

Major Milestones	Date
Preliminary Project Approval (PPA) Approval	Feb 2005
Refit Procurement Strategy Approval	Sept 2006
Effective Project Approval (EPA) Approval	April 2008
Refits Begin	April 2010
Refits Completed	April 2017
Project Closure	April 2018

Progress Report and Explanation of Variances: The FELEX Project is presently in its definition phase. Design integration work is underway, consultation with Industry has begun, a continuous risk management program has been implemented and costing efforts for the implementation phase are progressing.

Treasury Board granted original Preliminary Project Approval to the FELEX project on February 28, 2005, providing $28.0M Expenditure Authority for the Definition phase. The FELEX project should receive Effective Project approval on April 1, 2008 at an estimated total cost of $1,077.0 (BY) net of GST, which includes Definition funding expenditures of $28.0M. The FELEX project is currently running on budget.

Industrial Benefits: The definition phase of the FELEX Project has no Industrial Benefits implications.

Summary of Non-Recurring expenditures

Definition Phase (Approved):

($ Millions)	Current Estimated Total Cost	Expenditures to 31 March 2006	**Planned Spending 2006-2007**	Future Years' Requirement
Frigate Life Extension	$26.4	$2.4	**$10.2**	$13.8

Implementation Phase (Planned):

($ Millions)	Current Estimated Total Cost (EPA)	Expenditures to 31 March 2006	**Planned Spending 2006-2007**	Future Years' Requirement
Frigate Life Extension	$1,041.0	$0.0	**$0.0**	$1,041.0

Submarine Capability Life Extension

Description: The Submarine Capability Life Extension (SCLE) project will replace the *Oberon* class submarine fleet with four existing British *Upholder* class (to be renamed Canadian *Victoria* class) submarines. The project will ensure that Canada preserves its submarine capability within the existing capital budget. The project supports Canada's ability to conduct surveillance and control of its territory, airspace and maritime areas of jurisdiction, as well as Canada's ability to participate in bilateral and multilateral operations.

The project will deliver four functional *Victoria* class submarines with up-to-date, safe-to-dive certificates, four crew trainers (including a combat systems trainer, a ship control trainer, a machinery control trainer, and a torpedo handling and discharge trainer), and four trained crews.

Project Phase: Implementation

Leading and Participating Departments and Agencies

Lead Department	Department of National Defence
Contracting Authority	Public Works & Government Services Canada (PWGSC)
Participating Department	Industry Canada and its regional agencies

Prime and Major Sub-Contractors

Prime Contractor	The Government of the United Kingdom (UK) of Great Britain and Northern Ireland, Ministry of Defence, UK
Major Sub-Contractor	British Aerospace Engineering (BAE) Marine Systems (formerly Vickers Shipbuilding and Engineering Limited (VSEL)/Marconi Marine) Cumbria, UK

Major Milestones

Major Milestones	Date
Treasury Board Approval	June 4, 1998
Main Contract Award	July 2, 1998
Initial Support Contract Award	July 2, 1998
Commence lease 1st submarine	October 2000
Commence lease 2nd submarine	October 2001
Commence lease 3rd submarine	February 2003
Commence lease 4th submarine	October 2004
Relocate trainers to Canada	June 2003
Lease completed, submarines purchased	April 2009

Progress Report and Explanation of Variances: Canada has accepted all four *Upholder* submarines from the United Kingdom.

a. *Her Majesty's Canadian Ship (HMCS) Victoria* finalized her Canadianization in early 2003 and completed her transit to the west coast of Canada in August 2003. She completed a Repair Work Period in May 2004. Due to the incident onboard HMCS Chicoutimi, the operational pause prevented Victoria from going to sea. Once lifted, Victoria continued operations by progressing her Operational Trials and Evaluation (OT & E) work in defining the vessels weapons envelope. In June 2005 Victoria entered her Extended Docking Work Period (EDWP), currently being conducted in Fleet Maintenance Facility (FMF) Cape Breton, which is scheduled to complete June 2008.

b. *HMCS Windsor* completed her Canadianization in December 2003. She had begun participating in east coast exercises and patrols during the summer of 2004. Due to the incident onboard HMCS Chicoutimi, the operational pause prevented Windsor from going to sea. Once lifted, she continued with operations on the East Coast. Windsor is due to enter EDWP in FMF Cape Scott in Jan 2007.

c. *HMCS Corner Brook* started her Canadianization work in Halifax on January 5, 2004. The modifications required from the *Chicoutimi* incident will be complete when Corner Brook emerges from her Canadianization work in summer 2006.

d. *HMCS Chicoutimi* was handed over to Canada October 2, 2004. On October 5, 2004, while en-route to Canada, she had an electrical incident at sea and was returned to the UK via sealift. She is currently in Halifax Shipyard Limited (HSL) and was undergoing damage repairs and Canadianization work, which was expected to be complete winter 2007. The current Extended Docking Repair Work Period (EDRWP) has been cancelled and the submarine will proceed into an Extended Limited Maintenance Period (ELMP). Work is now ongoing to determine scope for ELMP. Canadianization Work Period (CWP) Engineering Changes (Ecs) are to be implemented in follow-on EDWP, which is scheduled for FY 11/12.

Effective Project approval was granted to the SCLE project on December 6, 1998 at an estimated total cost of $812.0M (BY) net of GST. The expenditure ceiling was increased $84.8M by Treasury Board June 18, 2003 (TB Minute 830633) to accommodate increased scope to include 17 submarine related projects and initiatives that were progressing outside the bounds of SCLE. SCLE project is currently running on budget.

Industrial Benefits: This project will provide an estimated $200M in direct and indirect industrial benefits. This includes Canadian modifications to the submarines and the relocation of the simulators and trainers to Canada. A further $100M in industrial benefits has taken the form

of waivers to provide industrial offsets in the United Kingdom for Canadian companies bidding on defence contracts.

Summary of Non-Recurring Expenditures

($ Millions)	Current Estimated Total Cost	Expenditures to 31 March 2006	**Planned Spending 2006-2007**	Future Years' Requirement
Submarine Capability Life Extension	$896.8	$701.7	**$68.0**	$127.1

Associated Projects

Project	**Cost ($ Millions)**
East Coast Capability	
Maritime Atlantic (MARLANT) Combat Special Tools and Test Equipment (SPTATE)	$10.0
MARLANT Construction	10.9
MARLANT Initial Provisioning	5.7
MARLANT Fleet Maintenance Formation Training	1.4
West Coast Capability	
Maritime Pacific (MARPAC) Fleet Maintenance Formation Training	0.9
MARPAC Construction	8.1
MARPAC Combat SPTATE	5.0
MARPAC Spares / Ancillary Equipment	16.8
MARPAC Sound Range	2.0
MARPAC Heavy Weight Torpedo Crane	0.5
MARPAC Battery Maintenance	0.5
Generic Victoria Class Projects	
Canadian Work Period Overrun	2.6
PWGSC Revenue Dependency charges	3.2
Engineering & Supply Mgt Activation Costs	2.4
Victoria Class Common to Fleet Trainer	8.0
Victoria Class Deperming	2.0
Victoria Class Noise Control/Monitoring	3.0
Total	**$82.99**

Canadian Patrol Frigate (CPF)

Description: The CPF Project will acquire twelve fully supported multi-purpose HALIFAX Class frigates to replace the aging ST LAURENT Class Steam Driven destroyers. In 1983, the Government approved the procurement of six HALIFAX Class frigates. On July 29, 1983, following a competitive contract definition phase, a contract was signed with Saint John Shipbuilding Limited, Saint John, New Brunswick, to supply six ships, shore facilities and related support to the Canadian Forces. An increase in the scope of the CPF Project from six to twelve ships was approved on December 17, 1987 and a contract amendment signed on December 29, 1987.

Project Phase: EPC (Effectively complete)

Leading and Participating Departments and Agencies

Lead Department	Department of National Defence
Contracting Authority	Public Works & Government Services Canada
Participating Departments and Agencies	Industry Canada Atlantic Canada Opportunities Agency Western Economic Diversification Canada Federal Office of Regional Development (QC)

Prime and Major Sub-Contractors

Prime Contractor	Saint John Shipbuilding Ltd, Saint John, NB
Major Sub-Contractors	Lockheed Martin Electronic Systems, Montréal, QC Marine Industries Ltd, Lévis, QC

Major Milestones

Major Milestones	Date
Contract award	July 1983
Contract amendment – change in scope	December 1987
Delivery of first ship	June 1991
Delivery of last ship	July 1996
Close out of Prime Contract	December 2002
Project Completion	31 March 2007

Progress Report and Explanation of Variances: Treasury Board granted original Preliminary Project Approval to the CPF project for the definition phase in July 1978 at an estimated cost of $59.7M. Effective Project Approval was granted in July 1983, with an amendment in December 1987 at an estimated total cost of $10,435.9M BY. The final estimated project cost is $8,914.9M BY. The Project is now effectively complete (E Status) and the project office is closed, with remaining CPF project closure activities managed by DMCM HFX. The remaining closeout activities are in accordance with the Effective Project Completion (EPC) Workplan, and are required to bring the project from E Status to I Status. These activities include archiving, financial reconciliation, and some final implementation of finish-the-job Engineering Changes. Target date for completion of these activities is 31 March 2007.

Industrial Benefits: The CPF Project industrial benefit commitments were exceeded. The actual direct and offset industrial benefits achieved totalled in excess of $7.5B (BY).

Summary of Non-Recurring expenditures

($ Millions)	Current Estimated Total Cost	Expenditures to 31 March 2006	**Planned Spending 2006-2007**	Future Years' Requirement
Canadian Patrol Frigates	$8,931.4	$8,928.6	**$2.8**	$0.0

Tribal Class Update & Modernization Project (TRUMP)

Description: The TRUMP Project updated the four IROQUOIS Class destroyers originally constructed and delivered to the Navy in the early 1970s.

The introduction of the HALIFAX Class frigates left the Canadian Task Group (CTG) deficient in two critical areas: the capability to defend escorted vessels against air attack (area air defence) and a Task Group command and control capability.

To address these deficiencies, the TRUMP project delivered four modernized IROQUOIS Class destroyers having extended life with new platform and combat systems, designed to compliment the frigates and ensure a balance of capabilities within the CTG.

Project Phase: EPC (Effectively Complete)

Leading and Participating Departments and Agencies

Lead Department	Department of National Defence
Contracting Authority	Public Works and Government Services Canada

Prime and Major Sub-Contractors

Prime Contractor	Litton Systems Canada Ltd., Etobicoke ON
Major Sub-Contractors	MIL Davie Inc., Lévis QC Pratt & Whitney Canada Inc., Longueuil QC MIL Systems Engineering Inc., Ottawa ON

Major Milestones

Treasury Board Approval for Contract Definition	June 1984
Treasury Board Approval for TRUMP	April 1986
Contract Award	June 1986
Last Ship Returned to Operational Status	September 1996
Finish-the-Job (FTJ) Initiatives, i.e. full project mandate, Approved	July 1995
Project Completion	31 March 2007

Progress Report and Explanation of Variances: Senior Review Board (SRB) 12 Nov 2005 endorsed Effective Project Completion (EPC) effective 31 Dec 05. All remaining work, including administration and payment of final invoices will be completed in accordance with the EPC Work.

Industrial Benefits: The TRUMP Contract commitments were achieved and were accepted by Industry Canada at the time of Prime Contract Restructuring (September 1991). As of ships'

acceptance in September 1996, Industrial Regional Benefits (IRBs) stood at $310.7M for Offsets and $856.4M for Direct IRBs.

Summary of Non-Recurring Expenditures

($ Millions)	Current Estimated Total Cost	Expenditures to 31 March 2006	**Planned Spending 2006-2007**	Future Years' Requirement
Tribal Class Update and Modernization Project (TRUMP)	$1,381.8	$1,381.3	**$0.5**	$0.0

Joint Support Ship (JSS)

Description: The JSS is a Major Crown Project which will maintain the Canadian Navy's current naval task group logistic support, while ensuring that the Canadian Forces has an adequate, assured strategic sealift capability to allow it to deploy and sustain operations in support of government policy and enhancing Canada's capability for joint command and control of forces ashore. This will be accomplished by awarding two separate contracts to one contractor for the design and construction in Canada of three vessels and another for In-Service Support of the units throughout their operational life. The ships will replace the two ageing *Protecteur* class support ship currently in service on the east and west coast.

Project Phase: Definition

Leading and Participating Departments and Agencies

Lead Department	Department of National Defence
Contracting Authority	Public Works & Government Services Canada
Participating Department	Industry Canada

Prime and Major Sub-Contractors

The Project is in the Pre-Qualification Phase and as such, no prime contractor has been selected. Four teams have been pre-qualified following the closure on June 30, 2005 of a Public Works and Government Services Canada issued Letter of Interest. Two of these four teams will be further selected for a funded Definition Phase following evaluations of their reply to the Request for Proposal. Final selection of the prime contractor will occur at Effective Project Approval, planned for 2008.

Major Milestones

Major Milestones	Date
Treasury Board Preliminary Project Approval	November 22, 2004
Request for Proposals released	Summer 2006
Request for Proposals closed	Fall 2006
Funded Definition Phase contracts awarded	Fall 2006
Treasury Board Effective Project Approval	2008
Initial Operating Capability	2013
Full Operating Capability	2016
Project Completion	2016

Progress Report and Explanation of Variances: The project continues to progress steadily since obtaining Preliminary Project Approval in November 2004. Treasury Board granted

expenditure authority of $72.2M(BY) for the pre-qualification and definition phases. Treasury Board also acknowledged the indicative cost of $2,012.9M(BY) for implementation.

Industrial and Regional Benefits (IRB): The JSS Project has a mandatory requirement that bidders' IRB proposals must meet the stated Eligibility Criteria and equal a minimum of 100% of each of the Implementation and In-Service Support Contract values in a combination of Direct and Indirect benefits (measured in Canadian Content Value). IRB performance guarantees will form part of each contract. Industry Canada is the IRB Authority for the JSS Project.

Summary of Non-Recurring Expenditures

($ MILLIONS)	Current Estimated Total Cost	Expenditures to 31 March 2006	**Planned Spending 2006-2007**	Future Years' Requirement
Joint Support Ship	$49.3	$7.2	**$13**	$29.1

Maritime Helicopter Project

Description: The purpose of this project is to replace the CH124 *Sea King* with a fleet of 28 new fully equipped Maritime Helicopters (MH) bundled with a long-term in-service support contract and modify the *Halifax* class ships to accommodate the new Maritime Helicopters. This replacement will address the operational deficiencies of the current CH124, eliminate the supportability difficulties of the older helicopter, and provide a sufficient fleet size of multi-purpose ship borne MH for operations well into the 21st century.

Project Phase: Implementation

Leading and Participating Departments and Agencies

Lead Authority	Department of National Defence
Service Department	Public Works and Government Services Canada
Participating Department	Industry Canada and its Regional Agencies

Prime and Major Sub-Contractors

Prime Contractor	Sikorsky International Operations Incorporated, Stratford, Connecticut USA
Major Sub-Contractor	General Dynamics Canada, Ottawa ON L-3 MAS, Montréal QC

Major Milestones

Major Milestones	Date
Definition Phase	
Government Announcement	August 17, 2000
Preliminary Project approval (PPA)	August 18, 2000
Department of National Defence Departmental and Treasury Board (TB) Approval – Synopsis Sheet (SS) (PPA)	June 18, 2003
Request for Proposals (RFP) issued	December 16, 2003
Winning Proposal for MH announced by Government	July 23, 2004

Implementation Phase	
TB Effective Project approval (EPA) and Contracts for MH	November 22, 2004
Critical Design Review – Helicopter and Mission Systems	June 2006
First Aircraft Delivery	November 2008
Initial Operational Capability (12 Aircraft)	November 2009
Final Aircraft Delivery	2011
Project completed and closed	2013

Progress Report and Explanation of Variances: The project received Preliminary Project Approval (PPA) from Treasury Board (TB) on June 18, 2003 for the purchase of 28 Maritime Helicopters, setup of in-service support, ancillary contracts and project office costs at a total indicative departmental cost estimate of $3,094M. Treasury Board granted Effective Project Approval (EPA) at a substantive departmental cost estimate of $3,160M Vote 5 Capital funds on November 22, 2004. The TB documentation also identified that $2,346M of Vote 1 Operations and Maintenance (O&M) funding is the estimated amount required for the 20 years of in-service support. Two contracts were released on November 23, 2004, one contract for $1,817M Vote 5 Capital funds, for the purchase of 28 Maritime Helicopters and one contract for $3,235M for In-Service Support ($889M Vote 5 Capital funds for setup of in-service support plus $2,346M Vote 1 O&M funds). The remaining approved Capital funds are identified for ancillary contracts, project office costs and contingency. The project is within budget and currently assessing the validity of a claim by the Contractor of a delay caused by a strike at its plant.

Industrial Benefits: This procurement offers business opportunities to Canadian firms in all Regions of Canada through the application of the Industrial and Regional Benefits (IRB) policy. For the acquisition phase, business opportunities in excess of the value of the contract will be provided to Canadian industry. The in-service support phase will include business opportunities in direct proportion to the major elements of the in-service support contract and estimated at 70% of the contract value.

	Industrial Regional Benefits		
Region	**Acquisition**	**In Service Support**	**Total**
Atlantic	$239M	$826M	$1065M
Québec	$556M	$399M	$955M
Northern Ontario	$3M	$8M	$11M
Ontario (excluding Northern Ontario)	$924M	$1073M	$1997M
West	$211M	$181M	$392M
Unallocated	$10M	$106M	$116M
Total	**$1,943M**	**$2,593M**	**$4,536M**

Summary of Non-Recurring Expenditures

($ Millions)	Current Estimated Total Cost	Expenditures to 31 March 2006	**Planned Spending 2006-2007**	Future Years' Requirement
Maritime Helicopters Project	$3,160.3	$427.9	**$385.0**	$2,347.4

Armoured Personnel Carriers

Description: The Armoured Personnel Carrier (APC) is essential for all foreseeable Canadian Forces roles, including territorial defence, UN peacekeeping and peace enforcement operations, other international commitments, and Aid of the Civil Power. The existing APC fleet does not meet the minimum operational requirements when compared to the modern, technically sophisticated weapons and vehicles Canadian soldiers encounter during operations. They suffer shortcomings in protection, self-defence capability, mobility, carrying capacity and growth potential. The APC Project is fielding a fleet of modern, wheeled, armoured personnel carriers. 651 Light Armoured Vehicles (LAV) III are to be procured in six configurations; Infantry Section Carrier, Command Post, Engineer, Forward Observation Officer, and TOW (Tube Launched, Optically Tracked, Wire Guided) Under Armour, and LAV III Less Kits.

Project Phase: Implementation

Leading and Participating Departments and Agencies

Lead Department	Department of National Defence
Contracting Authority	Public Works and Government Services Canada
Participating Departments and Agencies	Industry Canada and its regional agencies

Prime and Major Sub-Contractors

Prime Contractor	General Dynamics Land Systems - Canada, London, ON

Major Milestones

Major Milestones	Date
Treasury Board approval	December 1995
Contract award	December 1996
First vehicle delivery	July 1998
Exercise of first option	July 15, 1998
Exercise of second option	July 15, 1999
Exercise of third option	July 15, 1999
Last vehicle delivery	August 31, 2007
Project completed (Vehicle portion)	March 31, 2008

Progress Report and Explanation of Variances: In August 1995, the Government approved in principle the procurement of up to 651 APCs. In January 1997, the Government announced the award of a contract to General Dynamics Land Systems – Canada (GDLS-C) to build 240 new eight-wheel-drive APCs. The contract contained three options for an additional 120, 120 and 171 APCs. All three options have been exercised. A total of 574 vehicles have been delivered to date. The remaining vehicles will be delivered in the next two years.

The vehicles are equipped and configured to meet the demands of operational employment at the battle group level by Land Force infantry elements. The APC vehicle will provide a rapid response capability, both strategic and tactical, allowing the Canadian Forces to meet all tasks currently envisaged**.**

On March 29, 2004, Treasury Board authorized $129M for indoor accommodation for LAV III to facilitate regular maintenance and training programs, and prevent any deterioration that would result from outdoor storage. Construction will take place in six locations: Edmonton, Wainwright, Petawawa, Montréal, Valcartier, and Gagetown. Construction activities are scheduled between 2006 and 2009. This portion of the project can then close in March 2010.

Industrial Benefits: This project includes the following regional commitments:

Region	**Cash Benefits**
Atlantic Canada	$150.7M
Québec	$149.2M
Western Canada	$150.5M
Small Business	$210.3M
Total	**$660.7M**

Summary of Non-Recurring Expenditures

($ Millions)	Current Estimated Total Cost	Expenditures to 31 March 2006	**Planned Spending 2006-2007**	Future Years' Requirement
Armoured Personnel Carriers	$2,321.4	$2,027.2	**$129.8**	$164.4

Mobile Gun System (MGS)

Description: It is the army's intent to transform into a medium-weight, information age force. Key features of a medium weight force are global deployability, operational mobility and flexibility. Currently, the Land Force is primarily equipped with a fleet of multipurpose combat capable wheeled Light Armoured Vehicles (LAVs). Wheeled platforms provide broad operational capabilities and a range of transportability options. The MGS project will deliver 66 vehicles with associated integrated logistics support. These vehicles will be fully developed with minimal modifications required to accommodate unique Canadian equipment, such as the existing communications suites. It is intended to procure all 66 vehicles as part of the Effective Project Approval (EPA) phase and in joint production with the US Army for economies of scale and effort. The key timings in the EPA Phase that must be met to ensure co-production with the US; the US Long Lead Time Items buy in the fall of 2006 and the Main Production Line Contract in the summer of 2007.

Project Phase: Definition

Leading and Participating Departments and Agencies

Lead Department	Department of National Defence
Contracting Authority	Public Works and Government Services Canada
Participating Department	Industry Canada and its regional agencies

Prime and Major Sub-Contractors

Prime Contractor	General Dynamics Land Systems (GDLS), London, ON

Major Milestones

Major Milestones	Date
Treasury Board (TB) Preliminary Project Approval (PPA)	March 2004
Contract negotiations complete	June 2006
Treasury Board Effective Project Approval (EPA)	To be determined
First Vehicle Delivery (Forecast)	July 2008
Implementation – Initial Operational Capability (Forecast)	January 2009
Implementation – Full Operational Capability (Forecast)	December 2010
Project completed (Forecast)	December 2012

Progress Report and Explanation of Variances: The Main Contract is still in negotiation at this time. All contractual audits have been completed and PWGSC estimates completion of final negotiations by end June 2006. Other subordinate contracts are nearing completion of the negotiation phase and are awaiting EPA approval for finalization. PWGSC's contract signature authority submission and DND's EPA submission to Treasury Board should be scheduled to allow a contract award date no later than 1 October 2006 in order to meet this requirement. This will allow for a January 2009 Initial Operational Capability (IOC) deployment for the Canadian Forces. The estimated total cost for this project is $849M, with a Full Operational Capability (FOC) in December 2010 and Project Closeout in 2012.

Industrial Benefits: This project included the following industrial and regional benefits: Target Industrial Regional Benefits for this project are 100% of contract value, with 50% direct.

Summary of Non-Recurring Expenditures

($ Millions)	Current Estimated Total Cost	Expenditures to 31 March 2006	**Planned Spending 2006-2007**	Future Years' Requirement
Mobile Gun System	$157.7	$10.6	**$35.1**	$112.0

Multi Mission Effects Vehicle (MMEV)

Description: Thirty-six Air Defence Anti-Tank Systems (ADATS) entered service in the CF in the late 1980s and early 1990s. Since that time, the Army Strategy has refocused the Army's efforts into a transformation similar to that being undertaken in the US Army. This project aims to provide an information age direct fire system, which possesses increased lethality, agility and survivability on the battlefield in support of multi-purpose combat forces. The MMEV will require increased precision and accuracy and an automated command, control and communications network capable of the receipt from, and input into, joint and allied tactical data networks. The MMEV must be effective against both ground and air threats including tanks, light armoured vehicles, attack helicopters, Unmanned Aerial Vehicles (UAVs) including armed UAVs, cruise missiles, precision guided munitions and fighter ground attack aircraft.

Planned deliverables include 33 MMEV's, which will be replacing ADATS. They will be a strategically mobile, wheeled LAV mounted direct fire system capable of the delivery of precision guided, long range munitions in both the ground direct fire and air defence roles. Deliverables could include the replacement of active sensors (Radar, Electro-Optics), upgrading existing sub-assemblies and components with industrially supportable latest generation technologies, introduction of new training simulators, and the introduction of a ground-based sensor to mounting the ADATS onto the LAV III chassis. Deliverables will also include the associated integrated logistics support.

Project Phase: Definition

Leading and Participating Departments and Agencies

Lead Department	Department of National Defence
Contracting Authority	Public Works and Government Services Canada
Participating Department	Industry Canada and its regional agencies

Prime and Major Sub-Contractors

Prime Contractor	Oerlikon Contraves Canada, St-Jean sur Richelieu, QC

Major Milestones

Major Milestones	Date
Treasury Board Preliminary Project Approval	September 7, 2005
Treasury Board Effective Project Approval	September 2009
Implementation Contract Awarded	March 2010
Implementation – Initial Operational Capability	September 2010
Implementation – Full Operational Capability	March 2013
Project completed	March 2014

Progress Report and Explanation of Variances: MMEV was granted Treasury Board (TB) Preliminary Project Approval (PPA) on September 7, 2005 and was announced on September 22, 2005. Public Works Government Services Canada is waiting for TB approval to commence contract negotiations for the PPA phase with Oerlikon Contraves Canada. First possible vehicle delivery is in early 2010 and an Initial Operational Capability (IOC) in late 2010. The total Estimated Project Cost is $753.4M (GST included).

Industrial Benefits: To be determined

Summary of Non-Recurring Expenditures

($ Millions)	Current Estimated Total Cost	Expenditures to 31 March 2006	**Planned Spending 2006-2007**	Future Years' Requirement
Multi Mission Effects Vehicle	$ 94.0	$ 0.7	$ 26.9	$ 66.4

Light Utility Vehicle Wheeled (LUVW)

Description: Light utility vehicles are highly mobile and essential to facilitating the tactical command of combat, combat support and combat service support units, to assist in the gathering and dissemination of information and to liaison within and between field formations.

The LUVW Project mandate is to replace the current fleet of Canadian *Iltis* vehicles with two separate vehicle acquisitions: 1,159 Standard Military Pattern (SMP) vehicles (Mercedes Benz G Wagon) with integrated logistic support and 170 Armour Protection Systems ($241.4M), for use by field force units; and 1,061 militarized commercial off-the-shelf (Mil COTS) vehicles (GM Silverado) ($65.4M) for use primarily by the Reserve Force for a total project cost of $306.8M.

Project Phase: Implementation

Leading and Participating Departments and Agencies

Lead Department	Department of National Defence
Contracting Authority	Public Works and Government Services Canada
Participating Department	Industry Canada and its regional agencies

Prime and Major Sub-Contractors

Prime Contractor (Phase 1) SMP	Mercedes Benz Canada, Toronto ON
Prime Contractor (Phase 2) Mil-COTS	General Motors Defense Military Trucks, Troy, Michigan, USA

Major Milestones

Major Milestones	Date
Major Milestone (Phase 1) SMP	
Award of Contract	October 2003
First Full Production Delivery	March 2004
Project Completion	July 2007

Major Milestone (Phase 2) Mil COTS	
Award of Contract	October 2002
First Full Production Delivery	October 2003
Final Production Delivery	December 2004
Project Completion	July 2007

Progress Report and Explanation of Variances: Project is in full implementation. The LUVW SMP (G Wagon) contract was awarded to Mercedes Benz Canada on October 21, 2003. Fielding of the G Wagon started in March 2004, five months ahead of schedule. A total of 60 basic LUVW G Wagons were delivered directly from the manufacturer's plant in Graz, Austria to Kabul as a first step to replace the ILTIS fleet deployed on Op ATHENA. An additional 24 vehicles (20 Command & Reconnaissance and 4 Military Police) were fielded to complement Rotation (ROTO) 2 in September 2004 and complete the replacement of the ILTIS fleet in theatre. To date 1040 vehicles were received and delivery will continue until September 2006.

The LUVW Mil COTS contract was awarded to General Motors in October 2002 with the first vehicle delivery received in October 2003. All 1,061 vehicles have been delivered as of December 2004. There were options on both the LUVW SMP and Mil COTS contracts; however, they have both been exercised and the option quantities are already reflected in the quantities detailed above in the second paragraph under the Description.

The level of confidence in the LUVW is high. User feedback from Op ATHENA on the G Wagon has been positive and, even with the high mileage being placed on the vehicles in Afghanistan, the fleet serviceability remains steady at 95%. With the addition of the Land Force Reserve Restructure (LFRR) requirement, project closeout is now scheduled for July 2007.

Industrial Benefits: The industrial benefits are required for Phase 1 for a value 100% of the contract value. Latest report from Industry Canada indicates that Mercedes Benz Canada has exceeded the Industrial Regional Benefit goals by $300M. There are no mandated industrial benefits for the Mil COTS contract.

Summary of Non-Recurring Expenditures

($ Millions)	Current Estimated Total Cost	Expenditures to 31 March 2006	**Planned Spending 2006-2007**	Future Years' Requirement
Light Utility Vehicle Wheeled	$297.4	$242.4	**$53.8**	$1.2

Intelligence Surveillance, Target Acquisition and Reconnaissance (ISTAR)

Description: The purpose of this project is to develop, deliver and evolve an integrated, interoperable, ISTAR Capability that will improve the ability of commanders to visualize the operational area, manage sensors and information collection resources, and to plan and implement actions to successfully complete operational missions. The project will provide enhancements to existing capabilities and include the acquisition of new capabilities in the areas of communications, command and control and sensors. The project includes the acquisition of Unmanned Aerial Vehicles (UAV), Weapon Locating Sensors (WLS) and transformation or enhancement of existing sensor platforms to include Electronic Warfare (EW), Light Armoured Vehicle III, Coyote Reconnaissance Vehicle, Ground Based Air Defence, Geomatic support and Tactical Meteorology Systems. ISTAR is an omnibus project that received Treasury Board approval for definition phase activity on April 3, 2003. Implementation through sub-projects is anticipated upon completion of the definition activities. Although initial delivery of equipment was estimated to occur sometime in fiscal year 2005–2006, the Unforecasted Operational Requirement (UOR) for an UAV and other sensor upgrades has resulted in the delivery of a partial tactical UAV and EW capability in Afghanistan in 2003–2004. Early deliveries of ISTAR capabilities for Op ARCHER UORs will continue during 2006.

Project Phase: Definition

Leading and Participating Departments and Agencies

Lead Department	Department of National Defence
Contracting Authority	Public Works & Government Services Canada
Participating Department	Industry Canada and its regional agencies

Prime and Major Sub-Contractors

Prime Contractor for the UAV UOR Op ATHENA sub-project	Oerlikon Contraves Inc., Saint-Jean, QC
Major Sub-Contractor for the UAV UOR Op ATHENA sub-project	SAGEM SA, France
Prime Contractor for BLOS UOR OP Archer	ND Satcom, Germany
Prime Contractors for MEWT EW UOR OP Archer	Agilent Technologies, Ottawa, ON Digital Receiver Technology Inc, Maryland USA Signal Technology Associates Inc., Kanata, ON
Prime Contractor for Mini UAV UOR OP Archer	Thales Canada, Ottawa, ON
Major Sub-contractor for the Mini UAV UOR OP Archer	Elbit Systems, Israel

Major Milestones

Major Milestones	Date
Treasury Board Preliminary Project Approval	April 3, 2003
MND Approval UAV UOR	July 2003
Treasury Board Project Approval in Arrears UAV UOR	August 2005
Communications & Data Link Component Treasury Board Effective Project Approval	July 2006
Command and Control (C2) Treasury Board Effective Project Approval	December 2006
EW Sensors Treasury Board Effective Project Approval Phase 1	December 2006
In Service Sensors Enhancement Treasury Board Effective Project Approval	March 2007
WLS Sensor Component Treasury Board Effective Project Approval	October 2008
Mini UAV Treasury Board Effective Project Approval	March 2007
Deliveries Complete all ISTAR sub-projects	2012
Project Completion	March 2013

Progress Report and Explanations of Variances: Because the ISTAR project staffs are managing the UOR procurement for Op ATHENA and OP ARCHER, some of the definition studies have necessarily been delayed and it is possible that there will be as much as a year's delay in achieving some of the ISTAR project milestones. However, initial capabilities have being procured and the overall project is expected to complete one year ahead of the original schedule.

Delivery of equipment actually started with UORs in Op ATHENA, and final deliveries are scheduled out to 2012. The currently approved sub-projects in support of Op ATHENA and Op ARCHER are:

a. UAV UOR Op ATHENA
b. Beyond Line of Sight Satellite (BLOS) Op ARCHER
c. Mobile Electronic Warfare Team (MEWT) OP ARCHER
d. Mini UAV UOR Op ARCHER
e. Acoustic Weapon Locating System (AWLS) Op ARCHER

Industrial Benefits: A competitive procurement process was held for the UAV UOR. Oerlikon Contraves won with Sagem SA as the manufacturer of the SPERWER UAV system. How Canadian industry in Canada will benefit from the ISTAR project will be determined during the definition phase and will be based on an approved implementation procurement strategy for each sub project.

Summary of Non-Recurring Expenditures

($ Millions)	Current Estimated Total Cost	Expenditures to 31 March 2006	**Planned Spending 2006-2007**	Future Years' Requirement
LF ISTAR Omnibus	$134.7	$74.4	**$37.9**	$22.4

Medium Support Vehicle System

Description. . The MLVW is nearing the end of its service life. The MLVW has the most wide-ranging support and operational tasks of all fleets. It is the backbone of the Combat Service Support function. The MLVW fleet was acquired in 1982/1983 with an expected service life of 15 years. The age and heavy usage of the vehicle has resulted in a five-fold increase in the maintenance cost per kilometre. Corrosion has become such a problem that a corrective control program has been conducted, which has been followed by a limited recurring corrosion control spray program with the aim of keeping the fleet in service until 2008. After that, the fleet will become increasingly unsupportable due to a combination of various problems including parts availability, continued advancement of corrosion, performance of the brake system and vehicle overloading. The Medium Support Vehicle System Project will acquire a mix of up to 1,500 medium-sized standard military pattern trucks including 300 companion military pattern trailers, 800 commercial trucks with militarized components, 1,000 associated special equipment vehicle kits, and logistics support, be acquired at an estimated cost of approximately $1.1 billion (net of GST), noting that cost, cash-flow and schedule estimates will be further refined before the Minister of National Defence seeks effective project approval from Treasury Board;

2. **Project Phase:** Definition

3. **Leading and Participating Departments and Agencies**

Lead Department	Department of National Defence
Contracting authority	Public Works & Government Services Canada
Participating Departments and Agencies	Industry Canada and its regional agencies

4. **Major Contractors:** No major contracts have been issued to date.

5. **Major Milestones**

Preliminary Project Approval (PPA) Approval	June 2006
Procurement Strategy Approval	May 2006
Effective Project Approval (EPA) Approval	December 2007
Contract Award – Commercial Military Pattern Vehicles	December 2007
Contract Award – Standard Military Pattern Vehicles	June 2008
Contract Award – Special Equipment Vehicle Kits	July 2008
Delivery - Militarized Commercial Patten Vehicles	July 2008
Delivery - Military Patten Vehicles	November 2008
Delivery - Special Equipment Vehicle Kits	November 2008
Military Pattern Vehicles and Trailers	Winter 2010-11
Militarized Commercial Pattern Vehicles	Winter 2009-10
Special Equipment Vehicle Kits	Winter 2011-12
Project Closure	April 2018

6. **Progress Report and Explanation of Variances.** Upon Treasury Board Approval of the Preliminary Project Approval, the MSVS Project will be in its definition phase. Design integration work will commence in addition to consultation with Industry, development and release of Requests for proposal. A continuous risk management program has been implemented and costing efforts for the implementation phase are progressing.

Treasury Board was requested to grant Preliminary Project Approval to the MSVS project providing $25,799K ($BY) Expenditure Authority for the Definition phase. The MSVS project should receive Effective Project approval on December 2007 at an estimated total cost of $1,071M (BY) net of GST, which includes Definition funding expenditures of $26M.
.

Industrial Benefits: The definition phase of the MSVS Project has no Industrial Benefits implications.

8. **Summary of Non-Recurring Expenditures ($ Millions)**

Definition Phase

($ Millions)	Current Estimated Total Cost	Expenditures to 31 March 2006	Planned Spending 2006-2007	Future Years' Requirement
MSVS	26	0	12	14

Canadian Forces Utility Tactical Transport Helicopter (CFUTTH) Project

Description: The purpose of the Canadian Forces Utility Tactical Transport Helicopter (CFUTTH) Project is to acquire helicopters in support of national and international tactical aviation roles. The project supports the Land Force, Air Force, Deputy Chief of Defence Staff (DCDS) operations and Civil Emergency Preparedness, as well as a wide range of defence objectives. It replaces three aging helicopter fleets – the CH118 Iroquois, the CH135 Twin Huey and the CH136 Kiowa. The Bell 412CF/CH146 was procured as a single role multi-mission helicopter capable of supporting a majority of the tasks previously undertaken by fleets it replaced. The operational requirements for the CFUTTH defined the principle task requirements of the CFUTTH to include the tactical lift of troops and equipment, logistical lift, reconnaissance and surveillance, direction and control of fire, aero-medical support and casualty evacuation, command and liaison, and communications assistance. These mission capabilities are employed in support of DND operational commitments, United Nations peacekeeping missions, and support to other Government Departments and Agencies, including Aid of the Civil Power.

The project has delivered 100 Bell 412CF/CH146 Griffons, a flight simulator, composite maintenance trainer, facilities, mission kits (including defence electronic warfare suites), as well as other equipment, documentation and services.

Project Phase: Implementation

Lead and Participating Departments and Agencies

Lead Department	Department of National Defence
Contracting Authority	Public Works and Government Services Canada
Participating Department	Industry Canada and its regional agencies

Prime and Major Sub-Contractors

Prime Contractor	Bell Helicopter Textron Canada, Mirabel, QC
Major Sub-Contractors	Pratt & Whitney Canada, Montréal, QC BAE Systems Canada Inc., Montréal, QC CAE Ltd, Montréal, QC

Major Milestones

Major Milestones	Date
Contract Award	September 1992
Critical Design Review	April 1993
First Helicopter Delivery	March 1995
Simulator Acceptance	June1996
Last Helicopter Delivery	February 1998
Project Completion	March 2007

Progress report and Explanation of Variances: This project received Cabinet approval on April 7, 1992 and Treasury Board approval on September 8, 1992, with an original budget of $1.293B. Following directed reductions to the project budget and by assuming certain performance risks, the project will be completed in March 2007 for some $200M less than the initial Treasury Board budget approval.

Industrial Benefits: Bell Helicopter Textron Canada has committed to achieving $506.7M in Canadian value-added industrial regional benefits as follows:

Region	**Cash Benefits**
East	$10.0M
Québec	$420.2M
Ontario	$32.1M
West	$12.0M
Unallocated	$32.4M
Total	**$506.7M**

To date, Bell Helicopter has claimed $289.5M direct and $252.1M indirect industrial regional benefits, totalling $541.6M, representing some 107% of the overall commitment.

Summary of Non-Recurring Expenditures

($ MILLIONS)	Current Estimated Total Cost	Expenditures to 31 March 2006	**Planned Spending 2006-2007**	Future Years' Requirement
Canadian Forces Utility Tactical Transport Helicopter (CFUTTH) Project	$1,093.1	$1,070.5	**$11.5**	$11.1

Canadian Search and Rescue Helicopter Project

Description: Maintaining a national search and rescue capability is a direct departmental objective. The purpose of the Canadian Search and Rescue Helicopter (CSH) project was to replace the CH-113 Labradors with a fleet of 15 new helicopters. The new helicopters address the operational deficiencies of the CH-113 Labrador fleet, eliminate the supportability difficulties of these older airframes, and provide a fleet size sufficient for continuous operations well into the 21st century.

Project Phase: Completed

Leading and Participating Departments and Agencies

Lead Department	Department of National Defence
Contracting Authority	Public Works and Government Services Canada
Participating Department	Industry Canada and its regional agencies

Prime and Major Sub-Contractors

Prime Contractor	AgustaWestland International Limited (formerly E.H. Industries Ltd. (EHI)), Farnborough, United Kingdom
Major Sub-Contractors	GKN Westland Helicopters, United Kingdom Agusta Spa, Italy General Electric Canada Inc., Canada

Major Milestones

Major Milestones	Date
Treasury Board Effective Project Approval	April 2, 1998
Contract Award	April 6, 1998
First Aircraft Delivery (at plant in Italy)	September 2001
Final Aircraft Delivery (at plant in Italy)	July 2003
Project Completion	July 2006

Progress Report and Explanation of Variances: Treasury Board (TB) granted original Preliminary Project Approval on February 8, 1996, providing Expenditure Authority for $3.3M for Definition Phase activities and approval-in-principle for $704.2M. An amendment to the Preliminary Project Approval was granted on April 24, 1997, providing Expenditure Authority for $6.4M for total Definition Phase activities and approval-in-principle for $708.2M.

Effective Project Approval was provided by Treasury Board on April 2, 1998 including Expenditure Authority for $788.0M (BY) net-of-GST, which included Definition funding expenditures of $6.4M.

On April 6, 1998, E.H. Industries (EHI) Limited (renamed AgustaWestland International Ltd (AWIL)) was contracted to supply 15 AW511 Cormorant search and rescue helicopters, along with initial logistics support to the Canadian Forces. The initial support package includes training, publications, warranty, a repair and overhaul program providing coverage until October 2004, and software support until 2006.

The project has procured the required aircraft spares, maintenance and support equipment, a Cockpit Procedures Trainer and facilities for the four Canadian Forces search and rescue bases. The project has also established and funded the first two years of an in-service support contractor for follow-on support.

As of July 2003, all 15 Cormorant helicopters have been delivered. Spares parts and infrastructure are in place to support operations. Initial training is complete. The Cormorant have been operational at the squadrons in Comox, BC, Gander, NF, Greenwood, NS and Trenton, ON. However, CH149 operations at 424 Squadron in Trenton have been suspended temporarily due to the lack of aircraft availability and difficulty to maintain adequate aircrew training.

Industrial Benefits: The contractor (AWIL) has committed to providing direct and indirect industrial benefits valued at $629.8M, to be completed within eight years from the date of contract award. It is estimated that these benefits will create or continue roughly 5,000 person-years of employment in Canada. Canadian industry in all regions of Canada will benefit from the project. The contractor has completed its obligations to Canada in regard to Industrial and Regional Benefits under the CSH contract. Small businesses in Canada will also benefit from the project by the placing of $67.0M in orders.

Region	**Cash Benefits**
Atlantic Canada	$43.1M
Québec	$317.7M
Ontario	$146.5M
Western Canada	$86.2M
Unallocated	$36.3M
Total	**$629.8M**

Summary of Non-Recurring Expenditures

($ MILLIONS)	Current Estimated Total Cost	Expenditures to 31 March 2006	**Planned Spending 2006-2007**	Future Years' Requirement
Canadian Search and Rescue Helicopter Project	$774.4	$760.5	**$13.9**	$0

Military Automated Air Traffic System (MAATS) Project

Description: A national air traffic system project to automate air traffic services has been initiated by Transport Canada (now NAV CANADA). To ensure that military air operations continue to function effectively, remain compatible with the national system, and keep pace with these enhancements, the Department of National Defence and the Canadian Forces established the Military Automated Air Traffic System (MAATS) Project. The project directly supports the defence objective of conducting air traffic control operations.

The MAATS project will provide the essential equipment and system interfaces necessary to remain interoperable and compatible with NAV Canada's Canadian Automated Air Traffic System (CAATS). Where equipment or system interfaces are not currently available, new equipment will be installed. All existing Defence radar systems will be retained and interfaced to the MAATS as appropriate.

Project Phase: Implementation

Leading and Participating Departments and Agencies

Lead Department	Department of National Defence
Contracting Authority	Public Works Government Services Canada
Participating Department	Industry Canada and its regional agencies

Prime and Major Sub-Contractors

Prime Contractor	Raytheon Canada Limited, Richmond, BC NavCanada, Ottawa, ON
Major Sub-Contractors	Hewlett Packard Canada Ltd, Ottawa ON CVDS, Montréal PQ Frequentis Canada Ltd, Ottawa ON

Major Milestones

Major Milestones	Date
Treasury Board Effective Project Approval	July 1993
Contract Award	January 1994
Preliminary Design Review	March 2000
Critical Design Review	January 2001
Factory Acceptance Test	November 2001
Initial Delivery	April 2003
Contract Complete	December 2004
Phase One Complete	January 2007
Phase Two Complete	October 2013
Long Term Support Contract Award	January 2007

Progress Report and Explanation of Variances. Treasury Board initially approved the project with an estimated cost of $179.2M. The project funding was reduced by $15M following departmental review. Partial return of funding was approved at the December 2003 Senior Review Board. Current Departmental Funding is $169.2M.

Since accepting the Canadian Automated Air Traffic System (CAATS) from Raytheon Canada, NavCanada has independently continued system development and deployment. Their schedule has suffered numerous setbacks and, to date, only the Moncton Area Control Centre has been converted to CAATS. NavCanada has set an aggressive schedule extending into 2008 for the remaining six implementations. The Military Automated Air Traffic System (MAATS) is encountering many of the same system deficiencies that have slowed CAATS implementation. Correction of these deficiencies and the need to re-establish interoperability between the two products after many years of divergence has significantly delayed MAATS implementation and increased project risk. Full Operational Capability (FOC) is not estimated to occur before 2013. To preserve military Air Traffic Control operations in the interim, an initial deployment of MAATS is in progress. This Phase One deployment provides voice communication capabilities, and the integration and distribution of navigation aid information, weather information and Notices to Airmen (NOTAMs). Four units have been converted and are in operation. The Phase Two deployment will activate the radar processing equipment and activate additional automation features.

Industrial Benefits. Canadian industry in the following regions of Canada will benefit from the MAATS project.

Region	**Cash Benefits**
Atlantic Canada	$1.6M
Québec	$1.0M
Ontario	$1.8M
Western Canada	$50.2M
Unallocated	TBD
Total	**$54.6M**

Summary of Non-Recurring Expenditures

($ MILLIONS)	Current Estimated Total Cost	Expenditures to 31 March 2006	**Planned Spending 2006-2007**	Future Years' Requirement
Military Automated Air Traffic System (MATTS) Project	$168.6	$145.7	**$8.4**	$14.5

Airlift Capability Project (ACP) - Tactical

Description: The objective of the Airlift Capability Project – Tactical is to ensure a continued tactical airlift capability. In combination with the Fixed Wing Search and Rescue project, this project will replace the Canadian Forces' aging CC 130E/H fleet. This project will provide the Canadian Forces with an assured and effective tactical airlift capability that allows the requisite operational flexibility and responsiveness to support international and domestic operations.

Project Phase: Definition

Leading and Participating Departments and Agencies

Lead Department	Department of National Defence
Contracting authority	Public Works and Government Services Canada
Participating Department	Industry Canada and its regional agencies

Prime and Major Sub-Contractors: Not applicable

Major Milestones

Major Milestones	Date
Treasury Board Preliminary Project Approval	November 2005
Revised Preliminary Project Approval	June 2006
Solicitation of Interest and Qualification	Fall 2006
Treasury Board Effective Project Approval	Winter 2007/2008
Contract Award	Winter 2007/2008
Initial operational capability	Summer 2011
Final operational capability	Summer 2013
Project Completion	Winter 2013/2014

Progress Report and Explanation of Variances: The project office is completing documentation including those required for the issue of the Solicitation of Interest and Qualification to industry.

Industrial Benefits: Target IRBs for this project are 100% of contract value for both capital acquisition and in-service support, of which at least 60% will be identified as specific work packages.

Summary of Non-Recurring Expenditures

($ MILLIONS)	Current Estimated Total Cost	Expenditures to 31 March 2006	**Planned Spending 2006-2007**	Future Years' Requirement
Airlift Capability Project - Tactical	$ 11.8	$0	**$ 5.3**	$ 6.5

Airlift Capability Project (ACP) - Strategic

Description: The objective of the Airlift Capability Project –Strategic is to acquire a minimum of four aircraft that are operationally effective and provide an assured Canadian Forces strategic airlift capability. The Airlift Capability Project – Strategic together with Airlift Capability Project Tactical will provide the Canadian Forces with an assured and effective airlift capability that allows the requisite operational flexibility and responsiveness to support international and domestic operations.

Project Phase: Implementation

Leading and Participating Departments and Agencies

Lead Department	Department of National Defence
Contracting authority	Public Works and Government Services Canada
Participating Department	Industry Canada and its regional agencies

Prime and Major Sub-Contractors: Not applicable

Major Milestones

Major Milestones	Date
Treasury Board Effective Project Approval	June 2006
Contract Award	Fall 2006
Initial operational capability	Spring 2008
Final operational capability	Summer 2009
Project Completion	Summer 2010

Progress Report and Explanation of Variances: The project office is completing initial procurement documentation.

Industrial Benefits: Target IRBs for this project are 100% of contract value for both capital acquisition and in-service support, of which 60% will be identified as specific work packages.

Summary of Non-Recurring Expenditures

($ MILLIONS)	Current Estimated Total Cost	Expenditures to 31 March 2006	**Planned Spending 2006-2007**	Future Years' Requirement
Airlift Capability Project - Strategic	$ 1,807.4	$0	**$ 132.3**	$ 1,675.0

Fixed Wing Search & Rescue (FWSAR)

Description: The purpose of this project is to provide 23 new fixed wing aircraft (19 for Search and Rescue duties and four to replace the northern utility fleet of aircraft). This replacement will address the CC115 Buffalo, CC-130 Hercules fixed-wing search and rescue aircraft and CC138 Twin Otter utility transport aircraft fleets that are ageing, becoming less reliable and are more difficult and costly to maintain. As well, the immediate response, search and rescue service will be enhanced for Canadians in the North.

Project Phase: The FWSAR Project is currently in pre-definition. The PPA was departmentally approved in March 2004 with the PPA updated and again departmentally approved in March 2006. Departmental funding permitted project staffing and the preparation of project documentation to progress the FWSAR Project.

Leading and Participating Departments and Agencies

Lead Department	Department of National Defence
Contracting authority	Public Works and Government Services Canada
Participating Department	Industry Canada and regional agencies

Prime and Major Sub-Contractors: Not applicable

Major Milestones

Major Milestones	Date
Departmental approval of the Options Analysis Phase	November 15, 2002
FWSAR Project Stood-Up	May 2003
Options Analysis Complete	December 2003
Statement of Operational Requirement (SOR) approval	May 2006
Treasury Board Preliminary Project Approval	October 2006
Treasury Board Effective Project Approval	March 2008
Contract Award	March 2008
First Aircraft Delivery	March 2011
Initial Operational Capability	October 2012
Final Aircraft Delivery	March 2013
Full Operational Capability	September 2013

Progress Report and Explanation of Variances. The FWSAR Project received departmental approval of its identification phase November 15, 2002. The Budget 2004 announced that this acquisition will be funded by non-budgetary resources beginning in 2005–2006 to move the acquisition of the fixed-wing search and rescue aircraft forward as much as possible. The Record of Decision for the Departmental Program Management Board dated March 26, 2004 endorsed the original Synopsis Sheet for Preliminary Project Approval for onward transmission to the Minister of National Defence and Treasury Board and departmental funds have been used to progress the project. Additionally, the Government placed increased emphasis on Canada's

northern regions and announced some funding in Budget 2005 to acquire new utility aircraft (UTA) to replace the four Twin Otters. The FWSAR Project now reflects the FWSAR & UTA requirements.

At present, the FWSAR Project is forecasted to enter the Definition Phase in October 2006. Following this approval, the draft Solicitation of Interest and Qualification (SOIQ) for the FWSAR project would be issued in November 2006 with the final SOIQ issued in the January 2007. It is anticipated the Request for Proposal would be issued in the fall of 2007. Once the project receives Effective Project Approval from Treasury Board in the spring of 2008, a contract could be awarded with first aircraft delivery planned to occur in the spring 2011.

Industrial Benefits. This procurement will provide Industrial Regional Benefits (IRBs) equivalent to 100% of the contracted value for both the capital acquisition and in-service support, of which at least 60% will be identified as specific work packages in technology sectors. Furthermore, 50% of the work on the aircraft acquisition will be in the aerospace and defence sector and 10% will be directly related to work on the aircraft. A Canadian company will perform 75% of eligible direct in-service support work.

In a single compliant bidder situation, mandatory IRB requirements will ensure that for aircraft acquisition portion of the contract no less than 10% of the value of the IRB proposal will be placed in each of the Designated Regions (Atlantic Canada, Québec and Western Canada). For both the aircraft acquisition and in-service support portions of the contract, a minimum of 15% of the IRB value will be placed with Canadian small to medium sized businesses.

Summary of Non-Recurring Expenditures

($ MILLIONS)	Current Estimated Total Cost	Expenditures to 31 March 2006	**Planned Spending 2006-2007**	Future Years' Requirement
Fixed Wing Search and Rescue (FWSAR)	$8.2	$5.9	**$2.3**	$0.0

Medium to Heavy Lift Helicopter Project (MHLH)

Description:
Over the last decade, the ability to move personnel and equipment by air has become a vital and growing capability requirement for the Canadian Forces in fulfilling a wide range of roles. Canadian Forces operational experience, particularly in current operational theatres, has highlighted the urgent need for medium to heavy lift helicopters to support land, amphibious and special operations forces in a threat environment by quickly, efficiently and safely moving large numbers of personnel and heavy equipment from forward deployed bases, thus reducing their vulnerability to attack. Both at home and overseas, medium to heavy lift helicopters will provide the Government with a wider range of military options for addressing threats and emergencies than the Canadian Forces' current helicopter fleets.

The Medium to Heavy Lift Helicopter project will deliver the medium to heavy lift helicopter capability to support domestic and international deployments of land forces, special operations and amphibious formations. The project will acquire prime mission vehicles, integrated logistic support and other related support elements.

Project Phase: Identification / Pre Definition

Leading and Participating Departments and Agencies

Lead Department	Department of National Defence
Contracting authority	Public Works and Government Services Canada
Participating Department	Industry Canada and its regional agencies

Prime and Major Sub-Contractors: Not applicable

Major Milestones

Major Milestones	Date
Treasury Board Preliminary Project Approval	June 2006
Treasury Board Effective Project Approval	Fall 2006 / Winter 2006-07
Contract Award	Fall 2006 / Winter 2006-07
Initial operational capability	Fall 2010 / Winter 2010-11
Full operational capability	Fall 2012 / Winter 2012-13
Project Completion	Fall 2013 / Winter 2013-14

Progress Report and Explanation of Variances: The project received Preliminary Project Approval in June 2006, whereby expenditure authority of $8.4M (BY) was granted for the definition phase. Treasury Board also acknowledged the indicative cost of $2,022M (BY) for total project.

Industrial Benefits: Industrial and Regional Benefits (IRBs) will be determined as part of Preliminary Project Approval process. It is anticipated that IRBs will apply to both the capital and in-service support portions of the acquisition.

Summary of Non-Recurring Expenditures

($ MILLIONS)	Current Estimated Total Cost	Expenditures to 31 March 2006	**Planned Spending 2006-2007**	Future Years' Requirement
Medium to Heavy Lift Helicopter (MHLH) Project	8	0	**8**	0

Protected Military Satellite Communications (PMSC)

Description. The Department of National Defence and the Canadian Forces require global communications that are secure, guaranteed and directly interoperable with our allies. The aim of the Protected Military Satellite Communications Project (PMSC) is to overcome current Canadian Forces interoperability and global command and control limitations. Upon completion, this project will enable long-range communications to deployed forces and facilitate their interoperability with allies.

Project Phase: Implementation

Leading and Participating Departments and Agencies

Lead Department	Department of National Defence
Contracting Authority	Public Works and Government Services Canada
Participating Department	Industry Canada and its regional agencies

Prime Contractor and Major Sub-Contractors

Prime Contractor	United States Department of Defense
Major Sub-Contractors	TBD

Major Milestones

Major Milestones	Date
Preliminary Project Approval	August 25, 1999
Effective Project Approval	November 18, 2003
Initial Terminal Delivery	Summer 2009
Initial Satellite Delivery	Spring 2010
Terminal Delivery Completed	Summer 2013
Project Complete	Winter 2014

Progress Report and Explanations of Variances. The PMSC project will be implemented in two phases. Under Phase 1, a Memorandum of Understanding (MOU) with the United States Department of Defense (DOD) will guarantee Canadian participation in their Advanced Extremely High Frequency (AEHF) system. Definition studies for the terminal segment were completed in Phase 1. Under Phase II, the terminal segment will be procured, installed and tested.

On August 25, 1999, Treasury Board granted Preliminary Project Approval to the PMSC Project, with expenditure authority for the implementation of Phase I at an estimated cost of $252M and granted approval for the Department of National Defence to enter into a Military Satellite Communication (MILSATCOM) MOU with the US Department of Defense. The MOU was signed November 16, 1999.

On November 18, 2003, Treasury Board granted Effective Project Approval to the PMSC Project, with expenditure authority for the Implementation of Phase II at an estimated cost of $300M. The total cost is now estimated at $552M.

Industrial Benefits: Under Phase 1, the US Department of Defense has committed to a work share with Canadian industry proportional to our contribution. Suppliers from both nations will be permitted to bid on project work. In Phase II, Senior Procurement Advisory Committee (SPAC) endorsed that Terminal acquisition and support will be procured through Foreign Military Sales and the installation will be done through DND managed contracts. Industrial and Regional Benefits will be sought by Industry Canada at 100% of contract value.

Summary of Non-Recurring Expenditures

($ MILLIONS)	Current Estimated Total Cost	Expenditures to 31 March 2006	**Planned Spending 2006-2007**	Future Years' Requirement
Protected Military Satellite Communications	$552.0	$307.4	**$55.7**	$188.9

Material Acquisition And Support Information System (MASIS)

Description: The mission of the Material Acquisition and Support Information System (MASIS) Project is to provide a Department of National Defence (DND) integrated materiel acquisition and support information system that enables the cost-effective optimization of weapon/equipment system availability throughout the life cycle. The scope of MASIS includes all end-to-end information requirements within DND/CF related to the materiel acquisition and support functions which are comprised of systems engineering, integrated logistics support (ILS), equipment configuration, technical data management, asset management, maintenance management, project management, performance management, operational support, business management, decision support analysis and contract management.

Project Phase: Implementation – Phase 4

Leading and Participating Departments and Agencies

Lead Department or Agency:	National Defence
Contracting Authority:	Public Works and Government Services
Participating Departments and Agencies:	N/A

Prime and Major Sub-Contractors

Prime Contractor	IBM Canada, Ottawa, ON
Major Sub-Contractors	SAP Canada, Ottawa, ON Pennant, Ottawa, ON

The project follows the standard departmental project management framework, with a phased approach implemented by a fully Integrated Project Team (IPT) consisting of personnel from the Contractor, DND and PWGSC.

Major Milestones

Major Milestones	Date
Definition Phase	
Preliminary Project Approval - Expenditure Authority for Phase 1	June 10, 1998
Contract Awarded for Prime Systems Integrator	December 14, 1998
MASIS system—Go Live Phase 1 (202 Work Depot Montreal)	September 01, 1999
Implementation Phase	
Expenditure Authority (EPA) for Phases 2 and 3: a. Implementation of Complex Contracts; b. Implementation of the MASIS solution to the Navy; c. Operations Support & Maintenance for MASIS; d. Planning and scoping for requirements scheduled to be implemented for the Army.	June 15, 2000
Amended Expenditure Authority (EPA) for Phase 4:	December 2003

a. Investigation of opportunities to progress the implementation of MASIS to the maximum extent possible within the future available Phase 5 funding; b. Management of Operations Support & Maintenance for MASIS (outside MASIS project Expenditure Authority); c. Project was deemed as a Major Crown Project with this approval.	
Planned Amended Expenditure Authority (EPA) for Phase 5 to cover rollout of additional functionality to wider user base including Air Force and Army. Approval of amended SS(EPA) by TB is expected in the fall 2006.	2006
Project Closeout	2011

Progress Report and Explanations of Variances

Following Definition phase approval, EPA for MASIS was granted to DND in June 2000 in the amount of $147.8M departmental. This authority provided the project the means to cover the work under Phases 1 to 3, which have been completed.

The project follows a cyclical approval and delivery methodology. In December 2003, an additional $34.4M was approved to fund Phase 4 of the project. The project is currently in Phase 4 and will require TB approval of an amended SS(EPA) to move to the next phase(s) of implementation. The project team is presently reviewing options for the future based on new government priorities, perceived risk in large IM/IT projects and alignment of Financial and Materiel Acquisition and Support business processes. Based on a review of these options the department will move the submission forward to TB for approval to rollout to the Army and Air Force. Planned completion of project is 2011 timeframe.

Industrial Benefits All industrial benefits are attributed to Ontario since all project expenditures occur in Ontario.

Summary of Non-recurring Expenditures (includes approved Phases I to IV)

($ MILLIONS)	Current Estimated Total Cost	Expenditures to 31 March 2006	**Planned Spending 2006-2007**	Future Years' Requirement
Materiel Acquisition and Support Information System (MASIS)	$182.3	$176.8	$5.5	$0.0