Future Fighter Capability Project

Sustaining Canada's Future Fighter Fleet

January 2018

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DISCLAIMER

The information provided today is subject to change and is intended for discussion purposes only. Due to the interactive nature of the Future Fighter Industry Day, any verbal statements made by Canada's representatives will not be binding for purposes of the Suppliers List Invitation or the procurement process. Only the information released by Canada in the Suppliers List Invitation or in other procurement documents should be followed when preparing a response. Any verbal comments by Canada must not be construed as a preference, rejection or assessment of any solution. Canada reserves the right to consider comments and suggestions received during the Future Fighter Industry Day.

1. FFCP Sustainment Definition

Sustainment includes all activities related to managing, maintaining, and supporting the aircraft fleet and associated equipment throughout the aircraft's service life (set-up, transition, and steady state)

FFCP Sustainment includes:

- Fleet and Program Management
- Engineering Support
- Maintenance (aircraft, simulators, support equipment)
- Materiel Management
- Information Management
- Training (operational and support)

1. FFCP Sustainment Context

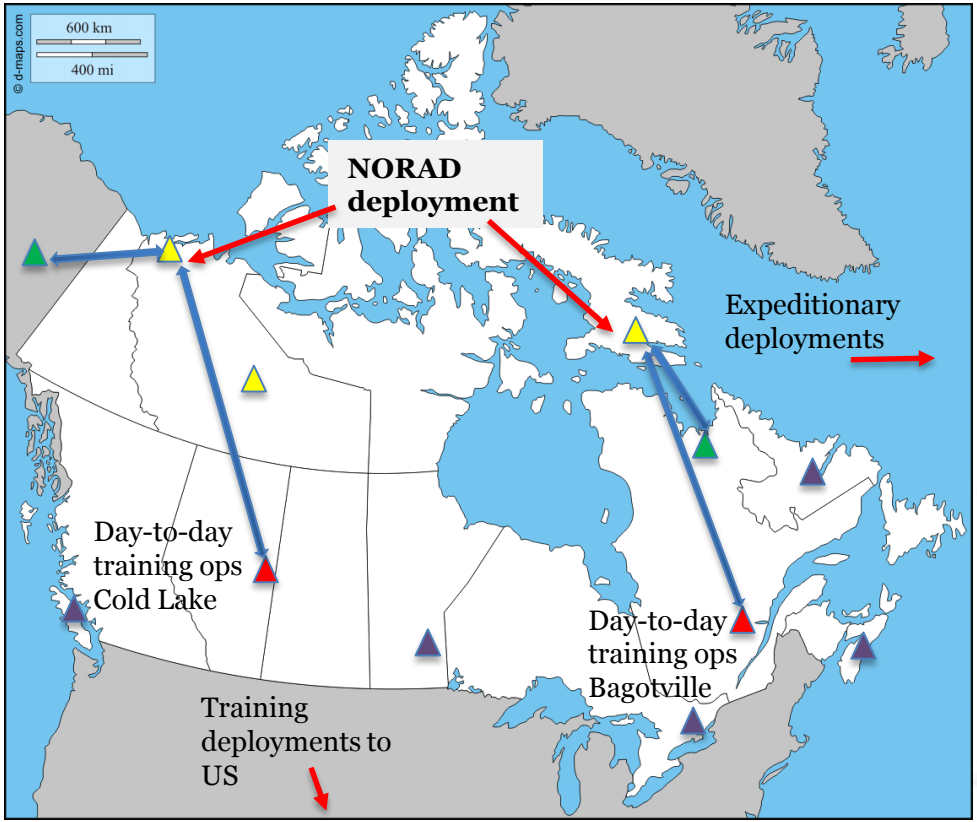
The Sustainment solution is expected to enable:

- Aircraft maintenance in extreme cold
- Aircraft operation and maintenance from austere support locations
- Continued ops despite limited resupply (both in frequency and capacity)
- World-wide and wide-ranging operations

Key Constraints:

- Occupational Health and Safety and Environmental legislation
- Controlled Goods Program & International Trade/International Traffic in Arms Regulations (ITAR)
- Intelligence data safeguarding, including 2/5 eyes data sharing arrangements
- DND and aircraft-specific security requirements
- DND/CAF Airworthiness Program -> http://www.forces.gc.ca/en/business-regulations-technical-airworthiness/technical-airworthiness-manual.page

2. Operating Locations



- Main Operating Base (MOB)
- Forward Operating Location (FOL)
  - FOL Alternate
- Deployed Operating Base (DOB)

<u>Types of Deployments</u>:

- NORAD
- Expeditionary
- Training Exercises

2. Sustainment Requirements at Operating Locations

Location	Operational Context	On-Site Logistics	Duration
MOB	Routine	Excellent	Permanent
FOL	Arctic, Alert Force	Limited	1-30 days
DOB	Alert Force	Limited	1-30 days
Expeditionary	NATO/ UN	Moderate	30-365 days
Exercise	Training	Limited	1-30 days

3. Sustainment Solution Development Process

The aim of the Sustainment Solution is to generate a result that optimizes the four *Sustainment Initiative* principles:

Performance – Aircraft must be operationally ready and mission capable.

Value for Money – Sustainment materiel and services shall be procured at a price commensurate with the market rate for comparable procurements.

Flexibility – The ability to adjust the sustainment solution to respond to financial, operational, industrial and technological changes throughout the life of the aircraft.

Economic Benefits – Industrial benefits are to be leveraged from this procurement to create jobs and economic growth for companies in Canada.

3. Sustainment Solution Development Process (cont'd)

Sustainment Supplier/Industry Engagement Plan

First Wave	o Required and Desired Outcomes o Sustainment Responsibility Assignments
Second Wave	o Materiel Management, Information Systems & Training Approaches o Contract/Agreement Performance Measures, Term and Basis of Payment o Contract/Agreement Governance
Third Wave	o Solicitation documents drafted, incorporating supplier feedback as required, and released to suppliers for comment

4. Sustainment Outcomes

PERFORMANCE:
- Mission readiness and effectiveness, yearly flying rate, # support personnel, training capacity, deployment support, aircraft maintainability, sustainment processes and services.

VALUE FOR MONEY:
- Life cycle costs & risks
- Visibility into costs and cost drivers
- Sustainment performance & continuous improvement

FLEXIBILITY:
- Ability to adjust the sustainment solution and contract/agreement(s) to respond to financial, operational, industrial and technological changes throughout the life of the aircraft.
- Ability to exit or de-scope the contract/agreement.

ECONOMIC BENEFITS:
- The sustainment solution will meet and exceed the minimum mandatory ITB/VP requirements for all elements, including those related to developing a solution that enhances Canadian sustainment capabilities and provides export opportunities to Canadian industry.

5. Sustainment Responsibility Assignments

General Principle: DND will determine the minimum sustainment tasks and services it must execute to enable autonomous deployed operations. The remainder may be executed and delivered by suppliers.

	DND	Suppliers
Fleet & Program Management	○ Fleet management ○ Business planning, operational & financial decisions	○ Data analysis & decision support
Engineering Support	○ Non-delegated airworthiness	○ Delegated airworthiness and engineering tasks
Maintenance	○ Maintenance program ○ Organizational-level maintenance	○ Depot-level work ○ Training device maintenance
Materiel Management	○ Materiel management of stocks & assets in DND's custody	○ Materiel management of stocks & assets in suppliers' custody
Information Management	○ DND information systems ○ Operational status information	○ Supplier tech data ○ Electronic pubs
Training	○ Steady-state: training of Future Fighter pilots and technicians	○ Initial training, then training support & augmentation

6. Initial Discussion Topics

- Understanding the Sustainment Solutions currently being used and the unique benefits each offers
- Determining how materiel will be effectively and efficiently managed over the life cycle
- Assignment of sustainment-related performance responsibilities
- Technical data access and intellectual property rights
- Controlled Goods and ITAR-related management
- On- and off-aircraft information systems data sensitivity and security
- Rapid exchange of data to enable respective information system operation
- Designing a flexible Sustainment Solution that accommodates changing requirements

7. Summary

- Canada's Future Fighter must be sustainable under extreme cold conditions and at austere locations, both in Canada and worldwide.
- The Sustainment Initiative is being followed, and Suppliers will be engaged, as we develop the sustainment solution for the Future Fighter.
- Notional Sustainment Outcomes and Responsibility Assignments have been developed.
- Several potential sustainment-related topics of discussion for supplier engagement have been identified.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