

# Taking Off:

## Canada's Plan for a 21<sup>st</sup> Century Fighter Aircraft



### Interdepartmental Working Group:

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# Challenge

Canada has been part of the Joint Strike Fighter program since 1997 and now has to decide on a **process to renew its aging fighter aircraft.**

**Key  
Considerations**



Controversy

Industry

Defence Gap

Commitments

# Recommendation

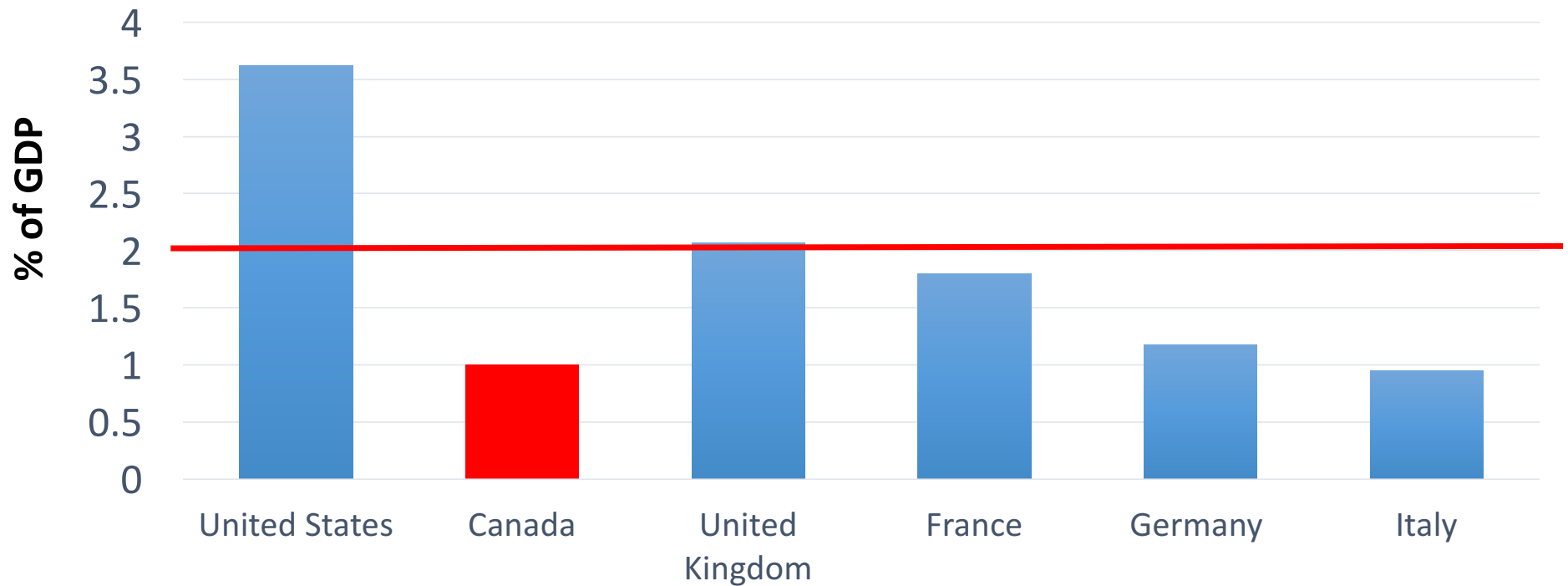
An open and transparent competition with Boeing and Lockheed Martin to determine the next fighter aircraft.

# “Equipped and Prepared”

“Your overarching goal will be to ensure that the Canadian Armed Forces are equipped and prepared...to **protect Canadian sovereignty, defend North America...conduct search and rescue, support United Nations peace operations, and contribute to the security of our allies....**”

*- Rt. Hon. Jonathan Turpel, 2015*

# NATO Contributions in % of GDP



# A Strong Aerospace Defence Industry

- Canada's aerospace industry accounts for **48% of our defence exports.**
- In 2014, Canada's aerospace defence industry generated **\$4.6B in revenues.**

Source : Statistics Canada Canadian Defence, Aerospace and Commercial and Civil Marine Sectors Survey (2014), 2016

# Where We Are Now

- ✓ Publicly committed to an open and transparent competition
- ✓ Purchased 18 Boeing F/A-18 Super Hornets
- ✓ Facing increasing public and media pressure
- Conducting Defence Policy Review

# We Need a Plan that is...

**DECISIVE**

Procure a new fleet that meets Canada's operational requirements

**ACCOUNTABLE**

Drive results and delivery to avoid wasting taxpayer dollars

**FORWARD-  
THINKING**

Sustain a a strong Canadian industrial and technological base



# Available Options

- 1) Sole-source the F-35
- 2) Launch an open competition for the Big Five
- 3) Launch an open competition for Lockheed Martin and Boeing

# Option 1: Sole Source Contract for F-35

*Continue investing in JSF program and commit to purchasing F-35*

Key Strengths	Risks
<ul style="list-style-type: none"><li>• \$10.2B in future production and sustainment contracts.</li><li>• Beneficial for Canada-US relations</li><li>• Interoperable with allies</li><li>• Remain on innovation curve</li><li>• Involvement in two supply chains</li></ul>	<ul style="list-style-type: none"><li>• Potential increase in formal spending</li><li>• Not aligned with government policy</li><li>• Infrastructure challenges</li><li>• Potential for aircraft overlap</li><li>• Limitations on intellectual property</li></ul>

# Option 2: Launch an open competition for the Big Five

*Open a competition for top five aerospace defence manufacturers*

Key Strengths	Risks
<ul style="list-style-type: none"><li>• Aligns with government policy</li><li>• Remain in JSF program and on innovation curve (R&amp;D continues)</li><li>• Beneficial for industry</li><li>• Beneficial for multilateral relations</li></ul>	<ul style="list-style-type: none"><li>• Potential disruption in US-Canada relations</li><li>• Leaving door open for alternative aircraft</li><li>• High maintenance costs for obsolete fleet</li><li>• Potential lack of interoperability with allies</li><li>• Lengthen the process</li></ul>

## Recommended Option:

### Launch an open competition for Lockheed Martin and Boeing

*Launch a new process within one year, using a directed Request for Proposal*

Key Strengths	Risks
<ul style="list-style-type: none"><li>• Expedites procurement process</li><li>• Higher degree of interoperability</li><li>• Beneficial for Research &amp; Development</li><li>• Beneficial for Canada-US relations</li><li>• Aligns with government policy</li></ul>	<ul style="list-style-type: none"><li>• Mixed public perception</li><li>• Potential loss of benefits from JSF program withdrawal</li></ul>

# Implementation Plan: Immediate (1st Year)

## STRENGTHEN INTERNAL TEAM

- Add Industry Canada to Interdepartmental group
- Establish a Results and Delivery Task Force
- Launch our internal communication strategy

## CONFIRM OPERATIONAL NEEDS

- Distribute Request for Information, then draft directed Request for Proposal
- Align draft defence policy with objectives
- Consider modernizing defence procurement process

## LAUNCH THE COMPETITION

- Release new defence policy
- Announce open competition for new aircraft
- Launch public communication strategy

# Medium-Term (1-4 Years)

## SEAL THE DEAL

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- Award the contract for fighter aircraft within 12 months
- Start drafting the contract

## EVALUATE SUCCESS

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- Results and Delivery Task Force releases Lessons Learned
- Release a public report on process

## ANTICIPATE FUTURE NEEDS

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- Invest in more Research and Development to extend jet life cycle
- Foster new initiatives for the aerospace and defence industry

# Managing Risk

Type	Risk	Level	Mitigation Strategy
Economic	Potential loss of benefits from JSF program withdrawal	High	<ul style="list-style-type: none"> <li>Invest in Research &amp; Development to innovate solutions</li> </ul>
Budgetary	Purchasing power decreases due to inflation, exchange rate, and economies of scale	High	<ul style="list-style-type: none"> <li>Complete the procurement process in short timeframe</li> </ul>
	Current infrastructure does not meet future acquisition needs	Medium	<ul style="list-style-type: none"> <li>Invest in Research &amp; Development to innovate solutions</li> </ul>
Procedural	Lack of support from the public service prevents process from moving forward	Medium	<ul style="list-style-type: none"> <li>Role modeling from leaders</li> <li>Internal communications plan</li> </ul>
Political	Limited support from taxpayers for military spending	Low	<ul style="list-style-type: none"> <li>Adapt communications strategy to public response</li> </ul>
International	Lower interoperability (US partnership)	Low	<ul style="list-style-type: none"> <li>Update fleet to meet interoperability needs</li> </ul>

# Communications Strategy

Target	Tactic	Desired Outcome(s)
Senior Leadership of CF	High-level meeting with Minister	<ul style="list-style-type: none"> <li>Earn buy-in from leaders, inspire role modeling</li> <li><b>Key Message:</b> Need a united front</li> </ul>
Interdepartmental Employees	Training through Canada School of Public Service	<ul style="list-style-type: none"> <li>Understanding of Results and Delivery</li> <li><b>Key Message:</b> Efficiency is key</li> </ul>
Defence Procurement Secretariat	Kick off event, regular briefings with Task Force	<ul style="list-style-type: none"> <li>Synergy between Task Force and Secretariat</li> <li><b>Key Message:</b> Task force will support you</li> </ul>
Canadians	News releases, social media campaign, media interviews	<ul style="list-style-type: none"> <li>Better understanding of economic benefits</li> <li><b>Key Message:</b> This is good for Canada's industry</li> </ul>
Industry	Outreach sessions	<ul style="list-style-type: none"> <li>Strong lines of communication</li> <li><b>Key Message:</b> Government will support industry</li> </ul>
Bilateral and multilateral partners	Regular briefings through Trade Commissioners	<ul style="list-style-type: none"> <li><b>Key Message:</b> Process is open and transparent</li> </ul>



# Landing Safely: the Bottom Line

- We recommend an open competition between Boeing and Lockheed Martin
- We need to be Decisive, Accountable, and Forward Thinking
- This targeted approach is feasible and balances *all* of our needs

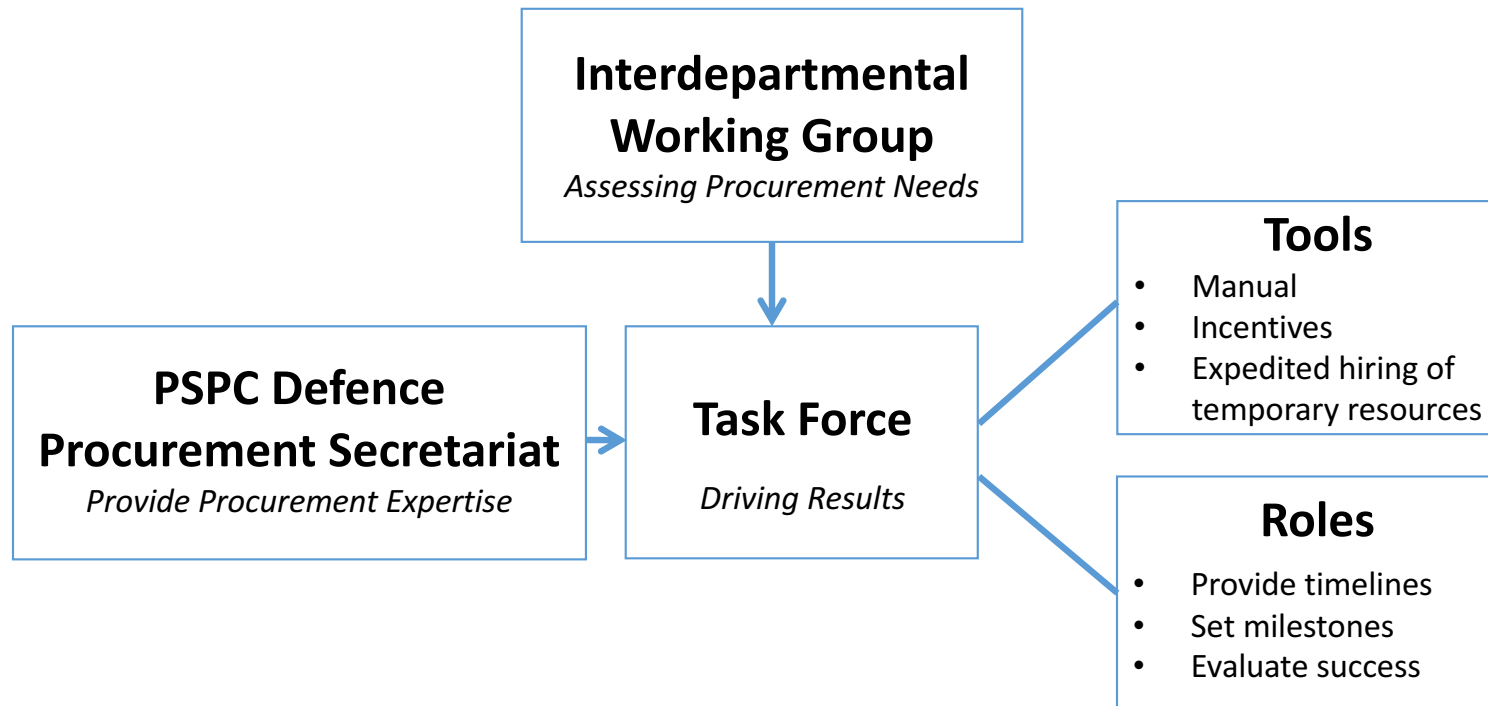


# Appendix A: Canada's Aerospace Defence Sales by Type of Goods and Services, 2014

Source: Statistics Canada Canadian Defence, Aerospace and Commercial and Civil Marine Sectors Survey (2014), 2016

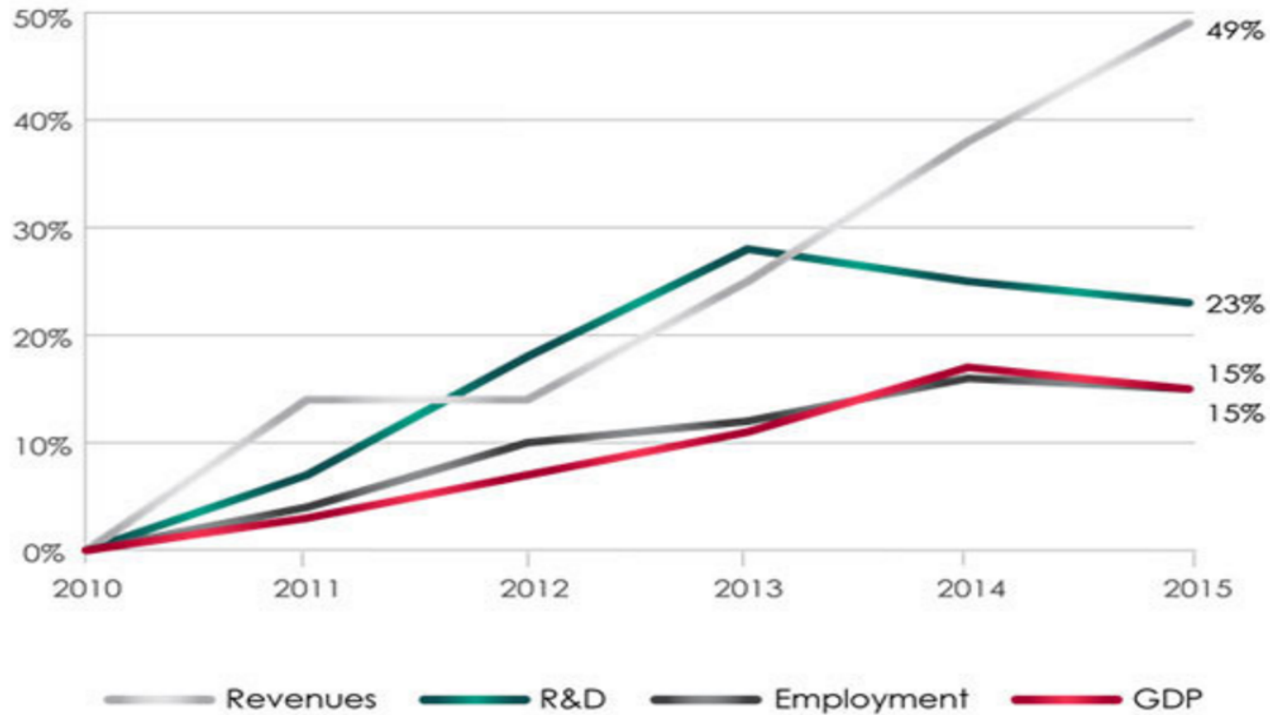
	<b>Sales (\$ Million)</b>	<b>Share of aerospace defence sales</b>
<b>Military aircraft maintenance, repair and overhaul services</b>	2,001	43%
<b>Aircraft fabrication, structures and components</b>	1,012	22%
<b>Airborne communications, navigation, &amp; other information systems, software, electronics</b>	765	17%
<b>Airborne sensor/information collection; and fire control, warning &amp; countermeasures systems</b>	578	12%
<b>Simulation systems for aircraft</b>	153	3%
<b>Military space systems</b>	90	2%
<b>Unmanned aerial systems/vehicles &amp; components</b>	40	1%
<b>Total aerospace defence sales</b>	4,639	100%

# Appendix B: Organization Chart



# Appendix C: Growth of the Aerospace Industry (2010-2015)

*Canada's aerospace industry generated \$29.8B in revenues, 89,000 in direct employment and \$13.3B in direct GDP*



**Source :** ISED's economic model estimates based on data from Statistics Canada Business Registry and CANSIM, National Input-Output Multipliers (2011 adjusted to 2015 GDP and employment), Canada Revenue Agency, OECD and firm-level observations, 2016

# Appendix D: Learning from Lengthy Sea King Replacement

<b>1983</b>	<i>DND launches Sea King Replacement Project to develop new avionics as current Sea King fleet ages.</i>
<b>1985</b>	<i>Mulroney Government replaces project with New Shipboard Aircraft Project (NSA). Competition fails one year later.</i>
<b>1987</b>	<i>Mulroney Government announces intent to purchase replacement, tacks on another purchase to save money, costs actually increase due to training needs.</i>
<b>1993</b>	<i>Campbell Government decreases order to reduce costs. Opposition campaigns on cancelling order, wins election, and immediately cancels order with no contingency plan.</i>
<b>1995</b>	<i>Sea King requires 30 hours of maintenance for each hour of flying, becoming more and more obsolete.</i>
<b>2002</b>	<i>Chretien Government launches Maritime Helicopter project with lowest-cost compliance model. Critics accuse competition of being rigged. Minister of National Defence changes procurement approach, forcing process to restart.</i>
<b>2003</b>	<i>Sea King helicopter crashes shortly after takeoff. Public relations embarrassment ensues. Chretien Government stalls procurement decision until Martin Government takes over.</i>
<b>2004</b>	<i>Replacement fleet announced after year-long competition, but aircraft production is delayed til 2013 due to testing issues.</i>
<b>2013</b>	<i>\$88 million in late damages accrued. Harper Government reevaluates new purchase, considers cancelling contract.</i>
<b>2014</b>	<i>Harper Government proceeds with contract, producer agrees to deliver fleet at no additional cost to government due to previous delays.</i>