National Defence
Deputy Minister

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Ottawa, Ontario
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Ottawa, (Ontario)
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The Honourable John Williamson
Chair, Standing Committee on Public Accounts
House of Commons
Ottawa, Ontario
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Dear Mr. Williamson,

As agreed upon in the Government Response to the Sixtieth Report of the Standing Committee on Public Accounts, entitled *Report 3, Canada's Fighter Force*, National Defence submits an update to Recommendation 2, due June 30, 2023.

Sincerely,

Bill Matthews

Enclosures: 1

Canada

**Response to the Standing Committee on Public Accounts'**
***Report 3, Canada's Fighter Force – Canadian Armed Forces, of the 2018 Fall Reports of the Auditor General of Canada***

**Recommendation 2**
*That, by 30 June 2019, National Defence provide the House of Commons Standing Committee on Public Accounts with a report outlining what progress has been made regarding 1) assessing what upgrades are required for the CF-18 to be operationally relevant until 2032 and 2) finalizing which ones, if any, will be implemented. Additionally, it should provide the Committee with a progress report every year thereafter until 2032.*

## Background

In its 2018 report on Canada's fighter force, the Auditor General recommended that National Defence analyze upgrades required for the CF-18 to be operationally relevant until 2032 and seek approval for those which are appropriate and achievable.

In its 2018 Management Action Plan, National Defence committed to implementing regulatory and interoperability upgrades, as well as combat capability upgrades, to address the Auditor General's recommendation. In its first update, National Defence noted that it was moving forward with seeking approval for these upgrades within the Hornet Extension Project, which would be completed in two concurrent phases: Phase 1 for interoperability and regulatory upgrades, to begin in summer 2019; and Phase 2 for combat capability upgrades, for which the analysis of requirements remained ongoing.

National Defence last provided the Committee with an update in June 2022 regarding the progress in delivering new capability upgrades through Hornet Extension Project Phase 1 and 2. National Defence reported that all Phase 1 elements remained on track for delivery and implementation by 2025, and all Phase 2 elements had entered the Implementation Phase, well ahead of schedule. National Defence also reported that it had received amended project approval to implement all aspects of the project and was on track to deliver the full operational capability by June 2025. National Defence committed to provide the Committee with a progress update on Phase 1 and 2 as part of its annual update in June 2023.Please find this update below.

## Progress made since June 2022 in assessing and selecting CF-18 upgrades

The Hornet Extension Project remains on schedule to deliver full operational capability by June 2025, within its approved fixed budget of $1.3 billion.

*Phase 1: regulatory and interoperability upgrades*

As part of Phase 1, National Defence remains on track to deliver enhancements for up to 88 aircraft by June 2025, six fewer aircraft than previously updated. Five of these six aircraft are currently not in flying condition and are instead being used for parts to sustain the rest of the CF-18 fleet. The sixth aircraft will continue flying with a training unit until its scheduled 2025/2026 retirement (the required modifications would ground this aircraft for a significant portion of its remaining life, as it would be scheduled to retire one year after receiving the upgrades).

The reduction of six aircraft will not affect Canada's operational effectiveness, allowing the Royal Canadian Air Force (RCAF) to continue to achieve its mission sets while transition to future fighter progresses towards its full operational capability of 88 aircraft. This assessment is based on the ability of the fleet size to generate the achievable yearly flying rate, meet RCAF operational mandates, and support the transition to the F-35.

The enhancements National Defence is making to the CF-18s via Phase 1 upgrades remain focused primarily on addressing evolving civilian air traffic management regulations and meeting Allied military interoperability requirements. For example, these enhancements include upgrades to transponders, navigation systems, simulators, mission computers, satellite radios, helmets, cryptographic systems, and electro-optical and infrared sensors.

Since the last update to the Committee, National Defence through Public Services and Procurement Canada, has now awarded all contracts related to Phase 1 upgrades, and has also commenced equipment deliveries and integration activities.

As an example, National Defence has begun testing new radios that will provide the latest cryptographic capability to ensure interoperability, as well as a satellite communications (SATCOM) capability necessary for northern operations. In addition, a Night Vision Cueing Device, an attachment to the existing helmet and Night Vision Googles, is in use, providing pilots with a nighttime cueing capability for CF-18 operations.

All Phase 1 elements remain on track for delivery and implementation by 2025 and will help sustain National Defence's current CF-18 fleet until 2032, when the replacement fighter aircraft is expected to be fully operational.

*Phase 2: combat capability upgrades*

As part of Phase 2, National Defence continues to focus on enhancing the combat capability for 36 of its CF-18s. Key combat capability enhancements include a new active electronically scanned array radar and advanced weapons and sensors, to help ensure that the CF-18 fleet is able to meet operational commitments, including to the North American Aerospace Defence (NORAD) Command and the North Atlantic Treaty Organization (NATO), until 2032 when the future fighter fleet is expected to meet these commitments.

National Defence is updating the CF-18's mission computer software with a new Operational Flight Program to support the integration of new equipment. This requires an extensive test and evaluation program. Since the last update, National Defence has tested an additional two of the planned Phase 2 aircraft software builds, developed in coordination with the United States Navy and United States Marine Corps, bringing the total tested to three out of the planned six. The fourth software build will commence testing in June 2023, which will allow an initial operating capability to be achieved by the end of 2023. The remaining two software builds will

progressively incorporate capabilities that will be tested through 2024, leading to a full operational capability by June 2025.

Apart from the upgrades to the aircraft, security enhancements are also well under way. To support the classified advanced capabilities being introduced with the Phase 2 aircraft, the first two of 15 classified non-permanent facilities have been delivered to National Defence, with the remainder to be delivered by the end of 2024. These classified work areas will be used for mission planning, de-briefing, and training of Phase 2 upgraded aircraft.

National Defence remains on track to implement all Phase 2 combat capability upgrades by June 2025, which will ensure that sufficient, operationally relevant, mission-ready CF-18 fighters are available to meet air power capability requirements in the current battle space until the future fighter fleet reaches full operational capability.

**Future updates to the Committee**

National Defence will provide an update to the Committee by 30 June 2024, outlining the progress made on implementing Phase 1 and 2 upgrades.