



# Evaluation Summary of the Satellite Communications Business Line

- The goal of the Satellite Communications Business Line (SCBL) is to **enhance**, where applicable, **the capacity** of federal departments and agencies **to deliver their programs** and services by implementing space-based solutions.
- Through this business line, the CSA oversees the implementation of satellite communication missions.

## About the evaluation

Evaluation covers the period from April 2012 to March 2017.

Conducted in 2017-2018 in compliance to the Treasury Board of Canada's Policy on Results (2016).

The evaluation's purpose is to systematically collect and analyze evidence on the **relevance, effectiveness and efficiency** of the business line, as well as unintended outcomes for the reporting period

It is the **first evaluation** of the SCBL.

The evaluation used a **mixed-methods approach** that combined **qualitative and quantitative analyses** which included:

- Documentation review
- Key informant interviews (with the CSA, industry and academia)

## What have we learned

- The **expertise and involvement of the CSA** is required to ensure that federal departments and agencies can effectively integrate Satellite Communications solutions to support the delivery of their programs and mandates.
- Federal departments and agencies still **lack institutional capacity** to fully engage in Satellite Communications technologies. In fact, there **is still limited government-wide coordination** being done in a systematic manner to support such an engagement.
- The M3MSat mission is the central communications project in which the CSA has been involved during the period covered by the evaluation. Jointly initiated in 2006 by DND and the CSA, the M3MSat mission **achieved its demonstration objectives** and has **supported the Canadian industry** in further exploring Automatic Identification System (AIS) opportunities.
- The CSA's GBA+ framework could support the planning and implementation of activities related to Satellite Communications technologies, particularly as it relates to isolated communities.

## How can we improve the program?

- There is a strong need to further enhance the capacity of federal departments and agencies to navigate space-based communications solutions, particularly as the range of these solutions continues to expand in the New Space environment.
- The evaluation recommends that: **the Space Utilization branch explore options with regards to the role the CSA could play concerning the use of space-based communications solutions by federal departments and agencies in order to enhance their ability to deliver their programs and activities.**



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[Link to full evaluation report including the Management Action Plan](#)





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**M3MSAT**, a joint microsatellite project undertaken by the **Canadian Space Agency** and the **Department of National Defence**, is **a technology demonstration project** that includes **FOUR** main **technologies**.



The M3MSAT mission provided an opportunity for the Canadian space sector to **test and demonstrate emerging technologies**.



**CIARS** from **Waterloo University** gained **considerable expertise**, which has further positioned this academic institution in space-based projects.

**M3MSAT**



Source: exactEarth®

## *Accomplishments of the M3MSAT Mission:*

The AIS antenna and system placed on M3MSat have provided **one of the most advanced and reliable information on ship movements** that is currently available.



The work on AIS and its successful results on M3MSAT will lead to the **integration and operational use of AIS capability and SAR imaging technologies** on board future Canadian missions such as *Radarsat Constellation Mission*.



Image credit: ISRO

