NAV CANADA

ICAO Drone Enable
UTM: Industry Perspective

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NAV CANADA





ANSP

- 1 NAV CANADA ATM-Facts and Figures
- 2 NAV CANADA UTM-Facts and Figures
- 3 UTM Implementation-Phase 1
- 4 Next Steps for UTM in Canada

Facts and figures-VFR and IFR Customers

Private, non-share capital company

Managing one of the largest regions of airspace in the world

Fiscal 2021



ACC Traffic:

2.1 million IFR flights

Total IFR Flight Hours: 2.0 million



Tower, FSS and RAAS Traffic:

4.5 million IFR/VFR movements



18 M

Square kilometres of airspace managed by NAV CANADA



More than

100

Staffed Sites



More than

4,000

Employees across the country



45,000+

Customer accounts
Crewed Aircraft

Facts and figures-UTM Customers

Private, non-share capital company

Managing one of the largest regions of airspace in the world

June 2021-Oct 2023



RPAS Traffic:

105,000+ Permission Requests

70% Automatically approved







UTM Implementation Phase 1

2019
Regulations published

CAR Part IX-VLOS

Dec 2020 NAV Drone Beta

June 2021
National Release-Live
Deployed to 60+ ATS units (web)
RPAS Users (web and mobile)

July 2022 Operational ATS User Review

July 2023 Operational RPAS User Review

RPAS OPERATOR

AIRSPACE INFORMATION

Provides operators with airspace information; classification, restrictions & NOTAMs

FLIGHT PLANNING

Provides capabilities to schedule and plan flights

FLIGHT AUTHORIZATION

Automates authorization responses to fly in controlled airspace

OPERATION MANAGEMENT / SAFETY AWARENESS



NAV CANADA

WORKLOAD AUTOMATION

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Automates majority of authorization requests based on preapproved flight areas.

OPERATIONAL INSIGHT

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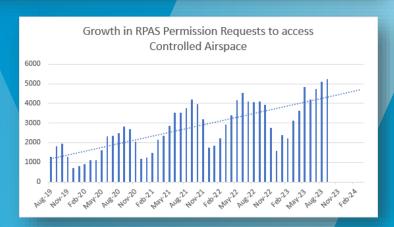
Provides ATS with a visual of scheduled drone flights occurring in controlled airspace

EMERGENCY MANAGEMENT

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Provides capabilities to quickly notify emergency operators

AWARENESS / EMERGENCY CONTACT



The Vision for UTM (RTM)

- A collaborative eco-system contributing to safe and sustainable growth in the RPAS sector
- Emphasis on industry participation to allow accelerated growth and maximize benefits of RPAS
- RTM Service Providers (RSPs) will provide services to operators and pilots through a combination of software capabilities and infrastructure to support operations in defined geographic areas
- NAV CANADA will provide a set of centralized capabilities delivered by the RPAS Flight Information Management System (rFIMS), as well as a software-only RSP

Implementation will be subject to dependencies including industry growth, demand for complex operations and a supportive regulatory environment

Phase 2 UTM in Canada

Safely Enabling RPAS Operations

Working Groups (TC, NC, NRC, AEAC, DND, Industry, etc.)

Visual Line of Sight VLOS Class G and Controlled Airspace (2019)

Stakeholder Engagement
(RTMAC)
(anticipated 2025)

Low Risk Beyond Visual Line of Sight
Class G [Low Ground and Air Risk]
(anticipated 2025)



Medium and High Risk BVLOS Class G and Controlled Airspace (target 2030)