



TERMS OF REFERENCE

Windsor Toronto Montreal Airspace And Services Review

NAV CANADA
Level of Service and Aeronautical Studies
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Appendix A – Stakeholders List

1.0 Purpose

The purpose of this Terms of Reference (TOR) document is four-fold:

1. To describe the methodology that the NAV CANADA Team will use in conducting a review to examine the present Air Traffic Management system and determine the appropriate airspace structure, classification and associated services for the Windsor, Toronto and Montreal area;
2. To obtain approval for appropriate NAV CANADA resources;
3. To obtain approval to negotiate with the FAA; and,
4. To obtain approval for consultation with customers.

2.0 Background

NAV CANADA facilitates the safe movement of aircraft efficiently and cost-effectively through the provision of air navigation services on a long-term sustainable basis. It achieves this through the attainment of primary corporate objectives. Some of them are:

- o maintaining a safety record in the top decile of major Air Navigation Service Providers (ANSP's) world-wide; and
- o implementing and maintaining a modern, cost-efficient ANS technology platform in the top quartile of major ANSP's world-wide.

NAV CANADA modernizes its technologies on a continuous basis. Similarly, customers replace their fleets with more technologically advanced models. The unparalleled leap in technology, which occurred over the last twenty years, provides an opportunity for both NAV CANADA and its customers to upgrade ATS procedures and practices. With today's systems, IFR operators can fly constant descent RNAV STARs rendering step down procedures obsolete and thereby diminishing the amount of airspace required and reducing fuel burn.

The amount of IFR traffic is increasing again after a decrease following September 11, 2001. Existing IFR procedures airspace requirements for Terminal Control Areas and Control Area Extensions are often at the detriment of VFR operations. Under the existing procedures, Control Areas are increasing in size and lowering in base altitude. This compresses VFR activity in the airspace below Control Areas. As a result, there is a congestion hazard with a concurrent risk of collision.

A number of years have elapsed since the last major airspace change in the Windsor, Toronto and Montreal Air Corridor, one of the busiest portions of airspace in this country. The present airspace system, practices and procedures, needs examination to ensure that service design aligns with customer needs and that NAV CANADA delivers service in the most efficient manner. This is an opportunity for NAV CANADA to respond to customer needs and contribute to the achievement of their goals of safety, schedule, efficiency, access and value.

3.0 Scope of the Review

This review includes the airspace, associated services and other requirements necessary to serve IFR and VFR aircraft within the Windsor, Toronto and Montreal Air Corridor. This corridor includes Ottawa, Gatineau and the surrounding airspace.

4.0 Methodology

As the scope is very broad, the project management team (PMT) will use a phased approach to address issues based on priorities set by the Steering Committee (SC). A report will be submitted at the completion of each phase and implementation will follow. As the project progresses through the various phases, it may be necessary to adjust previous implementations to ensure proper integration of the whole.

It is anticipated that the phase dealing with FAA negotiated changes will take longer than all other phases combined. NAV CANADA has no control on FAA planning. Therefore, the process shown in the table below is not inclusive of the FAA negotiation phase, which will be on going and parallel with other project activities. It is recognized that the implementation of the full outcome of this review may not be feasible until these negotiation is complete.

At the outset, a web survey and a series of interviews will be used as consultation with internal and external stakeholders to gather issues, needs and concerns data, which will be entered into a database for tracking. Customer involvement will also be sought at all appropriate milestones. A preliminary analysis (PA) will be conducted to provide the SC with information to identify areas, which may require immediate actions. The PA will also facilitate decision making on priorities for the SC. In this regard, it has now been established by the SC that the first priority of the project is the airspace 65 NM around Toronto.

The PMT will use the Expert-Panel (EP) format for detailed work breakdown structures of each project phase.

Project risks will be identified and tracked in a separate database. Response strategies will by developed and tracked by the SC and the PMT.

Management accountability:

Function	Responsibility	Accountability
Sponsor	Approval	Vice President – Operations
Direction (Steering Committee - SC)	<ul style="list-style-type: none"> o Vision o Scope management o Project risk identification and strategies o Communication plan approval o Workplan approval o Overall support – Triple constraint: <ul style="list-style-type: none"> o Time o Scope o Resources 	Chair Director – ANS Service Design <i>and</i> General Manager – Toronto FIR <i>and</i> General Manager – Montreal FIR <i>and</i> Manager – LOS & Aeronautical Studies <i>Note: The SC may invite others from time to time to assist as required.</i>

Function	Responsibility	Accountability
Project Management (Project Management Team - PMT)	<ul style="list-style-type: none"> ○ Project management ○ Project scope change management ○ Project risk management ○ Communication plan ○ Project workplan ○ Project budget ○ SMS ○ Workgroup activity Integration ○ Documentation ○ Reports 	Project Management Office, Aeronautical Studies <i>and</i> Toronto ACC <i>and</i> TBD Montreal ACC <i>and</i> Manager, LOS & Aeronautical Studies <i>and</i> Manager, Government and Public Affairs <i>Note: the PMT may invite others from time to time to help as required.</i>
Workgroup Leaders	<ul style="list-style-type: none"> ○ Workgroup workplan ○ Workgroup activities ○ Documentation ○ Reports 	TBD <ul style="list-style-type: none"> ○ Depending on activity and specialty requirements ○ To be named by responsibility managers ○ In charge of workgroup activities

Process:

To complete all phases of the project with the exception of the phase related to changes requiring negotiation with the FAA. .

Activity	Comment	Accountability	Milestones
Initiate Project	Develop Terms of Reference	SC and PMT	
TOR Approval	Authority to proceed	VP Operations	
Identify Project Risks	Identify project risks and develop response strategies Update at regular intervals	SC and PMT	
Prepare Project Budget	Responsibility, project and activity code	PMT	
Establish FAA Communication	FAA Cleveland – develop working relationships	PMT	
Develop Consultation, Communication & Data Gathering plan	Internal and external communication – customer involvement – use questionnaires and the web –	PMT	Summer 09
Complete preliminary analysis	Insert feedback into database – identify requirement for immediate actions	PMT	Fall 09
Conduct planning workshop	Based on analysis – review scope and priorities – divide project into workgroups –	PMT based on priorities set by the SC	
Finalize project concept	Customer involvement	PMT with SC and VP Ops approval	Spring 10
Conduct workshops and workgroup activities	Based on priorities – integrate IFR/VFR	Workgroup leaders	Winter 10
Finalize concept	Based on workgroup activities – customer involvement	PMT with SC and VP Ops approval	Spring 11

Activity	Comment	Accountability	Milestones
Simulate concept	Simulation for IFR system Use of TAAM Proof of concept	Project leader	Spring 11
Final consultation	Customers	Project leader	Spring 11
Final report	Justifying documentation HIRA Review report – service delivery Aeronautical study – LOS changes	PMT	Summer 11

A systems approach provides a view of the integrated operation, which permit cohesive service design and level of service recommendations. Levels of service recommendations generate a requisite for an aeronautical study.

The review adheres to the CSA Q850 Risk Management process.

5.0 Assumptions and Constraints

Assumptions:

Work breakdown structures and timelines for the various phases of the project will consider workload and resource availability.

Constraints:

- o Reductions and termination in level of service changes must be reviewed by Transport Canada prior to implementation.
- o Any change to level of service or published procedures must be synchronized with a publication date.
- o The implementation of CAATS at Toronto and Montreal ACCs creates workload
- o Any changes that require FAA cooperation for implementation may be affected by timeline constraints beyond NAV CANADA's control.

6.0 Study Safety Management Plan

As issues are identified, a preliminary analysis is carried out to determine if the issue requires immediate attention, if it is deferrable to the review in process, or if it can be disregarded.

Issues requiring immediate action are subject to an independent aeronautical study as a subset of the overall project. A HIRA is included.

All issues deferrable to the review are subject to the HIRA process. All proposed changes are subject to the HIRA as well.

7.0 Human Resources

Selected operations specialists act as workgroup leaders. Head office and/or GM FIR provide them as required. They report to the PMT.

The workgroup leaders rely upon and obtain the assistance of specialists in specific fields of expertise within NAV CANADA. They may require expert assistance external to the company.

Team membership is multi-disciplinary and matrix based. Representation is on an as needed basis for key technical, operational and support areas. Additional members identified during the course of the study are expected to participate on specific tasks as required. An estimate of the duration of those tasks will be provided to the appropriate manager for his own resource and overtime management. Head office and/or GM FIR provide these resources as required. They report to the workgroup leaders.

Administrative support is coordinated through the LOS and Aeronautical Studies Support Specialist.

8.0 Finance

The LOS and Aeronautical Studies Branch will provide budgeting for travel and related expenses. Each responsibility manager is responsible for the management of overtime.

Service design and level of service changes may generate an engineering support requirement or impact on other resources. These will be identified as the review progresses and appropriate coordination, planning and budgeting will be undertaken.

9.0 Importance of the Changes

Expectations are that service delivery changes will be made to ACC operations.

Any level of service change will require an aeronautical study report to Transport Canada. Formal notifications per the Civil Air Navigation Services Commercialization Act should apply.

10.0 Consultation

Customers and other stakeholders will participate fully in the identification of issues and in the development of solutions. Full consultation with stakeholders will be conducted before implementation of any changes.

The organizations and customers listed at Appendix "A" will be consulted. Others may be consulted as required and added to the list.

11.0 Authority

NAV CANADA Vice President of Operations – Kathleen C. Fox

APPENDIX A **Stakeholders List:**
Windsor Toronto Montreal Airspace and Services Review

Governments:

- Federal Government
- Provincial Governments
- Municipal Governments
- Transport Canada

Associations:

- Air Transport Association of Canada (ATAC)
- Canadian Business Aviation Association (CBAA)
- Association québécoise des transporteurs aériens (AQTA)
- Association des gens de l'air du Québec (AGAQ)
- Canadian Owners and Pilots Association (COPA)
- Hang Gliding and Paragliding Association of Canada (HPAC)
- Soaring Association of Canada (SAC)
- Canadian Sport Parachuting Association (CSPA)

Commercial Operations:

- Scheduled air carriers
- Non-scheduled air carriers
- Cargo commercial operators
- Flight schools

Airport Authorities

General Aviation

Flying Clubs