



## TRANS-REGIONAL AIRSPACE AND SUPPORTING ATM SYSTEMS STEERING GROUP FIRST MEETING (TRASAS/1)

### FIRST MEETING

*(Paris, 2-3 May 2007)*

**Agenda Item 3:** Review of work currently underway to enhance the ATS route network, using current and future technologies, and the need to plan for a transition towards a performance based navigation system

### TERMS OF REFERENCE OF THE CROSS POLAR TRANS-EAST ATM WORKING GROUP (CROSS POLAR WG)

*(Presented by Canada)*

#### SUMMARY

This paper informs of the Terms of Reference of the Cross Polar Trans East ATM Working Group, and its Action Items list which was discussed at its 3<sup>rd</sup> meeting, held in Washington from 24-26 April, 2007.

Action by the TRASAS/1 is in paragraph 3.

#### 1. Introduction

1.1 The Cross Polar Trans-East Air Traffic Management (ATM) Working Group (Cross Polar WG) provides a forum to improve the provision of air traffic services (ATS) to aircraft which operate between North America and Asia via Cross Polar and Russian Trans East routes.

#### 2. Discussion

The Terms of Reference of the Cross Polar Trans-East Air Traffic Management (ATM) Working Group (Cross Polar WG) is included at **Appendix A** and the Action Items list which was last updated at the September 2006 meeting is included at **Appendix B**.

#### 3. Action by the meeting

3.1 The TRASAS is invited to:

- i) note the attached Terms of Reference of the Working Group; and
- ii) take the work currently being carried out into consideration when establishing its Work Programme.



**CROSS POLAR TRANS-EAST ATM WORKING GROUP  
(CROSS POLAR WG)****Terms of Reference**Introduction

The Cross Polar Trans-East Air Traffic Management (ATM) Working Group (Cross Polar WG) provides a forum to improve the provision of air traffic services (ATS) to aircraft which operate between North America and Asia via Cross Polar and Russian Trans East routes. The Cross Polar WG shall be composed of Air Navigation Service (ANS) provider representatives from Russia, Canada, Iceland and the United States (US) and representatives from international organizations representing airspace operator groups (e.g., the International Air Transport Association (IATA) and International Business Aviation Council (IBAC)) who operate in the subject airspace.

Although the Cross Polar WG will focus primarily on Cross Polar and Trans-East airspace issues, in order to promote seamless, efficient and safe ATS, representatives from other organizations and ANS providers, including, but not limited to China, Mongolia, and Japan, may also be invited to participate in Cross Polar WG activities, as appropriate.

The Cross Polar WG is cognizant of other international bodies, both long standing as well as newly formed, which share many of its concerns and goals. The Cross Polar WG is committed to working cooperatively with these groups and is prepared to share its expertise as, and when, requested. Correspondence between the groups will include the dissemination of Cross Polar WG meeting minutes to ensure thorough coordination of efforts.

Purpose and Scope of Work

The Cross Polar WG addresses Cross Polar and Russian Trans East aviation issues focusing on continued improvements to operational efficiency through enhanced coordination, harmonized procedures and implementation of new technologies. Members work cooperatively to accomplish the WG activities, which may include:

1. Promotion of ATM and/or communications, navigation, surveillance (CNS) initiatives and associated technologies designed to improve safety, increase operational and economic efficiency and/or capacity, and harmonize ANS;
2. Harmonized implementation of Reduced Vertical Separation Minimum (RVSM);
3. Pursuit of new Polar ATS routes and/or tracks with entry/exit points on Flight Information Region (FIR) boundaries;
4. Development of air traffic flow management (ATFM) procedures designed to improve capacity/efficiency and overcome existing limitations;
5. Sharing information on plans for enhancing compatibility of air traffic operations and systems; and
6. Supporting the goals and objectives of associated International Civil Aviation Organization (ICAO) groups such as the European Air Navigation Planning Group (EANPG), the Asia/Pacific Air Navigation Planning and Implementation Regional Group (APANPIRG), the North Atlantic Systems Planning Group (NAT SPG), the Trans-Regional Airspace and Supporting ATM Systems Steering (TRASAS) Group, and the Informal Pacific ATS Coordination Group (IPACG).

Meeting Schedule

The Cross Polar WG meetings will normally be scheduled for approximately three days and will take place bi-annually or as needed. Locations of the meetings will vary. The length and timing of each meeting may

be adjusted to accommodate the work program. Work may also be conducted via other methods such as conference calls and/or electronic mail.

Management of Meetings

The US will be responsible to facilitate each Cross Polar WG meeting. ANS providers from Russia, Canada, Iceland and other States will provide points of contact to coordinate issues on behalf of each ANS provider. The facilitator will ensure that the outcomes of each meeting, including follow-up action items, are documented and distributed to participants in a summary. Notes, briefings and action items will be made available electronically to the greatest extent possible. Russia, Canada, Iceland and the US will share joint responsibilities for collaboratively developing and maintaining a comprehensive work program including target dates and milestones to be achieved.

Hosting responsibilities will be shared amongst the ANS Providers i.e., U.S., Russia, Canada and Iceland. The Host will be responsible for organizing and funding logistical arrangements for the meeting. Meeting attendees will be responsible for the cost of travel, meals and related personal expenses incurred by meeting attendance.

The working language of the meeting will be English and meeting documentation will be provided in English. If needed, interpretation services will be provided by the parties requiring interpretation.



**CROSS POLAR WG ACTION ITEMS LIST (updated in September 2006)**

Number	Item	Action	POC	Update	Status
030601	Establish PACOTS track across NOPAC into RFE	A. FAA to explore DOTS+ software options – this has been researched and can be adapted B. Airlines to develop trial routes. C. State ATM to assess additional entry points.	ZAN/State ATM/IATA	Parties will develop a proposal which will include entry points, route description, and a concept for a validation demonstration.	
030602	RVSM in Arctic Ocean (Russian Oceanic FIRs)	Internal coordination & report to spring 07 mtg	FAA/State ATM	S. Creamer provided an RVSM- metric discussion paper. Russian representatives advise they anticipate RVSM in Arctic FIR airspace by mid-07.	
030603	Westbound use of FL360	ZAN & ZEG to explore FL360 as interim altitude for westbound transitions to Polar-3 & 4	ZAN/ NavCanada	ZAN will not be able to fully utilize FL360 until RVSM is implemented by Russia. Aircraft often advises that they would be able to climb prior to the exit fix but later will advise they can not climb as planned. NavCanada asked if FL360 could be utilized on a “time of day” basis – ZAN will assess this aspect of use and report back. Review should also consider influence of RVSM implementation by Russia in mid '07.	
030604	Route Catalogue update & implementation	A. Update Russian Route catalogue & submit to IATA before spring 07 mtg B. Provide IATA with target dates for implementation of new routes	A. State ATM/ ZAN B. State ATM	Russia has compiled updated information and will share it with IATA. They will explore how to “publish” as well. Russia will work with other providers to incorporate additional route information from adjacent FIRs.	

Number	Item	Action	POC	Update	Status
030606	New city pair service. Providers need advance information for airspace planning	All parties	All parties	No formal process available to provide this information. All parties requested to share information as conditions allow to promote efficient airspace and procedural planning.	
030607	Plan next Cross-polar and Trans-East Routes Users/Providers Forum meeting.	Recommend US/Canada/Russia/Iceland/Japan/IATA to develop enhanced procedures & services for Cross-Polar & Trans-East operations. Host & venue TBD.	Palmer	Need to determine name, participants, host, and venue for future meetings.  Proposed April 3 – 5. Location: Reykjavik	Ongoing
030608	ATFM collaboration between FAA/ATO, State ATM Corp & NavCanada	Develop LOA's covering shared practices & cooperative coordination procedures for supporting cross-polar & trans-east flows	FAA	Not yet ready to engage in developing a tri (quadri)-lateral agreement.	
030609	Kamchatka 4 (B932)	B932 1 year trial has expired. IATA to write letter to JCAB (Cc: ICAO, Russian State ATM Corp & FAA) to request continuation of trial	ZAN/State ATM	LOA signed to begin use on Nov.23, 2006. State ATM and FAA/ZAN to report back next meeting on use. State ATM will look into proposed alternative route segments at BESAT.	
030610	En route reroute procedures	Develop procedures	State ATM/ NavCanada/ FAA/IATA	State ATM proposing new (additional) routes which will improve reroute options.	
030611	Table top exercise for reroute procedures	Conduct table top exercise –	State ATM/ NavCanada/ FAA/IATA	Discussion/presentation at 9/06 meeting.	Closed
030612	Track load over MARCC with 15 minutes flow	Brief meeting on results	FAA/State ATM	Compliance was an issue. Traffic congestion and poor communications forced termination of the test. Reassess after ZAN Ocean 21 implementation	

Number	Item	Action	POC	Update	Status
030613	Track load FRENK & VALDA as separate routes	Assess and develop procedures	FAA & State ATM	Deferred – pending new capabilities coming on line (RADAR) and introduction of parallel routes – Mar 07.	
030614	HF blackouts	Sharing of blackout data & development of procedures	NavCanada	Northern TDA will include HF actuals and forecasts – NOC will work with Iceland, FAA, Russia to include actual data north of 60N for entire region.	
030615	Automated Flight Data exchange between facilities	Analyze and report to next mtg	FAA State ATM NavCanada	ZAN is ready as soon as YEG is ready to implement. Brief discussion between ZAN and State ATM various interface protocols will be reviewed for potential application between ZAN and Russian ACCs. Report out at next meeting.	
030617	ATS & benefits statement	IATA to provide user report on cross-polar/RFE quantified benefits, services & provide a prioritized list of issues	IATA	No activity this period.  UAL/Gene Cameron, provided informational briefing on these subjects.	
030618	Improve departure/GRL compliance	NOC / ATCSCC / MATMC to explore venues for compliance	FAA NavCanada Airlines	Proposal submitted to session to use RTA rather than departure GRL – a research test proposal will be developed for consideration.	
030619	Mach Number Technique	Include MNT in LOA's	State ATM/ Lane	ZAN concurs with proposed LOA's to include Mach Number assignments to maintain separation. **Subsequent discussion indicates Nov 1, 2006, as an agreed upon effective date for LOA modifications implementing MNT procedures.	
030620	Recording statistics	Establish agreed recording & sharing of statistics	All	Ferguson/Alexey completed AI	Ongoing

Number	Item	Action	POC	Update	Status
090621	Post ATOP Assessment	ZAN Develop review items list for post ZAN-ATOP implementation assessment and report at next meeting.	ZAN		
090622	OnLine DOTS Track Advisory	DOTS on-line track advisory program. Research potential of web-based product.	ZAN/FAA		
090623	GRL/RTA Assessment	Conduct evaluation of RTA as proposed change to current GRL usage. Test would include assessment of RTA, en route conflict resolution through collaboration between airlines and NOC, and use of airline provided actual departure information (AFTN message). During trial period participating airlines would use GRL only as a guide – flow management would focus on RTA. NOC will provide an E:conference briefing to airlines, trial planned to start by 1 Nov 06.	NavCanada/All.		
090624	NOTAM Distribution	Missile launches – procedures for information distribution and issuance of International NOTAMs. FAA – NOTAM office/ZAN review.	ZAN		



Number	Item	Action	POC	Update	Status
090625	Performance Metrics	Performance Metrics – Carry over item from IOAC. What metrics would benefit Polar Routes Working Group.	FAA/All		
090626	Ocean 21/Arctic FIR	ZAN to assess use of Ocean 21 in Arctic FIR. Status at next meeting.	ZAN		
090627	Contingency Response	Begin development of contingency procedures – examples: aircraft difficulties, fuel, weather, volcanic, etc. Topic – including suggestions - to be discussed on Dec telcon. Note: Some Airlines currently conduct yearly contingency procedures exercises.	All parties.		
090628	Establish Working Group Coordination Telcons	Members of the working group felt that interim telcons between meetings would benefit members by sharing status/issues on action items on a more frequent basis. ZAN will set up a bridge to support a December telcon.	ZAN/All parties.		

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