



## TRANS-REGIONAL AIRSPACE AND SUPPORTING ATM SYSTEMS STEERING GROUP

### FIRST MEETING

(TRASAS/1)

(Paris, 2-3 May 2007)

**Agenda Item 1:** Terms of Reference of the Trans-Regional Airspace and Supporting ATM Systems Steering Group (TRASAS)

### TERMS OF REFERENCE OF TRANS-REGIONAL AIRSPACE AND SUPPORTING ATM SYSTEMS STEERING GROUP (TRASAS)

*(Presented by the Secretariat in support of Strategic Objectives No. A and E)*

This working paper presents the background to the establishment of the Trans-Regional Airspace and Supporting ATM Systems Steering Group (TRASAS) and its proposed Terms of Reference. The main expected benefits of this cooperation are highlighted in paragraph 2.7.

The Group is invited to review and adopt the proposed Terms of Reference in the **Appendix** to this paper.

#### 1. Introduction

1.1 One of the outcomes of the NAT SPG/41 meeting was regarding the air-to-ground communication constraints over the high seas areas of the Arctic Ocean and the need to transit between the Annex 2 compliant flight level allocation system (used by Canada, Iceland and the United States) and the non-compliant system used by the Russian Federation in Murmansk and Magadan Flight Information Regions (FIR). The NAT SPG/41 noted that these issues were being addressed, *inter alia*, by the Russian-American Co-ordinating Group for Air Traffic Control (RACGAT), which had worked very effectively and productively in the past but had not met for over a year.

1.2 In this respect, NAT SPG/41 invited the Russian Federation, the United States and other stakeholders to take all necessary steps to ensure the continuation of RACGAT meetings before the end of the year 2005 (NATSPG Conclusion 41/1 refers).

#### 2. Discussion

2.1 Since NAT SPG/41, significant changes took place in the Russian Federation Civil Aviation Administration and therefore it was not possible to convene a RACGAT meeting. These changes concerned

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the establishment of the Federal Air Navigation Authority (FANA) on 5 September 2005. FANA, a specially authorised federal body of executive power and subordinated directly to the Government of the Russian Federation would carry out the following functions:

- state regulation, control and oversight in the field of utilisation of the Russian Federation's airspace;
- provision of state services in relation to air navigation servicing of users of the Russian Federation's airspace;
- establishment of a unified aerospace search & rescue system;
- certification of types and aids to navigation, air traffic control facilities as well as production means thereof;
- establishment of air navigation charge rates and collection procedures, disposal of revenues from the above charges; and
- issuance of over-flight permissions for foreign aircraft operation through the Russian Federation's airspace and crossing the state boundary of the Russian Federation.

2.2 It was noted that a continuation of the "historical" RACGAT meetings would be highly improbable, considering the changes that affected/affects the Russian Federation Civil Aviation Administration. These changes had made the provision of the RACGAT Memorandum of Understanding of 1992 obsolete.

2.3 Although the RACGAT meeting, as requested by NAT SPG/41, was not held, several other meetings took place to discuss issues of interest in the area.

2.4 In this respect, a Special ATS Coordination Meeting Cross-Polar and Russian Far East ATS Routes was held in Bangkok, Thailand, from 15 to 16 November 2005. The meeting reviewed the existing operational and technical aspects related to the increase in traffic on the Cross-Polar and Russian Far East routes and was attended by 34 experts from China, Mongolia, Russian Federation, United States and IATA.

2.5 Secondly, a series of the Trans-East and Polar Track ATS Providers Meetings had been held in Anchorage, Alaska from 14 to 16 March 2006 and from 25 to 27 September 2006 at ICAO Offices in Montreal, Canada. These meetings had the objective to implement procedures and technologies to ensure maximum utilisation of the Russian Far East and Polar routes, addressed daily operational issues between the parties and continued improvement in coordination and capacity building. The September discussions included Russian proposals for two new Polar routes with entry/exit points in Anchorage FIR, implementation of technologies such as Controller-Pilot Data Link Communications (CPDLC), Automatic Dependent Surveillance - Broadcast (ADS-B) and implementation of Reduced Vertical Separation Minimum (RVSM) in China and Russia. The second meeting of this operational working group included participation from U.S., Icelandic, Canadian and Russian Air Traffic Services organizations, and airlines. The group was scheduled to meet again in the spring of 2007.

2.6 The successful outcome of the ICAO Informal Trans-Asia/Trans-Siberia/Cross Polar Routes High Level Steering Group (ITASPS) and its Contributory Working Group (ICG) is recalled. Their meetings, held from 1998 to 2001, co-ordinated the requirements of international civil aviation for a coherent and economically viable and operationally optimal structure of ATS routes, linking city-pairs in Europe and Asia, Europe and North America and Asia and North America. The ITASPS Group promoted improvements for the safety and efficiency of the Trans-Asia/Cross-Polar route structure and the supporting ATM systems within the States affected, based on the existing IATA Trans Siberian Route Study, which was expanded and complemented to adequately cover the Cross-Polar element.

2.7 At the NATSPG/42 and EANPG/48 meetings, aircraft operators underlined their continued need for improvement of the route structure and supporting infrastructure in the area. In this respect, several issues have already been identified as requiring continued attention, as follows:

- a) opening of more routes and improved efficiency of the current routes;
- b) implementation of RVSM in Russian Federation and China;
- c) improvement of the ATC coverage and hours of operations;
- d) ACC consolidation;
- e) development of improved ATFM tools that can be shared amongst States;
- f) communications in the Northern Airspace;
- g) airport availability for ETOPS aircraft;
- h) improved access to China airspace;
- i) simplified and more flexible access requirements to the Russian airspace (form “R”).

2.8 To continue the work already done and respond to the new requirements for increased efficiency and further developments, the United States and the Russian Federation participated in the Trans-East and Cross Polar ATS Providers Group. This group accepted the above tasks and given that the RACGAT had not met for some time, the United States and the Russian Federation agreed to dissolve RACGAT. However, since a co-ordinated effort of the international civil aviation community was required to implement future requirements and efficiencies that would involve States and Organisations from four of the ICAO Regions (EUR, ASIA, NAT and PAC), the establishment of a Trans-Regional Airspace and Supporting ATM Systems Steering (TRASAS) Group was therefore proposed. TRASAS would work under the auspices of ICAO and be composed of representatives with operational and technical expertise from Canada, China, Democratic People's Rep. of Korea, Denmark, Finland, Iceland, Japan, Mongolia, Norway, Republic of Korea, Russian Federation, United States and from international organisations (e.g. IACA, IATA, IBAC, IFALPA). The proposed draft Terms of Reference are attached at the **Appendix**.

2.9 The officials from the United States and the Russian Federation agreed that cooperation on airspace issues was still critical; therefore, agreed to support the Trans East and Cross Polar ATS Providers Group and instructed their provider organizations to participate in its meetings. Furthermore, the Russian Federation and the United States expressed their interest to participate in the work of the proposed TRASAS as a high level steering group, which would be able to follow up on the strategic issues of the former RACGAT group.

2.10 The TRASAS initiative in order to continue work on improvement of the route structure and supporting infrastructure in the interface area of four of the ICAO Regions: EUR, ASIA, NAT and PAC, was endorsed by the EANPG. (EANPG Conclusion 48/15 refers).

### **3. Action by the Steering Group**

3.1 TRASAS is invited to review and endorse the proposed Terms of Reference attached at the **Appendix**.



**PROPOSED TERMS OF REFERENCE OF THE  
TRANS-REGIONAL AIRSPACE AND SUPPORTING ATM SYSTEMS STEERING GROUP  
(TRASAS)**

1. Introduction

1.1 In order to continue work already done concerning the traffic in the Northern area and to respond to the new requirements for increased efficiency and further developments, co-ordinated efforts of the international civil aviation community is required. It would involve States and Organisations from four of the ICAO Regions: EUR, ASIA, NAT and PAC. A Trans-Regional Airspace and Supporting ATM Systems Steering (TRASAS) Group shall respond to these requirements under the following Terms of Reference.

2. Purpose and objectives

2.1 The ICAO Trans-Regional Airspace and Supporting ATM Systems Steering (TRASAS) Group shall co-ordinate the requirements of international civil aviation for a coherent and economically viable and operationally optimal structure of ATS routes, linking city-pairs in Europe and Asia, Europe and North America and Asia and North America. The route network shall have sufficient flexibility to plan different flight paths, day-by-day, to take advantage of prevailing upper winds.

2.2 The Group shall work in close co-operation with aircraft operators' international organisations in order to ensure that known and expected requirements for international and domestic routings and cost-effective implementation are taken into account. The Group will also take account of the requirements for adequate feeder and connection routings to enable optimal access to the route network from points of departure and points of destination, upstream, downstream and from within its vicinity. The scope of the work will respond to the global objectives of the ICAO operational concept and support the new ICAO Global Air Navigation Plan Initiatives: GPI-1 (flexible use of airspace), GPI-2 (reduced vertical separation minima), GPI-3 (harmonised level system), GPI-5 (performance-based navigation), GPI-6 (air traffic flow management), GPI-7 (dynamic and flexible ATS route management), GPI-8 (collaborative airspace design and management), GPI-17 (implementation of data-link applications), GPI-20 (WGS-84 implementation), GPI-21 (navigation systems) and GPI-22 (communication network infrastructure).

3. Scope of work

3.1 The TRASAS Group shall make proposals and promote improvements for the safety and efficiency of the Northern area route structure and the supporting ATM systems within the States affected by such proposals. It shall base its work on aircraft operators' requirements, which may be expanded and complemented, as necessary.

3.2 The Group shall take into account modern space based technology (GPS/GLONASS/GNSS and ADS) in accordance with the ICAO CNS/ATM system concept and plan for an orderly transition period. This transition period should enable a seamless migration of current aircraft fleets to full CNS/ATM compliance on such routes in the future. TRASAS shall consider an equitable cost recovery scheme for the established route system in accordance with ICAO provisions in line with Article 15 of the Chicago Convention.

3.3 The Group shall not substitute itself for other existing bodies which are active under the auspices of ICAO (e.g. European Air Navigation Planning Group (EANPG), North Atlantic Systems Planning Group (NAT SPG), ASIA/PAC Air Navigation Planning and Implementation Regional Group

**APPENDIX A**

(APANPIRG), etc.) or bodies operating as bilateral/multilateral State initiatives. It may provide guidance as well as a co-ordinating function for these Groups working on the various technical and operational aspects related to the intended transit route network and to combine the results into one coherent overall plan. This will lead to the amendment, if and when required, of the ICAO Regional Air Navigation Plan (ANP) in accordance with procedures established by the ICAO Council.

3.4 In addition to its technical work on the newly established route system, the TRASAS Group shall explore proposals for financing and cost recovery for this system.

#### 4. Activities

- To promote a modern, efficient and cost-effective international ATS route network linking city-pairs in Europe, Asia and North America, taking into account the recognized requirements of the airspace users, taking advantage of seasonal wind patterns, and making use of space-based technology in accordance with the ICAO CNS/ATM system concept.
- To promote efficient air traffic management and associated systems to improve safety, increase capacity and enhance operational and economic efficiency.
- To promote the provision of sufficient capacity so as to avoid the need for air traffic flow management (ATFM).
- To develop a coherent transition plan enabling a seamless migration of current aircraft fleets to full CNS/ATM compliance on such routes in the future.
- To promote the establishment of a minimum number of suitably equipped Area Control Centres (ACC) and an infrastructure adequate to provide the required air traffic services along the proposed ATS route structure.
- To promote suitable financing and cost recovery mechanisms for the newly established route system in accordance with the applicable ICAO provisions and in line with Article 15 of the Convention on International Civil Aviation (Chicago, 1944).
- To analyse the costs and benefits achieved by individual ATS routes of the newly established route system to determine their eligibility for inclusion into the ICAO Regional Air Navigation Plan.

4.1 TRASAS may establish Contributory Working Bodies (CWB) that shall work on its behalf on specific expert issues (route network developments, RVSM implementation, communications, airport issues etc).

#### 5. Composition

5.1 The TRASAS Group shall be composed of representatives with operational and technical, expertise from Canada, China, Democratic People's Rep. of Korea, Denmark, Finland, Iceland, Japan, Mongolia, Norway, Republic of Korea, Russian Federation, United States and from aircraft operators' international organisations (e.g. IACA, IATA, IBAC).

5.2 The TRASAS Group shall work under the auspices of ICAO. The EUR/NAT Office shall provide full secretarial support to the Group.

5.3 The Group may invite participation from other States which may be concerned during the progress of its work (e.g. States in Central Asia, in the South Caucasus area, and others) and international organizations which may provide useful input during its deliberations.

## 6. Reporting

6.1 Reports of the TRASAS shall be prepared by the ICAO Secretariat in the usual standard fashion. As reports of an informal group, this documentation will be made available to participating States and international organization(s) and shall be distributed to the Regional Planning Groups [in particular, the Asia/Pacific Air Navigation Planning and Implementation Regional Group (APANPIRG), the European Air Navigation Planning Group (EANPG) and North Atlantic Systems Planning Group (NAT SPG)] for their information and to facilitate co-ordination which may be required within their respective work programmes.

## 7. Communication

7.1 As far as possible, members and participants in the work of TRASAS shall correspond by electronic mail. Their communications should be as informal as possible to ensure rapid progress of the work programme.

## 8. Target dates and deliverables

8.1 TRASAS shall establish a comprehensive work programme containing target dates and milestones to be achieved. It should strive to complete its tasks in the shortest possible time.

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