



International Civil Aviation Organization

**Trans-Regional Airspace and Supporting ATM Systems Steering Group
Third Meeting (TRASAS/3)**

Paris, France, 19 – 20 October 2010

Agenda Item 3: Work currently underway to enhance the ATS route network

DEVELOPMENT OF ATS ROUTE NETWORK IN THE RUSSIAN FEDERATION

(Presented by the Russian Federation)

SUMMARY

Pursuant to the ICAO recommendation and airline proposals, the aeronautical authorities of the Russian Federation continuously improve ATS route network, providing a greater attractiveness of the airspace and enhancing the level of user air traffic services.

1. INTRODUCTION

- 1.1 The Air Navigation System designed by the Russian Federation is aimed at ensuring the national interests of the State in the field of airspace utilization and air traffic services and is based on the main provisions the ICAO Global Operational Concept and the decisions adopted by the ICAO Contracting States to support transition to the future CNS/ATM system.

The total area of the airspace where the Russian Federation provides air navigation services is 26 million square kilometres. The existing ATS route network, including 486 international routes with a total length of 441,600 kilometres and 77 Air Traffic Services Centres allow safely handling over 1 million flights annually.

2. DISCUSSION

- 2.1 In 2010, the number of flights operated in Russian airspace totalled 827,188 representing an increase of 11.77% in comparison to 2009. Traffic analysis for 2010 showed that there was an increase of 10.85% (506,091 flights) in international flights and an increase of 13.24% in domestic flights (321,097 flights) as compared to 2009. Similarly to the previous year, the largest increase in air traffic (over 19,5%) occurred on Crosspolar routes.

2.2 ATS route-related activities

The main goal of the development of international route network in the Russian Federation is to meet airspace users' needs and traffic demand. The total number of routes in use is 815, including 486 international ones. The total route length extends to 610,116 km with 441,600 km of international routes. 41 new routes, including 15 international ones were implemented in 2010. The route implementation history is shown in the table below:

(5 pages)

#	Year	Number of routes implemented			
		Total	International	Domestic	Conditional
1.	2004	124	75	42	7
2.	2005	36	19	15	2
3.	2006	50	43	6	1
4.	2007	61	57	2	2
5.	2008	140	119	20	1
6.	2009	91	79	11	1
7.	2010	41	36	5	-

Pursuant to RDGE Action Plan and the generally accepted classification of ATS transit routes, effective from November 1, 2010 there will be implemented 20 new international airways and 4 RNAV routes. The implementation of new routes is sanctioned by the Order of the Russian Ministry of Transport and is aimed at enhancing the existing international route structure. Routes implemented effective from March 2010.

#	Designator	Route Description	Date of implementation	Estimate Mileage Savings	Estimate Fuel Savings	Estimate Emissions savings
1	A920	OMITA-UIAA (shortcut on Trans-Siberian route, to remove restriction "upon coordination with ATS")	11.03.10 by NOTAM	14 kilometers		
2	B934	Zhigalovo-GUSIN- SERNA (shortcut)	11.03.10 by NOTAM	11 kilometers		
3	G34	OLEMA-NILAT (new corridor with Finland)	08.04.10 by NOTAM	new entry fix at the border with Finland		
4	R30	INLOG – SPB (new entry fix at the border with Finland)	08.04.10 by NOTAM	new entry fix at the border with Finland		
5	G359	ANODI-SORLI (Cross-Polar ATS route)	01.07.10 by NOTAM	New Crosspolar Route		
6	R706	MAGUN-ANODI – ML (Cross-Polar ATS route) - DAKIN	01.07.10 by NOTAM	New Transpolar Route		
7	R705	PIREL-ANODI (Trans-Polar route)	01.07.10 by NOTAM	New Transpolar Route		
8	B969	BELEK-RODOK	01.07.10 by NOTAM	Transition to Crosspolar Route G495		
9	G914	KW-KZ	01.07.10 by NOTAM due to assignment of international status to "Grozniy" airport			
10	G923	LISMU-BJ	01.07.10 by NOTAM	01.07.10 by NOTAM		

#	Designator	Route Description	Date of implementation	Estimate Mileage Savings	Estimate Fuel Savings	Estimate Emissions savings
				due to assignment of international status to "Grozniy" airport		
11	R806	MEGES- MARAT	01.07.10 by NOTAM	01.07.10 by NOTAM due to assignment of international status to "Grozniy" airport		
12	R103	GORAK-LELOT	01.07.10 by NOTAM	01.07.10 by NOTAM due to assignment of international status to "Grozniy" airport		
13	R351	Published in RF AIP as PEKUN-BEKMI, total length 3071 km, flight levels 8600-12100)	08.04.10 by NOTAM			
14	B954	Published in RF AIP as PETAG-GIKSI, total length 920 km, flight levels 8600-12100)	06.05.10 by NOTAM			
15	G7	Published in RF AIP as G7 GIKSI-LUNAD, total length 2120 km, flight levels 8600-12100)	06.05.10 by NOTAM			

Routes of high priority to be studied in September 2010

#	Designator	Route Description	States involved	Estimate Mileage Savings	Estimate Fuel Savings	Estimate Emissions savings	Catalogue number (if any)
1	RDGE-BLT/SG	DELON-PEMAS	RUS, BLR	Improve ATS routes between Belarus and ULLL FIR			
2		Ivenets-DIRUL-WKL	RUS, BLR	To be implemented on Nov 1, 2010			
3	RDGE-BLT/SG	RUSNE-BETAL – 5716.4 N 02752.6E PEMAS-BEGUT-Beozersk	RUS, LTU, LVA	Improve ATS routes between EYVL, EVRR and ULLL FIR/UIRs			BLT/8

#	Designator	Route Description	States involved	Estimate Mileage Savings	Estimate Fuel Savings	Estimate Emissions savings	Catalogue number (if any)
4	RDGE-BLT/SG	RUSNE-BETAL-5709.6 N 02749.5E – KORIN-MANIV-GIPRI-METAT	RUS, LTU, LVA	Improve ATS routes between EYVL, EVRR and ULLL FIR/UIRs			BLT/8

3. OTHER ISSUES

3.1 Interface issues with neighbouring States and/or adjacent ICAO regions, etc.

In order to achieve the above goals, the Russian Federation was maintaining regular contacts with airlines, IATA and participated in ICAO meetings. From March to September the following Letters of Agreement (LOA) between adjacent ACCs were revised and resigned:

- Rostov ACC and Baku ACC (Azerbaijan) – 19.03.10;
- Petropavlovsk-Kamchatskiy ACC and Anchorage ACC (USA) – 15.03.10;
- Lavrentiya FSS- Nome FSS (USA) - 21.05.10;
- Rostov ACC and Ankara ACC (Turkey) – 27.05.10;
- Vladivostok ACC – Pyongyang ACC (DPRK) – 07.06.10;
- Yuzhno-Sakhalinsk ACC – Sapporo ACC (Japan) – 20.07.10
- Khabarovsk ACC - Sapporo ACC (Japan) – 20.07.10;
- Vladivostok ACC - Sapporo ACC (Japan) – 20.07.10;
- Vladivostok ACC – Shenyang ACC (China).

3.2 Work is progress to develop an automation tool model for the Flow Management Unit - East and perform operational trials thereof and the National Flow Management Units in the Republic of Kazakhstan and the Republic of Uzbekistan. This work is done in the framework of the “Eurasia” Coordination Council.

Russian ACC consolidation program is being carried out in accordance with the Federal Target Programme "The Joint ATM System Modernization (2009-2015)".

Type	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Main Centre	1	1	1	1	1	1	1	1	1	1
Zonal Centre	7	8	8	8	8	8	8	7	7	7
Aux. Zonal Centre	4	4	4	4	4	4	4	-	-	-
ACC (two-sector)	42	41	40	40	32	29	-	-	-	-
ACC (one-sector)	26	25	25	24	30	33	60	40	34	34
Aux.ACC	44	44	44	40	36	38	32	20	17	17
Aux.ACC (without ATC)	2	1	1	1	1	-	-	-	-	-
ACC with planning functions	-	-	-	-	-	-	-	18	18	18
Total	126	124	123	118	112	113	105	86	77	77

3.3 A new version of the Federal Rules of airspace utilization in the Russian Federation approved by the Government decree № 138 dated 11.03.2010 becomes effective on 1 November 2010. The Rules establish simplified procedures of airspace utilization, stipulating:

- airspace classification;
- advisory process of Class G airspace utilization;
- changes to terminal, restricted and dangerous areas;
- simplification of new ATS routes approval and implementation, including RNAV routes and other provisions.

4. CONCLUSIONS

- 4.1 The meeting is invited to note the information provided in this information paper and reflect its main provisions in the meeting's final report.
- 4.2 The implementation of new ATS routes enables significant improvements of the existing route network in the Russian Federation, enhances flight safety and facilitates provision of air traffic services with adjacent RVSM airspaces.
- 4.3 Taking into consideration the work done by the Russian Federation to develop and improve the existing ATS route network, the airlines are able to choose more optimal routings, which will ultimately lead to increase of traffic and enhance the quality of air traffic services provided.

5. ACTION BY THE MEETING.

- 5.1 The meeting is invited to note this information paper.

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