

**Twentieth Meeting of the Cross Polar Trans East Air Traffic Management Providers' Work
Group
(CPWG/20)**

(Anchorage, USA, October 26-30 2015)

Agenda Item 6: ATS Route Catalogue

AIR TRAFFIC SERVICES ROUTE CATALOGUE

(Presented by STATE ATM CORPORATION)

SUMMARY

This working paper presents status and information on route proposals since the Eleventh Meeting of the Cross Polar Trans East Air Traffic Management Providers' Work Group (CPWG/20) for the CPWG information and discussion.

1. Introduction

1.1 Since the Ninth meeting of the CPWG, the State ATM Corporation has provided an Air Traffic Services (ATS) Route Catalogue for the Polar Region for discussion and use during the meetings.

2. Discussion

2.1 **Attachment A** is the proposed ATS Route Catalogue for the CPWG's discussion and consideration.

3. Recommendation

3.1 The meeting is invited to:

- a. review the information contained in this Working Paper;
 - b. recommend changes or additions to the ATS Route Catalogue at **Attachment A**.
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Anchorage, USA
October 26-30 2015

ATS ROUTE CATALOGUE

Section 1. Proposed Cross Polar Route Segments (CPRS)

Item	Reference	Route description	Proposed by	Objectives/Comments	Benefits	FIR	Target Dates
1	2	3	4	5	6	7	8
1	CPRS/2	RAMEL (8430.0N 16858.4W) - 8456.2N 16653.4E - 8331.1N 12736.3E - BESON (7921.0N 10431E) (bidirectional use)	State ATM Corporation. 2008	a) Implementation will be possible only after elaboration of procedures between oceanic sectors of Magadan, Murmansk ACCs and Anchorage ARTCC; b) Implementation is unreasonable. No stable communications. Safety concerns.		RUS USA	Implementation is deemed unreasonable.
2	CPRS/3	NALIM (8620.4N 16858.4W) - KUBON (8000.0N 12452.9E) - IRMAK (7601.4N 11830.0E) - ROMUL (7355.5N 11557.3E) – SALAK (7158.0N 11407.0E) – LALEN (6930.0N 11252.9E) – OLEMU (UERO 6831.0N 11228.0E) – RULAT (UERP 6624.0N 11202.0E) – IRBIS (6455.4N 11056.7E) - GIBRI (6318.6N 10953.4E) - DORIP (6054.2N 10831.5E) – PEKUN (6002.0N 10805.0E) - CI (Ust-Kut NDB) - URAMO (5542.9N 10526.0E) - MX (ZHIGALOVO) – then along the existing airways (bidirectional use)	State ATM Corporation. 2008	a) Open a new cross polar route; b) 8620.4N 16858.4W - 7600.4N 11839.6E segment is approved and ready for implementation; c) SALAK – LALEN – OLEMI – RULAT segment is under review and international coordination; d) IATA Top Priority		RUS USA	Published as G112 on Nov 1, 2010 (NALIM (8620.4N 16858.4W) – KUBON (8000.0N 12452.9E) segment is unavailable before Dec 16, .2010
3	CPRS/12	MAGUN (8500N 03200E) - BESED (8133.0N 05535.1E) - ANODI (7730.0N 06600.0E) – PINOG (7340.1N 06911.4E) - REFRI (6728.6N 07128.0E) - GIMIR (6528.9N 07242.0E) - R348 (H=8600 - 16100) – GISUR (6120.6N 07324.2E) - 5855.4N 07345.9E – ML (Chapayev NDB	State ATM Corporation. 2009	a) Establish a new route for flying from India, Pakistan and UAE to North America East Coast; b) Approved, ready for implementation after resolution of comm. Issues between Murmansk and Mys Kamennyi;		RUS ISL	Published as G706 (NOTAM A3432/10) on Jul 1, 2010

Item	Reference	Route description	Proposed by	Objectives/Comments	Benefits	FIR	Target Dates
1	2	3	4	5	6	7	8
		5615.0N 07357.0E) - A302 - G487 – DAKIN (5409.5N 07224.3E) (bidirectional use)		c) Will be assigned R706 designator			
4	CPRS/13	RIMAG (6828.0N 07335.8E) - OLDEM (6721.0N 07310.2E) – (6638.0N 07255.0E) - GONOK (6620.1N 07250.4E) - GIMIR (6528.9N 07242.0E) – LEBUL (6450.7N 07148.6E) - RILIS (6321.6N 06954.7E) - URMAN (6146.2N 06806.9E) – ATREM (6058.6N 06714.0E) – BAGEN (6638.0N 07255.0E) – LUGIK (5943.0N 06556.0E) (bidirectional use)	Emirates Airlines	a) Open a new route; Approved and ready for implementation		RUS	Published as A947on Nov 1, 2010
5	CPRS/14	SORLI (6228.0N 06602.0E) - BELEG (6341.3N 06642.0E) - MASUL (6455.1N 06639.8E) - SH (Salekhard VORDME 6635.3N 06636.4E) - GOPUS (6726.1N 06639.2E) - ADERA (6851.9N 06644.3E) - TUMOK (7113.0N 06654.5E) – LUGOT (7202.3N 06649.5E) - ANODI (7730.0N 06600.0E) (unidirectional use to ANODI)	Emirates Airlines	a) Transition from a new Crosspolar route; b) Approved and ready for implementation; c) Will be assigned G359 designator		RUS	Published as G359 (NOTAM A3429/10) on Jul 1, 2010
6	CPRS/15	PIREL (8000.0N 03500.0E) – ANODI (7730.0N 06600.0E) – then on B483 (bidirectional use)	State ATM Corporation. 14.05.2009	a) Open a new routing from China to North America; b) approved and ready for implementation. c) Will be assigned R705 designator		RUS NOR	Published as R705 (NOTAM A3427/10) on Jul 1, 2010
7	CPRS/16	ANODI (7730.0N 06600.0E) - MELAM (07610.7E 7657.0N) - TINEM (7459.4N 07610.7E) – DOSON (7331.0N 08022.9E) (bidirectional use)	State ATM Corporation. 14.05.2009	a) A new transition from Crosspolar route; b) ANODI - MELAN approved and ready for implementation			Published as R705on Nov 1, 2010
8	CPRS/17	MX (ZHIGALOVO NDB 5448.0N 10509.0E) – GUSIN (5106.0N 10614.0E) (bidirectional use)	State ATM Corporation. 14.05.2009	a) Shorten the route by 15 km b) Approved for implementation as a route by coordination with ATC; c) Will assigned B934 designator		RUS	Implemented on March 11, 2010 (NOTAM A0404/10)
9	CPRS/18	NIBUL (5913.1N 06239.8E) –5738.2N 06147.9E – EKB (Yekaterinburg/Koltsovo VORDME 5644.6N 06047.9E)	State ATM Corporation. 14.05.2009	a) Shorten the route by 13 km; b) Under review		RUS	Published as G552 on May 05 2011

Item	Reference	Route description	Proposed by	Objectives/Comments	Benefits	FIR	Target Dates
1	2	3	4	5	6	7	8
		(between 2100-7500 m unidirectional to NIBUL. between 8100-15100 m bidirectional)					
10	CPRS/19	RIVAS (7140.8N 08425.3E) - SIVDI (6951.1N 08736.9) – TESLA (6720.5N 09155.5E) – SAKAT (6526.6N 09432.4E) – OKASA (6225.8N 09728.3E) – KOSUM (5756.3N 10044.6E) - BRT (Bratsk VORDME) (bidirectional use)	Continental Airlines April 2008	a) Open up a route for flying from South-East Asia to North America; b) Under review		RUS	Published as R705 on Nov 1, 2010
11	CPRS/20	DAKIN (5409.5N 07224.3E) - ML (Chapayev NDB 5615.0N 07357.0E) - NJC (Nizhnevartovsk VORDME 6056.6N 07628.1E) (bidirectional use)	Emirates Airlines 2009	a) Open up a route for flying from Middle East to North America; b) Under review		RUS	Published as G715 on Nov 17, 2011
12	CPRS/21	BEBIR (6355.2N 06501.8E) - GUDIR (6734.5N 07001.6E) - NIDRA (7127.5N 07708.7E) (bidirectional use)	Emirates Airlines 2009	a) Shorten the existing route b) Under review		RUS	Published as G497 on Nov 17, 2011
13	CPRS/22	8530.0N 16858.6W	FAA December 4. 2009	a) Open up a new entry fix for Crosspolar routes b) Under review		RUS USA	4 th quarter 2010 NPRS/27
14	CPRS/23	8330.0N 16858.6W	FAA December 4. 2009	c) Open up a new entry fix for Crosspolar routes a) Under review		RUS USA	4 th quarter 2010 NPRS/28
15	CPRS/24	7800.0N 16858.6W	FAA December 4. 2009	d) Open up a new entry fix for Crosspolar routes a) Under review		RUS USA	4 th quarter 2010 NPRS/29
16	CPRS/25	7300.0N 16858.6W	FAA December 4. 2009	e) Open up a new entry fix for Crosspolar routes a) Under review		RUS USA	4 th quarter 2010 NPRS/30
17	CPRS/26	NIKIN (8100.0N 16858.6W)	FAA December 4. 2009	a) Relocate NIKIN b) Under review c) Relocation of NIKIN is unreasonable		RUS USA	4 th quarter 2010 Realignment is unjustified
18	CPRS/27	LISKI (7000.0N 16858.6W)	FAA December 4. 2009	d) Relocate LISKI e) Under review a) Relocation of LISKI is unreasonable		RUS USA	4 th quarter 2010 relocation of the entry fix is unnecessary

Item	Reference	Route description	Proposed by	Objectives/Comments	Benefits	FIR	Target Dates
1	2	3	4	5	6	7	8
19	CPRS/28	833000N1685823W - 740039N 1360232E - ... a) NA (Nizhneyansk NDB 7125.0N 13608.0E) – G226; b) GIKSI (7141.7N 12854.0E) – G491 (B489. G493) (bidirectional use)	State ATM Corporation. 09.02.2010	a) Open a new cross polar route; a) Under review		RUS USA	Published as G493 and G812 on Nov17, 2011
20	CPRS/29	AMATI (780000N 1685824W) - GILOD (755416N 1720106E) - LUNOG (720705N 1565953E) - NOGDA (711205N 1544019E) – OTNIR (690000N 1500037E) - SIPVI (652256N 1441620E) - NERPA (643256N 1430619E) (двухсторонняя)	State ATM Corporation. 09.02.2010	b) Open a new cross polar route; a) Under review		RUS USA	Published as B806 on Okt 18, 2012
21	CPRS/30	7300.0N16858.4W – LURET (7037.5N 14753.8E) – R351 (B933 . G7. G494 . G495. G806) (bidirectional use)	State ATM Corporation. 09.02.2010	a) Open a new cross polar route; b) Under review c) unacceptable at the moment		RUS USA	unacceptable at the moment
22	CPRS/31	ORVIT – 7500.0N 17000.0E -6500.0N 15300.0E – BANOT - .. B223 - LUMIN	Continental Airlines April 2010	a) New York – Tokio traffic; b) distance saving- 35.8 м.м. c) accepted for review d) unacceptable at the moment		RUS	unacceptable at the moment
23	CPRS/32	ORVIT - 7700.0N 18000.0E - 7000.0N 16100.0E - 6500.0N 15500.0E - 6000.0N 15100.0E – ROMEM .. B337 - ANIMO	Continental Airlines April 2010	a) New York – Tokio traffic; b) distance saving - 40.2 м.м. c) accepted for review		RUS	unacceptable at the moment
24	CPRS/33	DEVID (B480) - GIKSI .. G491 or G493 or B489	United Airlines April 2010	a) Transition routes for flying between Mid West US/US East Cost and Asia b) Accepted for review		RUS	unacceptable at the moment
25	CPRS/34	a) RAMEL (G491) - TAKUN (G226); b) PETUL - RUTIN (G226); c) UNELI (G491) - HA (G226)	United Airlines April 2010	a) Transition routes for flying between Mid West US/US East Cost and Asia b) Accepted for review		RUS	unacceptable at the moment
26	CPRS/35	a) NIKIN (G226) - UNELI; b) TAKUN (G226) - TIGNA (G491); c) HA (G226) - TEMGA (G491)	United Airlines April 2010	a) Transition routes for flying between Mid West US/US East Cost and Asia b) Accepted for review		RUS	unacceptable at the moment

Item	Reference	Route description	Proposed by	Objectives/Comments	Benefits	FIR	Target Dates
1	2	3	4	5	6	7	8
27	CPRS/36	a) ORVIT (G494) - TAKUN (G226); b) DILSA - RUTIN (G226)	United Airlines April 2010	a) Transition routes for flying between Mid West US/US East Cost and Asia b) Accepted for review		RUS	unacceptable at the moment
28	CPRS/37	ANODI-ABERI	Emirates Airlines 19.05. 2010	a) Accepted for review b) Reviewed. Implementation is possible.		RUS	Published as G359 on Sep 22, 2011
29	CPRS/38	a) NELTI-A299-DONUS-TINRI далее G359 or b) NELTI- TINRI .. G359	Emirates Airlines 19.05. 2010	a) Accepted for review.		RUS	under review
30	CPRS/39	a) W104 TARSA-NOR b) W98 DOSON-KUTET	Continental Airlines April 2010	a) assign an international status b) streamline DAKIN – DEVID route for Delhi/Mumbai – Newark daily flights c) transition from DEVID		RUS	Published as a) R200 as b) G498 on Nov17, 2011
31	CPRS/40	B358 LANEP – IKADA	British Airways 17.01.11	Remove flight level restrictions between FL350-530		RUS	Маршрут исключен
32	CPRS/41	LURUN (852500N 1685824W) - TUSAT (833607N 1543003E) - UNTEK (791121N 1340410E) - NIGES (750546N 1265137E) - RANEN (735405c 1252913E) - NESPA (715403N 1233405E) - MOPUL (693331N 1232755E) - GANPA (664703N 1232204E) - ARLAG (651308N 1254435E) - SUBOS (635738N 1272559E) - TAGIL (631602N 1282035E) - Yakutsk VOR/DME (UTS) (620533N 1294705E) (двухсторонняя)	State ATM Corporation. 09.02.2010	a) Open a new cross polar route; b) Under review		RUS USA	Implemented as R494 on Oct 18, 2012
33	CPRS/42	GIMON – NIRUT (76N035E)	2012	Purpose: for flights from India to existing routes to GIMON continue in the North America		RUS NOR	Published as A840 on March 07, 2013
34	CPRS/43	GIMON – AGATA (78N035E)	2012	Purpose: for flights from India to existing routes to GIMON continue in the North America		RUS NOR	Published as A841 on March 07, 2013
35	CPRS/44	ANODI – KOMEL (7730N035E)	2012	Use as a new Crosspolar route for flying from North America to		RUS NOR	Published as A839

Item	Reference	Route description	Proposed by	Objectives/Comments	Benefits	FIR	Target Dates
1	2	3	4	5	6	7	8
				Southeast Asia			on March 07, 2013
36	CPRS/45	SIMLI-G494-B331-W205-WZ	2013	Reduce mileage		RUS	Will be published as G494, A803 on September 19, 2013
37	CPRS/46	NERPA (643256N 1430619E) –FA (Yekimchan) (530807N 1324953E) – MAGIT (474131N 1310900E) Unidirectional traffic from FA to MAGIT	2013	Extend the existing Crosspolar route		RUS	Will be published as B806 on September 19, 2013
38	CPRS/47	WZ (503808N 1280207E) – PARIS (512001N 1300004E) - FA (530807N 1324953E). Unidirectional traffic from WZ to FA	2013	Establish parallel routes		RUS	Will be published as A803 on September 19, 2013
39	CPRS/48	493236N 1281936E-AMERA- WZ (unidirectional traffic to WZ)	IATA	Establish parallel ATS routes (G494 is unidirectional to SIMLI)		RUS CHN	Under review and coordination. Negotiate with China, in different formats (IATA, ICAO, etc.)
40	CPRS/49	RITEK – 495025N 1182854E - HAILAR	IATA	Establish an additional entry/exit point	Reduce mileage	RUS CHN	Under review and coordination. Negotiate with China, in different formats (IATA, ICAO, etc.)
41	CPRS/50	SALET (7957N 16858W) – RODOK then alogn G495	State ATM Corporation October 2013	Establish an additional entry/exit point		RUS FAA	To be published as G819 in 13.11.14
42	CPRS/51	BARIP (7457N 16858W) – LUTEM – OLMIN – ZR (Зырянка) - ASKIB	State ATM Corporation October 2013	Establish an additional entry/exit point		RUS FAA	To be published as B722 in 13.11.14
43	CPRS/52	Establish additional NCRPs at G819, G493, G226, R351	United Airlines August 2014	Establish additional NCRPs to simplify transitions between the existing airways	Increase Route Efficiency	RUS	The following NCRPs were established: BAKUK, BUNIT, OKLOS NOTAM: A3748/14, A3750/14, A3745/14, A3743/14
44	CPRS/53	Establish a new ATS route: SOTIS PILAN- LURAM-	United Airlines August 2014	Establish a new ATS route.	Increase airspace efficiency, provide fuel savings and CO ₂ reduction	RUS	The route proposal accepted. The new A303 airway implemented in April 2015 as follows LURAM (664606N 0375031E) - TOKRO (660730N 0391350E) – SOTIS (654100N 0400750E) Flight level band:, <u>FL100**</u> <u>FL140</u> <u>FL160*</u> <u>FL200</u>

Item	Reference	Route description	Proposed by	Objectives/Comments	Benefits	FIR	Target Dates
1	2	3	4	5	6	7	8
							FL080 FL110 FL150 FL170 <u>FL250*</u> <u>FL390</u> <u>FL510*</u> FL210 FL260 FL400
45	CPRS/54	820939N 1685824W – 802806N 1642448E– 755700N 1431800E – IDIMA	State ATM Corporation December 2014	Establish a new ATS route segment.	Increase airspace efficiency, provide fuel savings	RUS	The new route B802 will be opened effective from November 12, 2015 as follows: LETUN (820939N 1685824W) OLMAT(802806N 1642448E) LOMRI (760029N 1432814E) IDIMA (740045N 1360243E) <u>FL530</u> FL270
46	CPRS/55	755700N 1431800W –RUTIN	State ATM Corporation December 2014	Establish a new ATS route segment.	Increase airspace efficiency, provide fuel savings	RUS	The new route G813 will be opened effective from November 12, 2015 as follows: : LOMRI (760029N 1432814E) RUTIN (733414N 1403546E) BEKOP (721044N 1360641E) BANIK (714205N 1344553E) AKEBA (713047N 1341525E) RILAK (691609N 1290106E) DISES (650957N 1231911E) Vilyuysk NDB (CZ) (634438N 1214704E) <u>FL530</u> FL270
47	CPRS/56	762814N 1685824W - 754700N 1791349E – LUNOG	State ATM Corporation December 2014	Establish a new ATS route segment.	Increase airspace efficiency, provide fuel savings	RUS	The new route R827 will be opened effective from November 12, 2015 as follows: BEKAR (762814N 1685824W) OMELI (754700N 1791349E) LUNOG (720705N 1565953E) <u>FL530</u> FL270
48	CPRS/57	762814N 1685824W – 722712N 1662946E – OLMIN	State ATM Corporation December	Establish a new ATS route segment.	Increase airspace efficiency,	RUS	The new route R830 will be opened effective from November 12, 2015 as follows:

Item	Reference	Route description	Proposed by	Objectives/Comments	Benefits	FIR	Target Dates
1	2	3	4	5	6	7	8
			2014		provide fuel savings		BEKAR (762814N 1685824W) TUSET (743842N 1761440E) GOPAN (722659N 1662322E) IPTER (713000N 1631457E) RUDBA (703041N 1602609E) LULIR (692254N 1573900E) KEMED (690349N 1565606E) OLMIN (672801N 1534310E) <u>FL530</u> FL270

Section 2. Proposed Trans-East Route Segments (TVRS)

Item	Reference	Route description	Proposed by	Objectives/Comments	Benefits	FIR	Target Dates
1	2	3	4	5		6	7
1	TVRS/8	G907 - BANOT (5940.6N 14908.7E) - NILOT (5611.0N 14142.7E) - .6N 13726.1E -4809.5N 13131.6E -MAGIT (474131N 1310900E) - JMU (JIAMUSI) (unidirectional from 5340.6N 13726.1E to 474131N 1310900E)	State ATM Corporation. 10.07.2007	a) Open up a new Transeast route to join JMU (JIAMUSI); b) Approved and ready for implementation; c) There is no connection in China airspace from 4741.3N 13108.4E - JMU (JIAMUSI); d) ASBAT - BA (Balagannoye); e) After opening of the above route. G212 ARGUK - HAB (Khabarovsk VORDME 4832.7N 13512.6E) will be used only for eastbound flying.		RUS CHN	Published as R213 on Oct 20, 2011
2	TVRS/13	ASKIB (5924.1N 14303.1E) - 5340.6N 13726.1E (ASKIB (592407c 1430312B) - GIRUD (534038c 1372609B)	State ATM Corporation. 10.07.2007	a) Open up a new route; b) Approved and ready for implementation		RUS	Published as B722 on Oct 20, 2011
3	CHUKO TKA-1	LISKI (7024.3N 16858.3W) - PEVEK (UHMK) (6947.0N 17035.7E) - CHERSKY (UESS) (6844.6N 16120.2E) -Zyryanka (6543.8N 15046.2E) - INDIK (6316.0N 14312.0E) - Chagda (5845.0N 13039.0E) Flight Level Band 9600-11600 m (bidirectional use)	RACGAT/13	a) UESU - INDIK - Chagda segment is located to close to the existing FIR boundaries and is outside VHF and radar coverage. b) Developed and approved an alternative route G912		RUS USA	Implementation is deemed unreasonable
4	TVRS/14	BELEK (6817.1N 14247.1E) - RODOK (6633.7N 13710.1E) (bidirectional use)	Proposed by airlines August 1. 2009	a) Transition from G969 to G495; b) Approved and ready for implementation		RUS	Published as B969 (by NOTAM) on Jul 1, 2010
5	TVRS/21	ABAGO (5617.5N 14414.2E) - 5517.2N 14005.3E (ABAGO (561731c 1441418B) - GITAK (551707c 1400520B)	State ATM Corporation. апрель July 10. 2007	a) Open up a new route; Approved and ready for implementation		RUS	Published as G902 on Oct 20, 2011
6	TVRS/22	ARNAP (6440.0N 17025.0E) - ASMOK (6448.8N 16843.2E) - ILMUK (6456.1N 16714.7E) - LUVAK (6502.8N 16526.4E) - OSKON (6514.3N 16032.5E) - ABAPI	State ATM Corporation. 30.03.2010	a) Open up a new route; b) North America and Alaska traffic to Afganistan, Kyrgystan (Manas), Beijing, Hong Kong,		RUS	Published as B155 (by NOTAM A2204/10) on Jun 3, 2010

Item	Reference	Route description	Proposed by	Objectives/Comments	Benefits	FIR	Target Dates
1	2	3	4	5		6	7
		(6502.5N 15718.3E) – RUBIS (6433.3N 15159.3E) – ELBIN (6340.5N 14532.7E) – INDIK (6316.0N 14312.0E) – KURAK (6247.0N 13651.0E) – LUKON (6230.9N 13338.4E) – UEEE (6205.5N 12947.0E)		Mongolia and China; c) Approved and ready for implementation Assigned B155 designator			
7	TVRS/23	NUZAN – 5141.2N 16239.1E – RIMLI (5142.3N 15806.8E) – B932	State ATM Corporation. April 2010	a) Transition between R220 and B932; b) Initial review completed		RUS USA	Published as G801 on Nov 17, 2011
8	TVRS/24	5005.0N 15900.0E – 4947.2N 15400.0E – B932	State ATM Corporation. April 2010	a) Transition between R220 and B932; b) Initial review completed		RUS USA	Published as G804 on Nov 17, 2011
9	TVRS/25	NYMPH - 5310.5N 166310.E – RIMLI (5142.3N 15806.8E) – B932	State ATM Corporation. April 2010	a) Transition between R220 and B932; b) Initial review completed		RUS USA	Published as G816 LUMES - RIMLI
10	TVRS/26	NYMPH - 5325.0N 167126.E– B932 (5321.6N 16218.4E) -UHPP	United Airlines April 2010	a) Transition between G469 and B932 then to B915; b) Accepted for review		RUS USA	Published as G73 on Nov17, 2011
11	TVRS/27	OLCOT – NUZAN – 5141.0N 16237.6E – RIMLI – SENOR – G73 (B115)	United Airlines April 2010	a) Transition between R580 (A342) and B932 then to G73 (B115); b) Accepted for review		RUS USA	unacceptable at the moment
12	TVRS/28	OGDEN – 4855.5N 15636.2E – NETRI – LATAK – G103	United Airlines April. 2010	a) Transition between R580 (R451) and B932 then to G103; b) Accepted for review		RUS USA	unacceptable at the moment
13	TVRS/29	NETRI – 4304.2N 14640.4E - NODAN	United Airlines April 2010	a) Transition between B932 and B915; b) Requires opening of a new entry/exit fix with Japan c) Accepted for review		RUS JPN	unacceptable at the moment
14	TVRS/30	OSKON-UHMI (UHMI – PEMID)	Air Canada 14.02.2011	a) remove flight level restrictions 13100-16100		RUS	Published as A218 FL 270-530
15	TVRS/31	a) KURAK (6247.0N 13651.0E) – ODANA	IATA декабрь 2010	a) reduce mileage		RUS	unacceptable at the moment
		б) KURAK – KUNIK		b) provide transition from R819 to G494			Published KURAK – KUNIK as R819

Item	Reference	Route description	Proposed by	Objectives/Comments	Benefits	FIR	Target Dates
1	2	3	4	5		6	7
16	TVRS/32	Okhotsk - N5340.6 E13726.1	State ATM Corporation. 10.07.2007	open up a new route		RUS	Published as B722 on Oct 20, 2011
17	TVRS/33	ABAGO – GITAK (N.5517.2 E14005.3)	State ATM Corporation. 10.07.2007	open up a new route		RUS	Published as G902 on Oct 20, 2011
18	TVRS/34	BIRBO – ODEKA (N4809.5 E13131.6)	State ATM Corporation. 10.07.2007	open up a new route		RUS	Published as B723 on Oct 20, 2011
19	TVRS/35	ARNAP (N 644000 E 1702510) –ASBAT (N635331 E1644434)	Cathay Pacific 26.07.2011, RDGE/15 30.09.2011	extension R213		RUS	Published as R213 on May 31, 2012
20	TVRS/36	AMETO (N582137 E1532037)-NARIT (581534N 1525610E)- BAMUN (580808N 1522641E)-BENGA (575715N 1514437E)-BEBAT (573246N 1501419E)-GRUMA (N560501 E1453036)	Cathay Pacific 26.07.2011, RDGE/15 30.09.2011	extension B237		RUS	Published as B237 on May 31, 2012
21	TVRS/37	BUMAT (615007N 1603257E)-BUSUL (612501N 1555402E)-DERUD (604907N 1522350E)	Cathay Pacific 26.07.2011, RDGE/15 30.09.2011	extension A827		RUS	Published as A827 on May 31, 2012
22	TVRS/38	BUMAT (615007N 1603257E)-LUNЕК (605645N 1552506E)- ODERI (603231N 1532656E)	Cathay Pacific 26.07.2011, RDGE/15 30.09.2011	route realignment		RUS	Published as A828 on May 31, 2012
23	TVRS/39	URABI (601201N 1544108E)-BANEB (601415N 1552423E)-SOPUR (601839N 1570605E)-RUNAB (602101N 1581731E)-BEBOR (602257N 1593711E)-DIREG (602413N 1610436E)-RAMKA (602426N 1613257E)-Tilichiki NDB (TK) (602154N 1660045E)-NELTA (605736N 1725315E)-RUSOR (611400N 1775600W)	Cathay Pacific 26.07.2011, RDGE/15 30.09.2011	a) extension G370 b) Leaving the NOPAC		RUS	Published as G370 on May 31, 2012

Item	Reference	Route description	Proposed by	Objectives/Comments	Benefits	FIR	Target Dates
1	2	3	4	5		6	7
24	TVRS/40	BALUB (564751N 1671435E)- MURTA (562209N 1634311E)- Ust-Kamchatsk NDB (UK) (561324N 1624114E)- OSMOR (551335N 1565706E)- TOSNO (550813N 1563047E)- BANIT (544949N 1550431E)- KORES (535524N 1500000E)- GIRAN (532549N 1474300E)	Cathay Pacific 26.07.2011, RDGE/15 30.09.2011	route realignment		RUS	Published as B804 on May 31, 2012
25	TVRS/41	IRKAN-KOKUN-BANIT	Cathay Pacific 26.07.2011, RDGE/15 30.09.2011	route realignment		RUS	Published as B327
26	TVRS/42	FA – WZ - SIMLI (Proposed alternative is FA – PARUS – SIMLI)	Pacific United Airlines	route realignment		RUS	unacceptable at the moment
27	TVRS/43	SIBIR – LURED – EKVIK (decommission B451 LURED – IGROD)	IATA	To improve north-south traffic flows between Khabarovsk FIR and Fukuoka FIR	Reduce mileage	RUS JPN	under review
28	TVRS/44	KUNAD - OTLER	RUS 09.08.13	NOPAC transition to Trans-East	Reduce mileage	RUS	To be published as G815 in 13.11.14
29	TVRS/45	LUMES - RIMLI	RUS 09.08.13	NOPAC transition to Trans-East	Reduce mileage	RUS	To be published as G816 in 13.11.14
30	TVRS/46	Ust-Kamchatsk NDB (UK) - MIVAN (552730N 1615931E) - KEGOR (544042N 1611855E) - SIPVA (530624N 1600201E) - Khalaktyrka (HY) (530001N 1584736E) - PETIN (531012N 1582713E) – to be used by coordination with ATC	RUS 09.08.13	To support general aviation flights from USA to China		RUS	After implementation of a new automated ATC system at PK ACC. Target date December 2015 – 1 квартал 2016.
31	TVRS/47	NETRI – 430312N 1463915E - NODAN	RUS 09.08.13	To be used by coordination with ATC to avoid volcanic ash		RUS	Approved in Russia, no approval from Japan.
32	TVRS/48	Troitskoye NDB (FI) - REPIK - ADITO – LANRI FL120-FL300 are available by coordination with ATC, FL310-FL530 are available without restrictions.	RUS 05.06.14	Remove flight level restrictions	Increase efficiency of B915 Route	RUS	Implemented by NOTAM A3155/14 on August 28, 2014

Item	Reference	Route description	Proposed by	Objectives/Comments	Benefits	FIR	Target Dates
1	2	3	4	5		6	7
33	TVRS/49	KORES – DIPNA – NK (Nikilskoe) – UK (Ust-Kamchatsk) – 5150N 15301E – 453933E 1505937E	JCAB Feb 2015	Avoid volcanic ash	Increase airspace efficiency	RUS JCAB	Accepted for implementation. A new entry/exit point at FIR boundary between PK and Fukuoka shall be agreed. Domestic routes in PK shall be assigned an international status. Target date - 2016
34	TVRS/50	IRKAN 552000N 1625631E - BANIT 544949N 1550431E	RUS 2015	Avoid volcanic ash	Increase airspace efficiency	RUS	The new route segment of B327 will be opened on November 12, 2015 as follows: IRRAN 552000N 1625631E KOKUN 551630N 1611642E GITRU 551259N 1600635E LUPIR 550053N 1570825E NELEB 545837N 1564046E BANIT 544949N 1550431E
35	TVRS/51	PETIN- RIMLI	RUS 2015	Выполнение полетов в верхнем и нижнем воздушном пространстве	Increase airspace efficiency	RUS	The new route segment of B244 will be opened on November 12, 2015 as follows: RIMLI (514218N 1580655E) RINOT (522205N 1585954E) PETIN (531012N 1582713E) <u>FL530</u> <u>FL130</u>
36	TVRS/52	Open up new entry/exit points between FRENK and LISKI as follows 1. XXXX – OSKON; 2. XXXX – ASBAT; 3. XXXX – RAMKA 4. XXXX – TK	United Airlines May 2015	Establish new route segments	Increase airspace efficiency, provide fuel savings	RUS USA	The proposals reviewed and the following three new entry/exit points between FRENK and LISKA are suggested: 1. 692427N 1685824W - RUPIS; 2. 682642N 1685824W - LORKI; 3. 682642N 1685824W - BETAM; 4. 672752N 1685824W – NB (Uyelkal)

Abberviations:

- Proposed cross polar Route Segments (CPRS);
- Proposed Trans-East Route Segments (TVRS);
- Trans-Asian Route Segments (TARS);
- Asian Route Segments (ARS);
- Trans-polar Route Segments (TPRS);
- Trans-Siberian Route Segments (TSRS);
- Other Route Segments (DRS)

Brief catalogue description:

Item 1. Shows an ordinal number of a route proposal.

Item 2. Shows reference number of a route proposal.

Item 3. Route description consists only of IDENTs for NAVAIDS and 5LNC without coordinates. (where several NAVAIDS have same IDENT include name of NAVAID).

- b) when available, route designators to be included.
- c) unidirectional use of the route to be indicated in text (i.e. Westbound, Eastbound, etc.).
- d) several routes being studied within a single airspace planning package will be entered as one proposal.

Item 4. Shows Flight Information Regions (FIR) concerned.

Item 5. Shows objectives/comments.

Item 6. Proposed by.

Item 7. Target dates.

Route proposals that can not be implemented should be marked with grey

Implemented proposals should be marked by green

<i>FIR</i>	<i>CODE</i>
Afghanistan	AFG
Albania	ALB
Algeria	DZA
Armenia	ARM
Austria	AUT
Belarus	BLR
Belgium	BEL
Bosnia and Herzegovina	BIH
Bulgaria	BGR
China	CHN
Croatia	HRV
Cyprus	CYP
Czech Republic	CZE
Democratic People's Republic of Korea	PRK
Denmark	DNK
Egypt	EGY
Estonia	EST
Finland	FIN
France	FRA
Georgia	GEO
Germany	DEU
Greece	GRC
Hungary	HUN
Iceland	ISL
India	IND
Iran, Islamic Republic of	IRN
Iraq	IRQ
Ireland	IRL
Israel	ISR
Italy	ITA
Japan	JPN
Jordan	JOR
Kazakhstan	KAZ
Kuwait	KWT
Kyrgyzstan	KGZ
Latvia	LVA
Lebanon	LBN
Libyan Arab Jamahiriya	LBY
Lithuania	LTU
Luxembourg	LUX
Malta	MLT
Mongolia	MNG
Montenegro	MNE
Morocco	MAR
Netherlands	NLD
Norway	NOR
Pakistan	PAK
Poland	POL
Portugal	PRT
Republic of Azerbaijan	AZE
Republic of Moldova	MDA
Republic of Serbia	SRB
Romania	ROU
Russian Federation	RUS
Saudi Arabia	SAU
Slovak Republic	SVK
Slovenia	SVN

Spain	ESP
Sweden	SWE
Switzerland	CHE
Syrian Arab Republic	SYR
Tajikistan	TJK
The former Yugoslav Republic of Macedonia	MKD
Tunisia	TUN
Turkey	TUR
Turkmenistan	TKM
Ukraine	UKR
United Arab Emirates	ARE
United Kingdom	GBR
United States of America	USA
Uzbekistan	UZB

Легенда каталога маршрутов
Legend catalog routes

	Предложения, которые не могут быть реализованы в данный момент	
AMATI (780000N 1685824W) - GILOD (755416N 1720106E)	Реализованные предложения	
AMATI (780000N 1685824W) - GILOD (755416N 1720106E)	Предложения, реализуемые в ближайшее время	
AMATI (780000N 1685824W) - GILOD (755416N 1720106E)	Предложения, находящиеся на рассмотрении	
Implementation is deemed unreasonable	Реализация считается необоснованным	
Published as ...	Опубликовано как ...	
Implemented on ...	Реализован с ...	
segment is unavailable before ...	Сегмент недоступен до ...	
under review ...	на рассмотрении	
expected date of commissioning	Планируемый срок ввода ...	
unacceptable at the moment	Неприемлем в данный момент	
Consider after commissioning Ust-Khairyzovo SSR	Рассмотреть после ввода в строй в ВРЦ Усть-Хайрюзово ВРЛ	