

International Civil Aviation Organization

Europe - Asia Trans-Regional Special Coordination Meeting

Beijing, China, 23 – 25 September 2013

Agenda Item 4: ATS Route Alignment

COORDINATION OF PROPOSALS OF ATS ROUTES IN THE INTERFACE AREA BETWEEN THE ICAO EUR AND APAC REGIONS

(Presented by the Secretariat)

SUMMARY

This paper presents the current status of the ATS Route development process of the Far East and interface area sub group (Route Catalogue Part 4) of the ICAO Route Development Group - Eastern part of the ICAO EUR Region (RDGE)

1 Introduction

- 1.1. The ICAO Route Development Group Eastern part of the ICAO EUR Region (RDGE) Far East and its interface area Sub Group was established in 2011 and has continuously developed ATS route proposals which were presented/proposed by States and IATA for the enhancement of the ATS-Route network in the Far Eastern part of the ICAO EUR Region. These developments were intended to fulfill the increasing demand for enhanced regional coordination, more seamless ATS route planning (e.g. Trans-Asian, Trans-Eastern, Trans-Polar, Trans-Siberian, Trans-European Routes) and faster implementation of changes to the airspace and to the ATS Route network.
- 1.2. Since the inaugural meeting of the Far East Sub group during RDGE/15 in 2011 the following ATS routes or ATS route related changes have been implemented:

RDGE Far East Catalogue - Implemented Proposals

	Proposal ID : 15.026 / FE0001	Impl. Status:	State(s) & Org.	Comments:
1.	Description: To implement bidirectional ATS route G902 ARNAP - ASBAT. Objective: To further improve the ATS route network between FIRs Anadyr, Markovo and Magadan in the Russian Federation.	Implemented 31 MAY 2012 Project Group: SG FAR EAST Project Category: ATS Routes	RUS Originator(s): RUS	
	Proposal ID: 15.029 / FE0004	Impl. Status:	State(s) & Org.	Comments:
2.	Description: To implement bidirectional ATS route A828 BUMAT - ODEBI. Objective: To further improve the ATS route network within FIR Magadan.	Implemented 31 MAY 2012 Project Group: SG FAR EAST Project Category:	RUS Originator(s): RUS	
		ATS Routes		
	Proposal ID : 15.027 / FE0002	Impl. Status:	State(s) & Org.	Comments:
3.	Description: To implement bidirectional ATS route B237 AMETO - GRUMA. Objective: To further improve the ATS route network within FIRs Magadan and Khabarovsk.	Implemented 31 MAY 2012 Project Group: SG FAR EAST Project Category: ATS Routes	RUS Originator(s): RUS	
	Proposal ID : 15.031 / FE0006	Impl. Status:	State(s) & Org.	Comments:
		Implemented	RUS	

	Proposal ID : 15.030 / FE0005	Impl. Status:	State(s) & Org.	Comments:
5.	Description: To implement bidirectional ATS route G370 RUSOR - TK (Tilichiki) - URABI. Objective: To further improve the ATS route network within FIRs Anchorage, Petropavlovks-Kamchatsky and Magadan.	Implemented 31 MAY 2012 Project Group: SG FAR EAST Project Category: ATS Routes	RUS Originator(s): RUS	
	Proposal ID : 15.028 / FE0003	Impl. Status:	State(s) & Org.	Comments:
6.	Description: To implement bidirectional ATS route A827 BUMAT - BUSUL - DERUD. Objective: To further improve the ATS route network within FIR Magadan.	Implemented 31 MAY 2012 Project Group: SG FAR EAST Project Category: ATS Routes	RUS Originator(s): RUS	
	Proposal ID : 13.031 / FE0011	Impl. Status:	State(s) & Org.	Comments:
7.	Description: To implement ATS route segment A803 GOLOM - LUSOT - RULAT - NALEB. Objective: To reduce route distance of 47 NM as compared to current routing ABUMI-ENDER-BEDNA-NALEB.	Implemented 18 OCT 2012 Project Group: SG FAR EAST Project Category: ATS Routes	RUS Originator(s): IATA	Part of IATA EUR-North Asia package - #EN7. Related proposals: • 16.004
7.	To implement ATS route segment A803 GOLOM - LUSOT - RULAT - NALEB. Objective: To reduce route distance of 47 NM as compared to current routing ABUMI-	18 OCT 2012 Project Group: SG FAR EAST Project Category:	Originator(s):	Related proposals:

	Proposal ID:	17.010	Impl. Status:	State(s) & Org.	Comments:
9.	Description: To implement bidirection Objective: Changes to ATS route str	nal ATS route G229 GIKOS - GU - NINON. ructure at NALEB point.	Implemented 18 OCT 2012 Project Group: SG FAR EAST Project Category: ATS Routes	RUS Originator(s): RUS	Changes to ATS route structure at NALEB point. Related proposals: • 17.008 • 17.009 • 17.011
	Proposal ID:	17.012	Impl. Status:	State(s) & Org.	Comments:
10.	Objective: To further improve the	hal ATS route A929 GINUR - RULAS - GU. ATS route network at the interface between China and e reducing the route distance of 150 NM as compared to IVADA - TD - DIKUT.	Implemented 18 OCT 2012 Project Group: SG FAR EAST Project Category: ATS Routes	RUS Originator(s): RUS	Implementation of Russian part of proposal 13.034. Related proposals: • 13.034
	Proposal ID:	17.008	Impl. Status:	State(s) & Org.	Comments:
11.	Description: To implement bidirection Objective: Changes to ATS route str	nal ATS route A226 RULAS - NALEB. ructure at NALEB point.	Implemented 18 OCT 2012 Project Group: SG FAR EAST Project Category: ATS Routes	RUS Originator(s): RUS	Changes to ATS route structure at NALEB point. Related proposals: • 17.009 • 17.010 • 17.011
	Proposal ID:	17.009	Impl. Status:	State(s) & Org.	Comments:
12.	Description: To implement bidirection Objective: Changes to ATS route str	nal ATS route A824 LATAS - NALEB. ructure at NALEB point.	Implemented 18 OCT 2012 Project Group: SG FAR EAST Project Category: ATS Routes	RUS Originator(s): RUS	Changes to ATS route structure at NALEB point. Related proposals: • 17.008 • 17.010 • 17.011

	Proposal ID: 13.029 / FE0009	Impl. Status:	State(s) & Org.	Comments:
13.	Description: To implement ATS route segment A946 LEBNA - NALEB. Objective: To reduce route distance of 21 NM as compared to current routing LEBNA-LALIR-NALEB.	Implemented 18 OCT 2012 Project Group: SG FAR EAST Project Category: ATS Routes	RUS Originator(s): IATA	 Part of IATA EUR-North Asia package - #EN5. RUS: Re-organisation of ATS-Route structure, R211 deleted (AMBAR DCT GU instead), G363 deleted (GU DCT LATAS instead), G73 deleted (DIKOS DCT NALEB instead).
	Proposal ID: 16.001	Impl. Status:	State(s) & Org.	Comments:
14.	Description: Implement bidirectional ATS route A839 KOMEL 7730N 03500E - ANODI. Objective: To improve ATS route structure for flights from North America to South East Asia.	Implemented 07 MAR 2013 Project Group: SG FAR EAST Project Category: ATS Routes	RUS Originator(s): RUS	
	Proposal ID: 16.002	Impl. Status:	State(s) & Org.	Comments:
	Description: To implement bi-directional ATS routes:	Implemented 07 MAR 2013	RUS Originator(s):	• Extensions of route G108.
15.	 a. A840 NIRUT 7600N 03500E - GIMON; b. A841 AGATA 7800N 03500E - GIMON. Objective: To improve ATS route structure for flights from North America to India. 	Project Group: SG FAR EAST Project Category: ATS Routes	RUS	
15.	b. A841 AGATA 7800N 03500E - GIMON. Objective:	SG FAR EAST		Comments:

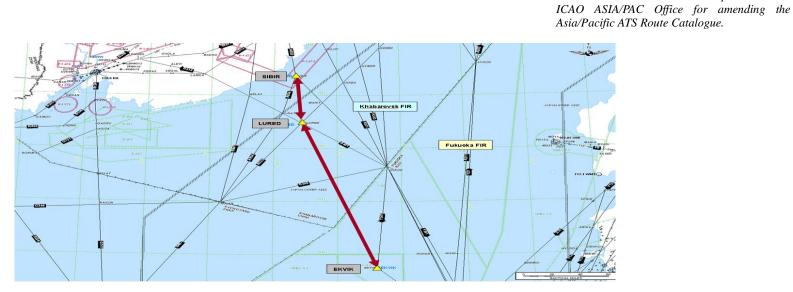
2 Discussion

2.1. During these ATS route developments, the Far East SG discussed also a significant number of ATS route proposals which could not be implemented so far as further coordination with the States in the interface area between the ICAO EUR and APAC Region was required. The

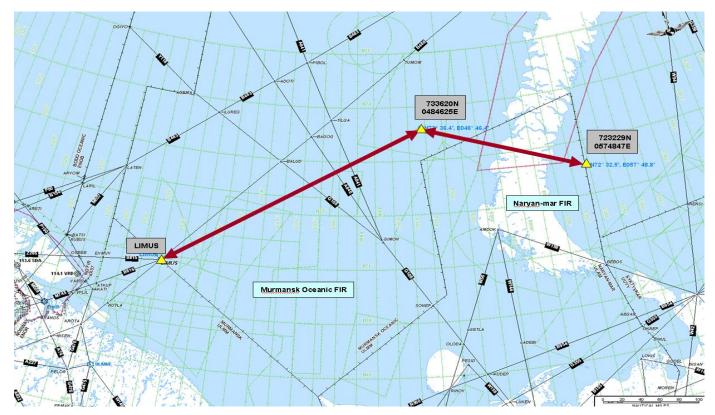
involved States from both Regions indicated/confirmed their interest in this ATS Route development, but also stated that further coordination/ studies would be required to continue the development process. Unfortunately this coordination of the ATS route development, which also includes the discussion of alternative ATS route proposals, has become a more difficult process as the lack of feedback from States on these ATS route proposals prevented the completion of the proposal development. The following list of ATS routes or ATS route related changes summarizes these still open developments and proposes also (in certain cases) alternative options:

RDGE Far East Catalogue - Proposals for implementation

	Proposal ID:	15.033 / FE0008 / APAC RUS 5	Impl. Status:	State(s) & Org.	Comments:
	Description: To implement bidire	ectional ATS route SIBIR - LURED - EKVIK.	Proposed 1 st Quarter 2014	JPN RUS	 Implementation delayed until further notice. RUS: As a result of the bi-lateral meeting
	Objective: To improve north-so	outh traffic flows between Khabarovsk FIR and Fukuoka FIR.	Project Group: SG FAR EAST	Originator (s): RUS	between Japan and Russian Federation, a major reorganisation (rearrangements of FIR
1.			Project Category: ATS Routes		boundary points and waypoints) with alternative ATS route proposals was discussed. Further studies and discussion are needed at the interregional level by the end of 3 rd Quarter 2013. • IPN: The conclusion will be reported to the

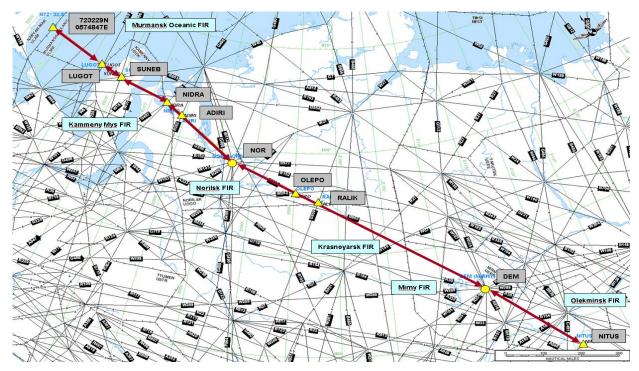


	Proposal ID:	16.003 / FE0027	Impl. Status:	State(s) & Org.	Comments:
2.	0484625E - new waypo Objective:	ctional ATS route LIMUS - new waypoint 733620N oint 723229N 0574847E. ce of 171 NM as compared to current routing LIMUS-N.	Project Group: SG BALTIC	RUS Originator(s): RUS IATA	 Implementation of A803 GOLOM - LUSOT on 18 OCT 2012 Transfer of route segment development for LIMUS - GOLOM to Baltic SG RUS: Further discussion required between IATA and FATA on the establishment of RNP4 aircraft navigation capability requirements for the segment.

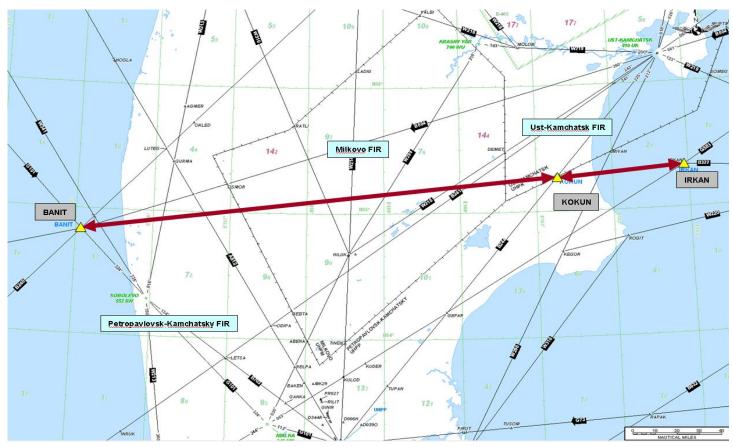


	Proposal ID:	16.004 / FE0026	Impl. Status:	State(s) & Org.	Comments:
3.	LUGOT - SUNEB - - NITUS - A333. Objective:	rectional ATS route new waypoint 723229N 0574847E - NIDRA - ADIRI - NOR - A232 - OLEPO - RALIK - DEM stance of 47 NM as compared to current routing ABUMI-ALEB.	Project Group: SG BALTIC SG FAR EAST	RUS Originator(s):	 Segment new waypoint 723229N 0574847E - LUGOT will require RNP-4 aircraft navigation capability. Alternative bi-directional route proposal for EN7, proposal 13.031. RUS: Further discussion required between IATA and FATA on the establishment of RNP4 aircraft navigation capability requirements for the segment.

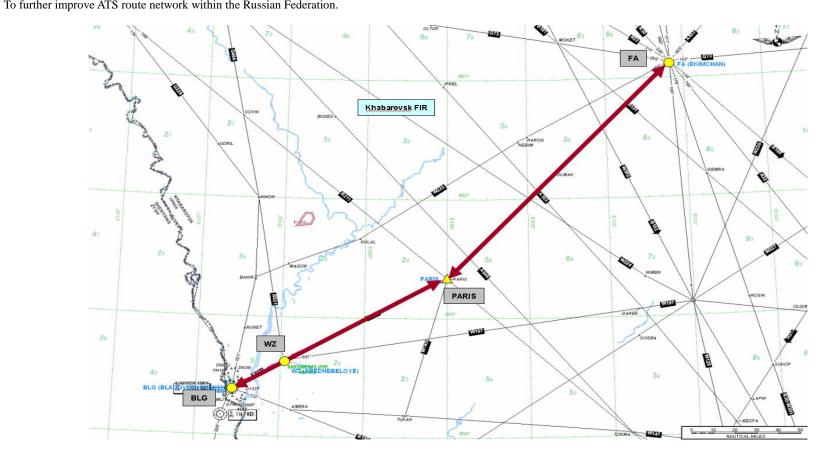
Related proposals: • 13.031



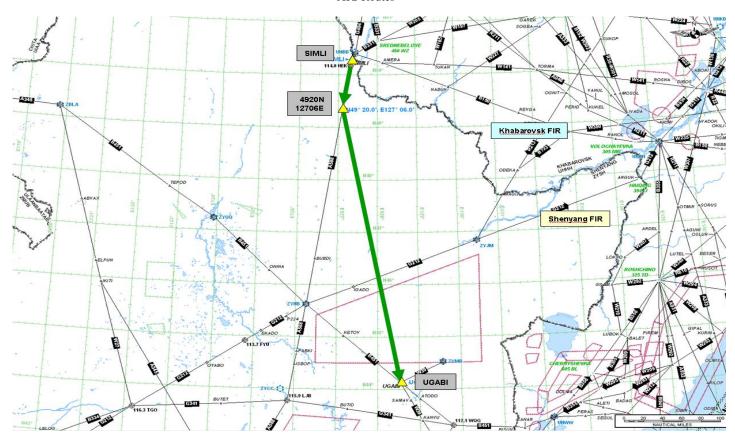
	Proposal ID:	15.032 / FE0007	Impl. Status:	State(s) & Org.	Comments:
4.	Objective:	e ATS route IRKAN - KOKUN - BANIT . e ATS route network within FIRs Petropavlovks - ovsk.	Planned 1st Quarter 2015 Project Group: SG FAR EAST Project Category: ATS Routes	RUS Originator(s): RUS	• RUS: KRONA radar implementation delayed until 4Q 2014.

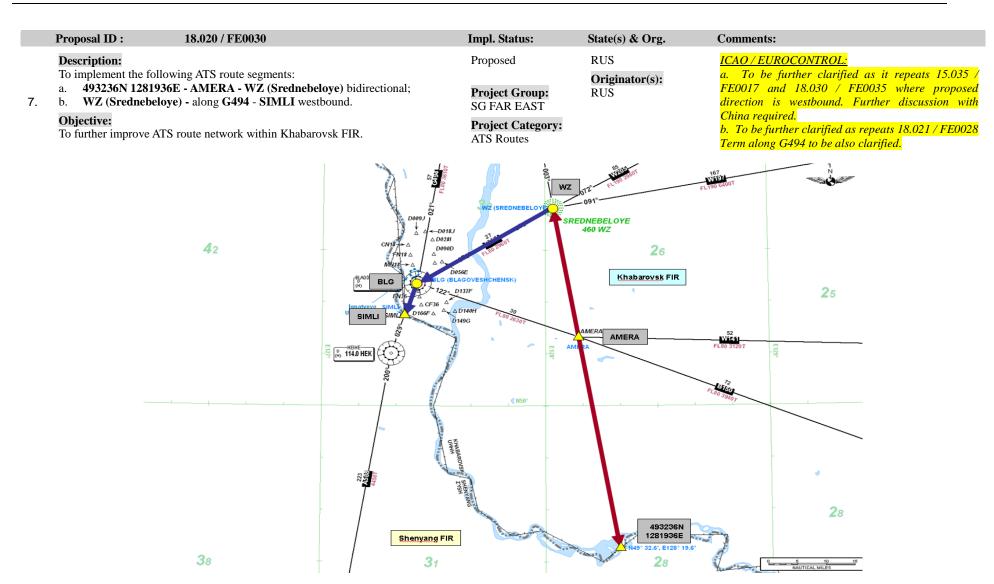


	Proposal ID:	18.021 / FE0028	Impl. Status:	State(s) & Org.	Comments:
5.	segments: a. BLG (Blagoveshc	b route A803 FA (Ekimchan) - PEMID with the following hensk) - WZ (Srednebeloye); e) - PARIS - FA (Ekimchan).	Proposed ng Project Group: SG FAR EAST	RUS Originator(s): RUS	 a bidirectional on FL060 - FL530; b eastbound on FL270 - FL530, subject to ATS approval.
	Objective:	route network within the Pussian Federation	Project Category: ATS Routes		



	Proposal ID :	18.031 / FE0029 / APAC RUS 13	Impl. Status:	State(s) & Org.	Comments:
	Description: To implement eastbou	and ATS route SIMLI - 4920N 12706E - UGABI.	Proposed	CHN RUS	Alternative ATS route proposals, further studies and discussion with China are needed at the inter-
6.	Objective: To further improve A	ΓS route network within Shenyang FIR.	Project Group: SG FAR EAST	Originator(s): RUS	regional level before the end of 4 th Quarter 2013.
			Project Category: ATS Routes		

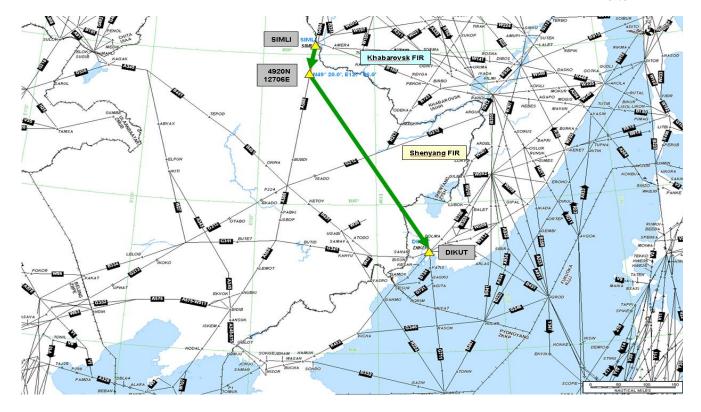




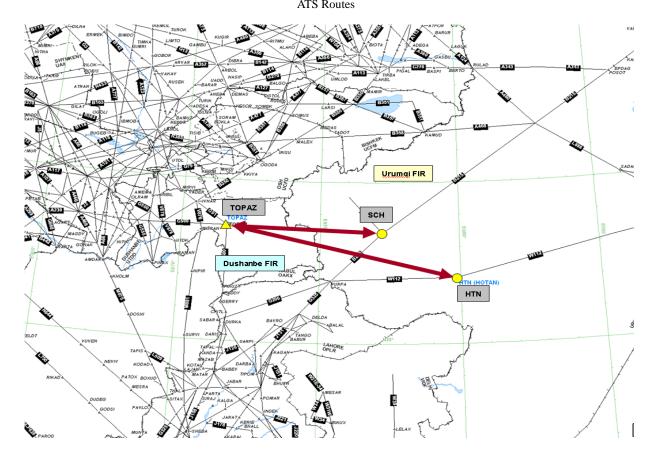
	Proposal ID :	16.005 / FE0031 / APAC RUS 11	Impl. Status:	State(s) & Org.	Comments:
8.	Objective:	und ATS route SIMLI - 4920N 12706E - DIKUT . tance of 150 NM as compared to current routing TIKUN-	Project Group: SG FAR EAST Project Category: ATS Routes	CHN RUS Originator(s): RUS IATA	 RUS: further discussion needed, special meeting planned by the end of 3rd Quarter 2013. CHN: Confirmation of interest in this ATS route but further studies/coordination are needed, updates will be given when available. Further discussion with Russian Federation required (via ICAO APAC Office).

Related proposals:

• 13.034



	Proposal ID :	17.005 / FE0032	Impl. Status:	State(s) & Org.	Comments:
9.	a. TOPAZ - SCHb. TOPAZ - HTNObjective:	(Hotan).	Proposed Project Group: SG FAR EAST SG MIDASIA	CHN TJK Originator(s): TJK	ICAO requested to coordinate this route with China through the ICAO Bangkok Office. ICAO / EUROCONTROL: a. To be further discussed as it connects flows into TJK
	To further improve Tajikistan.	ATS route network in the interface between China and	Project Category:		



	Proposal ID:	13.028 / FE0021 / APAC RUS 4]	Impl. Status:
	Description: To implement ATS route	segment AVGOK - GTC.		Proposed
		te of 13 NM as compared to current routing AV		Project Group: SG FAR EAST
10.	KADBO-RJSN. ICAO / EUROCONTRO	L:		Project Category: ATS Routes
	Direction of proposed AT	TS route to be defined by originator.		

Part of IATA EUR-North Asia package - #EN4.

Comments:

- Implementation delayed until further notice.
- RUS: As a result of the bi-lateral meeting between Japan and Russian Federation, a major reorganisation (rearrangements of FIR boundary points and waypoints) with alternative ATS route proposals was discussed. Further studies and discussion are needed at the interregional level by the end of 3rd Quarter 2013.
- JPN: The conclusion will be reported to the ICAO ASIA/PAC Office for amending the Asia/Pacific ATS Route Catalogue.



State(s) & Org.

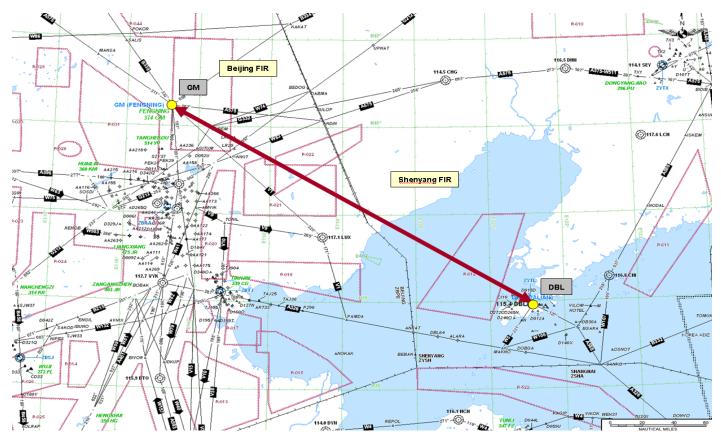
Originator(s):

JPN

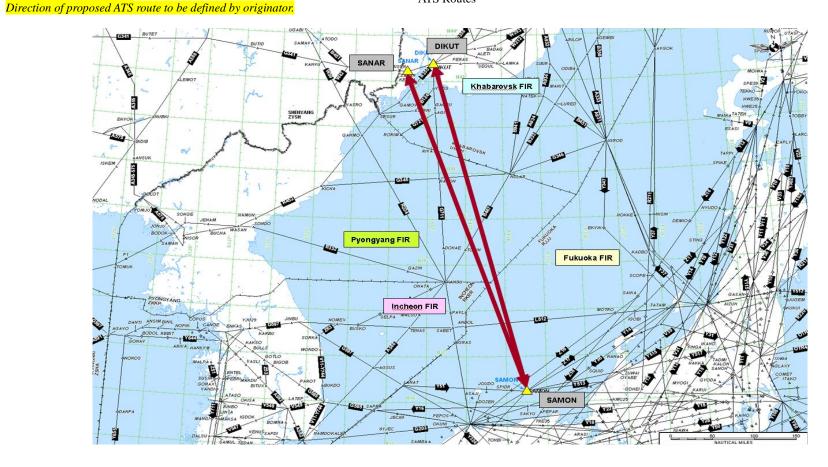
RUS

IATA

	Proposal ID:	13.037 / FE0023 / APAC CHA 13	Impl. Status:	State(s) & Org.	Comments:
11.	MAKNO. <u>ICAO / EUROCONTRO</u>	ce of 67 NM as compared to current routing GM-LADIX-	Project Group: SG FAR EAST Project Category: ATS Routes	CHN Originator(s): IATA	 Part of IATA EUR-North Asia package - #EN13. CHN: Confirmation of interest in this ATS-Route but further studies/coordination are needed, updates will be given when available. No reaction so far from China and further discussion required (via ICAO APAC Office).

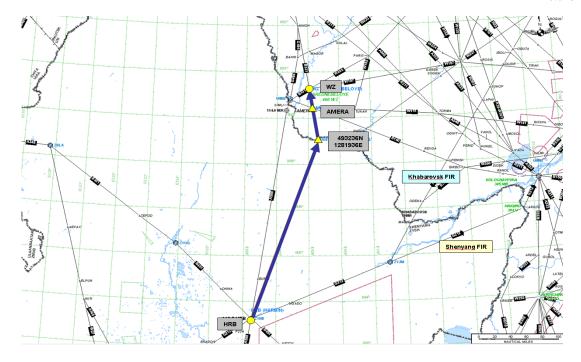


	Proposal ID:	13.033 / FE0022 / APAC RUS 7	Impl. Status:	State(s) & Org.	Comments:
12.	Objective:		Project Group: SG FAR EAST Project Category: ATS Routes	JPN RUS PRK Originator(s): IATA	 Part of IATA EUR-North Asia package - #EN9. RUS: Further discussion needed, special meeting planned by the end of 3rd Quarter 2013. JPN: The conclusion will be reported to the ICAO ASIA/PAC Office for amending the Asia/Pacific ATS Route Catalogue.

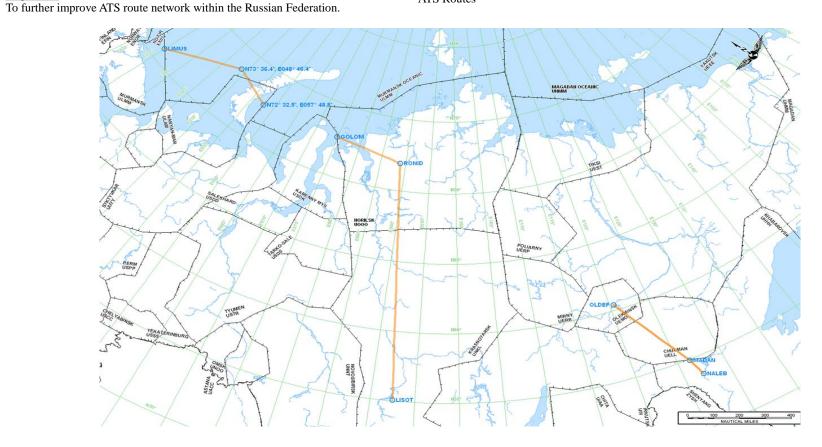


	Proposal ID:	15.035 / FE0017 /APAC RUS 12	Impl. Status:	State(s) & Org.	Comments:
	•	tional Westbound route HRB - 493236N 1281936E -	Proposed	CHN RUS	 Package together with 15.034 and new proposal no 16.028
13.	AMERA - WZ (Sredne Objective: To further improve ATS FIR.	beloye). Froute network between Shenyang FIR and Khabarovsk	Project Group: SG FAR EAST Project Category: ATS Routes	Originator(s): IATA	 RUS: westbound ATS route is needed for unloading traffic from SIMLI. No reaction so far from China, discussion with China required for proposal development CHN: Confirmation of interest in this ATS route but further studies/coordination are needed, updates will be given when available. Further discussion with Russian Federation required (via ICAO APAC Office)

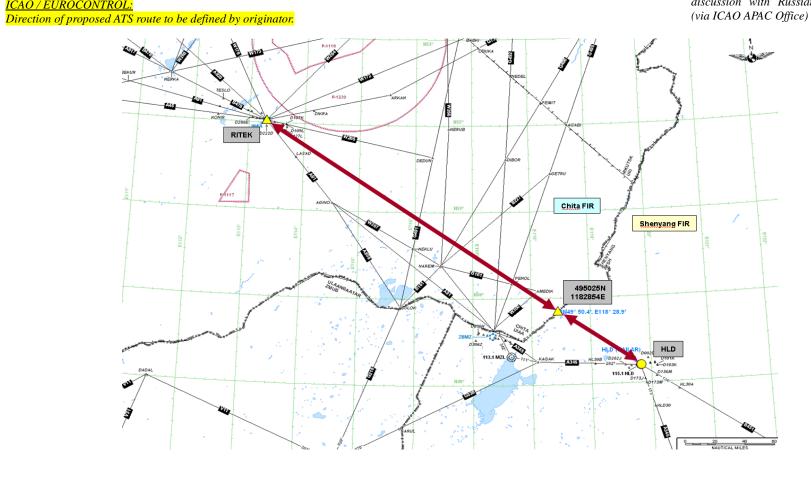
Related proposals: • 16.028



Proposal ID:	18.019 / FE0033	Impl. Status:	State(s) & Org.	Comments:
14. b. GOLOM - RO c. GULAT - OLI Objective:	ectional ATS routes: 620N 0484625E - 723229N 0574847E; DNID - LISOT; DEP - MADAN - NALEB.	Project Group: SG FAR EAST Project Category: ATS Routes	RUS Originator(s): RUS	ICAO / EUROCONTROL: a. To be withdrawn as repeats 16.003 / FE0027 c. 5LNC GULAT does not exit. To be replaced by relevant 5LNC. The remaining two proposals to be split as cover different areas and no connection between them.



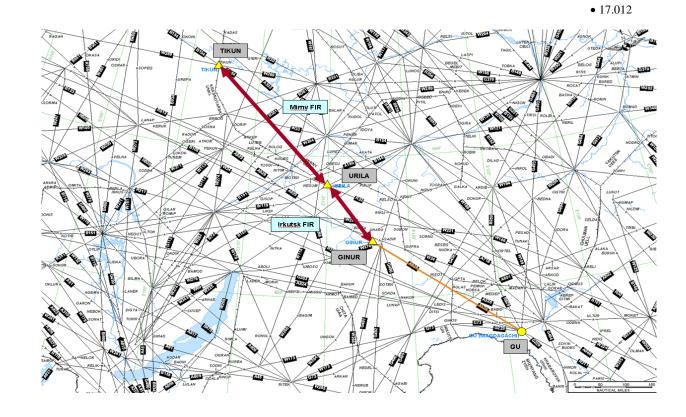
	Proposal ID:	16.027 / FE0034 / APAC RUS 9	Impl. Status:	State(s) & Org.	Comments:
	Description: To implement ATS rou	te RITEK - 495025N 1182854E - HLD.	Proposed	CHN RUS	• RUS: Further studies/discussion required. No reaction so far from China, discussion with
1	Objective: To reduce route distan HLD-DIKUT-KANSU	ce of 159 NM as compared to current routing PTG-RITEK-	Project Group: SG FAR EAST Project Category:	Originator(s): RUS IATA	 China required for proposal development CHN: Confirmation of interest in this ATS route but further studies/coordination are needed, updates will be given when available. Further
	ICAO / FUROCONTR	OI:	ATS Routes		discussion with Russian Federation required



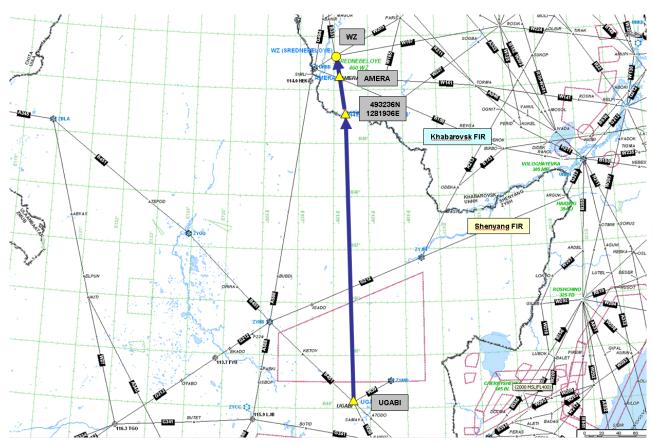
	Proposal ID:	13.038 / FE0024 /APAC RUS 8	Impl. Status:	State(s) & Org.	Comments:
	Description: To implement ATS rou	te segment KANSU - TOMMY.	Proposed	KOR JPN	Part of IATA EUR-North Asia package - #EN14. • Proposal to be withdrawn.
16.	IGRAS-TOMMY. <u>ICAO / EUROCONTR</u>	OL: ATS route to be defined by originator.	Project Group: SG FAR EAST Project Category: ATS Routes	Originator(s): IATA	 As a result of the relocation of the waypoint TOMMY, the original EN14 proposal cannot be discussed anymore within the FE SG. Further studies and discussion are needed at the inter- regional level by the end of 3rd Quarter 2013. The new proposal KANSU - MOTRO should be discussed by ICAO ASIA/PAC Office for



	Proposal ID:	13.034 / FE0013 /APAC RUS 10	Impl. Status:	State(s) & Org.	Comments:
	Description: To implement ATS route	e segment TIKUN - URILA - GINUR - GU.	Proposed	CHN RUS	Part of IATA EUR-North Asia package - #EN10. • CHN: Proposal can partly be withdrawn due to
	Objective: To reduce route distant	ce of 150 NM as compared to current routing TIKUN-	Project Group: SG FAR EAST	Originator(s): IATA	lack of CNS capabilities for the segment URILA - 492000N1270600E. Alternative proposal
17.	IVADA-TD-DIKUT.		Project Category: ATS Routes		 made. RUS: A929 SOSNA - RAMIS - AMIBI - BIMTA - GINUR - RULAS - GU implemented on 18 OCT 2012. (See proposal 17.012).
					Related proposals: • 16.005



	Proposal ID:	18.030 / FE0035 / APAC RUS 15	Impl. Status:	State(s) & Org.	Comments:
18.	To implement westbound ATS route UGABI - 493236N 1281936E - AMERA - WZ. Objective:		Proposed	CHN RUS	Alternative ATS route proposals, further studies and discussion with China are needed at the inter-
			Project Group: SG FAR EAST	Originator(s): RUS	regional level by the end of 3 rd Quarter 2013.
	To futher improve ATS FIR.	route network between Shenyang FIR and Khabarovsk	Project Category: ATS Routes		



- 2.2. Based on the experiences from the past years concerning the various route planning activities that would actually interfere/overlap with the area of accreditation of the ICAO EUR/NAT Office and due to the growing complexity for ATS route developments which sometimes go beyond the geographical limits of the ICAO EUR Region, the ICAO Secretariat was tasked to address and conduct the coordination of the ATS route proposals through the appropriate Regional Offices of ICAO to the concerned States in the other Regions. In addition several actions were given to the ICAO Secretariat to consider a dedicated inter-regional coordination meeting between the EUR/NAT Office, the ASIA/PAC Office and concerned States together with airspace users for further improvement of the coordination process and acceleration of the implementation.
- 2.3. In order to support this process, EUROCONTROL was invited to contribute to this coordination process with dedicated SAAM (System for traffic Assignment and Analysis at a Microscopic level) evaluations and theoretical findings on the potential (distance and environmental savings per day) of new route or alternative route proposals when compared to the existing ATS route structure.

3 Recommendation

- 3.1. The Meeting is invited to
 - a) note the information provided in this paper;
 - b) discuss and update the status of the ATS route implementation proposals as described in the section 2.1 above;
 - c) discuss and agree a system of cross referencing the ATS route proposals in line with the WP06 recommendation; and
 - d) propose further improvements to the acceleration of the implementation process.

Attachment SAAM presentation