Eighteenth Meeting of the Cross Polar Trans East Air Traffic Management Providers' Work Group (CPWG/18)

(Paris, France, 16-19 December 2014)

Agenda Item 3: Summary of Pertinent Issues from the ANSPs Meeting and other relevant meetings

**ROUTE DEVELOPMENT GROUP -
EASTERN PART OF THE ICAO EUR REGION (RDGE)**

(Presented by ICAO EUR/NAT Office)

SUMMARY
This paper highlights the main outcomes of the last Route Development Group – Eastern Part of the ICAO EUR Region meetings which took place in the European and North Atlantic (EUR/NAT) Office of ICAO in April and October 2014. The IP also identifies the need of active engagement from States, addresses the increasing demand for inter-regional coordination in order to achieve a more seamless ATS route network and presents the results from the election process of the chairpersons

1.   Introduction

1.1   The Twentieth Meeting of the Route Development Group – Eastern Part of the ICAO EUR Region (RDGE/20) was held in the European and North Atlantic (EUR/NAT) Office of ICAO in Paris, France from 31 March to 4 April 2014, which was attended by 65 participants from 22 States and 3 international organizations. The RDGE/20 meeting marked the 10 year anniversary of the Group which was created in 2004 as a successor to the former Meeting for the Planning and Coordination of Implementation of ATS Routes through the airspace of the Eastern Part of the Region including Middle Asia (TARTAR).

1.2   The Twenty-First Meeting of the Route Development Group – Eastern Part of the ICAO EUR Region (RDGE/21) was held in the European and North Atlantic (EUR/NAT) Office of ICAO in Paris, France from 20 to 24 October 2014. 63 participants attended the meeting from 21 States and 3 international organizations attended the RDGE/21.

1.3   The full Summary of Discussions of both meetings are available on the ICAO Secure Portal, **https://portal.icao.int/**, RDGE restricted. The RDGE work/activities are directly linked to the ASBU modules of the GANP in the improvement area of Optimum Capacity and Flexible Flights, with relationships to Block 0 modules: B0-CCO (improved efficiency in departure profiles), B0-FRTO (improved operations through enhanced en-route trajectories), B0-CDO (improved flexibility &efficiency in descend profiles)

2.   Discussion

Report from Secretariat on significant ICAO and international aviation developments

2.1   The RDGE was informed about recent significant international aviation developments and took note of the amendments to the ICAO Annexes (Annexes 1, 4, 6 all parts, 9, 10, 15, 16 both volumes, 17) and Documents (PANS-ATM, -OPS, -ABC, -TRG) and the proposed amendments to ICAO Annexes and PANS Documents (Annexes 1, 6 all Volumes, 10, 13, 14, 16, 17, 18, ANS-ATM, PANS-TRG) that had been adopted since the RDGE/19 meeting. A number of ICAO State Letters, ICAO manuals and circulars

together with several ICAO EUR/NAT publications on a wide range of subjects had also been published since the last meeting and special attention was given to the SL2014/66 (Proposed Amendment to the Note on the Notification of Differences).

2.2   The RDGE was also informed about the results from the Route Development Group – East, Middle Asia Special Coordination Meeting (MID ASIA SCM) was held at the kind invitation of AZERAERONAVIGATSIA (Azerbaijan Air Navigation Services Department of "Azerbaijan Hava Yollari" CJSC) in Baku, Azerbaijan from 28 to 30 January 2014. The main objective of the meeting was to review the current ATS route network and to discuss several issues that affect the provision of air traffic services, in the South Caucasus and Middle Asia/Middle East interface area, in response to RDGE Action 18/05. The meeting discussed a proposal by IATA to align the ATS route catalogues between the RDGE MID-ASIA Subgroup and the ASIA/PAC ATS route catalogue especially in the interface area involving Pakistan and Afghanistan. The SCM also discussed increasing problems at the interface area between Bagdad and Ankara ACCs caused by the unilateral introduction of flight level (FL) restrictions by Iraq at the interface area between Turkey and Iraq which has resulted in growing capacity problems for traffic flows in this area.

2.3   The RDGE also discussed several regional issues, such as contingency plan developments, activities from the COG Crisis Management Framework Development Working Group, the problems at interface areas between the EUR/NAT, ASIA/PAC, MID Region.

2.4   The RDGE took note of the results from the first meeting of the Ad Hoc Afghanistan Contingency Group, which was organised (as a joint inter-regional event involving the ICAO APAC, MID and EUR Region) in the framework of the APANPIRG/25 in Kuala Lumpur, Malaysia from 11 to 12 September 2014. Based on the ICAO presentations during the ASIA/PAC ATM/SG 2 Meeting in August 2014, ICAO provided information on certain aspects of the transition from military to civilian control of Afghanistan's airspace, and suggested considerations for sub-regional airspace contingency planning (with possible effects on the main European traffic flows AR-4 Routes), should the Kabul FIR become partially or fully restricted. Currently, the situation in Afghanistan remained fluid, with no certainty regarding the level of Air Traffic Control (ATC) services. It was concluded that the development of contingency routes and procedures (including the possibility to delegate the airspace of Kabul FIR to another country which could then provide Air Navigation Services for parts of the FIR remotely) for Afghanistan was of paramount importance, and should be undertaken as a matter of urgency. A second meeting of the AHACG is planned with all involved States, stakeholders and international organisations in Istanbul, Turkey from 17 to 19 November 2014.
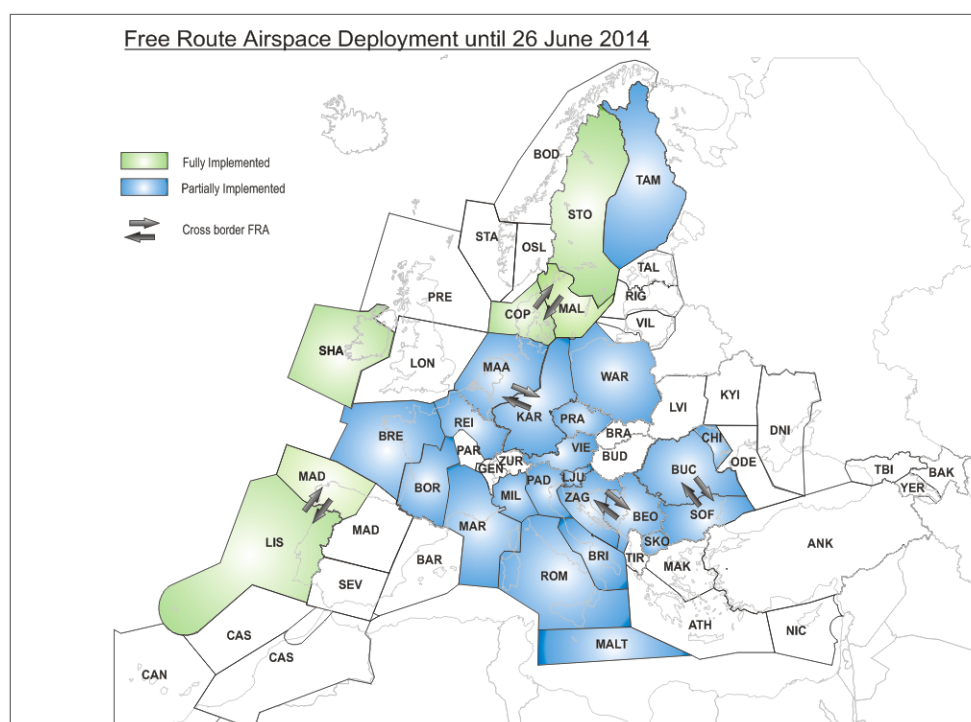
2.5   The RDGE was also informed about the main outcomes of the second Europe – Asia Trans-regional Special Coordination Meeting which was held at the ICAO Regional Sub Office in Beijing, China from 22 to 23 September 2014. 35 participants from China, Democratic People's Republic of Korea, Mongolia, Kazakhstan, Kyrgyzstan, Russian Federation, EUROCONTROL and IATA attended this meeting and discussed aspects such as the Asia/Pacific Seamless ATM Plan, ATS Surveillance capability and data sharing, ATS Route development and realignment (RDGE reports together with presentations from a number of States), RVSM issues, Airspace Improvement Programmes, the establishment of the North-Asia Regional ATFM Harmonization Group (NARAHG) and its progress in utilising Air Traffic Flow Management (ATFM) in the East Asian sub-region, ANSP Coordination and Civil Military Coordination, ATS Contingency Planning, SAR, the Russian Federation joint SAREX2014 and 5LNC issues. Unfortunately it must be noted with concern that there was little or no progress made with respect to ATS route proposals concerning China, due to the lack of feedback from China and non-participation of CAAC delegates, despite the EAT/SCM/2 meeting being held in Beijing.

Report from EUROCONTROL on activities from RNDSG

2.6   Detailed information concerning the activities of the Route Network Development Sub-Group (RNDSG) were presented by EUROCONTROL which, based on an EANPG invitation (EANPG conclusions 35/2 and 36/2), organises and carries out the necessary coordination of planning and

implementation activities for improving and upgrading the ATS route network in the European Civil Aviation Conference (ECAC) area of the ICAO EUR Region. As result of the above invitation and in the execution of the EU Regulation No 691/2010, Annex I - The European Route Network Design (ERND) Function, the Route Network Development Subgroup (RNDSG) of the Network Operations Team (NETOPS) has developed a number of activities aimed at improving the ECAC ATS route network and airspace structure as well as ensuring regional interconnectivity and interoperability of the European route network within the ICAO EUR Region and with adjacent ICAO Regions.

2.7   EUROCONTROL presented that the initial structure of ARN Version 2015 - 2019, including airspace projects for implementation for Summer 2015 and those airspace projects aimed to be implemented over the period autumn 2015 until end of 2019 had been finalised and over 360 proposals were incorporated. The content of the ARN Version 2015 - 2019 will be further presented at RNDSG/84 (3th - 5th February 2015) for discussions and refinement and at RNDSG/85 (5th - 7th May 2015) for final review and approval. It was noted that the ARN Version 2015 - 2019 identified a number of FABs that, based on their plans, are not expected to meet the European targets (evaluations per FAB were discussed and actions were launched to address the development of comprehensive cross-border Free Route Airspace projects at FAB level). The RDGE was also presented with a progress report on Free Route Airspace (FRA) implementations within the ECAC area of the ICAO EUR Region.

2.8   Free Route projects represent major objectives within the evolution of the European airspace and had been included in the Network Strategic Plan, in the Network Manager Performance Plan (NMPP) and will also be part of the EU the Pilot Common Project (PCP) Implementing Rule. The NM Performance Plan target dates agreed in the Network Strategy Plan for the Free Route Airspace Strategic Project are to achieve the flight efficiency targets ensuring initial implementation of FRA in at least 25 ACCs in Europe in 2014, in at least 35 ACCs in Europe in 2016 and achieve the flight efficiency targets ensuring gradual implementation of FRA in the European airspace at least above FL310, towards the SESAR deployment (PCP) objective of Free Routing in 2022 in the period 2017 – 2019 (DCT as from 1 January 2018, FRA as from 1 January 2022).

2.9   At the RDGE/19 meeting, IATA, supported by nearly all the States attending, requested EUROCONTROL to consider the possibility of restoring the production and distribution of the former Airspace Management (ASM) Planning Charts which was stopped in October 2011 and replaced by the

EUROCONTROL Regional Charts (ERC) charts. The restoring of ASM Charts was considered extremely useful for the airspace design meeting participants in their airspace and ATS route planning activities, as these charts (in their desk format) represent the entire ATS route network from West - Oceanic area / Canarias FIR to East - Caucasus States area and part of the Russian Federation to South - North African States and part of Middle Asia to North - Iceland and again the parts of the Russian Federation.

2.10   In response to this request EUROCONTROL presented a new version of the EUROCONTROL Regional Charts (ERCs), a combination of the former ASM and the CFMU Charts and are available every AIRAC in 13 areas for Upper and Lower Airspace over Europe. The EUROCONTROL Route Network Chart (ERN) covers all EUROCONTROL and ECAC member States and is based on EAD data. Charts (second version) were provided to all RDGE participants/delegations and all RDGE participants expressed their gratitude for all the efforts made by EUROCONTROL.

2.11   The RDGE noted that the RNDSG and ICAO Secretariats had been conducting a rationalisation process of the use of Route Designators (RD) and Five-Letter Name-Codes (5LNC) for the ICAO EUR/NAT Region for several years. The aim was to make the process of use of RD and 5LNC coherent and fully coordinated for the entire ICAO EUR/NAT Region through the monitoring bodies of the ICAO and RNDSG Secretariats. Following an agreement reached at RNDSG/83, ICAO and EUROCONTROL were requested to create a joint task force to look into all 5LNCs issues raised, into the aspects related to the implementation of a global ICARD system, into current regulations for designating significant points and how they could be enhanced to satisfy today's and future needs (see separate WP).

2.12   The RDGE also was informed about the results from the 16th meeting and 17th meeting of the Cross Polar Trans-East Air Traffic Management Providers' Working Group (CPWG) which was held in Ottawa, Canada, 3-6 December 2013 and was hosted by State ATM Corporation in Samara, Russian Federation, from 3-6 June 2014. The CPWG meeting addressed operational issues related to the provision or use of air traffic services for the Cross Polar and Russian Trans East (RTE) traffic flows. In addition a number of items including: CPWG work program; the Pacific Project; proposals related to radio communication failure (RCF) within the work of the ICAO Communication Failure Coordination Group (CFCG); VOLKAM related aspects (including the development of a draft Volcanic Ash Contingency Plan for Trans-East, NOPAC, and PACOTS; ICAO RDGE activities, update to the progress of Automatic Dependant Surveillance-Contract (ADS-C) Climb Descent Procedure (CDP) automation as global air traffic procedure and ANSP program updates were discussed. The next meeting of the CPWG (CPWG/18) will be organized at the ICAO EUR/NAT Office in Paris, France from 15 to 19 December 2014.

Report from States; highlighting, inter alia, ATS route developments and activities and needs and problems to be addressed by the Group

2.13   The RDGE/20 took note of and discussed a total number of 21 States reports, which indicated a general increase (between a decrease of minus 12.0% and a maximum increase of 14.1%, with an average of around **3.4%** of overall traffic increase) in traffic figures when compared with the traffic figures for the same time period in the previous year. Due to the shift in traffic patterns, the previously trend continued in which certain States have a decrease in total traffic figures (e.g. up to 16% less domestic flights, or reduction of up to 9% in Arrival/Departure traffic figures) but have an increase of 2.3% to 16.6% in overflight traffic figures. A number of ATS-route related activities (108 new ATS Route proposals were implemented and 9 major airspace change projects became operational) had been implemented since RDGE/19, in order to improve the Air Traffic Route Network System and thus resulting in direct benefits to aircraft operators with more efficient routes and optimized use of the routes for the airspace users. Following the presentations of the States' reports, the RDGE noted that some aircraft operators are not using the more efficient ATS-routes for a variety of reasons and this aspect raised some concern regarding the improvement of overall flight efficiency. **NO State report was received from Tajikistan** and the RDGE chairman stressed again the need for States to provide their reports.

2.14   During the RDGE/21 a total number of 21 States reports, which indicated a very different picture (between a decrease of minus 40.0% and a maximum increase of over 30%, with an average of still around **2.1%** of overall traffic increase) in traffic figures when compared with the traffic figures for the same time period in the previous year. The reasons of this decline were related to the situation in Syria and Iraq, as well as the avoidance of the Simferopol FIR and some parts of the European airspace (Ukraine) for flights to/from Europe. Significant flows were redirected as a result of Ukraine airspace unavailability and traffic increased significantly (over 30%) in several FIRs, but it has also to be noted, that most of the new flows are now concentrated in a small area over the Black Sea. As a consequence, this shift in flows also resulted in a massive drop in some other FIRs (e.g. overflight traffic in Chisinau FIR has significantly decreased by nearly 40% in the period from April to September 2014) and a concentration of traffic on specific ATS-Routes (e.g. in Georgia most of the overflight traffic is now concentrated on one ATS Route N644). A number of ATS-route related activities (90 new ATS Route proposals were implemented and 13 major airspace change projects became operational) had been implemented since RDGE/20, in order to improve the Air Traffic Route Network System and thus resulting in direct benefits to aircraft operators with more efficient routes and optimized use of the routes for the airspace users. **NO State report was received from Kyrgyzstan and Turkey** and the RDGE chairman stressed again the need for States, even if they cannot actually participate at the meeting, to provide State Reports for the RDGE meetings so that the implementation of operational improvements can be continued.

2.15   The ICAO Secretariat encouraged the RDGE members to make use of available tools such as the ICAO IFSET tool or via the EUROCONTROL ERNIP database in order to provide the environmental benefits of the ATS route and airspace changes that were being implemented by the RDGE member States.

Route Development Group – Baltic Sea area and its interface

2.16   The RDGE took note of the outcome of the Baltic Sea Area and its interface Sub-Group with participation of experts from the following States and international organisations: Belarus, Estonia, Finland, Latvia, Lithuania, Norway, Poland, Russian Federation, Sweden and IATA and EUROCONTROL. During the 2 meetings, a total of **110** existing proposals were reviewed and **16** new route proposals were agreed for incorporation into the Baltic ATS Route Catalogue.

Route Development Group – Black Sea and South Caucasus area and its interface
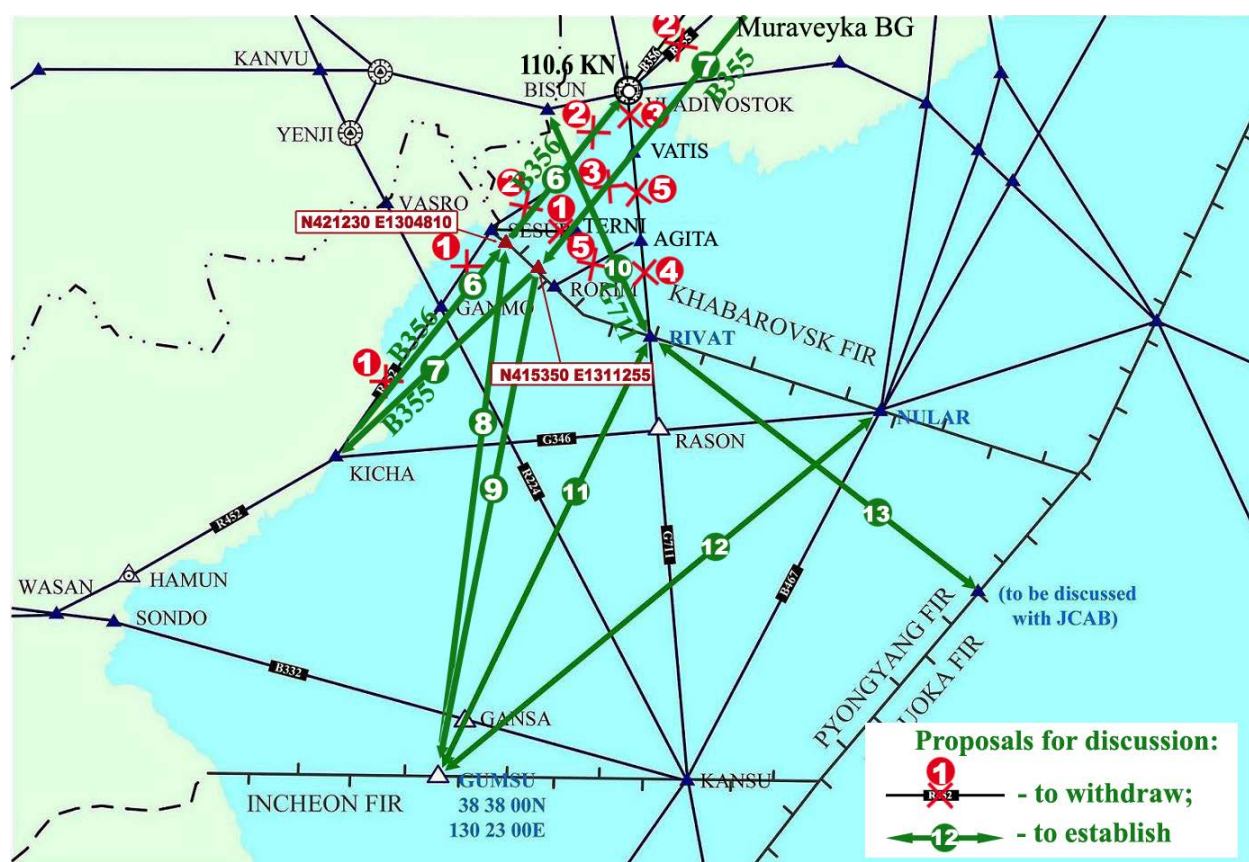
2.17   The RDGE took note of the outcome of the Black Sea and South Caucasus Area and its interface Sub-Group with participation of experts from the following States and international organisations: Armenia, Azerbaijan, Bulgaria, Georgia, Republic of Moldova, Romania, Russian Federation, Turkey, Ukraine, IATA and EUROCONTROL. During the 2 meetings, a total of **107** existing proposals were reviewed and **28** new route proposals were agreed for incorporation into the Black Sea ATS Route Catalogue. Armenia informed the Sub-Group about the newly implemented airspace structure in Armenia and the easier access to a number of SIDs/STARs. Representatives from Georgia and Armenia expressed their readiness to consider Free Route Airspace (FRA) implementation on South Caucasus on a regional basis and requested EUROCONTROL for further assistance (possible implementation of FRA in Yerevan FIR could be 4Q 2015/ 1Q 2016). Representatives from Bulgaria informed the meeting about the (TMA) RNAV procedures implementation and that it is planned to lower the FRA limit to FL105 between ENR and TMA in the Black Sea area. Arrivals and Departures will be included in FRA operations, allowing them to plan according to FRA rules between the entry/exit points of the TMAs and entry/exit points of Sofia FIR. EUROCONTROL presented the results of an analysis if the ATC contract for provision of services from the Kabul ACC would expire in December 2014. Detailed analysis and theoretical findings on potential daily distance and environmental savings/losses on traffic flows between Europe and Asia in case of unavailability of air navigation services within the Kabul FIR were presented for the around 250 flights.

Route Development Group – Middle Asia area and its interface

2.18   The RDGE took note of the outcome of the Middle Asia Area and its interface Sub-Group with participation of experts from the following States and international organisations: Afghanistan, Armenia, Azerbaijan, Kazakhstan, Kyrgyzstan, Russian Federation, Turkmenistan and Uzbekistan, IATA and ICAO. During the 2 meetings, a total of **122** existing proposals were reviewed and **4** new route proposals were agreed for incorporation into the Middle Asia ATS Route Catalogue. The Subgroup regretted again the absence of colleagues from Afghanistan, I.R. Iran, Kyrgyzstan, Pakistan and Tajikistan which led to the lack of progress of some of the proposals at the RDGE/21 meeting. It was recognised that the lack of coordination prevented the optimization of the ATS route network in this part of the ICAO European Region.
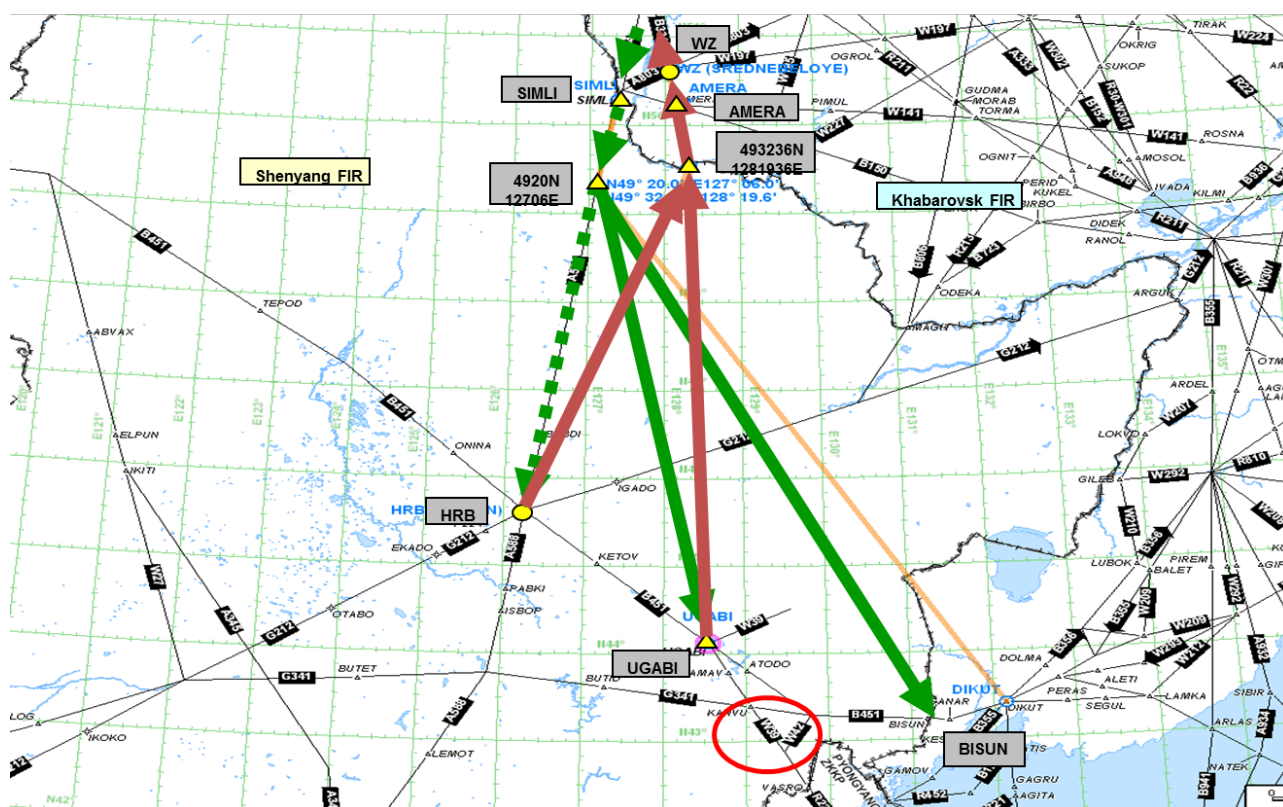
Route Development Group – Far East area and its interface

2.19   The RDGE took note of the outcome of the Far East Area and its interface Sub-Group with participation of experts from the following States and international organisations: Russian Federation, ICAO and IATA. During the 2 meetings, a total of **55** route proposals were discussed, reviewed and **18** new route proposals were agreed for incorporation into the Far East ATS Route Catalogue. The Sub-Group was informed about the results from coordination meeting between Democratic People's Republic of Korea (DPRK) and the Russian Federation which took place in August 2014. The Khabarovsk/Vladivostok airspace reorganisation project was discussed again in detail and due to the lack of progress in the coordination between DPRK and Republic of Korea (ROK), the implementation of the first part of this package, which was initially planned for implementation on AIRAC 11 December 2014, had to be delayed to 2015. The implementation date of the second package is still expected for 2015. The ICAO Secretariat was invited to address the issue with the stalled implementation of this package to the ICAO Office in Bangkok and to support the dialogue between DPRK and Republic of Korea (ROK).

2.20　　　At the last coordination meeting between JCAB, Japan and the FSUE "State ATM Corporation", Russian Federation the implementation of ATS Route Proposal No. 13 (RIVAT (N412900 E1321600) - new waypoint on Fukuoka/Khabarovsk FIR border was further delayed and might only be considered as part of the full Fukuoka FIR airspace reorganization in 2016.

2.21　　　The consolidation of the individual ATS-Route proposals which focussed on the reorganisation (dualisation of uni-directional ATS Route system) of the traffic flows, at the waypoint SIMLI could not be further developed as the Sub-Group had, despite various efforts, still no feedback from China on these proposals. The implementation of the SIMLI package has become more important as the envisaged benefits of this reorganisation are not only the reduction of flight time, fuel burn, or CO_2 emissions for the airspace users: Taking also into account the increasing number of flights (+10% traffic increase per year) using the Cross-Polar Route No.4 via SIMLI, there will also be considerable benefits in the reduction of airspace complexity and ATC workload together with an increased traffic predictability for the Air Traffic Controllers in that sector. The ICAO Secretariat was asked to address again the importance of the implementation of the SIMLI package to the ICAO Office in Bangkok and to ask China for further information on the implementation status.

2.22　　　During a meeting between the State ATM Corporation and the JCAB Japan (in Tokyo, November 2012) a difference in coordinates of the AVGOK waypoint was identified in the aeronautical information publications of Russia and Japan. Further analysis identified a mismatch of the FIR boundaries in the EUR and the ASIA/PAC ANP, thus the ANPs need to be corrected before the AVGOK coordinates can be revised. In order to facilitate this alignment process, the ICAO Secretariat was asked to organise a Coordination Meeting between the EUR/NAT Office , the ASIA/PAC Office, Japan, Russian Federation and other involved stakeholders during the 1Q 2015 in the Far East Area of the Russian Federation.

2.23　　　It must be noted that revised working procedures of the RDGE (ToR changes at COG/50 in 2011) also allowed the group to cover in a stepwise approach the full implementation aspects of ATS-Route implementation not only over the sovereign territory, but also the ATS-Route implementation over the High Seas (requiring a special coordination procedure). Due to the growing complexity for ATS route

developments which sometimes go beyond the geographical limits of the ICAO EUR Region, the ICAO Secretariat is 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. The following statistic indicates the evolution in the direct results/outcome from the last RDGE meetings:

Meeting	New routes or realignments Implemented	Number of new routes included in Catalogue	Number of existing routes reviewed
RDGE 15	94	9+2+1+17=29	17+52+44=113
RDGE 16	131	11+4+9=24	42+48+45+25=160
RDGE 17	83	3+3+3+5=14	48+50+31+27=156
RDGE 18	76	14+10+7+5=36	31+38+35+20=124
RDGE 19	60	4+7+2+6=19	44+39+40+18=141
RDGE 20	108	9+17+2+17=45	44+55+63+20=182
RDGE 21	90	7+11+2+1=21	56+52+59+35=202

Other highlights of the meeting and future meeting arrangements

2.24 The ICAO Secretariat was requested to assist in coordinating all new proposals affecting these States before the next RDGE meeting. The Chairman, together with the IATA delegation, expressed their appreciation on the number of States that were participating in this RDGE meeting and the excellent level of discussions, which resulted in a significant amount of ATS route improvements and updates to the RDGE ATS route catalogues in the Baltic Sea, Black Sea, Middle Asia and Far East Subgroups.

2.25 The Twenty-Second meeting of the Route Development Group – Eastern Part of the ICAO EUR Region (RDGE/22) will take place from 18 to 22 May 2015 at the ICAO European and North Atlantic (EUR/NAT) Office in Paris, France.

2.26 With the aim to allow a maximum number of participants from States in the Eastern part of the ICAO EUR Region, the Russian Federation was invited to consider the possibility to host the Twenty-Third meeting of the Route Development Group – Eastern Part of the ICAO EUR Region (RDGE/23) and a confirmation of this intention should be sent to the ICAO Secretariat as soon as possible, but in any case not later than end of July 2015.

Election of the RDGE Chairperson and Vice-Chairperson

2.27 With reference to the agreed arrangements at the last RDGE/20 meeting (WP/33revised) and in line with the following process for the election/re-election of Chairperson and Vice-Chairperson at the RDGE/21 meeting (see RDGE Action 20/05) the meeting started the election process accordingly. According to the procedures, the candidates were introduced by the Secretariat and both of them were seconded by a majority of States. Mr. Sergej Smirnov from Lithuania was re-elected as Chairman of the RDGE and Mr. Yury Bazulev from Latvia was re-elected as Vice-Chairman. Both thanked the RDGE meeting participants for their trust in continuing the work in these positions and are looking forward to the next 4 years of outstanding cooperation and excellent developments within the RDGE.

3. Recommendation

3.1 The CPWG is invited to note the information provided in this paper.

– END –