



REPORT OF

THE FIFTY-SEVENTH MEETING OF

THE EUROPEAN AIR NAVIGATION PLANNING GROUP

(Paris, 23 to 26 November 2015)

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0. INTRODUCTION

Place and duration

0.1 The Fifty-Seventh Meeting of the European Air Navigation Planning Group (EANPG) took place in the premises of the European and North Atlantic (EUR/NAT) Office of ICAO from 23 to 26 November 2015.

Attendance

0.2 The Meeting was attended by 92 representatives of 36 member and non-member States and by observers from 10 International Organisations. A list of participants is at **Appendix A** to this Report.

Officers and Secretariat

0.3 Mr Phil Roberts, the Chairman of the EANPG, presided over the meeting throughout its duration. Due to the unavailability of Mr Luis Fonseca de Almeida, ICAO Regional Director, Europe and North Atlantic, Mr George Firican, Deputy Director, was the Acting Secretary to the EANPG; Mr Firican was assisted by Mr Celso Figueiredo, Mr Christopher Keohan, Mr Sven Halle, Ms Cornelia Lüdorf, Mr Elkhan Nahmadov, Mr Arkadii Merkulov, Mr Sarantis Poulimenakos, Mr Rodolphe Solomon from the ICAO EUR/NAT Office, Mr Abbas Niknejad from the MID Office. Additional assistance was provided by Ms Patricia Cuff, Ms Leyla Suleymanova and Ms Isabelle Hofstetter from the European and North Atlantic Office.

0.4 The Meeting observed one minute of silence honouring the victims of the terrorist attacks on Metrojet flight 9268 (Egypt), several areas of Paris (France) and Radisson Blu hotel in Bamako (Mali).

Conclusions, Decisions and Statements

0.5 The EANPG records its action in the form of Conclusions, Decisions and Statements with the following significance:

Conclusions deal with matters which, in accordance with the Group's terms of reference, merit directly the attention of States or on which further action will be initiated by ICAO in accordance with established procedures.

Decisions deal with matters of concern only to the EANPG and its contributory bodies.

Note: in order to qualify as such, a Decision or a Conclusion shall be able to respond clearly to the "4W" criterion (What, Why, Who and When)

Statements deal with a position reached by consensus regarding a subject without a requirement for specific follow-up activities.

Agenda and Documentation

0.6 The Group agreed to the following agenda for organising the work of the Meeting and the structure of the report:

Agenda Item 1: Review of significant international aviation developments

1.1 Update from ICAO Secretariat; NCLB Campaign

1.2 Updates from States and International Organisations

Agenda Item 2: Previous EANPG follow up

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- Agenda Item 3:** Aviation safety
- 3.1 Update from RASG-EUR; EUR Safety Report; IE-REST; Coordination EANPG-RASG-EUR
 - 3.2 Air Navigation Safety related issues
 - 3.3 Follow-Up of the Civil/Military Cooperation Symposium; Outcome of the Baltic Sea Project Team Meetings
 - 3.4 Interregional LPRI Workshop
- Agenda Item 4:** Planning and Implementation
- 4.1 Amendments to ICAO documents
 - a) Volcanic Ash Contingency Plan
 - b) Update on the work on the EUR e-ANP
 - c) Proposal for amendments to ICAO Documents
 - 4.2 Inputs from the Contributory Bodies (AFSG, FMSG, RDGE, PBN-TF, SAR-TF, etc.)
 - 4.3 ICAO ASBU Monitoring Report (ATMGE)
- Agenda Item 5:** Monitoring
- 5.1 RVSM guidance material
 - 5.2 RMA Operations
 - 5.3 RMA Reports
- Agenda Item 6:** Deficiencies
- Agenda Item 7:** Any other business

0.7 The list of documentation reviewed by the Meeting is at **Appendix B** to this Report.

1. REVIEW OF SIGNIFICANT INTERNATIONAL AVIATION DEVELOPMENTS

1.1 UPDATE FROM ICAO SECRETARIAT

Jerome F. Lederer Award Presented to Ladi Mika

1.1.1 The Chairman informed the meeting that Mr Ladislav Mika, vice-chairman of the EANPG was presented on 27 August 2015 in Augsburg, Germany at 46th ISASI Seminar with “*Jerome F. Lederer Award*”. This prestigious recognition is presented annually by the International Society of Air Safety Investigators (ISASI) for outstanding lifetime contributions to technical excellence in furthering aviation accident investigation and achieving ISASI objectives, including enhancing aviation safety through the continuing development of investigation techniques. Mr Mika was the 41st recipient of this award since it was established in the mid of seventieth of the last century. The EANPG congratulated Mr Mika and applauded for his achievement.

ICAO update

1.1.2 The EANPG was informed about recent significant international aviation developments and took note of the amendments to a number of ICAO Annexes and Procedures for Air Navigation Services (PANS). The COG was also informed about the proposed amendments to ICAO Annexes and PANS Documents (Annexes 2,3,4,6,8,9,10,11,13,14,15,19, PANS-Aerodromes, PANS-ABC, PANS-ATM and PANS-OPS). A number of ICAO State Letters and ICAO Documents on a wide range of subjects had also been published since the last meeting. The EANPG also noted several ICAO global and EUR region related meetings that would take place in the near future.

Planning and Implementation of Regional Group (PIRG) Activities in Other Regions

1.1.3 The EANPG was presented with an update on the activities of the planning and implementation regional groups (PIRGs) in other regions during 2014 and 2015 and a summary of the review of the corresponding PIRG’s meeting reports by the Air Navigation Commission (ANC).

1.1.4 The EANPG also noted the items, which ANC considered good examples for sharing and possible application by other PIRGs, such as:

- The EANPG/56 report and its alignment with the Global Air Navigation Plan (GANP), and the related ASBU modules;
- The work of the EANPG on the Search and Rescue capability in the EUR Region and agreed on this work being important globally;
- The capability of the EANPG on providing continuous focus on resolving air navigation deficiencies; and
- In the MIDANPIRG/15 report, the references to performance indicators could feed into the Global Air Navigation Plan (GANP) process by reporting via regional dashboards.

Outcome Interregional Coordination Meeting

1.1.5 The EANPG was informed on the outcome of the Fourth Inter-Regional Co-ordination Meeting (IRCM/4) on Interface Issues between the Asia/Pacific (APAC), European and North Atlantic (EUR/NAT) and Middle East (MID) Regional Offices of ICAO which was held at the APAC Office in Bangkok, Thailand from 14 to 16 September 2015.

1.1.6 The EANPG noted that the IRCM/4 addressed a variety of issues of common interest of the three regional offices and acknowledged a number of actions of EANPG direct interest, e.g.:

- a) The need to resume the ICAO SSP and SMS courses;
- b) The need for additional resources to be made available to the regional offices in order to support current and future initiatives;
- c) The common view of the three regional offices on the need to work towards evolving a single Regional Aviation Structure incorporating the current PIRG and RASG responsibilities; that would avoid compartmentalization, increase efficiency, optimize the use of resources and address aviation systems as a whole;
- d) The need to establish an Advanced Inter-Regional ATS Route Development Task Force(s) commencing in the Second half of 2016 (APAC and EUR/NAT Offices);
- e) The need to ensure harmonised ASBU implementation across the regions;
- f) The need to develop a common SIP proposal for an interregional workshop on digital exchange of MET using IWXXM
- g) The need to organise an Interregional workshop about Integration of Digital AIM, MET and ATM Information through B1 modules

Update from the EUR/NAT Aviation Security Group (ENAVSECG/04)

1.1.7 The EANPG was updated on those topics addressed during the fourth meeting of the EUR/NAT AVSEC Group (ENAVSECG /04) having a shared interest for the European Air Navigation Planning Group (EANPG).

1.1.8 The EANPG noted that in the past years the EUR/NAT AVSEC group recognized a growing amount of new and emerging threats to civil aviation which required the expertise of aviation security, aviation safety, air navigation and more and IT specialists. In 2015 the EUR/NAT AVSEC group meeting dedicated one full day to address, from a security perspective, ATM/cybersecurity, laser illumination of aircraft and control towers, operations over or near conflict zones and remotely piloted aircraft systems (RPAS) issues.

1.1.9 The EANPG noted the progress made in the field of ATM/cybersecurity. On a global level, the establishment of the Industry High Level Group (IHLG) in December 2014 represented a step forward regarding coordination of relevant entities, such as the establishment of a cybersecurity repository currently under construction that would consolidate existing and relevant cybersecurity information at global level for global use.

1.1.10 The EANPG noted the new type of threat associated with the loss of MH17 on 17 July 2014. In this respect a global task force on risks arising from conflict zones (TF-RCZ) developed a 12 item work programme that was further discussed at the ICAO High Level Safety Conference which recommended, *inter alia*, to develop a web-based information repository. The ENAVSECG /04 welcomed this public information sharing repository which became operational on 2 April 2015.

1.1.11 It was also noted that the ENAVSECG/04 addressed Remotely Piloted Aircraft Systems (RPAS) related issues, in the context of aviation security. In this respect, the ENAVSECG/04 concluded that a joint work of the ICAO RPAS and the AVSEC panel would be the way forward to define the threshold when RPAS would become a security risk.

1.2 UPDATE FROM STATES AND INTERNATIONAL ORGANISATIONS

EUROCONTROL Activities Update

1.2.1 The EANPG noted the information received from EUROCONTROL regarding 2015 traffic and capacity performance, their institutional reform, their centralised services related activities, their representation in ICAO Montreal, their Civil-Military ATM Performance Framework, the certification European AIS Database.

1.2.2 Regarding the institutional reform, it was noted the establishment of the Study Group of Alternates (CN-SG) to the EUROCONTROL Permanent Commission (CN-SG), entrusted to carry out preliminary work in what manner the EUROCONTROL legal framework could require to be amended, carry out a review of its provisions, and report to the Permanent Commission. The work of the CN-SG was in progress and discussions would continue during 2016.

1.2.3 The EANPG recalled that EUROCONTROL launched in 2013 the concept of several (9) Centralized Services (CS), with the aim to reduce the costs resulting from overlapping investments, improve performance, improve the level of interoperability and help put Europe at the cutting edge of ATM technology. In 2014 the EUROCONTROL Member States decided to entrust EUROCONTROL to develop, set up and demonstrate a series of centralised support services. Following a split of some CS's the current package comprised 18 CS's ranging from a service for collecting and providing Aeronautical Information, "a successor to EAD, the European Aeronautical Information Database", to a 4D trajectories prediction tool from departure to landing. It was further noted that 9 Call for Tenders were published since the launch of the CS programme.

1.2.4 The EANPG noted the information that the Director General of EUROCONTROL agreed with the Secretary General of ICAO to intensify the cooperation between both Organisations by considering the presence of a EUROCONTROL representative in Montréal. The representative would be in place in 2016, and should allow EUROCONTROL to be more closely associated to the discussions of new issues and ICAO provisions.

1.2.5 The EANPG noted also that in order to enhance civil-military coordination and fulfil a Provisional Council task, a Civil-Military ATM Performance Framework document was developed by EUROCONTROL in its capacity as a civil-military intergovernmental organisation. The objectives were consistent with relevant SES regulations and performance targets were outside of the framework remaining as a national responsibility. The framework was approved by the Civil Military Interface Standing Committee (CMIC) and supported by the EUROCONTROL Provisional Council (PC) as guidance material for stakeholders intending to establish a civil-military performance-based partnership.

1.2.6 The EANPG recalled that the EAD service allowing Aeronautical Information Service Providers (AISPs) to enter and maintain their data in a central repository and enabling data users to retrieve and download AIS data in real time, was extensively used by the majority of ECAC States. The EANPG noted that the certification of the EAD service provider under the SES regulations was not yet resolved. Certification aspects related to the EAD service provider had been initiated and discussions were ongoing about the possible inclusion of the EAD service as a part of the Network Manager, potentially as one of the functions covered by Regulation (EU) N 677/2011.

Progress on SES and SESAR

1.2.7 The EANPG noted the information received from European Commission regarding an update on the SES regulatory framework (SES2+) and on the SESAR development and deployment activities. The EANPG noted that the SES2+ package had passed through first reading of the European Parliament in March 2014 and had achieved a general approach in the Council in December 2014. The negotiations between the European Parliament and the Council (known as "trilogue") had however yet to be started, pending the resolution of a legal dispute between two Member States.

1.2.8 The EANPG recalled that in regard to SESAR development and validation activities, the SJU was currently in the process of closing down its first work programme covering the period from 2007 to 2016 (SESAR1) and in parallel it was launching its new work programme (SESAR 2020) that would run up to the end of 2024. SESAR 2020. This new work programme, co-funded under the Union's new Horizon 2020 framework programme with a Union budget of EUR 585 million, was broken down into 3 main threads of activities: exploratory research, industrial research & validation and very large scale demonstrations.

1.2.9 The EANPG noted as well the information concerning the ATM Master Plan update and that the formal consultation period for all SJU Board members, except the European Commission and EUROCONTROL, closed on 18 September 2015. Meanwhile, the Master Plan update was also undergoing an approval process by its founding members (notably EUROCONTROL and the European Commission). The SJU would then have to consolidate the positions of its members and resubmit it to the Administrative Board before it could be adopted by the end of 2015.

1.2.10 The EANPG noted that the SESAR deployment had considerably advanced in 2015 notably thanks to the establishment and activities of the SESAR Deployment Manager, which had drafted a Deployment Programme for the Pilot Common Projects related ATM Functions.

Progress in the implementation of Single European Sky Interoperability Regulations

1.2.11 The EANPG noted the information received from European Commission concerning the implementation of a number of the Interoperability Implementing Rules.

1.2.12 Regarding the Implementation and evolution of Data Link Regulation (EU) No 29/2009, The EANPG noted the existence of some difficulties related to deployment delays in the ground Data Link Services (DLS) infrastructure as well as in the airborne environment (concerning aircraft operators), and with the identification of technical issues (provider aborts) affecting the performance of the system. The later issue prompted the European Commission to request the European Aviation Safety Agency (EASA) to investigate the matter.

1.2.13 The current DLS implementation status in Europe, as reported by the SESAR Deployment Manager (SDM) in the Deployment Plan, depicted a scattered European geographical coverage with operational ground systems in Ireland, UK, the Benelux (covered by MUAC in Maastricht), Germany, Switzerland, Austria, Sweden, Denmark, and the initial DLS services in France, while the peripheral Southern and Eastern areas were just planning operations for 2018. Regarding the DLS implementation by the airspace users, SDM has been conducting a survey confirming, on the basis of preliminary figures from 40 airlines totalizing 2873 aircraft, that only 40% of the fleet was already equipped, and providing plans for a coverage of 84% of the fleet by 2020.

1.2.14 In the meantime, a SJU study on "VDL Mode 2 Capacity and Performance Analysis" was conducted and was recently finalized. The study showed that VDL2 technology would not be sufficient to support the European ATM requirements beyond a certain horizon. The study showed that in high density areas VDL2 technology using 4 frequencies would be sufficient to support the European ATM requirements until around 2025 while in medium density areas the system capacity limits may be reached in 2030. It was therefore highly recommended to anticipate the evolution of the European datalink infrastructure and to prioritize the development of the next generation datalink technology.

1.2.15 In respect to the implementation and evolution of SPI Regulation (EU) No 1207/2011, the EANPG noted that the European Commission (EC) initiated, after consultation of stakeholders, a two-step revision of the Regulation. The EC tasked the SESAR Joint Undertaking (SJU) to carry out a preliminary study on the subject which was presented and debated in a stakeholder workshop in April 2015. On the basis of those discussions, and after consolidation of the received stakeholders comments and recommendations in coordination with the SJU, EUROCONTROL and EASA, the EC requested EASA to launch, no later than the fourth quarter of 2015, a new Rulemaking Task for the revision of the SPI Regulation (considering the

possible extension to General Aviation), ensuring that a careful impact assessment of any preferred option would be conducted.

1.2.16 In addition to the required rulemaking activity, a number of remaining technical issues, such as possible spectrum congestion on the 1030 and -1090 MHz, and the definition of appropriate surveillance performance targets, still needed to be addressed. The EC therefore requested the SJU to analyze and programme such activities in the SESAR2020 Work Programme, and ensure that they would be carried out in full coordination with the related EUROCAE or ICAO on-going or planned work.

1.2.17 Regarding the Implementation of VCS Regulation (EU) No 1079/2012 the EC organized on January 2015 a workshop on the implementation of Regulation (EU) No 1079/2012, with representatives from the major stakeholders (ANSPs, Airspace Users, EASA, EUROCONTROL, NSA's). Following the workshop, the Commission requested the Network Manager to take an active and central role in the "coordination of the implementation of 8.33 kHz voice channel spacing capability below FL195" by :

- monitoring and steering the implementation of 8.33 kHz VCS channels on both ground and air;
- providing a central coordination and information function on the granted exemptions and derogations under the specific provisions of the Regulation;
- building and providing awareness raising and implementation support capabilities, notably as regards the VCS IR implementation status.

1.2.18 In regard to the implementation and evolution of ADQ Regulation (EC) No 73/2010, the EANPG noted that the EC organized on June 2014 a workshop that confirmed implementation difficulties and delays and further highlighted the problems encountered by the regulated parties, notably as regards some legal uncertainties.

1.2.19 During that workshop EASA notably informed of its on-going Rulemaking Task on AIS/AIM (RMT.0477 & RMT.0478) focusing on the transposition of ICAO Annex 15, addressing in that context the provisions from the ADQ Implementing Rule, and providing hence an opportunity to address and clarify the remaining legal issues in the current ADQ existing provisions. With the view to present an outlook on the evolution of the ADQ Regulation, the EC consulted again the EU member States in the autumn of 2015 to obtain an update on ADQ implementation.

1.2.20 The consultation confirmed to a large extent the previously known implementation status and indicated that, for the very large majority of the EU Member States (with very few exceptions) the full compliance for the requirements to be met by the implementation dates of respectively 1st July 2013 and 1st July 2014 have not been met. At same time, most of the Member States indicated that they would be able to fulfil their pending and remaining requirements by 30th June 2017, while at least 5 member states announced that they would experience even further delay (up to 2023) and not be in a position to respect the 2017 deadline.

1.2.21 The work of the EASA RMT was still on-going but a first set of draft implementing rules have been finalized, while still to be consolidated by the rulemaking group. The proposed implementing rules (still subject to alignment with outcome of the ICAO AIS/AIM Study group) covered first and foremost the provisions on aeronautical information products and services stemming from ICAO Annex 15 and the new PANS-AIM, which were both subject to final development at ICAO level. The rulemaking group also developed draft implementing rules on data quality requirements, both for aeronautical information service providers and for those organizations originating aeronautical data.

1.2.22 These requirements were mainly based on the ADQ Regulation (EC) No 73/2010 (but also aligned with the data quality requirements included in the upcoming Annex 15 amendment). Following a detailed analysis of the provisions of the ADQ Regulation, the rulemaking group proposes to maintain the necessary elements of the Regulation but to ensure that all the other provisions would be sufficiently covered

through other regulatory developments. Consequently, the rulemaking group would propose that it was not adequate to maintain two regulations with several overlapping provisions, and therefore proposes to eventually replace the ADQ Regulation with the proposed EASA implementing rules on data quality.

1.2.23 The current planning of the EASA RMT anticipated that the NPA would be published by March 2016 and, following a 2-3 months public consultation period for commenting the NPA, the EASA would issue its opinion by the end of 2016.

Significant Developments in the area of air navigation in Ukraine

1.2.24 The EANPG was provided with an update by Ukraine on the latest ANS developments since EANPG/56 including the traffic statistics. It was noted that the number of IFR movements within Ukrainian airspace and airspace over the High Seas where Ukraine assumed the responsibility for provision of ATS (the ICAO Council Decision of February 17, 1997 related to European Air Navigation Plan (EUR ANP, Doc 7754), amendment No. EUR/NAT96/38-ATS refers) decreased by 40.4 % compared to the previous year.

1.2.25 The EANPG noted that Ukraine has recently issued a safety case regarding the provision of air navigation services within Ukrainian airspace and the airspace over the High Seas aiming at the gradual normalization of air traffic flows within the airspace over the High Seas in the Simferopol FIR. Based on the safety case, four ATS routes were made available in the High Sea portion of the Simferopol FIR (AIC 02/15) and a series of NOTAMs (A1785/15, A1776/15, A1777/15, A1778/15 issued by Ukraine refer).

1.2.26 It was noted that Ukraine has started post-implementation monitoring activities with a purpose to collect and analyze qualitative and quantitative data to demonstrate that all the mitigation measures identified in the above-mentioned safety case were effective and to take any further measures if deemed necessary. Ukraine advised that about 3000 flight were conducted using the four above-mentioned routes during the first two months of post-implementation monitoring.

1.2.27 The EANPG was informed that EASA, following a coordination meeting that took place with Ukraine, would request more information collected through the post implementation monitoring with intent to issue an update to the EASA Safety Information Bulletin (SIB) addressed to the airspace users considering operating on that part of airspace. A 2-step approach was recommended, first starting with 2 routes and implementing the other 2 routes in a second, later phase.

1.2.28 The EANPG noted that the data collected through the post-implementation monitoring would be made available to all interested parties; Ukraine would make this information available to the ICAO EUR/NAT for further promulgation. Similarly, it was agreed that the updated EASA bulletin would be also provided to the ICAO EUR/NAT for further dissemination. It was noted that Ukraine made the above-mentioned safety case available on their CAA and ANSP (UkSATSE) websites.

1.2.29 In this respect, the EANPG recalled that the responsibility for safety risk assessment of aircraft operations in a given airspace volume was with the aircraft operators as approved by the appropriate State authorities, i.e the State of the Operator or State of Registry. It was also noted that ICAO endeavored to make all relevant information, in support of such assessments, available to States and airspace users, including through the ICAO web-based repository of information on conflict zones.

1.2.30 The EANPG recalled the UN General Assembly Resolution 68/262 and EANPG Statement 56/02 and acknowledged that the resumption of the normal flight operations in the airspace over the Black Sea was a priority. The outcome would likely be instrumental in easing the airspace restrictions that currently applied in the Region more generally. It was also noted that bilateral coordination activities had been taking place since EANPG/56 involving ICAO, the Russian Federation and Ukraine. As part of this activity, the President of the ICAO Council sent a letter to the Russian Federation on 22 July 2015 and the Secretary General of ICAO sent another letter on the same topic to Ukraine on 7 August 2015.

1.2.31 The ICAO Regional Director, Europe and North Atlantic, also sent a state letter (EUR/NAT 15-0420) on 18/08/2015 whereby airspace users were urged to consider the safety case information made available by Ukraine, together with any other pertinent information, to reassess flight safety risk in the area of the Simferopol FIR.

1.2.32 In this respect, it was noted that the purpose of the EANPG was to address strictly the technical and operational issues and avoid the political context as these issues were in the remit of the ICAO Council. It was noted that coordination was ongoing between the Russian Federation, Ukraine and ICAO in the pursuit of a long-term and lasting solution in the airspace concerned.

1.2.33 The Russian Federation recalled that FIR boundaries shall be defined and/or delineated strictly in compliance with the provisions of Articles 25 and 27 of the Chicago Convention (Doc.7300/9) and Annex 11, as well as ICAO Assembly Resolution A38-12, which stipulated that “the limits of ATS airspaces, whether over States’ territories or over the High Seas, shall be established on the basis of technical and operational considerations with the aim of ensuring safety and optimizing efficiency and economy for both providers and users of the services”, (paragraph 1, Appendix G, A38-12).

1.2.34 The Russian Federation stated their position that the airspace changes promulgated by Ukraine (AIC 02/15 and a series of NOTAMs (A1785/15, A1776/15, A1777/15, A1778/15) issued by Ukraine refer) did not reflect the existing technical capabilities and had a negative impact on flight safety in the Region. The Russian Federation indicated that they remained available for a broad cooperation on matters of air traffic service provisions within Simferopol FIR and ready to confirm their obligations declared in previous gatherings, provided that mutually acceptable solutions would be found.

1.2.35 The EANPG noted with content that all parties involved expressed their readiness for continuation of the dialogue in order to find the optimal way forward to ensure safe and efficient aircraft operation in the EUR Region and encouraged continuation of consultations between the parties with the support of ICAO. The EANPG agreed to invite ICAO to establish a Task Force to advance the work. The Task Force would work under specific Terms of Reference (to be developed) and in full compliance with the ICAO Chicago Convention and its Annexes, and relevant ICAO and UN Assembly Resolutions. However, there was considerable debate regarding the precise drafting of a commonly agreed conclusion. In conclusion, the EANPG agreed to the following:

EANPG Conclusion 57/01 - Resumption of Normal Flight Operations in the Airspace Over the Black Sea

That, the EANPG:

- a) urge the States concerned and the ICAO Secretariat to work together and use all necessary means to support the normalisation of the flight operations within the airspace over the Black Sea as soon as practical;
- b) invite the ICAO Regional Director, Europe and North Atlantic, on behalf of EANPG to establish a Task Force composed of Russian Federation, Ukraine and all other affected States in the Region and airspace users organisations, to consider and develop mutually acceptable proposals for normalisation; and
- c) remind States and airspace users to use all pertinent available information, including ICAO SL EUR/NAT 15-0420 of 18 August 2015, to reassess flight safety risk in the airspace over the Black Sea.

Note: ICAO would make reference on its website to any information made available to it

2. PREVIOUS EANPG FOLLOW UP

Update on follow-up actions to EANPG/56 conclusions and decisions

2.1.1 The EANPG was informed on the actions stemming from EANPG/56 and noted that from the 36 EANPG/56 Conclusions 29 had been closed and the remaining 7 being in various stages of implementation and would be further addressed at the present meeting. It was also noted that 6 of the 8 EANPG/56 Decisions had been also closed while the remaining 2 were on-going and would be addressed at the present meeting.

2.1.2 The EANPG also noted the several resolutions of the Air Navigation Commission addressing EANPG Conclusions related to proposal for amendments to the global documents and the allocation of work to several groups and panels established at global level.

3. AVIATION SAFETY

3.1 UPDATE FROM RASG-EUR

Update on the activities of RASG-EUR and Its Contributory Bodies

3.1.1 The EANPG noted the information provided by ICAO secretariat describing the activities and outcomes of RASG-EUR and its contributory bodies since EANPG/56 meeting.

3.1.2 In particular the EANPG noted the concerns raised as per achievement of priority safety targets and metrics for the ICAO EUR Region in 2015, including the increase in the number of States having significant safety concerns (SSCs), an increase in overall number of SSCs, a degradation of USOAP results evaluating financial and human resources of the CAAs and related to certification, surveillance and resolution of safety concerns by the States. Also the progress in SSP implementation in the region was seen not to be sufficient to reach the goal of having all States concerned implemented SSP by end of 2017.

3.1.3 The EANPG also noted the publication of RASG-EUR 2014 annual safety report and that the process of preparation of the 2014 Report showed that States, International Organisations and the industry needed to increase their level of contributions, with the aim to improve the measurement of overall achievements. Specifically, the EANPG noted the need and the call for a more active participation from States, regional and international organizations and industry in preparation of RASG-EUR 2015 safety report.

3.1.4 The EANPG noted the progress in implementing safety enhancement initiatives (SEI) in the region, the results of a survey conducted by ICAO secretariat to gain additional expert support in the framework of RASG-EUR contributory bodies, the creation of the Helicopter Safety Team (IE-HOST) as well as approval by RASG-EUR Coordination Group (RCOG) of a proposal to establish a specific IE-REST team tasked to develop SEIs in the area of ANS safety oversight (IE-ANS SO). The EANPG noted the invitation from ICAO Secretariat to participate in the work to develop terms of reference (ToR) for IE-ANS SO. The EANPG was also informed that new SEIs are being developed with the aim to reduce the number of accidents related to the loss of control in flight (LOC-I) and controlled flight into terrain (CFIT).

Coordination between EANPG and RASG-EUR

3.1.5 The EANPG recalled that in line with its Handbook, the EANPG and the European Regional Aviation Safety Group (RASG-EUR) should coordinate their activities and provide regular updates on their common areas of interest. In this regard the EANPG was informed that the Chairmen and Secretary of RASG-EUR and EANPG attended the Second PIRG-RASG Global Coordination Meeting (Montréal, 5 February 2015), which invited each region to establish a mechanism for PIRG-RASG coordination and reflect this requirement in the PIRG and RASG procedural handbooks/manuals by December 2015. The

coordination mechanism should include, in addition to the existing cross-participation and briefing between regional groups by its Chairpersons, information on which regional group would lead subject areas of common interest, based on their past and current related activities and holding the most relevant expertise.

3.1.6 Following above mentioned provisions the ICAO Secretariat developed a table with information on which regional group would lead subject areas of common interest, based on their past and current related activities and holding the most relevant expertise (**Appendix C** refers). This table was presented to EANPG COG/63 meeting (13 to 16 October 2015) and to the fifth meeting of the RASG-EUR Coordination Group (R-COG/05) (3 to 4 November 2015). COG/63 invited the COG members to review the proposed table and revert to ICAO Secretariat by end of October 2015 with proposed changes. No changes were received by ICAO Secretariat. The RCOG/05 reviewed the table and agreed that the proposal shall be presented unchanged for further approval by both EANPG and RASG-EUR

3.1.7 Therefore, the EANPG agreed to the following

EANPG Conclusion 57/02 – Coordination Matrix of RASG-EUR and EANPG Activities

That:

- a) The coordination matrix (**Appendix C** refers) be approved and form the basis for future coordination activities between EANPG and RASG-EUR and their contributory bodies; and
- b) the ICAO Regional Director, Europe and North Atlantic, if needed, prepare the necessary amendments to the EANPG handbook to reflect the final approved coordination matrix.

3.2 AIR NAVIGATION SAFETY RELATED ISSUES

Facilitating Stabilized Approaches and Enhancing Situational Awareness – Paris CDG APW Implementation Report

3.2.1 The EANPG was presented with a report from France on their experience with an Area Proximity Warning (APW) system alerting air traffic controllers when an aircraft on final approach entered areas of defined dimensions above the nominal ILS glideslope. This system was implemented at Paris CDG airport in March 2015. The monthly number of alarms, around 150, was consistent with those experienced during the April 2014 trial, and amounted to fewer than 5 aircraft involved per day (since some of the aircraft trigger several alarms in a row), out of about 700 landings per day.

3.2.2 The initial feedback from summer 2015 showed that some flight crews, although satisfied with the “above-glideslope” advisories, indicated that they would not intercept the glideslope from below, as proposed, but from above. Air traffic controllers feedback was overall positive about this additional safety net, although the defined procedure was not applied at all times. In conclusion, although further work was needed in order to increase controllers’ familiarity with the system, and refine its procedures, the implementation of this additional safety net appeared to have assisted several flight crews over the course of the summer in either getting back on a nominal descent profile, or deciding to abort the approach. The system was believed to have further improved aviation safety at Paris CDG.

3.2.3 During the following discussion IFALPA and France exchanged views about safety risk assessment and mitigation actions in accordance with the ANSP’s SMS based on recorded alarms. It was noted that it is desired that the system should be used in a way that respects the distribution of responsibilities contained in the ICAO provisions.

3.2.4 The EANPG noted the information and asked France to provide further updates on developments in the area during EANPG COG meetings.

3.3 THE CIVIL/MILITARY COOPERATION; BALTIC SEA PROJECT TEAM

Outcome of the Baltic Sea Project Team (BSPT)

3.3.1 The EANPG was informed that as a follow up to the ICAO Civil/Military Cooperation Symposium which was held at the ICAO EUR/NAT Office in Paris from 14 to 15 April 2015, the EANPG COG/62 established in May 2015 the Baltic Sea Project Team (BSPT) (COG Decision 62/01 refers). Based on an initial proposal from the Russian Federation, the outcome of the ICAO Civil/Military Cooperation Symposium and the recommendations from the EASA Report on occurrences over the High Seas involving military aircraft in 2014 (Report-ED0.1-2015), the BSPT was tasked to address a variety of operational and institutional aspects amongst all involved stakeholders in the Baltic Sea area.

3.3.2 The BSPT started its work with a kick-off meeting in Helsinki, Finland on 2 July 2015. The BSPT, chaired by Mr. Kari Siekkinen from the Finnish Transport Safety Agency had been attended by civil and military experts nominated from all involved States (Denmark, Estonia, Finland, Germany, Latvia, Lithuania, Poland, Sweden, Russian Federation) and from NATO, EASA, EUROCONTROL. Two additional BSPT meetings were held (BSPT/02 from 8 to 9 September in Vilnius, Lithuania and BSPT/03 on 9 November in Copenhagen, Denmark). All involved States, represented by civil and military experts and International Organisations attended all three BSPT meetings.

3.3.3 Detailed presentations from EUROCONTROL, Sweden and Finland on the areas where the current traffic flows would have the most difficulties with the presence of uncoordinated/uncooperative aircraft (or State aircraft that would only partially operate in compliance with ICAO provisions) facilitate to identify the following hot spots: Copenhagen/Malmö TMA, Stockholm TMA and Helsinki/Tallinn TMA.

3.3.4 The data gathering (e.g. in terms of exchange of verbal flight information, distributions of flight plans for State aircraft, the use of SSR-Codes for State aircraft operations, the use of radar data from civil and/or military sources) and the collaborative data sharing aspects between civil and military stakeholders were discussed amongst all States. The BSPT concluded that any enhancement in sharing the information on State aircraft operations would raise the awareness and increase the predictability of the State aircraft trajectory in the ACC sectors within the Hot Spot areas.

3.3.5 The identification of uncoordinated/uncooperative aircraft (or State aircraft that would only partially operate in compliance with ICAO provisions), in terms of situational awareness and not relation to provision of separation, could only be done by using primary surveillance radar (PSR) data. The discussions amongst States revealed a number of different issues and operational practices and the BSPT concluded that the use of PSR data, especially in the hot spot areas, would be a major improvement in order to enhance the situational awareness. The BSPT invited States and NATO to investigate if the PSR data from military radars could be made available to other NATO countries or selected 3rd countries (the data would be used in an Air Situation Display and not for separation).

3.3.6 The BSPT noted the capabilities/features of the EUROCONTROL Civil-Military ATM Coordination Tool (CIMACT), a software application supporting the exchange and display of surveillance and flight plan data between civil and military entities allowing enhancing situational awareness and efficient coordination.

3.3.7 All States in the BSPT presented and discussed their existing procedures for State aircraft operations over the High Seas, which ranged from regulations similar to civil operations (compliant to ICAO Annex 2 provisions) up to national policies for State aircraft operations under due regard. The BSPT invited States to share their best practices as individual examples from States on the “due regard” operation of State aircraft over the High Seas could be included into the chapter 3 of the ICAO EUR Doc 032. At the last BSPT meeting, Denmark, Finland, Poland, Russian Federation and Sweden indicated that they would submit their examples to the Secretariat for inclusion into the first version of the ICAO EUR Doc 032.

3.3.8 The BSPT also discussed issues related to Flight Plans (FPLs). EUROCONTROL explained some of the IFPS functionalities that had resulted in rejections of FPLs for certain flight profiles (e.g. FPLs from St. Petersburg FIR to Kaliningrad FIR). The IFPS constraints (syntax and semantic checks) for the flight plan dissemination of State aircraft operations using IM and IN-type flight plans were presented from EUROCONTROL. Several States presented several examples of flight plans that caused problems as well as operations where flight plans had not been available.

3.3.9 There was a common understanding that FPLs could help to raise the awareness of ATC and that there was a need for increased cooperation (e.g. non-typical FPLs to be sent to all other involved ACCs). As a result of the discussions, the BSPT reached an agreement that States to send any information regarding incorrect or missing flight plans to EUROCONTROL /IFPS (contact point - Mr A. Woollin) in Brussels and the Main ATM Center (contact point - Mr V. Pustovarov) in Moscow for further investigation on the causes.

3.3.10 Based on several concrete examples of missing flight plans, the Russian Federation, Finland and Estonia agreed to define 7 new waypoints for State aircraft operations over the High Seas that could be used, to replace the current string of LAT/LONG coordinates, to facilitate all future FPLs between St. Petersburg FIR and Kaliningrad FIR. The ICAO Secretariat assigned the following 5LNCs: PISIS-PIDIN-PISIM-PIRUX-PINIX-PIVAX-PIPOM. All involved States (Russian Federation, Estonia, Finland and Latvia) agreed to implement/publish these waypoints (all over the High Seas), for the 30 MAR 2016 AIRAC date. The BSPT concluded that the use of direct routings between the 5LNCs would facilitate considerably the flight planning and aircraft operations over the High Seas for flight profiles concerned.

3.3.11 The BSPT discussed also the new EU regulation (R376/2014, amended with R2015/1018) on the occurrence reporting framework which would become applicable from November 2015 onwards. The BSPT concluded that the presented EU occurrence classification had no link to the existing ICAO AIRPROX concept (as in ICAO Doc 4444) and it was not clearly defining the term „inadequate separation“. This new term („inadequate separation“) should rather be understood as „perceived or subjective inadequate separation“ and EASA offered to discuss the problem with the EC for further refinement. The BSPT welcomed the EASA initiative to develop/propose an amendment of the new regulation so that the ICAO AIRPROX concept would be included into the guidance material of the new EU occurrence reporting framework.

3.3.12 The BSPT agreed to collect contact details of focal points for the civil and (where applicable) military aspects at the operational ACC level. The current list is attached in **Appendix D** to this report.

3.3.13 The BSPT addressed the necessity to raise the awareness of State aircraft operations to all other airspace users. EUROCONTROL together with EASA, NATO and ICAO developed a draft document for this intended awareness campaign for flight operations over the High Seas. The BSPT agreed to publish this material as an ICAO EUR OPS-Bulletin (**Appendix E** to this report refers). This ICAO OPS-Bulletin would be further disseminated via the NOP Portal, potentially serve to develop an EASA SIB and would also serve as an input to an IFALPA Bulletin. These documents would also be made available/referenced via States aeronautical information websites and advertised by ANSPs during specific airspace user meetings.

3.3.14 The EANPG thanked the *Rapporteur* and the involved experts for the excellent outcome of the BSPT and fully supported the various BSPT conclusions. States and NATO were invited to further investigate if the PSR data from military radars could be made available to other NATO countries or selected 3rd countries. The EANPG also welcomed the confirmation from EASA and IFALPA to use the EUR OPS Bulletin as baseline for further publications. IFALPA recommended that the layout of the draft EUR OPS Bulletin should be designed with human factors principles in mind, i.e. placing the map with the area concerned as attention catcher on the first page together with the most relevant operational information/recommendations

Initial Draft Version of ICAO EUR DOC 032 (Interim Guidance Material on Civil/Military Cooperation in Air Traffic Management)

3.3.15 The EANG was informed that the ICAO Civil/Military Cooperation Symposium (14 to 15 April 2015, Paris, France) concluded that the current ICAO provisions could be improved in a number of areas (e.g. an update to ICAO Circular 330, a merger of the Circular with Doc 9554, an update of the European eANP to include conclusions from previous EANPG Meetings on civil/military cooperation and coordination aspects). In addition, the work of the Baltic Sea Project Team addressed the aspect of promulgation of national regulations regarding the operation of State aircraft under due regard and it was found beneficial to include this material into an Interim Guidance Material (EUR Doc 032), so that it would be easily accessed by aviation stakeholders.

3.3.16 The purpose of this Interim Guidance Material was to assist States (in particular in the ICAO EUR Region) in the improvement of civil/military coordination and cooperation by sharing best practices in airspace management and aircraft operations. It was expected that this regional interim guidance material from this document would be discussed and evaluated during the Circular 330 revision process by the ATMOPS Panel. The work of the ATMOPS Panel Study Group should be finalised by 4Q 2016 and it was expected that a draft version of the new document would be presented at the 39th Assembly in October 2016.

3.3.17 The initial draft version of the EUR Doc 032 was presented at the COG/63 meeting in October 2015 for initial consultation and several (mainly editorial) comments from States and EUROCONTROL had been received and incorporated in a revised version. The revised draft was also presented at the BSPT/03 Meeting in November 2015, where a number of States indicated that they would provide additional examples of their national due regard regulations to be included in the EUR Doc 032 (at the time of the meeting this input was in a final coordination process).

3.3.18 The EANPG reviewed the ICAO EUR Doc 032 (Interim Guidance Material on Civil/Military Cooperation in Air Traffic Management, 1st edition, November 2015) and the Secretariat provided clarifications on the wording and status of the Assembly resolutions in the introductory part of the document. Therefore the EANPG agreed to the following:

EANPG Conclusion 57/03 – Endorsement and Publication of the ICAO EUR Doc 032

That the ICAO Regional Director, Europe and North Atlantic, on behalf of the EANPG:

- a) invite States to submit their national examples on the “due regard” operation of State aircraft over the High Seas for inclusion into EUR Doc 032 before 11 December 2015; and
- b) take necessary measures to publish the “*Interim Guidance Material on Civil-Military Cooperation in Air Traffic Management*” (EUR Doc 032) on the ICAO EUR/NAT website/portal, as provided in **Appendix F** to this report; and
- c) submit the EUR Doc 032 to the ATMOPS Panel Study Group for further considerations.

3.4 INTERREGIONAL LANGUAGE PROFICIENCY REQUIREMENT IMPLEMENTATION

1st Inter-regional English Language Proficiency Workshop Outcomes

3.4.1 The EANPG was apprised of the outcomes of the first Interregional English Language Proficiency Workshop (IELP) held in Kuwait from 9 to 11 November 2015. The Workshop, jointly organized by the ICAO APAC, EUR/NAT and MID Regional Offices was hosted by the Directorate General of Civil Aviation of Kuwait and it was attended by 116 participants, originating from 14 States from 3 ICAO regions, 4 International Organizations, and 8 industry stakeholders.

3.4.2 The EANPG recalled that the Programme Coordinating Group (COG) Language Proficiency Requirements Implementation (LPRI) Task Force (TF), a unique and highly specialized group of linguistic and operational experts reporting to the ICAO EUR/NAT, EANPG/COG was mandated to support the organization of the IELP Workshop in the behalf of the ICAO EUR Region.

3.4.3 The EANPG was informed that the IELP workshop acknowledged that:

- The Language Proficiency Requirements are safety critical and their effective implementation should continue to be supported by States;
- ICAO will continue to monitor the implementation of LPRs through USOAP CMA;
- While progress has been made in the aviation language testing and training domains, this industry remains unregulated;
- The implementation of aviation language testing and training best practices in accordance with ICAO Manual on the Implementation of ICAO Language Proficiency Requirements (Doc 9835 AN/453) are key for the successful implementation of the language proficiency requirements;
- Licenses for pilots and air traffic controllers should be endorsed based on ICAO recognized tests;
- Relating to LPRI there is a need to enhance States' safety oversight capabilities, including through ICAO HELPP (Home of the English Language Proficiency Programme) and the training of concerned regulators' staff;
- Regulators should maintain regular contact with the Test Service Providers;
- ICAO to consider inclusion of ELP related procedures in the PANS Training document (Doc 9868) as appropriate;
- ICAO to consider developing additional ELP (testing) related Protocol Questions (PQs) within the USOAP CMA framework;
- Based on identified requirements (safety case), ICAO to consider the development of provisions related to ELP for other aviation safety related disciplines (e.g. AIM, MET, firefighting, flight attendants, ground staff);
- Cooperation and sharing of information and resources at regional/sub-regional level to be encouraged;
- ELP ICAO training material (i.e. sound samples) to be used and further developed, including the development of a CBT.
- ICAO should consider:
 - establishing a validity/currency for Level 6;
 - recognition (through AELTS) of level 6 specific developed tests.

3.4.4 During the EANPG discussions, Turkey suggested to consider the development of dedicated ELP requirements and training material for military personnel operating in a mixt civil-military environment, within the framework of COG LPRI TF. NATO supported Turkey and both were invited to participate in the works of the COG LPRI TF.

3.4.5 IFALPA fully supported the Working Paper and the proposed conclusion and highlighted that the safety benefit of the language proficiency program would come from training and practice; therefore States should be encouraged to use all appropriate and cost-efficient ways to increase the training and the use of the English language by professionals involved in international air transport including, as an example, recurrent trainings, staff briefings and similar professional meetings which could be held in English, instead of a local language.

3.4.6 In addition, the EANPG recalled that it was essential for the Member States to continue the implementation of aviation language testing and training best practices in accordance with ICAO Document 9835, and Assembly Resolution A38-8.

3.4.7 Therefore, the EANPG agreed to the following:

EANPG Conclusion 57/04 – Support LPRI

That the ICAO Regional Director, Europe and North Atlantic:

- a) Encourage Member States to:
 - i) endorse pilot and air traffic controller licenses, based on ICAO recognized tests;
 - ii) make use of the ICAO Aviation Language Test Service (AELTS) to verify language testing instruments;
- b) Invite COG LPRI TF to support and organize, under the ICAO IHELP programme, similar interregional events.

4. PLANNING AND IMPLEMENTATION**4.1 AMENDMENTS TO ICAO DOCUMENTS*****Progress towards a Common European and North Atlantic Volcanic Ash Contingency Plan***

4.1.1 The EANPG was presented with an update on the status of the progress from the 2015 European and North Atlantic (EUR/NAT) Volcanic Ash Task Force (VATF), towards a common EUR and NAT Volcanic Ash Contingency Plan (VACP). As agreed at COG/62, a meeting of experts, to advance the work and address any remaining issues in the drafting of a common draft EUR/NAT VACP, took place on 14 September 2015 in Paris, France, co-chaired by the Chairmen of EANPG COG and the NAT IMG with the support of the VATF Rapporteur, and assisted by the Secretariat.

4.1.2 The meeting was attended by experts representing those States providing services in both ICAO EUR and NAT Regions, as well as experts from Germany and the United States, and representative of the International Air Transport Association (IATA) and the International Federation of Air Line Pilots' Associations (IFALPA). The EANPG noted that the primary objective was to reach agreement for a common EUR and NAT VACP to take effect as soon as feasible. The meeting of experts focused on the key issues in the main body of the document aiming at "closing the loop" and producing a close-to-final version to be reviewed by the full VATF. The meeting also agreed on a change management process for the common EUR and NAT VACP to ensure it would remain common in the future.

4.1.3 The EANPG noted that the outcome of the meeting was presented to COG/63 (13-16 October 2015) and to the 47th meeting of the North Atlantic Implementation Management Group (NAT IMG/47, 2-5 November 2015).

4.1.4 The EANPG noted the experts' meeting agreement that a vast amount of expertise had already been captured in the draft proposed common EUR and NAT VACP, and that the current format of the document was adequate for its purpose. It was noted that the experts' meeting addressed all the issues previously identified and reported by the 2015 EUR/NAT VATF members, and that the document was close to being an acceptable common document for both ICAO EUR and NAT Region. Nevertheless, some actions were still required to be finalised (including completing the content of some appendices and attachments). The EANPG also noted that the experts supported a configuration management process for the document.

4.1.5 The EANPG noted the guidance provided along with the agreed timeline to conclude the drafting process and finalise the common EUR and NAT VACP, and noted that a physical meeting of the full VATF initially planned on 7 December 2015, would take place in the beginning of 2016 (tentatively 11-12 February 2016), at the request of the NAT States not present the VATF expert's meeting.

4.1.6 The *Rapporteur* of the Volcanic Ash Task Force highlighted that the creation of an improved version of a Volcanic Ash Contingency Plan (VACP) for the EUR and NAT Regions was an opportunity to significantly reduce the high cost of a volcanic ash event to the airline industry, which was estimated for the 2010 event to 2 billion US \$. In the view of the *Rapporteur* this cost was largely due to the limited knowledge available and sub-optimal contingency procedures in place at that time. In that respect, the *Rapporteur* recalled that State letters 2015/36 (on State Emergency Response Plans for Natural Disasters) and 2015/46 (PfA for Annex 19 proposing new Recommended Practices in paragraph 3.2.6 on State Emergency Response Planning) supported the integrating approach taken by the COG's drafting team in developing a draft for a VACP that included all members of the ATM community, going beyond the IVATF-developed template for an ATM contingency plan.

4.1.7 Following the meeting of VACP experts held on 14 September some ambiguity existed about the exact version of some elements of the VACP body text and the procedure to be followed. This ambiguity was clarified offline during the EANPG meeting. In this respect it was confirmed by the EANPG Chairman (who also co-chaired the Experts' Meeting) that Attachment C of EANPG/57-IP16 constituted the agreed process to be followed with the amendment that the next full 2015 EURNAT VATF meeting should be held in February 2016. The *Rapporteur* highlighted that the EANPG members would be requested to approve the final version of the VACP (including all Appendices and Attachments) by correspondence following agreement by the task force.

Contingency Planning for Nuclear Events

4.1.8 The EANPG was informed on the outcomes of the exercise of the network-wide response in case of a nuclear emergency in Europe (NUCLEAR14) led by the Network Manager (NM) and the European Aviation Crisis Coordination Cell (EACCC). This exercise was conducted from 19 to 20 November 2014 and was based around the accidental release of nuclear material in the atmosphere originating from a fictitious nuclear power plant located in Poland. Nuclear contamination impacted airports and airspace of Poland, France, Belgium, Netherlands, Germany, Italy, FYROM, Romania, Bulgaria, Malta, United Kingdom, Serbia, Slovenia, Croatia, Montenegro, Switzerland, Czech Republic, Bosnia-Herzegovina and Austria.

4.1.9 Specifically, the exercise demonstrated that there were shortcomings in information and information flow as well as decision making criteria. The following main recommendations included:

- Recommended action 1: develop a comprehensive Concept of Operations for ATM in case of a nuclear disaster, in particular regarding information flows and decision making criteria, including radiological parameters for nuclear contamination of airspace and ground level;
- Recommended action 2: develop contamination charts linked to decision making criteria that can be used to support Airspace user and ANSP decision making;
- Recommended action 3: mandate expert organizations (i.e. Regional Specialized Meteorological Centres (RSMC)) to produce the contamination charts as per recommendation 2 and provide them to all stakeholders (including NM) as per the changed information flow in recommendation 1;
- Recommended action 4: develop a guidance to compose the SIGMETs for nuclear contaminated airspace;
- Recommended action 6: define acceptable threshold values and procedures for radioactive contaminated airframes on both health and technical aspects (including aircraft engine); and
- Recommended action 7: decontamination procedures shall include the levels at which the airline can perform the decontamination with their existing tools and processes, and at which level help from National Authorities should be sought.

4.1.10 In short, outcomes of NUCLEAR14 produced two basic questions: ‘where is the released nuclear material in the airspace?’ and ‘is it safe to fly?’

4.1.11 The EANPG noted that the first meeting of the Working Group Meteorological Information System Development of the MET Panel (METP/WG-MISD) held in Washington D.C. from 17 to 20 November 2015 discussed the outcomes of NUCLEAR14. The METP/WG-MISD agreed at this meeting on the finalization of the Nuclear Concept of Operations and initial guidance to support the full implementation of Nuclear SIGMET as well as the provisions of other relevant nuclear contamination information and how to use this information in an operational context. These activities would need to be completed by October 2016 for discussion and approval by the relevant ICAO bodies in order for these provisions to be available by November 2018.

4.1.12 To address the European regional needs identified by NUCLEAR14, the METP/WG-MISD agreed that the Nuclear Concept of Operations and initial guidance could be made available to European Members of the MET Panel for use in a European Aviation Crisis Coordination Cell (EACCC) context at the same time it would be made available to the MET Panel for approval (October 2016). This material would be available to European stakeholders on a trial-basis. This could also contribute to the development of an ATM Contingency Plan for a Nuclear Event (EANPG COG Conclusion 50/07 and NAT SPG Conclusion 47/07 refers). In addition, the following EUR Regional needs as identified by NUCLEAR14 would be considered by the METP/WG-MISD:

- Develop contamination charts and request the WMO Expert Team on Emergency Response Activities (ET-ERA) to facilitate a pilot project on the provision of this 3D contamination information and provide a report to the ICAO;
- Provide guidance on Nuclear SIGMET; and
- Develop context for use by operational decision makers of the Contamination Charts and Nuclear SIGMETs including preliminary considerations on applicable thresholds for contamination (and potentially dosages).

4.1.13 Therefore, it was agreed to support the global developments related to provisions on information related to a nuclear event for international civil aviation noting that provisions being developed would be available in trial mode to European stakeholders in October 2016. These provisions, however, would need to be vetted by MET Panel and ANC and therefore it was suggested that the activities of the MET Panel on the subject would be monitored closely. If the planned deliverables or progress on these deliverables change, the EANPG should reconsider the initial proposal to set-up a regional task force to progress the issue under EANPG control and therefore, the EANPG agreed to the following:

EANPG Conclusion 57/05 – Nuclear Event Follow-Up

That the ICAO Regional Director, Europe and North Atlantic, on behalf of the EANPG invite the Director General EUROCONTROL to:

- a) monitor the global progress on developing provisions in support of improved information and improved guidance to enhance the readiness and appropriate response of all aviation stakeholders in case of a nuclear incident or accident; and
- b) inform the COG/65 and EANPG/58 on global progress and advise on any remedial action to be taken by the EANPG, when appropriate.

4.1.14 The EANPG acknowledged the position of IFALPA that considered this conclusion as unnecessary since EUROCONTROL and some EUR States were members of the METP/WG-MISD. In addition, ICAO RO-MET also would follow global developments. Nevertheless, no other member of the EANPG disagreed with the spirit of this conclusion.

Development and Approval of the European Regional Air Navigation Plan (EUR eANP)

4.1.15 The EANPG was presented with a comprehensive report on the work that had been carried out to populate and finalise the new Council-approved eANP templates (Volumes I, II and III) in order for Proposals for Amendment (PfA) to the *EUR Air Navigation Plan* (EUR eANP, Doc 7754) to be processed according to Council-approved procedures.

4.1.16 In follow up to EANPG Conclusion 56/02 (*Collection and Coordination of Data for population of European eANP*), it was reported that the ICAO EUR/NAT Office issued State Letters (EUR/NAT 15-0161.TEC of 11 March 2015 and EUR/NAT 15-0421.TEC of 17 August 2015 refer) inviting States to nominate ANP national Focal Point and to send updates to the Table AOP and Tables AIM in Volume II respectively. It was also reported that coordination with the European Commission, EUROCONTROL and other appropriate stakeholders also took place to agree on texts and tables in the two Volumes.

4.1.17 The EANPG recalled EANPG Conclusion 56/01 (*PfA of Volume I of European eANP*) which agreed that the PfA of Volume I be circulated without Tables ATM I-1 (*Flight Information Regions (FIR)/Upper Flight Information Regions (UIR) of the Region*) and SAR I-1 (*Search and Rescue Regions (SRR) of the Region*) on the understanding that the Secretariat would undertake to research and ensure that the last approved coordinates were included in the EUR eANP. Nonetheless, it was noted that Table GEN I-1 (*FIRs/UIRs of the ICAO EUR Region*), listing only the FIR/UIR names in Volume I, would be included. It was agreed that Table GEN I-1 would reflect the FIRs/UIRs approved by the ANP PfA procedure before December 2013. A footnote was inserted specifying this in paragraph 2.1 in Part I-General Planning Aspects (GEN) of Volume I. It was noted that in several instances, discrepancies between current States' AIP publications and the ANP approved FIR/UIR names would be highlighted for consideration by the ICAO Council, in view of the fact that they were not in accordance with the Annex 11 provisions concerning naming of FIRs.

4.1.18 In Volume II, Part I-General Planning Aspects (GEN), the EANPG was informed that following coordination with EUROCONTROL and the European Commission, specific regional arrangements concerning the Single European Sky (SES) and Functional Airspace Blocks (FAB) were described in paragraph 3, [*Specific Regional Requirements*] and a new Table GEN II-2 (*Functional Airspace Blocks (FAB) Arrangements*).

4.1.19 In response to reservations voiced by Turkey to Table GEN II-2, the Secretariat recalled the outcome of EANPG/51 (Paris, 1-3 December 2009) whereby the Secretariat had performed an analysis of the relevant EU legislation and ICAO provisions regarding the Single European Sky in general and of the implementation of FABs in particular. On the basis of the analysis that had been performed, the Secretariat had concluded that the establishment of FABs in accordance with the EU Regulations on the Single European Sky was not in itself subject to the process for amendment of ANPs. However, it was stressed that should changes to the FIR boundaries or to the facilities and services provided be required at a later stage, such changes might be subject to the ANP amendment procedure and should therefore be examined on a case-by-case basis (*EANPG/51 Report*, paragraphs 4.1.3 to 4.1.4 refer).

4.1.20 With regard to Tables AOP I-1 (*International Aerodromes required in the EUR Region*) in Volume I and AOP II-1 (*Requirements and Capacity Assessment*) in Volume II, it was highlighted that the AOP Tables formed the primary basis for the list of aerodromes in the entire eANP. All information related to the associated air navigation services (e.g. CNS and MET) should be made available in the specific sections of the eANP. Additionally, the spelling of all aerodromes in the eANP should be identical with those in *ICAO Location Indicators* (Doc 7910) to enable the appropriate links in the electronic database and to ensure accuracy of the data.

4.1.21 With regard to airspace management and optimization of traffic flows in the EUR Region in Part IV - Air Traffic Management (ATM), the EANPG was informed that appropriate text had been coordinated and agreed with EUROCONTROL for insertion in Volumes I and II in paragraph 3, [*Specific*

Regional Requirements]. In this respect, the EANPG noted that the European Route Network Improvement Plan (ERNIP) database, which records the airspace and ATS route projects developed within the framework of the EANPG Route Development Group-East (RDGE) and the EUROCONTROL Route Network Development Sub-Group (RNDSG), would serve as the repository of all airspace projects in the EUR Region, especially those over the high seas and agreed upon through regional air navigation agreements.

4.1.22 The EANPG was informed that the texts and tables of Parts V-Meteorology (MET) and VI-Aeronautical Information Management (AIM) of both Volumes I and II were reviewed and updated by States and the relevant EANPG and EUROCONTROL Subgroups. Further coordination with the European Commission had also taken place for updates to the text in Part VI-AIM.

4.1.23 With regard to outstanding actions to be completed before the circulation of the PfA to Volume I, the EANPG noted that the Russian Federation would provide input, by 12 December 2015, to paragraph 7 [*Establishment and provision of a multinational ICAO Air Navigation Facility/Service*] giving an example of multinational air navigation services established in the Eastern part of the ICAO EUR Region in Volume I, Part 0-Introduction and that explanations of acronyms used in the Table SAR II-1 (*Rescue Coordination Centres (RCCs) and Rescue Sub-centres (RSCs)*) in Volume II would be inserted in the "Explanations of the Table". Additionally, in Part III-Communications, Navigation and Surveillance (CNS) in Volume II, the URL links for Tables CNS II-1 (*AFTN Plan*) and CNS II-3 (*ATS Direct Speech Circuits Plan*) would be inserted. It was noted that the Tables CNS II-2 (*Required ATN Infrastructure Routing*) and CNS II-4 (*Required HF network designators*) had not been retained as they were not applicable for the EUR Region.

4.1.24 The EANPG agreed that the PfAs to Volumes I and II at **Appendix G** and **Appendix H** be circulated to all States and International Organisations and processed according to the Council approved procedures. The EANPG was informed that the PfA to Volume II would be circulated after the PfA to Volume I had been approved by the Council. In this respect, the EANPG noted that a tight timeline had been set by ICAO Headquarters to obtain Council approval of all Regional eANPs at its Spring Session in early 2016, so that States, International Organisations and the ICAO Secretariat could begin work from a commonly updated reference document as soon as possible.

EANPG Conclusion 57/06 – PfAs to Volumes I and II of the EUR eANP

That, the ICAO Regional Director, Europe and North Atlantic, undertake the necessary action to process the PfAs to Volume I and II of the EUR eANP, at **Appendix G** and **Appendix H** to this Report, in accordance with the procedure approved by the Council.

4.1.25 With regard to the EUR eANP Volume III, the EANPG was presented with an initial draft which took into account the planning and implementation progress for the agreed requirements detailed in Volume II and a new section to differentiate between implementation of Aviation System Block Upgrades (ASBU) Module elements and implementation of regional aviation system improvements not directly related to ASBU implementation.

4.1.26 The EANPG also noted that the *EUR ASBU Handbook* (Appendix A of Volume III) was proposed for adoption to assist in the application of the ASBU approach as detailed in the Fourth Edition of the *Global Air Navigation Plan* (GANP, Doc 9750). It was noted that the Handbook provided an outline of the ASBU Modules to the Element level and it was envisaged to provide the details necessary for States and regions to be able to correlate their plans with the ICAO ASBU planning framework. The detailed material had formed the basis of the Fourth Edition of the GANP presented at the 12th Air Navigation Conference (12th ANC, Montreal, 19-30 November 2012). This material was subsequently updated to incorporate the recommendations of the 12th ANC and is available as *The Aviation System Block Upgrades - ASBUs (Edition March 2013)* (ASBU Working Document) at the following links:

<http://www.icao.int/Meetings/anconf12/Pages/Aviation-System-Block-Upgrades.aspx>

and/or

<http://www.icao.int/sustainability/Documents/ASBU.en.Mar.%202013.pdf>

4.1.27 The EANPG also noted a proposed Analysis and Implementation Workflow and ASBU Implementation Status Tables. It was noted that the proposed format was aimed at facilitating the monitoring of regional ASBU implementation, harmonization and inter-regional coordination to achieve a seamless ATM by providing high level overviews of the status of ASBU Module *element* implementation in the EUR Region.

4.1.28 It was recognized that the proposed approach differed from the process that had been agreed at EANPG/55 (EANPG Conclusion 55/02 *Regional planning for ASBU Implementation* refers) for reporting of ASBU implementation in the EUR Region. In order to avoid duplication of efforts and confusion, the EANPG agreed that more work and coordination with all States and stakeholders concerned were required to finalise Volume III of EUR eANP and the *EUR ASBU Handbook* (Appendix A of Volume III), particularly to ensure appropriate mapping with the European ATM Master Plan, SESAR Operational Packages, European Single Sky Implementation (ESSIP) objectives and other regional initiatives, for approval at EANPG/58.

EANPG Conclusion 57/07 – First Draft of Volume III of the EUR eANP

That, the ICAO Regional Director, Europe and North Atlantic, in coordination with States, EUROCONTROL, European Commission, SESAR JU, SESAR DM, airspace users and other relevant stakeholders, finalise Volume III of EUR eANP and the *EUR ASBU Handbook* (Appendix A of Volume III) at **Appendix I** to this Report, for approval at EANPG/58.

4.1.29 The EANPG also noted that a number of suggested improvements to the Council-approved templates had been identified. Most of the suggested improvements were to provide consistency between Volumes, between different parts of the same Volume and between paragraphs dealing with the same or similar subjects. It was noted that after the initial versions of the ANPs of all Regions had been approved, the eANP working group (eANP WG), composed of representatives from each ICAO Regional Office and ICAO Headquarters, which had developed the initial Council-approved templates, would make a post-implementation review and consolidate all suggested improvements in 2017. The revised version would be processed formally as updated templates of the eANP for the approval of the ICAO Council. The EANPG was informed that any additional suggested improvements to the Council-approved templates could be submitted to the ICAO Secretariat by COG/65 in May 2016 in order for a consolidated version to be presented to EANPG/58 for endorsement.

eANP Development

4.1.30 The EANPG was presented with information on the transition from the current versions of the *Basic Air Navigation Plan* (Basic ANP) and the *Facilities and Services Implementation Document* (FASID) to the electronic versions of the new *Regional Air Navigation Plans* (eANP). The EANPG noted that, upon approval, the English versions of all new eANPs would be posted in the ICAO Secure Portal in the group “SPACE” under the application “ANP”. Instructions on how to access the group “SPACE” was also provided.

Proposal for Amendment to ICAO PANS-ATM and PANS OPS related to Responsibility for Terrain/Obstacle Clearance

4.1.31 In follow-up to the EANPG Conclusion 56/26 [*Cold temperature correction*] and EANPG Decision 56/05 [*PfAs to ICAO Docs 4444 and 8168*], EUROCONTROL presented the EANPG with a progress report on work on-going to improve the application of Cold Temperature Correction (CTC) procedures through the development of guidelines and tools to support a common, harmonised determination and application of the CTC to minimum flight altitudes by ATS.

4.1.32 The EANPG reviewed the proposed changes to the provisions related to altimetry corrections to minimum altitudes to compensate for the effect of cold temperatures in the ICAO Doc 4444 (PANS-ATM) and Doc 8168 (PANS-OPS). The application of corrections to altimetry to compensate for the

effect of cold temperature was closely related to the responsibility for obstacle and terrain clearance. In as much as harmonised methods for the determination of the necessary cold temperature corrections could be promoted, an essential role was played by a common understanding of the circumstances and the responsibility for applying such corrections

4.1.33 The EANPG took note of the detailed proposed changes to PANS-ATM and PANS-OPS which were jointly developed with representatives from IFALPA. These changes did not include an IFALPA proposal calling to apply altimeter corrections due to low temperatures when the corrections exceeds 10% of the Minimum Obstacle Clearance (MOC), versus the current provisions establishing this threshold at 20%. In the IFALPA's opinion, the 20% threshold could result in an excessive erosion of safety.

4.1.34 As no agreement could be reached with regards to the application of 10% or 20% cent MOC, the EANPG agreed to the EUROCONTROL recommendation to submit these considerations, as part of the change proposals, to the ICAO global groups having competencies in the design of instrument flight procedures and determination of minimum flight altitudes and operations of aircraft, for final clarifications (including clear responsibilities and the tasks of the ATC and flight crew with regards the terrain/obstacle clearance as well as the application of cold temperature corrections).

4.1.35 Therefore the EANPG agreed to the following:

EANPG Conclusion 57/08 – Proposal for amendment to ICAO PANS-ATM and PANS-OPS related to Responsibility for Terrain/Obstacle Clearance and Cold Temperature Correction

That, the ICAO Regional Director, Europe and North Atlantic, on behalf of the EANPG undertake the necessary action to bring to the attention of the appropriate ICAO global groups the MOC considerations and the proposed amendments to ICAO PANS-ATM (Doc 4444) and ICAO PANS-OPS (Doc 8168) Volume I – *Flight Procedures*, detailed in **Appendices J and K** to this report

Proposal for Amendment to ICAO DOC 4444 related to Level in Traffic Information

4.1.36 The EANPG noted the results of an analysis conducted by EUROCONTROL to analyse several level bust occurrences which identified that pilots sometimes misinterpret the flight level or altitude they receive in traffic information as an instruction to climb/descend to the stated level, leading to unexpected and undesirable manoeuvring of the aircraft.

4.1.37 A survey was conducted to identify if and how the various air navigation service providers had addressed the identified safety risk. The survey showed that, in operations (sometimes also documented in local instructions) controllers routinely pass the vertical element in the traffic information in form of number of feet above or below the aircraft receiving the traffic information, rather than use flight level, altitude or height as it was required by ICAO Doc 4444, PANS-ATM.

4.1.38 Considering the widespread use of such a practice, the EANPG supported the EUROCONTROL proposal to pass level information in the form of relative vertical position/movement. The EANPG agreed to accommodate the option to pass level information in relative terms (as indicated in the proposed changes for ICAO Doc 4444, PANS-ATM, paragraphs 5.4.2, 8.8.2, 12.3.1.1 and 12.4.1.8) and the following conclusion was adopted:

EANPG Conclusion 57/09 – Proposal for Amendment to ICAO PANS-ATM related to Level in Traffic Information

That, the ICAO Regional Director, Europe and North Atlantic, on behalf of the EANPG undertake the necessary action to bring to the attention of the appropriate ICAO global group the proposed amendment to ICAO PANS-ATM (Doc 4444), as detailed in **Appendix L** to this report.

ATS Reporting Office Functions, Submission and Acceptance of Flight Plans, and Flights through Intermediate Stops

4.1.39 The EANPG discussed proposals for amendments to Annex 2 and PANS/ATM presented by EUROCONTROL addressing a number of issues.

4.1.40 Given the current context of ATM, with multiple technical options for submitting flight intentions to ATS, the EANPG considered as necessary to ensure a common, harmonised understanding of ICAO Annex 2 requirements for submitting a flight plan to an *ATS reporting office* (Annex 2 paragraph 3.3.1.3 refers). It was noted that the use of the term “ATS reporting office” was perceived as a requirement to establish a physical entity performing the respective functions. However, the EANPG was of the view that ICAO SARPs and PANS in this context did not refer to physical entities but to functions to be performed, and therefore that Annex 2 provisions should be complemented with additional guidelines to build this common understanding.

4.1.41 The EANPG agreed to the amendment proposal to Annex 2, presented at Appendix A to WP/20.

4.1.42 Considering that, in accordance with Annex 15 – *Aeronautical Information Service*, the requirements relating to the submission of flight plans must be promulgated in the national Aeronautical Information Publication (AIP), the EANPG agreed that the approved method by which a flight plan could also be submitted should be indicated in the aeronautical information publication (AIP), and therefore supported the proposal regarding para 4.4.2 to PANS-ATM (first part of Appendix B to WP/20) for amendment to PANS-ATM to that effect.

4.1.43 Another issue addressed by the EUROCONTROL paper was related to the difficulties encountered to obtain information from Item 19 – *Supplementary Information*, which included data such as endurance, POB and emergency equipment carried, all required and important to the search and rescue (SAR) services. This issue was recognized in particular by the 2014 ICAO High Level Safety Conference (HLSC), and was also highlighted in the Concept of Operations to Enhance Global Flight Tracking (ICAO HLSC/15-WP/2, page 30):

"2.4.4 Another consideration is the current lack of the ability for ATSUs/RCCs to reach the aircraft operator's staff e.g. the flight Operations Centre (FOC). The only addressing information normally possessed is the AFTN address from which the aircraft's flight plan originated; messages to that address frequently go unanswered. This may have concrete adverse consequences (inability to retrieve supplementary safety information for the flight) but also greatly restricts the ability for operational consultations between air traffic controllers, RCC coordinators and airline operations staff."

4.1.44 The EANPG acknowledged that the processes for submitting flight plans were developed decades ago. The system was primarily based on the utilization of a flight plan form – as per PANS – ATM, Appendix 2 – to be completed and submitted to an ATS Reporting Office (ARO). The ARO officer was then responsible to verify the correctness of the information provided, its compliance with the format and data conventions, its completeness and accuracy and, last but not least, its acceptability to ATS. Subsequently, the items in fields 1 to 18 were disseminated to all ATS units concerned and the flight crew would be informed that their intentions were acceptable to ATS. The rest of the information in the remaining items would be stored (supplementary flight plan) at the ARO and it would be provided at the request from an ATS unit having an operational need of that information.

4.1.45 It was assumed – considering the organizations of the ATS services - that such information would be available or retrievable at all times. However:

- a) it was recorded in some cases that the Item 19 information was not available H24 for the reason that it had been queried outside the working hours of the entity storing the information;
- b) the emergence of new communication technologies, in particular the connectivity of Internet with AFTN nodes, permitted the development of applications that could further automate the submissions for flight plan forms and the dissemination of the filed flight plans. It has been documented that, in some cases, such alternatives were not fully compliant with the requirements to provide timely access to supplementary flight plan information.

4.1.46 The solutions to this issue were of a global nature, and the EANPG was of the opinion that ICAO should develop global provisions to address the above mentioned issue, and include it in its work programme accordingly. The EANPG considered that the proposal for amendment to the PANS-ATM as reflected in the second part of appendix B to working paper 20 was not considered to be sufficiently mature, although it recognized the need for ICAO to finding a solution in order to ensure timely access to flight plan Item 19 information.

4.1.47 Therefore the EANPG agreed to the following:

EANPG Conclusion 57/10 – ATS Reporting Office Functions, Submission and Acceptance of Flight Plans, and Flights through Intermediate Stops

That, the ICAO Regional Director, Europe and North Atlantic, on behalf of the EANPG undertake the necessary action to bring to the attention of the appropriate ICAO global groups:

- a) the proposed amendment to ICAO Annex 2, *Rules of the Air*, and Doc 4444, *Procedures for Air Navigation Services – Air Traffic Management*, as detailed in **Appendices M** and **N** to this report.
- b) the need to develop global provisions in order to ensure timely access to flight plan Item 19 information.

Compliance with the documents related to aeronautical meteorological services in the Russian Federation

4.1.48 The EANPG noted the implementation of MET Services for international civil aviation in the Russian Federation and in particular to the following accomplishments:

- Implemented QMS in May 2011;
- Established the Institute of Aeronautical Meteorological Subdivisions Inspection in October 2011
 - Updated Federal Aviation Regulations – Provided Meteorological Information for Flight Operations Support (Ministry of Transport order No. 60 dated 3 March 2014) and Ministry of Natural Resources and Roshydromet regulatory documents with current ICAO/WMO provisions
 - Implemented in 2015
- Implemented Aeronautical Meteorological Personnel (AMP) Competency Assessment in accordance to WMO provisions in 2013;
- Developed instructional material related to SIGMET and AIRMET; METAR and SPECI and TAF codes; and GAMET weather forecasts format;

- Developed WMO-format headings for AIREP and GAMET bulletins;
- Currently improving software and measuring systems for aerodrome meteorological information for 70 aerodromes;
- Conducted 3 volcanic ash exercises called VOLKAM/13,14,15 from 2013-2015
 - ATM measures in such events were developed and being refined
 - Dissemination of special air-reports on volcanic ash developed and succeeded
 - Coordination amongst all stakeholders developed and teleconferences conducted
- Conducted joint meeting of Meteorological Services for Civil Aviation of the Interstate Council for Hydrometeorology (WG-4 ICH CIS) and Project Group on ICAO SARPs implementation in Eastern Europe, including Central Asia (PT/EAST of METG) in Sochi in April 2015;
- Conducted an international seminar on Flight Safety System Control in Meteorological Respect which included WMO and ICAO in St. Petersburg in September 2015;
- Provided report on sub regional activities related to METG, PT/EAST and EANPG coordination as well as Working Group on Aviation Meteorology of the CIS-States Interstate Council for Hydrometeorology at the European Conference on Meteorology for Aviation (ECMA-2015) in Vienna in October 2015.

4.2 INPUT FROM THE CONTRIBUTORY BODIES

Implementation of the Regional Performance Framework

4.2.1 The EANPG was presented with an update of the work of the COG Performance Task Force and in particular the activities related to the implementation of the ICAO EUR Region Performance Framework. In response to the two ICAO State Letters related to the development and implementation of the ICAO EUR Regional Performance Framework, it was noted that only 21 States had provided replies to the questionnaire, mainly reflecting the European area (only Israel and Russian Federation outside the EU/EUROCONTROL area responded to the letters). After the extension of the deadline one additional State returned the questionnaire (Portugal) and Hungary provided a further reply, resulting in a total of 23 responding States.

4.2.2 The EANPG recalled that the main aim of the questionnaire was to involve States in the Eastern part of the Region as well as States in Northern Africa. The questionnaire was designed to identify difficulties in the availability of data and obstacles in the implementation of the performance framework. Despite a number of additional activities (presentations at ATMGE meetings, ATM2020 Symposium and discussions during various State support missions) performed by the Secretariat and the Performance Task Force in order to raise awareness and to provide information and clarifications in the Region the responses remained still low (50%).

4.2.3 The key aspects were the difficulties in the launch of the implementation phase (very low responses from States on the nomination of focal points, data collection delays, data provision uncertainties for States under the EU Performance Scheme), the promotion of the regional performance framework and the commitment of all States in the EUR Region to actively participate in this framework.

4.2.4 The EANPG recognized that, despite all efforts, it was not possible to present a first regional performance report to EANPG/57 due to the difficulties in the launch of the performance framework implementation. The EANPG concurred that the activities aimed at supporting a wide participation of States in the implementation of the regional performance framework should continue and agreed to the following:

EANPG Conclusion 57/11 – Implementation of the ICAO EUR Region Performance Framework

That the ICAO Regional Director, Europe and North Atlantic, on behalf of the EANPG:

- a) urge States concerned to provide by 31 December 2015 their replies to the questionnaire prepared by the COG Performance Task Force;
- b) continue to promote the regional framework through State Support Missions that are planned in the Central-Asia Area and the Mediterranean Area of the EUR Region;
- c) request States to provide performance results according to ICAO EUR Doc 030 provisions, in order to have a first regional report presented at EANPG/58 in 2016.

4.2.5 With reference to the global activities aimed at defining performance metrics and indicators for global use, the EANPG noted that ICAO HQ was working on a more developed performance chapter in the draft revised Global Air Navigation Plan (GANP 2016). There was still confusion (at global and regional level) in the performance domain due to the different use of the term “performance” and “KPIs/KPAs”, as either indicators that would measure the performance of the air navigation system or as indicators that would measure the activities related to the implementation of the ASBU modules. The new GANP was expected to contain a list of potential Key Performance Indicators (KPIs). It was also expected that the new version of the GANP would build on existing practices and that the KPIs from the EUR Doc 030 would be included into the new performance chapter. The EANPG noted that the COG PERF TF would assess this alignment as soon as the new GANP would become available next year.

Outcome of the Twenty-First Meeting of the All-Weather Operations Group (AWOG/21)

4.2.6 The EANPG was presented with the results from the work of the All-Weather Operations Group of the European Air Navigation Planning Group, which took place in the European and North Atlantic (EUR/NAT) Office of ICAO from 2 to 3 September 2015 and attended by 19 experts from 8 States and 6 International Organizations. The AWOG/21 reviewed and discussed latest significant developments from ICAO and EUROCONTROL in the areas of GBAS, LATO and SESAR GBAS projects.

4.2.7 In addition EASA presented an overview on the proposed rulemaking task RMT.0379 related to Low Visibility Operations (LVO), Performance-Based Navigation (PBN) and Air Operations. It was also highlighted that AWO has an impact in all aviation domains, namely Airworthiness, Air operations, Flight crew training, Aerodromes, Air Traffic Management/Air Navigation Services and ATCO training. EASA will assure that the ICAO EUR Doc 013, as well as the relevant parts of the (All Weather Operations Manual) Doc 9365, be considered in the process of this rulemaking task development.

4.2.8 The EANPG noted that the Navigation System Panel has finalized the long required update of the ICAO Annex 10 guidance material on ILS Critical and Sensitive Areas (CSA). This new version of the Annex 10 CSA Guidance Material (which includes now New Large Aircraft) solved the inconsistencies in the Glide Path CAS examples, integrated the latest avionics developments and addressed the operational and technical trade-offs. The increased number of new large aircraft operations in Europe had already triggered the challenges to make the new aircraft category/sizes consistent with the old/existing material. Therefore AWOG proposed to publish the technically correct material (which did not diverge significantly from operational practices that had been established in States) at an earlier stage and to prepare a more detailed (in terms of explanations) interim material before the next AWOG/22 meeting.

4.2.9 The EANPG took note of the new version of the ICAO EUR Doc 015 (European Guidance Material on managing building restricted areas, 3rd edition) which was developed by PT/BRA and which was adopted at the last COG/63 meeting in October 2015. It was also noted, that due to the complexity of the technical matters and divergence on how States apply step 2 provisions, the new Doc 015 would not include step 2 guidance material for ICAO EUR Doc 015 as this guidance material would need to address/include all building types, all Navigation Aids, Surveillance Systems and Communication Facilities, and all types of operations.

4.2.10 The EANPG was also informed about the activities of the other AWOG Project Teams. The ICAO EUR Doc 013 update was postponed to the AWOG/22 meeting, as the PT/AWO found a number of inconsistencies between ICAO EUR Doc 013, the Draft ICAO All Weather Operations Manual, PANS-ATM, and European Air Operations and Aerodrome Regulations. The EANPG was informed that, due to the fact that there had been no significant changes to the last version of the EUR Doc 017 TKI (Identified Transition Key Issues for the introduction and application of non-visual aids to all-weather operations in the European Region of ICAO, 4th edition, September 2013) which was published after the EANPG/55, the AWOG agreed to have the next update of this document for the AWOG/22 meeting, which was tentatively scheduled from 7 to 8 September 2016.

4.2.11 The EANPG noted the AWOG work programme and addressed the lack of support to the work of AWOG. States and International Organisations were invited to provide the necessary resources in order to ensure the successful continuation of the AWOG work. As a result of the EANPG discussions, EUROCONTROL nominated Mr. Andreas Lipp, from the EUROCONTROL EEC (and a long-term AWOG member) as a candidate for the AWOG chairperson.

Outcome of the Twenty-First Meeting of Frequency Management Group (FMG/21)

Use of SAFIRE

4.2.12 EANPG/57 recalled its Conclusion 50/20 that had mandated the use of SAFIRE in the EUR Region for COM 2 assignments and agreed it was timely to extend the scope of this Conclusion to mandate the use of SAFIRE for COM 3 and COM 4 tables as well. EANPG/57 also invited those EUR States that have not yet nominated focal points for frequency coordination matters and the use of SAFIRE to address this issue as soon as possible.

4.2.13 In addition, EANPG/57 was informed on the need for real-time frequency coordination between the SAFIRE users and non-SAFIRE users within the EUR and with the States outside EUR that was imposing additional workload on the already limited resources of ICAO EUR/NAT Office. Taking the number of routinely exchanged messages through SAFIRE, it was unreasonable to expect that the ICAO EUR/NAT Office would be in a position to support this work.

4.2.14 It was noted that this issue would likely disappear when the global ICAO frequencies assignment table would be established and a mechanism implemented to allow regular synchronization of the SAFIRE database with the ICAO global database. The availability of the regularly synchronized data should allow the EUR States to identify and mitigate potential incompatibilities and interference in the early stages of frequency coordination. Reciprocally, the ICAO Regional Offices in the other ICAO Regions would have the regularly updated EUR information through the ICAO global table.

4.2.15 However, until the afore-mentioned table and mechanisms were implemented, some interim contingency measures were required to minimize risks of incompatibility and interference while not imposing unreasonable workload on the ICAO EUR/NAT Secretariat. In this respect, it was noted that an automatic dissemination of selected coordination messages for selected groups of States was implemented in the SAFIRE system. By means of this dissemination the ICAO MID and AFI Regional Offices were informed about ongoing coordination within the EUR Region that potentially could have impact on the frequency assignments in their Regions. The EUR Region was also providing the latest versions of the EUR COM Tables to keep the draft global ICAO table up-to-date, thus allowing all other Regional Offices to obtain the updated information.

4.2.16 EANPG/57 also noted that the experience accumulated in the EUR Region on the use of the advanced frequency planning and coordination tools and database (SAFIRE and AFM) demonstrated the great potentials these tools could provide. Therefore, the EANPG invited EUROCONTROL to consider whether these tools, in particular SAFIRE, could be made available for the States adjacent to the EUR Region and potentially for eventual global use.

4.2.17 In view of the above, the EANPG agreed the following:

EANPG Conclusion 57/12 – Use of SAFIRE as the Unique Means of Frequency Assignment Coordination

That, the ICAO Regional Director, Europe and North Atlantic:

- a) inform States that starting on 1 January 2016, the on-line system SAFIRE will be used as the only means of frequency assignments coordination and registration for COM2, COM3, COM4 Tables in the ICAO EUR Region;
- b) invite Kazakhstan, Kyrgyzstan, the Russian Federation, Tajikistan and Turkmenistan to nominate focal points for frequency coordination matters and consider the regular participation of their representatives in the EANPG FMG activities; and
- c) invite EUROCONTROL to consider making available the EUR frequency management tools (SAFIRE and AFM) for the EUR adjacent Regions and eventual global use.

EANPG Decision 57/01 – Frequency Assignments Compliance

That,

- a) FMG is tasked to monitor the usage of the SAFIRE tool amongst the ICAO EUR Provider States and reports regularly to EANPG; and
- b) Until global ICAO frequency assignments table and the mechanism for regular synchronization of EUR Region and global frequency assignments data are implemented, the coordination with non-SAFIRE user-States should be conducted through automatic dissemination of email message from SAFIRE to the ICAO Regional Offices.

VDL sub-band reallocation programme

4.2.18 EANPG/57 recalled that the EU data link regulation (29/2009, amended by regulation 310/2015) mandated the deployment of the Controller Pilot Data link Communication (CPDLC) service over ATN/VDL Mode 2. Accordingly, ground systems had been installed to support air-ground applications as defined in the ICAO standards. The fleet of equipped aircraft increased quickly. However, the resulting use of the CSC 136.975 MHz, shared between all users including airline operational data and air traffic control data, contributed to performance issues, mainly observed in areas with a significant number of VDL stations being operational. The observed level of provider aborts (i.e. a sustained loss of ATN connectivity greater than 6 minutes leading to loss of CPDLC communication between controller and pilot) significantly exceeded the threshold considered acceptable for operational use.

4.2.19 Despite several corrections to the airborne and ground systems since 2008, the network was far from meeting its performance target. The EASA report¹, issued in April 2014, provided an analysis of the issues, as well as a number of specific recommendations to improve the situation. The need for multiple VDL frequencies and an optimized RF environment were two key recommendations. Following the findings of the EASA Report, the EC requested the SESAR JU to initiate VDL Mode 2 capacity and measurement analysis projects, as follows:

- a) The *capacity study* (led by ENAV in consortium with DFS, ENAIRE, LFV, DSNA, SITA and University of Salzburg) to address the capacity and performance of VDL Mode 2 in

¹ EASA Report - Technical issues in the implementation of Regulation (EC) No 29/2009 (Data Link); http://ec.europa.eu/transport/modes/air/single_european_sky/doc/implementing_rules/2014-04-23-easa-datalink-report.pdf

support of the implementation of data link services including the capability of multi-frequency.

- b) The VDL Mode 2 *measurement study* (led by NATS together with Airbus, ENAV, Altys, in consortium with Boeing, SITA and ARINC) to address three various work areas such as VDL performance analysis (WA1), multi-frequency options modelling and testing (WA2), as well as RF level modelling and testing (WA3).

4.2.20 EANPG/57 noted that the first results of the above-mentioned studies have been finalized in the 3rd quarter of 2015 and the rest would be made available during the summer of 2016.

4.2.21 EANPG/57 noted that several States emphasized the urgency of reviewing the data link allotment plan as they had pending requests from communications service providers for assigning a dedicated frequency for aerodrome, terminal and en-route use. These States were ready to proceed with temporary assignments under the condition that any such use should not prevent the implementation of a revised EUR VDL frequency sub-band allotment plan. Also, in accordance with the current data link plan, ACARS assignments on 136.725 MHz and 136.750 MHz would expire in 2016 and guidance on the transition from ACARS to VDL Mode 2 on these channels was required.

4.2.22 In order to address the above-mentioned issues, the EANPG agreed to the following:

EANPG Conclusion 57/13 – EUR VDL Sub-Band Usage

That:

- a) The Final Goal of the revised data link allotment plan as provided at **Appendix O** to this report is approved as an aspirational goal; and
- b) the ICAO Regional Director, Europe and North Atlantic, invite States, ARINC and SITA to start off-loading data traffic as early as possible the common signalling channel (CSC) 136.975 MHz by using the second VDL Mode 2 frequency 136.875 MHz, in accordance with the Transition Step 1 of the revised data link allotment plan.

EANPG Decision 57/02 – EUR Data Link Allotment Plan

That the FMG is tasked to:

- a) develop the final version of the EUR data link allotment plan, taking into consideration the outcome of the relevant SJU studies and addressing the eventual ACARS sunset dates; and
- b) present the final version of the EUR data link allotment plan for the endorsement of EANPG/58.

4.2.23 Furthermore, EANPG/57 noted several issues related to VDL Mode 4 frequency assignments in the EUR Region that due to the ongoing uncertainty of VDL Mode 4 deployment in the EUR was a subject of concern. It was noted that currently all systems operating in the 112-117.975 MHz band were ground-based navigation aids and no transmissions were taking place from the aircraft. There was the potential for aircraft-based VDL Mode 4 transmissions to cause interference to users of these existing ground-based navigation aids, such as VOR and GBAS including their ground monitors, unless a capability would be provided to prohibit unintended aircraft transmission outside of a VDL Mode 4 designated operational coverage.

4.2.24 With regards to operational considerations relating to VDL Mode 4 assignments in the band 112-117.975 MHz and to alleviate concerns about operating VDL Mode 4 equipment in the band and the potential for harmful interference to the use of existing navigation aids, it was noted that clarifications from the system design authorities and potential service providers were needed. In view of the above, it was

agreed that no VDL Mode 4 frequencies should be assigned VHF NAV band 108 – 117.975 MHz until the above mentioned issues would be clarified. Furthermore, the EANPG noted that the existing VDL related provisions of EUR Doc 7030 were obsolete and needed to be updated. Therefore, the EANPG agreed the following:

EANPG Conclusion 57/14 – Use of VDL Frequency Assignments in the EUR

That the ICAO Regional Director, Europe and North Atlantic, take appropriate actions to process the proposal for amendment to EUR SUPPS (Doc 7030) as provided in **Appendix P** to this report.

CNS tables of EUR eANP

4.2.25 EANPG/57 was presented with a proposal to discontinue CNS 2, 3 and 4a Tables of the EUR ANP due to the fact that they largely contained the same information as COM 2, 3 and 4 Tables, maintained through the online SAFIRE database. Therefore, the EANPG agreed the following:

EANPG Conclusion 57/15 – Discontinuation of CNS 2, CNS 3 and CNS 4a Tables

That Supplement Tables CNS 2, CNS 3 and CNS 4a of the EUR ANP shall be discontinued with immediate effect and not referenced in the new EUR eANP.

Performance Based Navigation Issues

Status of the Assembly Resolution 37-11 implementation

4.2.26 The EANPG recalled that the EUR PBN task force monitors the status of PBN implementation in the EUR using the EUR ANP Table CNS4b and PBN implementation plans status table (**Appendix Q and R refer**)

4.2.27 The EANPG noted that 23 EUR States confirmed the availability of a national PBN plan, 27 had work in progress and 6 provided no information. Overall, the EUR Region was in compliance with the Assembly Resolution 37-11 on PBN implementation for en-route and terminal airspace operations, where applicable. With regards to PBN for approach, the current percentage is 35,7% for all instrument runway ends. By 2018 this number was anticipated to reach 62%.

4.2.28 The EANPG, while acknowledging that this was not in compliance with the Assembly Resolution target, noted that this expected timeline was in general better aligned with the timelines of the ICAO Global ANP ASBU Block 0-APTA. The EANPG noted that a very robust progress was made in the recent years in the EUR on PBN implementation by collective efforts of States, industry and supported by International Organisations. A series of PBN support workshops and PBN implementation assistance missions were conducted in cooperation between ICAO, EUROCONTROL and industry in the last 3 years that had an important influence to boost the implementation of PBN. The EANPG agreed that it was important not to lose this momentum and continue with the implementation of PBN. In this respect, the following COG conclusion was recalled:

COG Conclusion 62/12 – Timelines of the Assembly Resolution 37-11

That the ICAO Regional Director, Europe and North Atlantic, advise the appropriate bodies in ICAO on the need to align the Assembly Resolution 37-11 timelines with the timeline of the GANP ASBU Module B0-APTA (2018) for all relevant international aerodromes as listed in the AOP Tables of the regional ANPs and consider the EUR RNP APCH prioritization as agreed by EANPG Statement 55/01.

4.2.29 In addition, the EANPG recalled its Statement 55/01 on prioritization of RNP APCH implementation recalled that was setting the EUR priorities as a) implement at instrument runways served only by procedures based on NDB, b) as replacements to all non-precision approach procedures, and c) implement as a back up to precision approaches procedures. It is also noted that if the scope of implementation for monitoring was limited to international aerodromes as declared in the EUR ANP AOP Table, then the percentage would be higher.

4.2.30 Therefore, the EANPG agreed to the following:

EANPG Conclusion 57/16 – Completion of the National PBN Implementation Plans

That the ICAO Regional Director, Europe and North Atlantic:

- a) Urge Kyrgyzstan, Tajikistan, the former Yugoslav Republic of Macedonia and Turkmenistan to provide information on the status of the development of the national PBN implementation plans in accordance with ICAO Assembly Resolution 37-11;
- b) Invite all States that have not yet provided their national PBN implementation plans (**Appendix Q** refers) to urgently complete them and inform the ICAO EUR/NAT Office.

4.2.31 The EANPG was also informed that in line with the EANPG Conclusion 56/10 a workshop was held on 6-10 April 2015 in Minsk, Belarus. The objectives of the workshop were to support implementation of PBN and PANS-OPS provisions, share best practices on implementation of PANS-OPS oversight arrangements and discuss solutions to better use available resources and promote cooperation between States on PBN oversight issues. The workshop was attended by about 80 participants from 16 States. The main outcomes and recommendations of the workshop were the following:

- a) There were different approaches to PBN (PANS-OPS in particular) oversight in the EUR. Further sharing of best practices and harmonization of approaches to PANS-OPS oversight is necessary;
- b) Create a regional bank of expertise for mentoring on PBN issues. A number of volunteers were identified;
- c) Agreements between States on delegation of some of PANS-OPS oversight responsibilities were promoted. This initiative could be part of the above-mentioned bank of expertise proposal. Some States have indicated their readiness to provide such services;
- d) Data houses (Jeppesen) proposed to work on a continuing basis with the PANS-OPS providers prior to AIP publications to avoid potential issues at the following phases of navigation database coding. This proposal could be integrated as part of the proposed bank of expertise;
- e) The draft ICAO guidance material for PANS-OPS inspectorate and on GNSS monitoring and recording was noted and supported;
- f) The expected amendments to ICAO Manual on fuel planning in connection with operations on point merge procedures was noted and supported.

4.2.32 The EANPG noted that the weaknesses in the PBN oversight related to ANS oversight and approval of aircraft operators have been identified as important hurdles to PBN implementation. The ICAO 2nd HLSC has also emphasised the need for ICAO to develop a clear overview of the different regulatory oversight requirements, functionalities and activities necessary for an effective PBN implementation. In this respect, the following COG Decision was recalled:

COG Decision 62/03 – PANS-OPS Oversight

That the ICAO EUR PBN TF, taking due account of the provisions of the ICAO SL 2015/22, be tasked to:

- a) *review and provide comments to the draft ICAO guidance material for PANS-OPS inspectorate;*
- b) *develop a training programme for PANS-OPS inspectors;*
- c) *establish a PBN mentoring forum on the ICAO EUR/NAT portal and identify volunteers from States and industry to provide expert support;*
- d) *promote the EANPG approved EUR Memorandum of Cooperation on sharing of PANS-OPS resources (EANPG Conclusion 55/14 refers); and*
- e) *organize an EUR PBN Symposium in the first quarter of 2016 that, among other issues, would facilitate the roll out of the new ICAO guidance material for PANS-OPS inspectorate and other material to be developed with the PBN TF.*

4.2.33 The EANPG was provided with a presentation by CANSO highlighting challenges in the implementation of PBN. The EANPG was also informed that the IATA Director Safety and Flight Operations European Region had sent 29 letters in 2014 addressed to the Directors General of the CAAs of ECAC States. It was noted that the majority of States did not respond to the IATA letters, with a few exceptions that indicated progress in implementation.

4.2.34 The EANPG acknowledged the safety, efficiency and environmental benefits of PBN implementations and recognised the challenges and the need for harmonised and synchronised implementation. In addition the EANPG recognized that some flexibility in determining prioritization was needed, as different areas could have different priorities.

4.2.35 EANPG supported the statement by IATA encouraging States to complete as a matter of urgency the implementation of WGS-84 in order to take the benefits of the current aircraft PBN equipment which could not be materialised if other than WGS-84 systems were used.

4.2.36 In conclusion, the EANPG recalling EANPG Statement 55/01, COG Decision 62/03 and COG Conclusion 62/12, agreed to the following:

EANPG Conclusion 57/17 – Accelerating the Implementation of PBN

That the ICAO Regional Director, Europe and North Atlantic, on behalf of the EANPG:

- a) Invite States and International Organisations to contribute to the EUR/NAT PBN Symposium on 26-28 January 2016 (Dublin, Ireland) to discuss and identify ways and means to accelerate the implementation of PBN in line with the ICAO global implementation plan; and
- b) Provide feedback to COG/65 and EANPG/58.

Outcome of the Route Development Group – Eastern Part of the ICAO EUR Region (RDGE) Meetings

4.2.37 The EANPG noted the main outcomes of the latest Route Development Group – Eastern Part of the ICAO EUR Region meetings (RDGE/22 and RDGE/23) which took place in the European and North Atlantic (EUR/NAT) Office of ICAO in May 2015 and in Sochi, Russian Federation, in October 2015.

4.2.38 The EANPG noted that at RDGE/22, a total of 22 State reports were presented, indicating traffic trends between a decrease of 70.2% (with a maximum drop of 71,8% in one State in February 2015) and a maximum increase of over 32%. In average the overall traffic decreased with **2.3%** when compared with the traffic figures for the same time period in the previous year. The reasons of this decline were related to the airspace 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 airspace unavailability and traffic increased significantly (over 30%) in several FIRs. It has to be noted, that

most of the new flows are still concentrated in a small area over the Black Sea and at the interface area between Turkey and Iran.

4.2.39 The EANPG also noted that at RDGE/23, a total of 24 State reports were discussed, which continued to depict a volatile picture of traffic figures (between a decrease of minus 43.0% and a maximum increase of over 20%) with an average of around **1.6%** of overall traffic decrease when compared with the traffic figures for the same time period in the previous year. The huge traffic flow constraints and the growing impact of contingency arrangements in airspace that was adjacent to the EUR Region were the reasons for this decline.

4.2.40 The EANPG was informed that a total number of 203 new ATS route proposals were implemented and 20 major airspace change projects became operational in the year 2015. However, following the presentations of the States' reports, it was noted that some aircraft operators did not use the more efficient ATS routes for a variety of reasons and this aspect raised some concerns regarding the improvement of overall flight efficiency.

4.2.41 At both meetings, a total of 203 existing proposals were reviewed and 29 new route proposals were incorporated into the RDGE ATS Route Catalogues. Unfortunately, the absence of delegations from several key States as well as the lack of feedback from several other States, prevented the optimization of the ATS route network in the ICAO European Region.

4.2.42 In this respect, the EANPG was informed that a considerable number of airspace improvement proposals and contingency arrangements could not be addressed due to the last minute cancellation of participation of the Turkish delegation at RDGE/23. Considering the importance of State representation at these meetings and particularly in view of the current immense impact on traffic flows of constraints over the Black Sea and other contingency arrangements, the EANPG agreed that continued coordination in the area concerned was urgent.

EANPG Conclusion 57/18 – Importance of States Participation to the Route Development Group - East

That the ICAO Regional Director, Europe and North Atlantic urges the Black Sea and South Caucasus Area States, and especially Turkey to ensure:

- a) the continuous coordination of airspace improvements, contingency arrangements, optimization of the ATS route network; and
- b) the participation in the next coordination meetings in order to resolve the necessary airspace improvements at western interface area, especially over the Black Sea, before the summer season 2016.

4.2.43 With respect to work carried out in the RDGE Far East Area and its interface Sub-Group, the EANPG was informed that ATS route proposals focussed on the reorganisation of traffic flows (dualisation of an uni-directional ATS route system) at the waypoint SIMLI on the FIR boundary between China and the Russian Federation could not be further developed due to the lack of feedback from China. The envisaged benefits of this project would serve the increasing number of Cross-Polar flights (over 10% traffic increase per year) via SIMLI by reducing airspace complexity and ATC workload together with increased traffic predictability.

4.2.44 It was reported that the RDGE requested ICAO and IATA to address the lack of responses from China and Japan through their Regional Offices in the Asia and Pacific (ASIA/PAC) Regions. Due to the benefits that would be gained from the "SIMLI dualisation project", the EANPG supported ICAO's and IATA's efforts in improving inter-regional cooperation and coordination with the States concerned, through the appropriate ICAO Regional Offices.

EANPG Conclusion 57/19 – Progress on the Implementation of the SIMLI Dualisation Airspace Project

That, recognising the importance of the implementation of the “*SIMLI dualisation project*” the ICAO Regional Director, Europe and North Atlantic, in the behalf of EANPG:

- a) In coordination with the ASIA/PAC Office of ICAO, invite China to progress the implementation of the “*SIMLI dualisation project*”; and
- b) Invite States concerned to participate in the next coordination meetings in order to address the necessary airspace improvements in 2016.

4.2.45 The representative of Georgia informed the meeting that the twenty-fifth meeting of the RDGE will be hosted by Georgia in October 2016 after the ICAO Assembly.

Outcomes of the Twenty-Fifth Meeting of the Meteorology Group (METG/25)

4.2.46 The EANPG noted that the twenty-fifth meeting of the Meteorology Group (METG/25) of the European Air Navigation Planning Group (EANPG) was held at the European and North Atlantic Office of ICAO, Paris from 15 to 18 September 2015. The METG/25 meeting was attended by 91 experts from 33 States in the EUR Region as well as Iceland and the United States and 5 international organizations (European Organisation for the Safety of Air Navigation (EUROCONTROL), International Air Transport Association (IATA), International Civil Aviation Organization (ICAO), International Federation of Air Line Pilots' Association (IFALPA) and the World Meteorological Organization (WMO)).

4.2.47 The EANPG also noted that the sixty-third meeting of the EANPG Programme Coordination Group (COG/63) held in Paris from 13 to 16 October 2015 reviewed outcomes of the METG/25 meeting and agreed to two COG Decisions and three COG Conclusions as well as formulated seven draft Conclusions and one draft Decision for consideration by the EANPG.

Competency of aeronautical personnel

4.2.48 The EANPG supported the initiative of including in Annex 3 a new provision of the competency of aeronautical meteorological personnel, similar to paragraph 3.7.4 in Annex 15 (2013) on the competency of AIS personnel. This proposal references relevant WMO material on the competency and qualification of aeronautical meteorological personnel in Annex 3 (APANPIRG Conclusion 26/58 refers). As this Conclusion from APANPIRG would be considered by the ANC, no action by EANPG was necessary.

English Language Proficiency (ELP)

4.2.49 The EANPG noted the survey results on practices for oral MET briefings and/or consultations and current practices concerning English Language Proficiency (ELP) which consisted of two parts: one with questions for oral MET briefings and/or consultations and the other with questions on current practices concerning ELP. Thirty-seven States responded to the survey and highlights included that Aeronautical MET Personnel (AMP) required English for oral flight briefings in most States as well as for SIGMET coordination in more than half the States who responded to the survey.

4.2.50 Expected trends included less direct interactions with pilots and flight crew (e.g. self-briefing platforms, web-based communication tools) and more coordination with Collaborative Decision Making (CDM) personnel and other MET offices. Furthermore, twenty-eight States required a certain ELP level noting nearly 20% of respondents used Common European Framework of Reference for Languages (CEFR) rating scale and near 15% of respondents used ICAO Language Proficiency Rating Scale Attachment 1 of Annex 1.

4.2.51 The COG agreed with the advice of the Language Proficiency Requirements Implementation (LPRI) Task Force to use CEFR rating scale since the ICAO rating scale was developed for radio tele-

communication between ATC and pilots/flight crew, which was normally conducted using very specific phraseology. In addition, when reading and writing skills in English were needed in the MET Field (for some tasks); the ICAO rating scale (previously proposed Level 3 of the ICAO Language Proficiency Rating Scale in Attachment A of Annex 1 – *Personnel Licensing*) was deemed unsuitable. A major advantage of the CEFR was that it would not require cost for developing its own rating scale or specific guidance material for the implementation of such a rating scale or suitable language examination questions since it was already well established.

4.2.52 The COG agreed that the METG ad-hoc group consisting of representatives from Germany (rapporteur), Croatia, France, Georgia, United Kingdom, World Meteorological Organisation and ICAO continue its work on the ELP of appropriate MET personnel in coordination with COG Language Proficiency Requirements Implementation (LPRI) Task Force. The LPRI Task Force and the METG ad-hoc group are tasked to: develop guidance taking into account the proposed ELPR-MET of CEFR – B1 and established English training procedures from selected METG Members as well as work done previously (**COG Decision 63/03 refers**). Note that appropriate MET personnel includes those providing oral aeronautical meteorological briefings and/or consultations to flight crew members and/or ATC personnel in the context of Collaborative Decision Making as well as those coordinating between aeronautical meteorological offices in different States.

World Area Forecast System

4.2.53 The EANPG noted the cessation of the SADIS 2G service that would occur on 31 July 2016. The Meteorological Panel agreed with the SADISOPSG consensus of discontinuing this service based on costs, benefits and risks of utilizing the replacement satellite which would not have the capability to use existing uplink/downlink frequencies used by the SADIS 2G service.

4.2.54 The meeting noted that the COG agreed that the ICAO Regional Director, Europe and North Atlantic, on behalf of the EANPG, request SADIS user States and SADIS users to confirm the nature of their SADIS service, and where necessary ensure that they are prepared for the cessation of SADIS 2G by a) making arrangements at the earliest opportunity to migrate to Secure SADIS FTP as described at Appendix S to SoD of COG/63 for those SADIS 2G users who do not yet have access to Secure SADIS FTP and b) ensuring that SADIS workstations are configured to use data from Secure SADIS FTP operationally for those SADIS 2G users who already have access to Secure SADIS FTP (**COG Conclusion 63/02 refers**). Although the SADIS 2G service will continue until 31 July 2016, it is recommended that user's transition is complete and that SADIS 2G is not being used operationally after 1 June 2016.

Volcanic Ash Exercises

4.2.55 The EANPG noted events related to volcanic ash exercises during the previous year, and in particular, to VOLKAM15 which simulated a volcanic ash eruption of Ksudach in Kamchatka from 2200 UTC 15 April 2015 to 0400 UTC 16 April 2015. The simulated volcanic ash cloud impacted Northern Pacific (NOPAC) routes, trans-east routes as well as Pacific Organized Track System (PACOTS). The main recommendations derived from this exercise were: formalize a Letter of Agreement (LOA) between Petropavlovsk-Kamchatsky, Fukuoka and Anchorage Flight Information Regions (FIR)s; use the matrix being developed on ACCs preferred methods to provide revised flight plans downstream to other ACCs; and arrange teleconferences for real events.

4.2.56 The EANPG noted that VOLKAM16 would simulate a volcanic eruption of Karpinsky in the northern Kurile Islands from 2200 UTC 21 April 2016 to 0130 UTC 22 April 2016 which would impact the same routes listed above. The objectives of this exercise included: testing LOA between Petropavlovsk, Fukuoka and Anchorage FIRs; testing matrix on ACCs preferred methods to provide revised flight plans downstream to other ACCs; and testing VAAC Tokyo/Anchorage handover at their border 60N.

EUR SIGMET and AIRMET Guide

4.2.57 The EANPG noted examples of SIGMET and AIRMET for complex FIR boundaries would assist States in generating SIGMET and AIRMET since many State boundaries have irregular shapes in the EUR Region. To assist other Regions with similar concerns, this guidance would be useful in global guidance material for SIGMET and AIRMET and therefore, the EANPG agreed to the following Conclusion:

EANPG Conclusion 57/20 – EUR SIGMET and AIRMET Best Practices for Complex FIR Boundaries

That the ICAO Regional Director, Europe and North Atlantic, on behalf of the EANPG, undertake the necessary action to bring to the attention of the appropriate ICAO global group the recommendations relating to the provision of SIGMET and AIRMET for complex boundaries as provided at **Appendix S** to this report.

4.2.58 In addition to the above examples, other proposed updates to the EUR SIGMET and AIRMET Guide included: removal of Upper Information Region (UIR) on its own; re-ordering SIGMET and AIRMET examples in accordance with IATA; improving guidance related to amending SIGMET; updating World Meteorological Organisation (WMO) Abbreviated Header Lines (AHL) provided by States; introducing guidance on corrected SIGMET; and introducing guidance on special air-reports. These proposed changes were agreed upon by the COG and consequently the revised EUR SIGMET and AIRMET Guide (EUR Doc 014) was published on the ICAO Portal on 26 October 2015 (**COG Conclusion 63/03 refers**).

4.2.59 With reference to cross border coordination, the EANPG noted **METG Decision 25/3** that established a task force to develop appropriate guidance material for cross-FIR SIGMET coordination procedures between MET Air Navigation Service Providers that could be used as a common minimum standard. This Decision will also address harmonisation of more complex aspects of the coordination process such as collectively determining the intensity of the phenomena.

OPMET Exchange – special air-reports

4.2.60 The EANPG noted that in order to improve the format and dissemination of special air-report messages, the EUR Data Management Group (DMG) would: a) conduct a special air-report test in order to be able to identify routing deficiencies; b) conduct a special air-report monitoring period in February 2016; and c) report back to METG with the results of the special air-report test and monitoring in the EUR Region and present an action plan to reduce deficiencies (**METG Decision 25/6 refers**).

OPMET Exchange – EUR OPMET Data Management Handbook (EUR Doc 018)

4.2.61 The EANPG noted the proposed changes to the EUR OPMET Data Management Handbook (EUR Doc 018) that included modifications to explaining performance indices; removal of all references to the FTP sites for public use (the ICAO Portal now has a DMG group for meeting documentation); and introducing guidance on the format and dissemination of special air-reports. These proposed changes were agreed upon by the COG and consequently the revised EUR OPMET Data Management Handbook (EUR Doc 018) was published on the ICAO Portal on 26 October 2015 (**COG Conclusion 63/04 refers**).

OPMET Exchange – remark in METAR

4.2.62 The EANPG noted that international distribution of METAR with remark section was not allowed following WMO No. 306 and ICAO provisions as well as the ICAO Meteorological Information Exchange Model (IWXXM) schema. However, IATA and some States at METG claimed that information in the remark section was valuable such as variable cloud base. The METG also noted that using remark in METAR may not be the best way to supply operators with such information. The EANPG concurred that the appropriate global group(s) should consider this issue in the context of data-centric approach and therefore, agreed to the following Conclusion:

EANPG Conclusion 57/21 – MET Requirements for Free Text Information

That the ICAO Regional Director, Europe and North Atlantic, on behalf of the EANPG, invite the appropriate ICAO global working groups to develop modified or new provisions related to what MET information in free text is needed and how it should be disseminated.

OPMET Exchange – WMO documentation

4.2.63 The EANPG noted that the first two characters in the international four-letter location indicator of the station or centre originating or compiling the bulletin (referred to as CCCC) in WMO-No. 9, *Catalogue of Meteorological Bulletins*, did not follow Part II of WMO Doc 386, *Manual on the Global Telecommunication System*, and that the alignment should also be consistent with ICAO Doc 7910 in this regard. This convention allows for identification of which geographic area (e.g. North Atlantic, Western Europe, Russia, etc...) OPMET data originated. Therefore, the EANPG agreed to the following Conclusion:

EANPG Conclusion 57/22 – Alignment of WMO-No. 9 to WMO Doc 386

That the ICAO Regional Director, Europe and North Atlantic, on behalf of the EANPG, invite WMO to align WMO-No. 9, Volume C1, *Catalogue of Meteorological Bulletins*, with Part II-2 of WMO Doc 386, *Manual on the Global Telecommunication System*, such that the CCCC part of the bulletin should conform to the first two letters defined in ICAO Doc 7910.

OPMET exchange – IWXXM (proposed workshop, CONOPS, implementation plan, translation agreements, testing platform)

4.2.64 The EANPG recalled Amendment 76 to Annex 3 applicable in November 2013 enabled the exchange, under bilateral agreements between States in a position to do so, of METAR and SPECI, TAF and SIGMET in digital form. This enabling clause would become a recommendation in November 2016 and a requirement in 2018 or 2019. These elements in digital form should be formatted in accordance with a globally interoperable information exchange model and use extensible mark-up language (XML)/geography mark-up language (GML) i.e. ICAO Meteorological Information Exchange Model (IWXXM) format.

4.2.65 The EANPG recalled COG Decision 60/03 to conduct a survey on EUR States' implementation plans of ICAO IWXXM. Most of the 32 States that replied were planning on exchanging OPMET data in digital form between 2016 and 2019, with the majority of respondents indicating implementation between 2016 and 2017.

4.2.66 The EANPG also noted that nearly all respondents desired a workshop on the implementation of IWXXM, most of which preferred a coordinated ICAO and WMO workshop. As a result, ICAO proposed to conduct a workshop for OPMET data exchange hubs (Regional OPMET Centres – ROCs, Regional OPMET Data Banks – RODBs and Inter-Regional OPMET Gateways – IROGs) from all Regions. The proposal, that should be implemented via a Special Implementation Project (SIP), as provided at **Appendix T** would address the following workshop goals: 1) present the Concept of Operations for the Transition of OPMET Data Exchange using IWXXM; 2) identify any issues related to implementation of IWXXM and develop an associated action list of responsible parties to address these issues and timelines; 3) develop global implementation plan on the implementation of IWXXM for centres described above and 4) communicate workshop results to States. The proposed attendees were expanded to other appropriate organisations (e.g. ASECNA) in addition to Eurocontrol and WMO as suggested by the METG. In addition, there was a need to conduct subsequent workshops that addressed training and capacity building. The EANPG concurred with this SIP proposal and agreed to the following Conclusion:

EANPG Conclusion 57/23 – Workshop on Implementing IWXXM

That the ICAO Regional Director, Europe and North Atlantic, on behalf of the EANPG, conduct a *workshop on implementing the ICAO Meteorological information exchange model (IWXXM) for the exchange of OPMET data* in the form of a Special Implementation Project at the EUR/NAT ICAO Regional Office in 2016 that would involve regional OPMET data exchange hubs in all Regions, World Meteorological Organisation, Eurocontrol, other appropriate organisations and any other experts deemed necessary as provided at **Appendix T**.

Note: this proposed workshop is expected to be the first in a series of workshops which will follow in order to consider training and capacity building related to the migration to IWXXM.

4.2.67 The EANPG noted that the EUR DMG in coordination with the EANPG Aeronautical Fixed Service Group (AFSG), ICAO and WMO developed the Concept of Operations (CONOPS) for the Transition of OPMET Data Exchange using IWXXM as provided at **Appendix U**. The main purpose of this document was to describe the activities relating to the transition of intra- and inter-regional OPMET data exchange in the 2016 to 2018 timeframe. It was also noted that the intention of this document was not to define net-centric services, but to provide guidance for a swift transition to IWXXM implementation and therefore, the EANPG agreed to the following Conclusion:

EANPG Conclusion 57/24 – Concept of Operations for the Transition of OPMET Data Exchange using IWXXM

That the ICAO Regional Director, Europe and North Atlantic, on behalf of the EANPG, undertake the necessary action to publish the *Concept of Operations for the Transition of OPMET Data Exchange using IWXXM* as provided at **Appendix U** to this report as EUR Doc 033.

4.2.68 The EANPG noted that this document was submitted to the ICAO Meteorology Panel Working Group on Meteorological Information Exchange (WG-MIE) in November 2015 for their consideration to be used as guidance globally, noting it could take some time to agree on.

4.2.69 The EANPG noted that the Data Management Group (DMG) of METG with the assistance of the Planning Group (PG) of the Aeronautical Fixed Service Group (AFSG) were tasked by the COG to define and monitor intra-regional implementation plan on IWXXM data exchange that includes planning implementation of AMHS links by States to their associated ROC noting that the first priority should be put on exchange between the States hosting a ROC and/or RODB (**COG Decision 63/04 refers**).

4.2.70 The EANPG noted that some States would need assistance in having OPMET traditional alphanumeric code (TAC) translated to IWXXM. As a result, the EANPG agreed that States not in a position to provide OPMET data in digital form (XML) could request its respective ROC to translate TAC to XML on the States' behalf until the State can provide OPMET data in digital form. This translation service could begin as early as November 2016, but be necessary by November 2018 or November 2019. Consequently, the EANPG agreed to the following Conclusion:

EANPG Conclusion 57/25 – Traditional Alphanumeric Code to Digital Form Translation Agreement

That the ICAO Regional Director, Europe and North Atlantic, on behalf of the EANPG,

- a) invite States in the EUR Region not in a position to provide OPMET data in digital form to request its respective Regional OPMET Centre to translate Traditional Alphanumeric Code to digital form on the States' behalf until the State can provide OPMET data in digital form; and
- b) maintain the arrangements in a) on the EUR/NAT ICAO Regional Office website.

4.2.71 The EANPG noted that the METG agreed that it would be beneficial to define a testing platform. To support this effort, the METG agreed that the DMG add to its work programme the tasks to a) define a process to ensure that XML data generated by Data Producers are compliant to IWXXM schema; b) define a process to initiate and enable the IWXXM exchange between regions that should resemble the process defined in a); and c) report back to METG/26.

MET ToRs

4.2.72 The EANPG noted the proposed updates to the MET Terms of Reference (ToRs) which included the following: a) the impacts of the MET Panel and working groups on METG; b) alignment with the GANP and ASBU methodology; c) changing references from Basic ANP and FASID to EUR eANP; and d) exchanging information on the latest technology from pilot research programmes. The EANPG concurred with these proposals and therefore, agreed to the following Decision.

EANPG Decision 57/03 – Update to the METG Terms of Reference

That the ICAO Regional Director, Europe and North Atlantic, on behalf of the EANPG, undertake the necessary action to update the EANPG Handbook to reflect the updated Terms of Reference of the Meteorology Group as provided at **Appendix V** to this report.

Outcomes of the First Meeting of the EUR Search and Rescue Task Force

4.2.73 The EANPG was presented with the outcome of the First meeting of the European Search and Rescue Task Force (EURSAR/TF/1) that was held in Budapest, Hungary, during the EANPG ATMGE/21, from 14 to 18 September 2015.

4.2.74 The EANPG noted that the EURSAR/TF reviewed the tables listing the SAR Agreements and the SAR Capabilities and identified a number of inconsistencies in the list of SAR agreements. In consequence, the Task Force agreed to review the information provided by the States and update the table accordingly.

4.2.75 The EANPG noted that the EURSAR/TF agreed the format of the EUR Aeronautical SAR Contact List; this contact list should not be confused with any listings of SAR Point of Contacts (SPOCs) which were used for SAR emergency contact purposes. In the same vein, the EURSAR/TF agreed with a proposed Task List template and its preliminary tasks that would be revised at the EURSAR/TF/2. Further inputs from IRCM/4 would be included in the Task List to reinforce the inter-regional cooperation in Search and Rescue matters.

4.2.76 With regard to the international cooperation with the ICAO/IMO JWG, the EANPG noted that a single State from the ICAO EUR Region, Tajikistan, was included in the list of non-responsive Search and Rescue Point of Contact (SPOC) for 2015; however, after further discussion with the Civil Aviation Authority of Tajikistan, the CAA agreed to re-confirm the SPOC nomination and update all the contact details, so that the regional SPOC communication could be improved.

4.2.77 The EANPG was informed that the EURSAR/TF/2 would take place in Larnaca, for a four days meeting in 2016, 2 days dedicated to the EURSAR/TF/2 meeting combined with a two days SAR Exercises arranged by Joint Rescue Coordination Centre (JRCC) Larnaca.

4.3 ICAO ASBU MONITORING REPORT (ATMGE)

Outcome of the Twenty-First Meeting of the Air Traffic Management Group EAST (ATMGE/21)

4.3.1 The EANPG was informed about the main outcomes of the ATMGE/21 meeting, which took place in conjunction with an ATM 2020 symposium in Budapest, Hungary from 14 to 18 September 2015 and which was attended by 34 participants from 13 States and 3 international organizations.

4.3.2 The EANPG noted that EUROCONTROL presented the ATMGE with detailed information on the status of work regarding the implementation of a Harmonised European Transition Altitude (HETA), an update on the Centralised Services, especially on the PENS developments and the latest EUROCONTROL Voluntary ATM Incident Reporting Statistics for 2010-2014, addressing general statistics of ATM events & causes. The ATMGE discussed 11 State Reports that included a presentation on the implementation of a new Approach Path Monitoring System at Yerevan airport (Armenia) and the new implementation of point merge procedures within Baku TMA (Azerbaijan).

4.3.3 The EANPG recalled the EANPG Conclusion 55/03 with regard to the regional monitoring of ASBU implementation. EUROCONTROL presented the EANPG with the first version of the 2014 ICAO/ EUROCONTROL ASBU Implementation Monitoring Report. The EANPG noted that this report contained information/overviews on the implementation progress of ASBU Block 0 from the 42 ECAC States (direct information and reports through their 2014 LSSIP documents) and from 4 non-ECAC States (in terms of information on the priorities, status of implementation and any relevant references to national documentation for all listed ASBU modules). It was also noted that this was a successful example of cooperation using combined efforts and existing resources and processes, to avoid unnecessary duplication of reporting. The EANPG reviewed the 2014 ICAO/ EUROCONTROL ASBU implementation monitoring report (Version 1.2) and agreed to the following decision:

EANPG Decision 57/04 – Endorsement of the 2014 ASBU Implementation Monitoring Report

That the EANPG endorses the 2014 ICAO/ EUROCONTROL ASBU implementation monitoring report (Version 1.2), as provided in **Appendix W** to the report, as the first report regarding the regional monitoring of ASBU implementation in response to EANPG Conclusion 55/03.

4.3.4 As part of the lessons learned from the EUROCONTROL presentation, the EANPG discussed the proposed way forward in order to increase the number of responses and enhance the quality of the reported information. The EANPG invited those States not covered by the ESSIP process, to actively support the described ASBU implementation monitoring process. In order to achieve the aim of a complete overview of the status of ASBU Block 0 implementation from all States within the complete ICAO EUR Region, the EANPG agreed to the following:

EANPG Conclusion 57/26 – ASBU Implementation Monitoring within the ICAO EUR Region

That the ICAO Regional Director, Europe and North Atlantic, on behalf of the EANPG:

- a) invite States to use the new ATMGE State Report format, as presented in **Appendix X** to the report, on the status of implementation of ASBU Block 0 modules;
- b) continues to promote the collaborative implementation monitoring approach by asking States to nominate an ASBU implementation focal point;
- c) request States to provide their ASBU implementation data to the next ATMGE/22 meeting in March 2016, so that the 2015 version of the ASBU implementation monitoring report can be presented at EANPG/58 in 2016.

4.3.5 The EANPG noted that a dedicated ATM 2020 Symposium was conducted during the ATMGE/21 to allow the ATMGE Members to address and discuss aspect, such as the „end-users” requirements, the already available implementation programs (i.e. SESAR), the implementation of a Performance Based Approach and the human factor and licencing issues as crucial enablers for the implementation of any new ATM concepts and technology. This symposium was supported by a number of ANSPs, CAAs, EC, EASA, IFALPA, and included also sharing of best practices from HungaroControl with their validation and implementation of new operational improvements.

4.3.6 The EANPG was informed that the next meeting of ATMGE (ATMGE/22) was planned at the ICAO EUR/NAT Office from 14 to 17 March 2016. The Chairman thanked EUROCONTROL for the excellent cooperation and welcomed the collaborative approach on the ASBU implementation Monitoring. As a result of the additional discussions, the delegations from Algeria, Israel and Tunisia nominated their

national focal points and indicated that they would submit their questionnaire by March 2016 for inclusion into the next version of the report.

4.4 AERONAUTICAL INFORMATION MANAGEMENT

AIM Global Developments

Outcome of the first meeting of Information Management Panel (IMP/1)

4.4.1 The EANPG was apprised of the outcome of the first meeting of the Information Management Panel (IMP/1), held in ICAO Headquarters, Montreal, Canada 26-30 January 2015. The EANPG recalled that the IMP was established by the ICAO ANC to elaborate on necessary concepts and develop a global and interoperable approach to ensure effective management of information within the global air navigation system. Working and Information Papers issued for the IMP/1 meeting as well as the meeting Report are available on the ICAO Secure Portal at: <https://portal.icao.int/IMP/Pages/default.aspx>

Outcome of the tenth, eleventh and twelfth meetings of the AIS-AIM Study Group

4.4.2 The EANPG was apprised of the latest developments in the AIM field, in particular the Annex 15 restructuring, the development of PANS AIM, the AIM Data Catalogue and the status of the AIS/AIM Guidance Materials, through the review of the outcome of the tenth, eleventh and twelfth meetings of the AIS-AIM Study Group.

4.4.3 It was highlighted that the target effective date for the amendment to Annex 15 and introduction of PANS AIM and Data Catalogue is July 2017 with the applicability date November 2018. The status of other AIS/AIM guidance materials are as follows:

- New Quality Manual (Doc 9839) – English draft by Q4-2015
- AIS Manual – Amdt 3 (Doc 8126) – to follow Quality Manual
- New Training Manual (Doc 9991) – English draft by Q4-2015
- Aeronautical Chart manual – Amdt 3 (Doc 8697) – With editorial
- Update of WGS-84 Manual (Doc 9674) – To be updated
- Update of Public Usage of Internet (Doc 9855) – On work program of IMP

4.4.4 It was underlined that the Twelfth meeting of the AIS-AIMSG held in Montreal, 19-23 October 2015 was the last AIS-AIMSG meeting and the IM Panel would follow up for every AIM and IM issues. The list of Study Notes and Information Papers issued for the AIS-AIMSG/10, 11 and 12 meetings, as well as the Summary of Discussions, are available on the ICAO website at: <http://www.icao.int/safety/ais-aimsg/Pages/default.aspx>

Global AIM Hanoi 2015

4.4.5 The EANPG was apprised of the outcome of Global AIM 2015 held in Hanoi, Vietnam, 9-11 June 2015. The presentations and Summary, Conclusions and Recommendations of the conference are available on the IFAIMA website at: <http://www.ifaima.org/index.php/global-aim/item/177-global-aim-hanoi-2015>

Amendment Proposals to Annex 4 and Annex 15

4.4.6 The EANPG noted the proposals for amendment Ref.: SP 65/4-15/22 dated 13 May 2015 and Ref.: AN 4/1.1.55-15/30 dated 29 May 2015, in particular parts regarding the changes in Annex 4 — *Aeronautical Charts* and Annex 15 — *Aeronautical Information Services*.

Outcomes of the Twenty-Ninth COG/AIM Task Force

4.4.7 The EANPG was provided with an update on the status of implementation of the required AIS/AIM facilities and services in the Eastern part of the EUR Region based on the outcome of the COG/AIM TF/29 meeting.

4.4.8 The EANPG noted that the following issues were identified in transition from AIS to AIM of the States of the Eastern part of the European Region:

- a) Aeronautical Data Exchange;
- b) Aeronautical Information Briefing;
- c) Agreement with Data Originators;
- d) Electronic Aeronautical Charts;
- e) Digital NOTAM.

4.4.9 The EANPG was informed about the discussions of the COG/AIM TF/29 regarding the use of AIXM 5.1 for automating the production processes for AIS products and the provision of information services necessary for ATM. It was noted that the implementation of AIXM 5.1 is an important pre-requisite for the Integrated Aeronautical Information Database (IAID).

4.4.10 The EANPG noted the progress achieved by the States of the Eastern part of the European Region in the transition from AIS to AIM and the updates of the COG/AIM TF in the FASID AIM Tables.

eTOD and AIS/AIM

4.4.11 The EANPG was presented with a summary of activities on the status of eTOD implementation and the latest developments in the AIM domain at the European level, based on the EANPG Conclusions assigned to EUROCONTROL.

Transition from AIS to AIM

4.4.12 The EANPG recalled that the EANPG/56 meeting, based on the outcomes of the AIM/SWIM Team-7 and COG/AIM TF/27 meetings related to supporting States in the AIM transition, invited EUROCONTROL AIM/SWIM Team and the COG/AIM Task Force to identify specific actions to support those States facing difficulties in the transition from AIS to AIM; and provide update to COG/63 and EANPG/57 (EANPG Conclusion 56/30 refers).

4.4.13 It was noted that the COG/63, taking into consideration inputs received from the COG/AIM TF and the EUROCONTROL AIM/SWIM Team, agreed to AIM Capacity Building/Support Missions to Seven (7) States which were in the list of air navigation deficiencies for non-implementation of QMS in AIS (Bosnia and Herzegovina, Greece, Kyrgyzstan, Malta, Tajikistan, Turkmenistan and Uzbekistan). Accordingly, the EANPG agreed to the following:

EANPG Conclusion 57/27 – Support States in AIM Implementation

That the ICAO Regional Director, Europe and North Atlantic, in order to provide support to States with a better understanding of the planning and implementation issues related to the transition from AIS to AIM, and foster the implementation of the AIS/AIM requirements in a harmonized manner, in particular in the QMS and WGS-84 implementation, undertake necessary actions, in coordination with the COG/AIM TF Chairman and EUROCONTROL, for the organisation of AIM Capacity Building/Support Missions to Seven (7) States, as a Special Implementation Project (SIP).

4.4.14 The EANPG noted that the Fourth Inter-Regional Coordination meeting between APAC, EUR/NAT and MID (IRCM/4) (Bangkok, Thailand, 14-16 September 2015) agreed that an Interregional Seminar be held jointly between the APAC, EUR/NAT and MID Regions on “*Service Improvement through Integration of Digital AIM, MET and ATM Information*” in 2017 to monitor/review implementation status of the ASBU Block 0 Modules of the PIA 2 (i.e. B0-DATM, B0-AMET and B0-FICE) and associated challenges/lessons learned and to focus on the pre-requisites for an efficient and timely planning for the implementation of the Block 1 Modules of the PIA 2 (B1-DATM, B1-AMET, B1-SWIM and B1-FICE). The EANPG further invited States to support the Seminar with all the means.

5. MONITORING

5.1 RVSM GUIDANCE MATERIAL

Proposal to issue new RVSM Post-Implementation Guidance Material

5.1.1 The EANPG was presented, in follow-up of EANPG conclusion 56/32, with the results of the EUR RMA and RMA EURASIA review of EUR Doc. 009, to evaluate its suitability for providing guidance to States in the RVSM post implementation environment. This review concluded that a revision of Doc 009 was not appropriate and that a new EUR Document should be developed.

5.1.2 This new Guidance material was intended to provide States with guidance material applicable to post RVSM implementation and the requirements for continuous safety monitoring. An overview of the contents of the proposed material with specific reference to the interaction between States was presented to the EANPG and the two RMAs included recommendations for appropriate actions to be taken by States when informed by the RMA that an operator is not compliant with one or more RVSM operational requirements.

5.1.3 The EANPG also noted the specific emphasis on the proposal to publish a bulletin of aircraft/operators not approved for operations in RVSM airspace or not compliant with one or operational requirements as defined in ICAO Annex 6. The two Regional Monitoring Agencies have reported numerous problems in verifying the approval status of aircraft operating in RVSM airspace. In addition they reported many examples where inappropriate actions have been taken by State authorities by permitting non-approved aircraft to continue operating in the airspace without any sanction.

5.1.4 Therefore the RMAs should make the information available to all States within the Region, so that they could individually take appropriate action in the event that the non-approved aircraft flight planned to operate within their sovereign airspace. It was proposed to achieve this by publishing a bulletin on one or more restricted access web sites which would be made available to designated points of contact within each accredited State.

5.1.5 The EANPG reviewed the proposed new guidance material and agreed to the following:

EANPG Conclusion 57/28 – Endorsement and Publication of the EUR Doc 034

That the ICAO Regional Director, Europe and North Atlantic, on behalf of the EANPG, undertake the necessary action to publish the “*Guidance Material for the Continued Monitoring of the European RVSM Airspace*” (EUR Doc 034) on the ICAO EUR/NAT website/portal, as provided in **Appendix Y** to this report.

5.1.6 The RMA EURASIA also informed the EANPG that, once the ICAO EUR Doc 034 would be adopted, they would prepare/develop a Russian version of this document.

5.1.7 The EANPG also supported the proposed implementation of the RMA Bulletin. In this respect, it was agreed that States should be requested to nominate designated points of contact that would be

granted access to the online bulletin. Other organisations including ICAO, other RMAs and approved member organisations of EANPG would also be permitted to designate users to have access to the site. In some circumstances ATS providers could be granted access to the bulletin. Operators could also be granted access in some cases, but only to view records applicable to aircraft from their own fleets.

5.1.8 The delegation from Germany raised the issue on the inclusion of State aircraft into the RMA bulletin and it was concluded that the EUR Doc 34 would be slightly amended to clarify this aspect. The EANPG supported the proposal from both RMAs an operational implementation date of 1 FEB 2016 and agreed to the following conclusion:

EANPG Conclusion 57/29 – Implementation of the RMA Bulletin

That

- a) The EUR RMA and RMA EURASIA proceed with an implementation of the RMA bulletin, as referenced in section 7 of the EUR Doc 34, by 01 February 2016; and
- b) report regularly to the EANPG and EANPG COG.

5.2 RMA REPORTS

RVSM Safety Monitoring Reports for 2014 from both RMAs

5.2.1 The EANPG noted that the both Regional Monitoring Agencies conduct their programme of aircraft height monitoring, RVSM approval verification and safety assessment for the RVSM Airspace in the EUR Region in accordance with the requirements of Annex 11 (13th Edition), Annex 6 (9th Edition) and the ICAO Docs 9574 (2nd Edition) [*Manual on Implementation of a 300 m (1000 ft) Vertical Separation Minimum between FL 290 and FL 410 inclusive*] and ICAO Doc 9937 (1st Edition) [*Manual of Operating Procedures and Practices for Regional Monitoring Agencies in Relation to the Use of a 300 m (1000 ft) Vertical Separation Minimum above FL 290*].

5.2.2 Consequently, the EANPG was presented with the results of the 2014 EUR RMA Safety Monitoring Report and with the results of the flight safety monitoring in the airspace of the Eastern part of the ICAO European Region by the RMA EURASIA for the 2014.

5.2.3 The EANPG noted that the EUR RMA estimated that both quantitative safety objectives had been satisfied for the reporting year 2014. The EANPG also noted that the total number of altitude deviation reports received by the EUR RMA was extremely low (35 reports). This total was supplemented by the addition of a further 85 reports extracted from the EUROCONTROL ESARR2 Mandatory Incident Reporting scheme. The majority of reports (from both sources) did not include the important parameter of duration, which has had to be estimated by the application of standard models for various types of incident.

5.2.4 The EANPG also noted with some concern that the number of non-approved aircraft confirmed as operating in RVSM airspace was low; however this number could be much higher. The EANPG agreed that additional efforts were required on the part of States to cooperate with the RMA.

5.2.5 The EANPG noted that all its previous conclusions and decisions associated with RVSM and the EUR RMA that were active when the 2014 Safety Monitoring Report was issued have been addressed satisfactorily.

5.2.6 The EANPG was informed that the results from the data sample and analysis conducted by the EUR RMA and the analysis the risk of collision due to all causes indicated that the objective has been satisfied. However, there was sufficient evidence to suggest that the data sample used for the analysis was not representative and additional effort was required to improve the reporting of operational incidents in RVSM airspace to the RMA.

5.2.7 The EANPG also noted that the performance analysis of both individual airframes and generic aircraft types indicated that there was no general technical safety issue currently affecting RVSM airspace. Furthermore, compliance with operator fleet monitoring targets remained high indicating that the data sample used for all analyses was representative.

5.2.8 The EANPG also noted that the EURASIA RMA calculations had indicated that the level of overall and technical collision risk in the Eurasian RVSM airspace in 2014 corresponded to the established target values. The EANPG noted that for the year 2014, the flight safety level for the Eastern part of the ICAO EUR Region met the requirements of ICAO, and all four objectives of the Safety Policy had been achieved.

5.2.9 The EANPG recalled that the confidence in the accuracy of the estimate for the total risk remained very low due to the low number of LHDs and other operational error reports sent to the RMA. In that respect, some RMAs requested LHD reports from States on a monthly basis and EANPG/57 tasked the two RMAs to investigate the possibility of implementing such a process in the ICAO EUR Region and report to COG/65. The EANPG considered as a possible option to include the LHD on the new occurrence reporting framework as part of the new EU regulation (R376/2014, amended with R2015/1018). The EANPG was informed on the outcome of COG/63 meeting discussions regarding a height monitoring future plan in the EURASIA region which would be presented to COG/65 meeting.

5.2.10 Therefore, the EANPG agreed to the following:

EANPG Statement 57/01 – 2015 EUR RVSM Safety Monitoring Report

That the EANPG, noting the reports provided by the European Regional Monitoring Agencies (EUR RMA and RMA EURASIA), is satisfied that Reduced Vertical Separation Minimum (RVSM) operations in the ICAO European Region met the four safety objectives for the year 2014.

Note: It should be noted that confidence in the accuracy of the estimate for the total risk remains very low due to the low number of LHDs and other operational error reports sent to the RMA.

5.3 RMA TERMS OF REFERENCE

EUR and EURASIA RMA Common Terms of Reference

5.3.1 As a follow-up of the COG Conclusion 62/13, which tasked the two RMAs to review the existing EUR RMA ToRs and propose a revised common set of Terms of Reference (ToRs) applicable to both RMAs and the whole of the ICAO EUR RVSM Region, the EANPG was presented with a new proposal for common ToRs, which had been jointly developed and agreed by the EUR RMA and RMA EURASIA.

5.3.2 The new ToRs (including the present the introductory text which was proposed to precede the list of individual activities and responsibilities applicable to RMA EURASIA and EUR RMA) were presented and discussed by the EANPG. A small amendment in para 3 of the roles and responsibilities of the RMA EURASIA and the EUR RMA, which should rather read as follows:

3. Maintain a height monitoring infrastructure to provide aircraft technical height keeping performance data.

5.3.3 The EANPG thanked both RMAs for the significant amount of work that was done in order to have fully harmonized ToRs for both Regional Monitoring Agencies and agreed to the following:

EANPG Conclusion 57/30 – EUR RMA and EURASIA RMA ToRs

That:

- a) the ICAO Regional Director, Europe and North Atlantic, on behalf of the EANPG, undertake the necessary action to update the EANPG Handbook to reflect the updated Terms of Reference of the EUR RMA and RMA EURASIA as provided at **Appendix Z** to this report; and
- b) the RMA EURASIA and EUR RMA adapt current operational procedures to align with the new TORs.

6. DEFICIENCIES

6.1 AMENDMENTS TO THE AIR NAVIGATION DEFICIENCIES LIST

Review of the list of Air Navigation Deficiencies

6.1.1 The ICAO secretariat presented a working paper summing amendments to the air navigation deficiencies.

Inclusion of ETOD Area 1 and Area 4 in the list of Air Navigation Deficiencies

6.1.2 The EANPG recalled that the EANPG/56, through Conclusion 56/06, tasked COG to assess the appropriateness to add new deficiencies related to the lack of provision of eTOD data for Area 1 and Area 4 to the list of Air Navigation Deficiencies; and report proposed action to the EANPG/57.

6.1.3 The issues was addressed by COG/63 where it was noted that the EUROCONTROL AIM/SWIM Team-8 and COG/AIM TF/29 meetings supported the addition of new Deficiencies related to the lack of provision of eTOD data for Area 1 and Area 4 to the list of Air Navigation Deficiencies. Nevertheless, when discussing the issues, the COG identified a number of concerns (e.g. size of the non-implementation in the region, reasons/rationales for the non-implementation, States' corrective action plans, clear benefits of eTOD, financial issues, etc.) and agreed to keep the subject open until a detailed status/analysis of eTOD implementation in the region would become available. Accordingly, the COG agreed to the following COG Conclusion:

COG Conclusion 63/05 – Lack of Implementation of the eTOD Area 1 and Area 4

That the ICAO Regional Director, Europe and North Atlantic, on behalf of the EANPG COG, invite EUROCONTROL AIM/SWIM Team and the COG/AIM Task Force to:

- a) *develop a detailed status/analysis of the eTOD Area 1 and Area 4 implementation;*
and
- b) *report to COG/65.*

Implementation of WGS-84

6.1.4 The EANPG noted that with regard to deficiency ref. EUR-AIS-01-02, the EUR/NAT Regional Office was informed by the Civil Aviation Committee (CAC) of Kazakhstan, on 27 July 2015 about the WGS-84 implemented for ENR (airspace) and 5 (five) INTL aerodromes: Astana, Almaty, Aktau, Atyrau and Kostanay. Information was published in KAZ AIP and was available on the KAZ ANSP's official website http://ans.kz/AIP/AIRAC_AMDT_02_15/AIP/html_ru/UA-frameset-en-KZ.html . Full implementation was planned for July 2016 (corrective action plan was also attached).

Quality management system for Aeronautical Information Services (AIS)

6.1.5 The EANPG noted that the EUR/NAT Regional Office was informed by the Civil Aviation Committee (CAC) of Kazakhstan, on 27 July 2015 about the full implementation of the QMS in AIM. The QMS ISO 9001 Certificate valid through to May 2018 was sent to the EUR/NAT Regional Office.

6.1.6 In addition COG/63 received updates from the COG/AIM TF/29 on the list of air navigation deficiencies in the AIM field. In this respect, the EANPG noted that COG agreed with COG/AIM TF/29 to delete the deficiencies related to the non-implementation of QMS by Belarus and Kazakhstan since these States have been certified ISO 9001:2008. Therefore, the COG agreed to the following COG Conclusion:

COG Conclusion 63/06 – Deficiencies Related to the Quality Management System (QMS) in AIS

That the ICAO Regional Director, Europe and North Atlantic, on behalf of the EANPG, delete Belarus (deficiency ref EUR-AIS-02-04) and Kazakhstan (EUR-AIS-02-02) from the list of EUR air navigation deficiencies related to the Quality Management System (QMS) in AIS.

6.1.7 The EANPG was informed on the COG agreement to invite the ICAO Secretariat to send a reminder to States to provide their Corrective Action Plans (CAPs) for their deficiencies in the list of Air Navigation Deficiencies relating to QMS, in order to reflect their plan of taking corrective action(s) and the reason(s)/difficulty(ies) resulted in the non-implementation.

Aeronautical charts and flight instrument procedures

6.1.8 The EANPG noted that with regard to deficiency ref. EUR-AIS-04-04, the EUR/NAT Regional Office was informed by the Civil Aviation Committee (CAC) of Kazakhstan on 27 July 2015, that appropriate data to support navigation database coding for five redesigned WGS-84 non-RNAV procedures was published in AIP on the verso of the instrument approach chart and were available at ANSP's official website http://ans.kz/AIP/AIRAC_AMDT_02_15/AIP/html_ru/UA-frameset-en-KZ.html. It was also stated that requirements of Annex 04 paragraphs 9.9.4.3, 10.9.4.3 did not apply to conventional SID/STAR and Kazakhstan had not yet developed the RNAV SID/STAR.

Validation of RVSM approvals

6.1.9 The EANPG noted that the COG/63 received information provided by Lithuania on status of deficiency reference number EUR-ATM-05-06, ICAO secretariat reviewed the evidence provided by Lithuania on the topic and based on the outcome proposes EANPG/57 the deletion of this deficiency. In the same vein, the EANPG was informed that Algeria presented the ICAO secretariat with necessary information regarding their actions with respect to RVSM monitoring obligation and agreed to delete it from the deficiency list.

Deficiencies - MET

6.1.10 The EANPG noted that the Ministry of Transport of the Russian Federation has provided the ICAO EUR/NAT Regional Office an official letter on 13 May 2015. This letter provided notification of a mandate in Federal Aviation Rules for appropriate services to comply with Annex 3, Appendix 3, Table A3-2 effective 27 April 2015 with reference to runway state in supplementary information of METAR and SPECI.

6.1.11 The EANPG noted that DMG monitoring in November 2015 produced a list of aerodromes non-compliant in this regard. The list did not contain aerodromes from the Russian Federation or Luxembourg and therefore, the EANPG/57 agreed to remove these deficiencies.

6.1.12 This list, however, contained seven aerodromes (UKDD, UKOO, UKLL, UKLI, UKLU, UKLR and UKMM) from the Ukraine. The EANPG/57 agreed that the DMG of METG look into this matter further and inform the Ukraine of what needs to be changed and report to the COG/65.

6.1.13 The EANPG noted that Algeria had implemented 24-hour TAF at 7 AOP aerodromes as per the EUR FASID Table MET 1A, which was verified by DMG. This information was well received since operators could use these aerodromes as alternates which were needed for flights deviating airspace over Libya for the AFI-EUR and EUR-AFI flights. Therefore, no proposed deficiencies were necessary in this regard.

6.1.14 The EANPG noted the proposed deficiencies for Finland with reference to missing identification of the type of report, specifically, *METAR*, for EFHF, EFMA and EFIV. The EANPG also noted a corrective action plan was submitted by the Finnish Meteorological Institute (FMI) on 11 September 2015 to the ICAO EUR/NAT Regional Office. The corrective action plan stated expected implementation in this regard for EFIV and EFMA aerodromes in 2016. As for EFHF aerodrome, there was no implementation timetable since the aerodrome would be run down at the end of 2016 according to current information from the Ministry of Transport and Communication.

6.1.15 The EANPG noted the proposed deficiency for Monaco in that *METAR* was not available internationally as per FASID Table MET 1A requirements. The EANPG noted that despite this aerodrome being a heliport, it could serve as an alternative for helicopter operations.

6.1.16 The EANPG noted the proposed deficiency for Tajikistan and Turkmenistan in that 24-hour TAF was required for UTDD (Tajikistan) and UTAA (Turkmenistan), but only 12-hour TAF was provided. The 24-hour TAF was warranted for use as alternate aerodromes, particularly for EUR-ASIA and ASIA-EUR flights.

6.1.17 Lastly, the EANPG referenced the proposed electronic Air Navigation Plan (eANP) MET Table B0-AMET 3-1 that would provide a status of implementation of SADIS 2G and/or Secure SADIS FTP for States. The following States in the EUR Region had not yet acquired SADIS: Belarus, Kyrgyzstan, Norway, Tajikistan and Turkmenistan. These States were included in the proposed list of deficiencies in MET as WAFS forecasts were needed for briefing and flight documentation. Luxembourg and Montenegro informed ICAO that SAIDS is used to provide WAFS forecasts for briefing and flight documentation. The related cost-recovery scheme is being considered by ICAO in coordination with the SADIS Provider.

6.1.18 Given the aforementioned, the EANPG reviewed the amended list of deficiencies and agreed to the following:

EANPG Conclusion 57/31 – Updated List of EUR Air Navigation Deficiencies

That the ICAO Regional Director, Europe and North Atlantic, on behalf of the EANPG, undertake the necessary action to amend the database on air navigation deficiencies as provided at **Appendix ZA**.

7. ANY OTHER BUSINESS

7.1 IFAIMA MEMBERSHIP

7.1.1 The EANPG noted that on 4th March 2015, the ICAO Council recognised IFAIMA as an Organization that could be invited to suitable meetings of ICAO. Consequently, on 11th August 2015, IFAIMA requested the ICAO Regional Director, Europe and North Atlantic to become a member of the EANPG in order to cooperate with ICAO in all AIM and COM related subjects. Based on its Terms of Reference, the EANPG agreed to the following:

EANPG Conclusion 57/32 – Revised Terms of Reference of the EANPG to include IFAIMA as Regular Participant

That:

- a) the Terms of Reference of the EANPG to be revised to include IFAIMA as a regular participant;
- b) the ICAO Regional Director, Europe and North Atlantic, take the necessary action to update and publish a revision to the EANPG Handbook (EUR Doc 001).

7.2 REVISED EANPG COG TERMS OF REFERENCE

7.2.1 The EANPG recalled previous discussions regarding the future composition and working arrangements for the EANPG COG as addressed at EANPG/56 and COG/62. While the majority of the proposed changes have been accepted by EANPG/56, several changes relating to the composition and working arrangements of the COG merited further discussion. During COG/62, the overriding view recognised that the COG worked fairly effectively and therefore any changes should be carefully assessed not to adversely impact on the effective working arrangements which contributed so significantly to the smooth running of the EANPG plenary sessions.

7.2.2 However, it was acknowledged that for those EANPG members who were not members of the COG it could appear that some of the business was being concluded by a small group behind closed doors. In order to avoid any misperception that some of the EANPG business was being concluded by a small group behind closed door, it was agreed that changes in process and procedure would help address the concerns of some parts of the EANPG membership without significantly upsetting the dynamic within COG. That would be achieved through an improved transparency, including making all COG papers available to EANPG members for comments to be provided to the Chairman or the Secretariat either before or after the meeting.

7.2.3 In addition, it was also agreed that the approval by correspondence process should be used more frequently rather than routinely delegating decisions to the COG. This would include use of the silence procedure for those EANPG members electing not to respond. Part of this transparency would require greater discipline in terms of the time line for acceptance of papers if there was to be adequate opportunity for EANPG and COG members to review and provide comment.

7.2.4 In order to better reflect the overall membership with the EANPG, it was agreed that the addition of a relatively small number of members would improve the overall representation across the EUR Region. This should be achieved by some States/International Organisations only sending one participant to the COG in order to ensure the overall numbers remain manageable. The EANPG concurred with the COG proposal to include in the new composition one member to represent Lithuania and Poland and to two more members to represent the Maghreb area and those States interfacing with the MID/APAC Regions.

7.2.5 Based on the above, the COG approved the draft revised ToRs as presented at **Appendix ZB**. Therefore, the following draft EANPG Decision was agreed:

EANPG Decision 57/05 – Revised EANPG COG Terms of Reference

That:

- a) the Terms of Reference (ToRs) of the EANPG Programme Coordinating Group (COG) is amended as provided at **Appendix ZB** to this Report; and
- b) the ICAO Regional Director, Europe and North Atlantic, undertake the necessary action to update the EANPG Handbook accordingly.

7.3 PROPOSED UPDATE TO EANPG HANDBOOK

7.3.1 The EANPG noted that several sections of the EANPG Handbook required amendments to include the following changes:

- In the EANPG Section, on page 6, the participation of IFAIMA is included in the Terms of Reference of the EANPG (*WP25 of EANPG57 refers*)
- In the COG Section, on pages 9 and 10, revised Terms of Reference are included (*EANPG57 WP16 refers*)
- In the EANPG Contributory Group section, on pages 20-24, revised Terms of Reference for METG are included (*EANPG57 WP05 refers*)
- In the COG Task Force section, on pages 29-30, revised Terms of Reference for the COG AIM TF are included (*COG Decision 57/02 refers*)
- In Appendix C to the EANPG Handbook, Common EUR and EURASIA RMA Terms of References are introduced (*EANPG57 WP13 refers*)
- In the Reference Documentation Section, on page 40-45, an update of the latest release of EUR Documents is included.

7.3.2 In addition, the EANPG agreed to review the composition of the Aeronautical Fixed Services Group (AFSG), replacing the outdated list of States with the following “Representatives from all ICAO Contracting States in the EUR air navigation region, EUROCONTROL and IATA”. The EANPG also invited the Secretariat to further update the Reference Documentation Section, on page 40-45 with the new EUR Documents approved by the EANPG/57. Therefore, the following EANPG Conclusion was agreed:

EANPG Conclusion 57/33 – Amendment 2 to the First Edition of EUR Doc 001, EANPG Handbook (2013)

That, the ICAO Regional Director, Europe and North Atlantic:

- a) take the necessary steps to update the EANPG Handbook (EUR Doc 001) with Amendment 2, as shown in **Appendix ZC** to this report; and
- b) publish the First Edition (2013) of the EANPG Handbook (EUR Doc 001), Amendment 2 on the ICAO EUR/NAT website no later than 15 January 2016.

7.4 INTERNATIONAL WORKSHOP ON SAFE SERVICES AT AERODROMES WITH SPECIFIC CONDITIONS

7.4.1 The Russian Federation presented the EANPG with a proposal to support an International Workshop on safe services at aerodromes with specific conditions (low level of operations, remote areas, alternate aerodromes needed for Cross-Polar, Trans-Polar or ETOPS operations etc.) to be held during the last week of April 2016, in St. Petersburg, Russian Federation.

7.4.2 The EANPG noted that this initiative would allow the sharing of best practices of operations at aerodromes with special conditions, including remote aerodrome control services and implementation of AFIS. Furthermore, Hungary confirmed its availability to participate in the seminar/workshop and support this initiative sharing its lessons learned in this matter.

7.4.3 With due consideration to the above, the EANPG/57 agreed with the following:

EANPG Conclusion 57/34 – International Workshop on Safe Services at Specific Aerodromes

That the ICAO Regional Director, Europe and North Atlantic, on behalf of the EANPG:

- a) support the International workshop on safe services at specific aerodromes; and
- b) invite States, International Organisations, Air Navigation Service Providers (ANSP) and Industry to participate at the workshop.

7.5 ON THE NON-STOP SURVEILLANCE TO MONITOR AIRCRAFT GLOBALLY

7.5.1 The EANPG was provided with a Russian Federation proposal that the ICAO Regional Director, Europe and North Atlantic, on behalf of the EANPG, undertake the necessary action to bring to the attention of the appropriate ICAO global group the recommendation to:

- a) establish the mandatory uninterrupted use of SSR transponders and ADS-B transceivers and develop appropriate amendments to ICAO provisions;
- b) evaluate efficient communications technologies for the delivery of ADS-B messages to ATC/airlines under BRLOS conditions;
- c) assess the capabilities of self-organizing airborne networks to deliver information under BRLOS condition.

7.5.2 The EANPG noted that this was a very important topic which was also addressed by various ICAO global groups, including the work on GADSS and amendments to ICAO provisions on global flight tracking. Several ICAO panels would need to be involved, including the Surveillance Systems Panel, flight operations and ATM panels etc. The EANPG was informed that the recent session of the ICAO ANC has reviewed the latest proposals related to the global flight tracking system and GADSS.

7.5.3 In view of the above, the EANPG agreed that the proposed specific technical solutions needed to be considered in a global performance based framework and discussed within the global ICAO contributory bodies. Therefore, it was suggested that the above-mentioned proposals should be submitted directly by the Russian Federation to the appropriate global ICAO groups for discussion.

7.6 NEXT MEETING

7.6.1 The EANPG agreed to convene its next meeting in the European and North Atlantic Office of ICAO in Paris, France, from 28 November to 1st December 2016.

7.6.2 The EANPG noted the following dates for EANPG-COG meetings:

- EANPG-COG/65, Prague, Czech Republic from 30 May to 3rd June 2016
- EANPG-COG/66, Paris, France, 10 to 13 October 2016
- EANPG-COG/67, Paris, France, 1st December 2016

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Appendix B – Meeting documentation

(paragraph 0.7 refers)

EUROPEAN AIR NAVIGATION PLANNING GROUP FIFTY-SEVENTH MEETING

(Paris, France, 23 to 26 November 2015)

WP	Ag It	Title	Presented by
WP01	0	Provisional Agenda	Secretariat
WP02	2	EANPG conclusions and decisions follow-up	Secretariat
WP03 Att	+ 4.1 b)	Development and Approval of the European Regional Air Navigation Plan (EUR eANP)	Secretariat
WP04 App	+ 4.2	FMG/21 Outcome	Secretariat
WP05 App	+ 4.2	METG/25 Outcomes	Secretariat
WP06 App	+ 4.2	Performance Based Navigation Issues	Secretariat
WP07	4	Transition AIS to AIM	Secretariat
WP08	4.2	Implementation of the Regional Performance Framework	Secretariat
WP09	3.1	Coordination between EANPG and RASG-EUR	Secretariat
WP10	4.2	AWOG Outcome	Secretariat
WP11	5.3	Report on Flight Safety Monitoring in EURASIA RVSM Airspace	RMA EURASIA
WP12 App	+ 5.1	Proposal to issue new RVSM post implementation guidance material	RMA EUR+ EURASIA
WP13	5	EUR RMA and EURASIA RMA Terms of Reference	RMA EUR + EURASIA
WP14	6	Deficiencies	Secretariat
WP15	7	International Workshop on Safe Services at Aerodromes with Specific Conditions	RUSSIA FEDERATION
WP16	7.1	Revised EANPG COG Terms of Reference	Secretariat
WP17	4.3	ATMGE Outcome	Secretariat
WP18	4.1c	Proposal for Amendment to ICAO PANS-ATM and PANS-OPS related to Responsibility for Terrain/Obstacle Clearance and Cold Temperature Correction	EUROCONTROL
WP19	4.1c	Proposal for Amendment to ICAO Doc 4444 related to Level in Traffic Information	EUROCONTROL
WP20	4.1c	ATS Reporting Office Functions, Submission and Acceptance of Flight Plans, and Flights through Intermediate Stops	EUROCONTROL

WP21	5	2015 EUR RVSM Safety Monitoring Report	EUROCONTROL	
WP22 Att	+	3.3	Baltic Sea Project Team	Secretariat
WP23 App	+	3.3	Initial Draft Version of ICAO EUR DOC 032 (Interim Guidance Material on Civil/Military Cooperation in Air Traffic Management)	Secretariat
WP24	4.2	RDGE	Secretariat	
WP25	7	IFAIMA Membership	Secretariat	
WP26 App	+	7	EANPG Handbook Update	Secretariat
WP27	7	Amendment Terms of Reference of PIRGS (deletion of BORPCs as instructed by Council)	Secretariat	
WP28	1.2	Significant Developments in the area of air navigation in Ukraine	Ukraine	
WP29	3.4	Interregional LPRI Workshop	Secretariat	
WP30	7	On the non-stop surveillance to monitor aircraft globally	Russian Federation	
WP31	7	On the non-stop surveillance to monitor aircraft globally using self-organizing airborne networks	Russian Federation	
WP32	4 + 7	Contingency Planning For Nuclear Events	EUROCONTROL	
IP	Ag It	Title	Presented by	
IP01	-	Meeting schedule	Secretariat	
IP02	-	Meeting documentation	Secretariat	
IP03	1.1	ICAO Update	Secretariat	
IP04	3.1	Update on the activities of RASG-EUR and Its Contributory Bodies	Secretariat	
IP05	1.2	EUROCONTROL Activities Update	EUROCONTROL	
IP06	4	Update on EANPG Conclusions related to eTOD and AIS/AIM assigned to ECTL	EUROCONTROL	
IP07 + App	4	Global AIM Developments	Secretariat	
IP08	4.2	Review of the Outcome of COG/AIM TF/29	Secretariat	
IP09	4.2	EUR Search and Rescue Task Force – First Assembly	Secretariat	
IP10	1.1	Planning and Implementation of Regional Group (PIRG) Activities in Other Regions	Secretariat	
IP11	3	Facilitating Stabilized Approaches and Enhancing Situational Awareness – Paris CDG APW Implementation Report	FRANCE	
IP12	1.2	Progress on SES and SESAR	EC	

IP13	1.2	Progress in the implementation of single European Sky Interoperability Regulations	EC
IP14	4.1 c	Compliance with the documents related to aeronautical meteorological services in the Russian Federation	Russian Federation
IP15	1.1	update on topics discussed within the framework of the fourth meeting of the eur/nat aviation security group (enavsecg/04) affecting the EANPG	Secretariat
IP16	4.1a)	Update on VACP	Secretariat
PR	Ag It	Title	Presented by
PR01	4.1 b)	eANP Development	ICAO HQ
PR02	1.1	Outcome Interregional Coordination Meeting	Secretariat
PR03	4	PBN Implementation	CANSO
PR04	4	ASBU Monitoring Report	EUROCONTROL
FL	Ag It	Title	Presented by
FL01	1.2	In support of discussion WP/28	Russian Federation
FL02	1.2	In support of disuccsion WP/28	Chairman + Secretariat












Appendix C – Coordination Matrix of RASG-EUR and EANPG Activities

(paragraph 3.1.6 refers)

Function	RASG-EUR (L-lead; C-coordinate)	EANPG (L-lead, C-coordinate)
ATM operational issues (including safety, incidents reporting, SMS, RVSM, conflict zones, civil/military coordination)	C	L
MET		L
AIS, Charts, PANS-OPS		L
SAR		L
CNS		L
ANS oversight	L	C
Aerodromes operations and oversight	L	C
Runway safety programme and teams	L	C
ANS training(including LPR)		L
Training AGA/PEL/OPS/AIR/AIG	L	
PEL/OPS/AIR/AIG operations and oversight issues	L	
Annual AN report	C	L
Annual safety report	L	C
Mandatory and voluntary reporting	L	C
PBN	C	L
Contingency planning	C	L
Air navigation deficiencies	C	L
RPAS(ANS issues)	C	L
RPAS(other issues)	L	C
SSP implementation	L	C

Appendix D – BSPT Operational Focal Points

(paragraph 3.3.12 refers)

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Appendix E – EUR OPS BULLETIN

(paragraph 3.3.13 refers)



EUR OPS BULLETIN

Serial Number: **2015_002**

Effective: 15 December 2015

Subject: Guidelines to airspace users in order to raise their awareness on State aircraft operations especially in the High Seas airspace over the Baltic Sea

The purpose of European Operations Bulletin **2015_002** is to promulgate guidelines to airspace users in order to raise their awareness on State aircraft operations under due regard, or when State aircraft operations are conducted only partially in accordance with ICAO provisions, especially in the High Seas airspace over the Baltic Sea.

This Bulletin was prepared in response to one of the recommendations from the ICAO Civil/Military Cooperation Symposium (ICAO EUR/NAT Office, April 2015) and is also reflecting the outcome of the Baltic Sea Project Team, which was established by the EANPG COG/62 Meeting (May 2015) to address several coordination issues and operational aspects identified in the Baltic Sea area. It was endorsed by the 57th Meeting of the European Air Navigation Planning Group in November 2015.

Questions or comments regarding this Bulletin may be directed to:

The European and North Atlantic Office of ICAO: icaoournat@paris.icao.int

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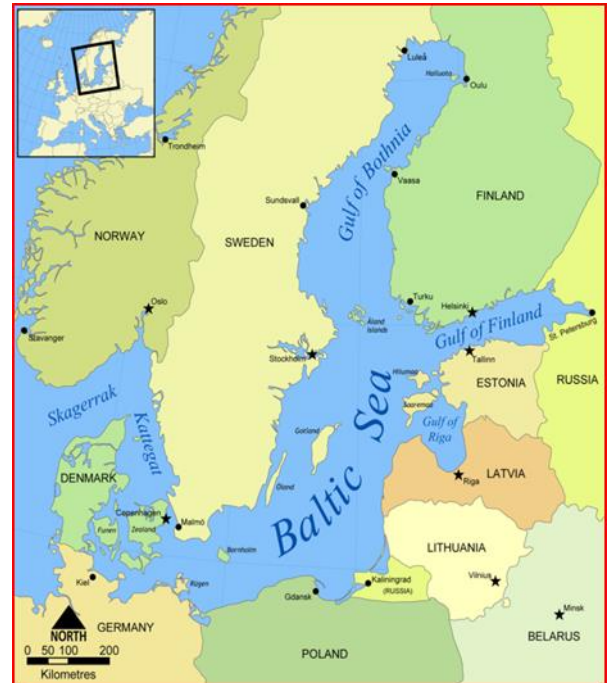
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The practical meaning for airspace users that are operating over the High Seas

- Within a Flight Information Region (FIR), classes of airspace established for volumes of airspace extending over the High Seas and their associated rules apply only to civil aviation. However, the safety of air navigation is paramount for all airspace users.
- All airspace users must be aware that State aircraft have the possibility to operate under “due regard” over the High Seas as the access of State aircraft to High Seas airspace cannot be restricted.
- State aircraft will operate in compliance with ICAO SARPS to the maximum extent practicable, but can, due to mission requirements, also operate under "due regard" for the safety of navigation of civil aircraft. When operating under "due regard", the State aircraft is not subject to ATC, irrespective of the declared airspace-class over the High Seas.



- A State aircraft operating under “due regard” might not have filed a flightplan, might not necessarily establish radio communications or enable its identification through means of cooperative surveillance. State aircraft operating under “due regard” are required to maintain safe separation from civil aircraft flying in their proximity
- Civil Air Traffic Control (ATC) units have normally no responsibilities for the separation of State aircraft when they are operating under "due regard", and can only, when know to them, provide traffic information to all other aircraft which are in the vicinity of the particular State aircraft.
- All civil airspace users must adhere to ICAO SARPS, in particular to the Rules of the Air in ICAO Annex 2, when operating over the High Seas. They must be aware that State aircraft are authorised to operate under "due regard" at any time in the airspace over the High Seas.

Additional information can be found in:

- ICAO Circular 330, Civil/Military Cooperation in Air Traffic Management
- ICAO EUR Doc 032, Interim Guidance Material on Civil/Military Cooperation in ATM

The legal background

UN Convention on the Law of the Sea (UNCLOS) with Relevance for Aviation



Article 2, Legal status of the territorial sea, of the air space over the territorial sea and of its bed and subsoil

1. The **sovereignty of a coastal State extends**, beyond its land territory and internal waters and, in the case of an archipelagic State, its archipelagic waters, to an adjacent belt of sea, described as **the territorial sea**.
2. This **sovereignty extends to the air space over the territorial sea** as well as to its bed and subsoil.
3. The sovereignty over the territorial sea is exercised subject to this Convention and to other rules of international law.

Article 3, Breadth of the territorial sea

Every State has the right to establish the breadth of its territorial sea **up to a limit not exceeding 12 nautical miles**, measured from baselines determined in accordance with this Convention.

Article 58, Rights and duties of other States in the exclusive economic zone

In the exclusive economic zone, all States, whether coastal or land-locked, enjoy, subject to the relevant provisions of this Convention, **the freedoms referred to in article 87 of navigation and over-flight** and of the laying of submarine cables and pipelines, and other internationally lawful uses of the sea related to these freedoms, such as those associated with the **operation** of ships, **aircraft** and submarine cables and pipelines, and compatible with the other provisions of this Convention.

Article 86

The provisions apply to all **parts of the sea that are not included in the exclusive economic zone, in the territorial sea or in the internal waters of a State**, or in the archipelagic waters of an archipelagic State. This article does **not entail any abridgement of the freedoms enjoyed by all States in the exclusive economic zone in accordance with article 58**.

Article 87, Freedom of the high seas

The **high seas are open to all States**, whether coastal or land-locked.

1. Freedom of the high seas is exercised under the conditions laid down by this Convention and by other rules of international law. It comprises, inter alia, both for coastal and land-locked States:

- (a) Freedom of navigation

(b) Freedom of over-flight

Note : Turkey is not a signatory to the UNCLOS III from 1982 and their position is well known and remains unchanged

ICAO Provisions

The ICAO Chicago Convention in **Article 3 (a) expressly excludes State aircraft from its scope of applicability**. Articles 3 (b), (c) and (d) further clarify the definition and scope of application of the Articles of the Convention. As a consequence of Article 3, in particular subparagraph 3 (d), **States are required to safeguard navigation of civil aircraft when setting rules for their State aircraft**. This leaves it up to the individual State to regulate these operations and services, generating a wide diversity of military regulations. However, especially in congested airspace, harmonized regulation is a precondition for a safe, efficient and ecologically sustainable aviation system.

At the same time, States are aware of the limitations of ICAO Standards and Recommended Practices (SARPs) and designated Annexes to the Convention, including PANS and regional supplementary procedures (SUPPs), as they relate to State/military aircraft and their services. Indeed, as seen above, Article 3 of the Convention specifically exempts State aircraft from compliance with articles of the Convention. More and more multinational military operations that cross international boundaries require complex coordination and planning processes to avoid unnecessary segregation or restrictions and to achieve the required level of safety.

In accordance with the Chicago Convention, **Article 3 (b), “Aircraft used in military, customs and police services shall be deemed to be State aircraft”**. In broad terms, the right to access all airspace, within the limits of the operational needs, is a crucial requirement to enable the military, customs and police to perform the security, defence and law enforcement missions mandated by their States and by international agreements. It is, therefore, a fundamental requirement that each State be able to train and operate its State aircraft effectively. In this manner, it is vital for State aircraft to be provided access to sufficient space, enabling adequate opportunities for the training and execution of security, defence and law enforcement elements.

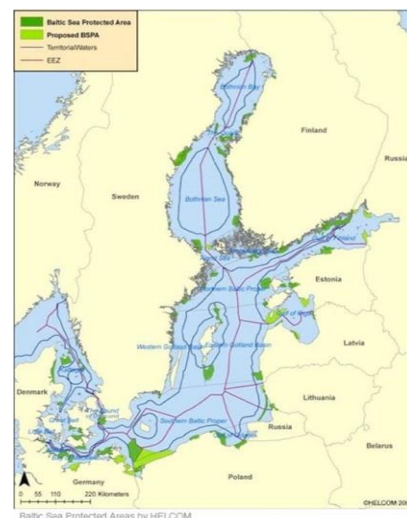


In pursuit of their tasks, operators of State aircraft should, where practicable, respect international, regional and State civil aviation legislation and aim for compliancy. However, it is recognized that the nature of the defence and security tasks can create unique situations that need special handling and considerations. In this regard, ICAO Circular 330 chapter 5 explains in detail what roles are performed by military and non-military flights under the title of “State aircraft”. It also highlights circumstances when State aircraft can be fully compliant or partially compliant with international civil aviation rules and procedures, as provided for in ICAO SARPs, and it lists the general expectations for handling such aircraft by an air navigation service provider (ANSP). A number of States and international organisations have regulated the operation of State aircraft and made this information publicly available.

ICAO Annex 11 specifies a number of provisions that address the aspects of air traffic services over the High Seas, including the division of airspace in Flight Information Regions (each under the responsibility of ICAO Member States). The State that has accepted the provision of ATS over the High Seas must provide air traffic services in accordance with Annex 11, but “may apply the SARPs in a manner consistent with that adopted for airspace under its jurisdiction” and the obligation on States that their ATS authorities closely coordinate with military authorities on activities that may affect flights of civil aircraft (e.g. provide flight plans and other relevant data)

In Summary

- Over the High Sea only the relevant international law applies
- All States enjoy the freedom to overfly the high seas and so called “passages” (i.e. international straits)
- High seas start outside the territorial sea and the territorial sea extends up to a maximum of 12 NM from the national coastline
- High Seas airspace is not territorial airspace, hence national and/or other legislation DO NOT apply
- ICAO SARPs apply to civil aircraft over the High Seas, but not to State aircraft in military services (‘military aircraft’) or other State aircraft
- States must have due regard for the safety of civil aircraft and must have established respective regulations for national State aircraft



Appendix F – EUR Doc 032 Interim Guidance Material on Civil/Military Cooperation in Air Traffic Management

(paragraph 3.3.18 refers)

(document provided in a separate folder)

Appendix G – Proposal for Amendment to Volume I of EUR Air Navigation Plan (EUR eANP

(paragraph 4.1.24 refers)

(document provided in a separate folder)

Appendix H – Proposal for Amendment to Volume II of EUR Air Navigation Plan (EUR eANP)

(paragraph 4.1.24 refers)

(document provided in a separate folder)

Appendix I – Proposal for Amendment to Volume III of EUR Air Navigation Plan (EUR eANP) and the EUR ASBU Handbook

(paragraph 4.1.28 refers)

(document provided in a separate folder)

Appendix J – Draft Proposal for Amendment to PANS-ATM

(paragraph 4.1.35 refers)

4.10.3 Minimum ~~en~~crising levels for IFR flights

4.10.3.1 Except when specifically authorized by the appropriate authority, cruising levels below the minimum flight altitudes established by the State shall not be assigned.

4.10.3.2 ATC units shall, when circumstances warrant it, determine the lowest usable flight level or levels for the whole or parts of the control area for which they are responsible, use it when assigning flight levels and pass it to pilots on request.

Note 1.— Unless otherwise prescribed by the State concerned, the lowest usable flight level is that flight level which corresponds to, or is immediately above, the established minimum flight altitude.

Note 2.— The portion of a control area for which a particular lowest usable flight level applies is determined in accordance with air traffic services requirements.

Note 3.— The objectives of the air traffic control service as prescribed in Annex 11 do not include prevention of collision with terrain. The procedures prescribed in this document do not relieve pilots of their responsibility to ensure that any clearances issued by air traffic control units are safe in this respect. When an IFR flight is vectored or is given a direct routing ~~which takes the aircraft off an ATS route~~, the procedures in Chapter 8, 8.6.5.2 apply. [Editorial Note: the change should be applied to Note 2 to Foreword, paragraph 2 and Note 3 to paragraph 5.9]

Note 4.— See also the Procedures for Air Navigation Services – Aircraft Operations (PANS-OPS, Doc 8168), Volume I, Part III, Chapter 4 for details on altimeter corrections.

...

8.6.5.2 When vectoring ~~or assigning a direct routing not included in the flight plan, which takes an IFR flight and when giving an IFR flight a direct routing which takes the aircraft off an a published ATS route~~ ~~or instrument procedure~~, the ~~a~~ controller ~~providing ATS surveillance service~~ shall issue clearances such that the prescribed obstacle clearance will exist at all times until the aircraft reaches the point where the pilot will ~~resume own navigation~~ ~~re-join the flight plan route, or join a published ATS route or instrument procedure~~. When necessary, the relevant minimum vectoring altitude shall include a correction for low temperature effect [Editorial Note: the last sentence is relocated at paragraph 8.6.5.2.2]

Note 1. – Prescribed obstacle clearance will exist at all times when controller issues clearances at or above the minimum flight altitudes provided by the appropriate ATS authority.

Note 2.— When an IFR flight is being vectored, the pilot may be unable to determine the aircraft's exact position in respect to obstacles in this area and consequently the altitude which provides the required obstacle clearance. Detailed obstacle clearance criteria are contained in PANS-OPS (Doc 8168), Volumes I and II. See also 8.6.8.2.

8.6.5.2.1 When a flight crew request a direct routing which will take the IFR flight outside controlled airspace, the controller shall inform the flight crew accordingly.

Note — ~~It is the responsibility of the ATS authority to provide the controller with minimum altitudes corrected for temperature effect.~~ [Editorial Note: the note transformed as paragraph 8.6.5.2.2]

8.6.5.2.2 The ATS authority shall provide the controller with minimum altitudes, including the minimum vectoring altitudes, corrected for temperature effect.

Note. – It is the responsibility of the ATS authority to specify:

- a) the temperature range for which the minimum altitudes are designed;
 - b) the period of applicability and provisions to apply when the temperature is lower than the one used for calculating the corrections;
 - c) the information to provide to flight crew, when necessary.
-

Appendix K – Draft Proposal for Amendment to PANS-OPS

(paragraph 4.1.35 refers)

Chapter 4 ALTIMETER CORRECTIONS

Note.— This chapter deals with altimeter corrections for pressure, temperature and, where appropriate, wind and terrain effects. The pilot is responsible for these corrections, except when under radar vectoring. In that case, the radar controller issues clearances such that the prescribed obstacle clearance will exist at all times, taking the cold temperature correction into account.

4.1 RESPONSIBILITY

4.1.1 Pilot's responsibility

4.1.1.1 The pilot-in-command is responsible for the safety of the operation and the safety of the aeroplane and of all persons on board during flight time (Annex 6, 4.5.1). This includes responsibility for obstacle clearance, except when a controller providing ATS surveillance service vectors or assigns direct routing not included in the flight plan to an IFR flight being vectored by radar taking the aircraft off a published ATS route or instrument procedure.

Note 1. - In cases described above, ATC is responsible to issue clearances such that the prescribed obstacle clearance will exist at all times until the aircraft reaches the point where the pilot will re-join the flight plan route, or join a published ATS route or instrument procedure. Minimum vectoring altitudes provide obstacle clearance at all times until the aircraft reaches the point where the pilot will resume own navigation. When necessary, the relevant minimum vectoring altitude includes a correction for low temperature effect. The pilot-in-command is expected to should closely monitor the aircraft's position with reference to pilot-interpreted navigation aids to minimize the amount of radar navigation assistance required and to alleviate the consequences resulting from a radar failure of the ATS surveillance system. The pilot-in-command should is also expected to continuously monitor communications with ATC while being radar vectored, and should to immediately climb the aircraft to the minimum sector altitude if ATC does not issue further instructions within a suitable interval, or if a communications failure occurs.

Note 2. — See also the Procedures for Air Navigation Services – Air Traffic Management (PANS-ATM, Doc 4444), Chapter 4, Section 4.10 and Chapter 8, paragraph 8.6.5.2.

4.1.1.2 When operating on standard pressure setting of 1 013.2 hPa, or when the ambient temperature on the surface is significantly lower than that predicted by the standard atmosphere or when operating in mountainous area, the pilot in command shall determine the necessary corrections to minimum flight altitudes.

Note.— See 4.2 – Pressure Correction, 4.3 – Temperature Correction, 4.4 – Mountainous Areas – En Route and 4.5 – Mountainous Terrain – Terminal Areas.

4.1.1.2.1 For IFR flights operated in controlled airspace the pilot-in-command shall:

- a) Request a higher level when the level assigned by ATC is unacceptable due to altimeter corrections ; [Editorial Note: provisions partly relocated from 4.1.4]
- b) Apply the altimeter corrections when flying an instrument procedure, and advise ATC, as necessary.

Note. – In general, no information to ATC is necessary when applying altimeter corrections along the final approach segment.

4.1.1.2.2 For IFR flights outside controlled airspace, including flights operating below the lower limit of controlled airspace, the pilot-in-command shall determine the lowest usable flight level. Current or forecast QNH and temperature values should be taken into account. [Editorial Note: provisions relocated from 4.1.5.1]

4.1.1.2.2.1 It is possible that altimeter corrections below controlled airspace may accumulate to the point where the aircraft's position may impinge on a flight level or assigned altitude in controlled airspace. The pilot-in-command shall then obtain clearance from the appropriate control agency ATC unit. [Editorial Note: provisions relocated from 4.1.5.2]

4.1.2 Operator's responsibility

4.1.2.1 The operator is responsible for establishing minimum flight altitudes, which may not be less than those established by States that are flown over (Annex 6, 4.2.6). The operator is responsible for specifying a method for determining these minimum altitudes (Annex 6, 4.2.6). Annex 6 recommends that the method should be approved by the State of the Operator and also recommends the factors to be taken into account.

4.1.2.2 The operator shall include an item on cold temperature correction on the standard operating procedures addressing altimetry settings.

4.1.3 State's responsibility

Annex 15, Appendix 1 (Contents of Aeronautical Information Publication), indicates that States should publish in Section GEN 3.3.5, "The criteria used to determine minimum flight altitudes". If nothing is published, it should be assumed that no corrections have been applied by the State.

Note.—The determination of lowest usable flight levels by air traffic control units within controlled airspace does not relieve the pilot in command of the responsibility for ensuring that adequate terrain clearance exists, except when an IFR flight is being vectored by radar.

4.1.4 Air traffic control (ATC)

If an aircraft is cleared by ATC to an altitude which the pilot in command finds unacceptable due to low temperature, then the pilot in command should request a higher altitude. If such a request is not received, ATC will consider that the clearance has been accepted and will be complied with. See Annex 2 and the PANS-ATM (Doc 4444), Chapter 6. [Editorial Note: provisions partly relocated to 4.1.1.2.1 a)]

4.1.5 Flights outside controlled airspace

[Editorial Note: provisions relocated to 4.1.3]

4.1.5.1 For IFR flights outside controlled airspace, including flights operating below the lower limit of controlled airspace, the determination of the lowest usable flight level is the responsibility of the pilot in command. Current or forecast QNH and temperature values should be taken into account. [Editorial Note: provisions relocated to 4.1.1.2.2]

4.1.5.2 It is possible that altimeter corrections below controlled airspace may accumulate to the point where the aircraft's position may impinge on a flight level or assigned altitude in controlled airspace. The pilot in command must then obtain clearance from the appropriate control agency. [Editorial Note: provisions partly relocated to 4.1.1.2.3].

4.2 PRESSURE CORRECTION

...

4.3 TEMPERATURE CORRECTION

4.3.1 Requirement for temperature correction

The calculated minimum safe altitudes/heights must be adjusted when the ambient temperature on the surface is ~~much~~ lower than that predicted by the standard atmosphere.

4.3.1.1 Approximate correction

In such conditions, an approximate correction is 4 per cent height increase for every 10°C below standard temperature as measured at the altimeter setting source. This is safe for all altimeter setting source altitudes for temperatures above -15°C.

4.3.1.2 Tabulated corrections

For colder temperatures, a more accurate correction should be obtained from Tables III-1-4-1 a) and III-1-4-1 b). These tables are calculated for a sea level aerodrome. They are therefore conservative when applied at higher aerodromes. To calculate the corrections for specific aerodromes or altimeter setting sources above sea level, or for values not tabulated, see 4.3.3, “Corrections for specific conditions”.

Note 1.— The corrections have been rounded up to the next 5 m or 10 ft increment.

Note 2.— Temperature values from the reporting station (normally the aerodrome) nearest to the position of the aircraft should be used.

4.3.1.3 Corrections for specific conditions

...

4.3.1.4 Accurate corrections

...

4.3.25 Assumption regarding temperature lapse rates

Both the above equations assume a constant off-standard temperature lapse rate. The actual lapse rate may vary considerably from the assumed standard, depending on latitude and time of year. However, the corrections derived from the linear approximation (see 4.3.1.3) can be taken as a satisfactory estimate for general application at levels up to 4 000 m (~~12 000~~ 13 000 ft). The correction from the accurate calculation (see 4.3.1.4) is valid up to 11 000 m (36 000 ft).

4.3.36 Small Application of corrections

For practical operational use, it is considered appropriate to apply a temperature correction when the value of the correction exceeds 20 per cent of the associated minimum obstacle clearance (MOC).

4.4 MOUNTAINOUS AREAS — EN ROUTE

Appendix L – Draft Proposal for Amendment to ICAO Doc 4444, PANS-ATM

(paragraph 4.1.38 refers)

5.10 ESSENTIAL TRAFFIC INFORMATION

[...]

5.10.2 Information to be provided

Essential traffic information shall include:

- a) direction of the flight concerned;
- b) type and wake turbulence category (if relevant);
- c) ~~crising~~ level or **relative vertical distance** of aircraft concerned; **and**
- d) one of the following, as appropriate:**
 - 1) estimated time over the reporting point nearest to where the level will be crossed; or
 - 2) relative bearing of the aircraft concerned in terms of the 12-hour clock as well as distance from conflicting traffic; or
 - 3) actual or estimated position of the aircraft concerned.

Note 1. — Nothing in Section 5.10 is intended to prevent ATC from imparting to aircraft under its control any other information at its disposal with a view to enhancing air safety in accordance with the objectives of ATS as defined in Chapter 2 of Annex 11.

Note 2.— Wake turbulence category will only be essential traffic information if the aircraft concerned is of a heavier wake turbulence category than the aircraft to which the traffic information is directed.

Note 3. – When considered appropriate, the controller may provide the vertical position of the aircraft concerned in form of vertical distance (feet/metres) above or below the cleared level of the aircraft provided with such information.

[...]

Chapter 8 ATS Surveillance Service

[...]

8.8 EMERGENCIES, HAZARDS AND EQUIPMENT FAILURES

[...]

8.8.2. Collision hazard information

[...]

8.8.2.3 Information regarding traffic on a conflicting path should be given, whenever practicable, in the following form:

[...]

d) level or **relative vertical distance** and type of aircraft or, if unknown, relative speed of the conflicting traffic, e.g. slow or fast.

Note 1. – When considered appropriate, the controller may provide the vertical position of the aircraft concerned in form of vertical distance (feet/meters) above or below the cleared level of the aircraft provided with such information.

[...]

Chapter 12 Phraseologies

[....]

<p>12.3.1.1 DESCRIPTION OF LEVELS (SUBSEQUENTLY REFERRED TO AS “(LEVEL)”) <p>...when passing level information in form of vertical distance from the other traffic.</p> </p>	<p>a) FLIGHT LEVEL (<i>number</i>); or b) (<i>number</i>) METRES c) (<i>number</i>) FEET d) (<i>number</i>) FEET/METRES ABOVE (or BELOW)</p>
<p>[....]</p> <p>12.4.1.8 TRAFFIC INFORMATION AND AVOIDING ACTION <p>...when passing level information to aircraft climbing or descending, in form of vertical distance from the other traffic</p> </p>	<p>a) TRAFFIC (<i>direction of flight</i>) (<i>distance</i>) [<i>any other pertinent information</i>] [...] 8) [<i>type</i>] 9) (<i>level</i>) 10) [YOUR CLEARED LEVEL] 11) CLIMBING (or DESCENDING)</p>

[...]

Appendix M – Draft Proposal for Amendment to ICAO Annex 2

(paragraph 4.1.47 refers)

3.3.1.3 A flight plan shall be submitted, before departure, to an air traffic services reporting office or, during flight, transmitted to the appropriate air traffic services unit or air-ground control radio station, unless arrangements have been made for submission of repetitive flight plans.

Note.– The reference to an air traffic services reporting office denotes the functions to be performed by such an office.

Appendix N – Draft Proposal for Amendment to ICAO Doc 4444, PANS-ATM

(paragraph 4.1.47 refers)

4.4.2 Submission of a flight plan

4.4.2.1 PRIOR TO DEPARTURE

4.4.2.1.1 Flight plans shall not be submitted more than 120 hours before the estimated off block time of a flight.

4.4.2.1.2 Except when other arrangements have been made for submission of repetitive flight plans, a flight plan submitted prior to departure should be submitted to the air traffic services reporting office at the departure aerodrome. If no such unit exists at the departure aerodrome, the flight plan should be submitted to the **ATS** unit serving or designated to serve the departure aerodrome. **A flight plan may also be submitted via approved direct methods as indicated in the aeronautical information publication (AIP).**

4.4.2.1.3 In the event of a delay of 30 minutes in excess of the estimated off-block time for a controlled flight or a delay of one hour for an uncontrolled flight for which a flight plan has been submitted, the flight plan should be amended or a new flight plan submitted and the old flight plan cancelled, whichever is applicable.

[...]

Appendix O – Revised Data Link Allotment Plan

(paragraph 4.2.22 refers)

Status		MHz																
		131,525	131,725	131,825	...	136,675	136,700	136,725	136,750	136,775	136,800	136,825	136,850	136,875	136,900	136,925	136,950	136,975
Current Plan and Use	ICAO current plan	ACARS SITA	ACARS SITA	ACARS ARINC	...	Analog voice	"_"	M2	"_"	M4	"_"	M2, ENR shared	"_"	M2, TMA shared	"_"	M4, CSC	"_"	M2, CSC shared
	Current use	ACARS SITA	ACARS SITA	ACARS ARINC	...	Analog voice	"_"	ACARS ARINC until 2016	ACARS SITA until 2016				"_"	M2, shared	"_"		"_"	M2, CSC shared
Transition Steps	Transition Step 1	ACARS SITA	ACARS SITA	ACARS ARINC	...	Analog voice	"_"	ACARS ARINC until 2016	ACARS SITA until 2016				"_"	M2, GND, SITA and GND + AIR, ARINC	"_"	M4, CSC	"_"	M2, CSC shared
	Transition Step 2	ACARS SITA	ACARS SITA	ACARS ARINC	...	Analog voice	"_"	ACARS ARINC ceases operation	ACARS SITA until 2016				"_"	M2, GND, SITA and GND + AIR, ARINC	"_"	M4, CSC	"_"	M2, CSC shared
	Transition Step 3	ACARS SITA	ACARS SITA	ACARS ARINC	...	Analog voice	"_"		ACARS SITA until 2016				"_"	M2, GND, SITA and GND + AIR, ARINC	"_"	M4, CSC	"_"	M2, CSC shared
	Transition Step 4	ACARS SITA	ACARS SITA	ACARS ARINC	...	Analog voice	"_"	M2, GND + AIR, SITA advertised network	ACARS SITA until 2016				"_"	M2, GND + AIR, ARINC advertised network	"_"	M4, CSC	"_"	M2, CSC shared
Final Goal Plan	Draft proposed ICAO revised plan	ACARS SITA	ACARS SITA	ACARS ARINC	...	Analog voice	"_"	M2, GND, [SITA] advertised network	"_"	M2, AIR, [ARINC] advertised network	"_"	M2, AIR, [SITA] advertised network	"_"	M2, GND, [ARINC] advertised network	"_"	M4, CSC	"_"	M2, CSC shared

GND - ground use means that a channel is used by aircraft stations with its “wheels on the ground”.

AIR - airborne use means that a channel is used by aircraft stations when airborne.

Additional note: For dual squitter systems an alternative use of the VDL M2 identified frequencies (i.e. 136.725 MHz, 136.775 MHz, 136.825 MHz and 136.875 MHz), including its sharing principles, may be accepted under the condition that any such use should be subject to a FMG coordination

Appendix P – Proposal for Amendment EUR SUPPS DOC 7030

(paragraph 4.2.24 refers)

Notes on the Presentation of the Amendment

The text of the amendment is arranged to show deleted text with a line through it and new text highlighted with grey shading, as shown below:

1. ~~Text to be deleted is shown with a line through it.~~ text to be deleted
2. **New text to be inserted is highlighted with grey shading.** new text to be inserted
3. ~~Text to be deleted is shown with a line through it~~ followed by the **new text to replace existing text** replacement text which is highlighted with grey shading.

3.7 RADIO CHANNELS/FREQUENCIES

3.7.1 VHF Datalink (VDL) Mode 2 – system characteristics of ground and airborne installations

(A10, Vol. III, Part I)

~~3.7.1.1 With effect from 1 January 2010, all VDL Mode 2 ground transmitters in the European Region shall meet the provisions specified in Annex 10, Volume III, Part I, 6.2.4.1.1, 6.2.4.2.1, 6.2.4.2.2 and 6.2.4.3.1, relating to adjacent channel emissions.~~

~~3.7.1.2 With effect from 1 January 2010, all VDL Mode 2 airborne transmitters in the European Region shall meet the provisions specified in Annex 10, Volume III, Part I, 6.3.4.1.1, 6.3.4.2.1, 6.3.4.2.2 and 6.3.4.3.1, relating to adjacent channel emissions.~~

~~3.7.1.3 With effect from 1 January 2010, the receiving function of all VDL Mode 2 installations in the European Region shall meet the provisions specified in Annex 10, Volume III, Part I, 6.3.5.3.1, relating to the specified error rate.~~

3.7.1.1 In the EUR Region, all VDL Mode 4 ground and aircraft stations shall only operate on 136.925 MHz and in accordance with the ICAO EUR Frequency Management Manual (Doc 011).

Appendix Q – PBN Status 2015

(paragraph 4.2.26 refers)

States requested to complete a PBN Implementation Plan	availability of the National PBN impl plan	Compliance with A37-11 deadlines(PBN operations in en-route and terminal areas by 2016)	Compliance with A37-11 deadlines-RNP APCH (70% by 2014&100% by 2016) See also EUR Table CNS4b
ALBANIA	in progress	yes	partial
ALGERIA	in progress		partial
ANDORRA	N/A		
ARMENIA	yes	yes	partial
AUSTRIA	in progress	yes	partial
AZERBAIJAN	yes	yes	partial
BELARUS	yes	yes	partial
BELGIUM	yes	yes	partial
BOSNIA & HERZEGOVINA	in progress	yes	partial
BULGARIA	in progress	yes	partial
CYPRUS	in progress	yes	partial
CROATIA	In progress	yes	partial
CZECH REPUBLIC	yes	yes	partial
DENMARK	in progress	yes	partial
ESTONIA	TBD 2015	yes	partial
FINLAND	yes	yes	partial
FRANCE	yes	yes	partial
GEORGIA	TBD 2015	yes	partial

GERMANY	yes	yes	partial
GREECE	In progress	In progress	partial
HUNGARY	in progress	yes	partial
ICELAND	in progress	yes	partial
IRELAND	yes	yes	partial
ISRAEL	yes	yes	partial
ITALY	yes	yes	partial
KAZAKHSTAN	in progress	yes	partial
KYRGYZSTAN	N/a		partial
LATVIA	In progress	yes	partial
LITHUANIA	in progress	yes	partial
LUXEMBOURG	in progress	yes	partial
MALTA	in progress	yes	partial
MONACO	N/A		
MONTENEGRO	in progress	yes	partial
MOROCCO	yes	yes	partial
NETHERLANDS	yes	yes	partial
NORWAY	yes	yes	partial
POLAND	in progress	yes	partial
PORTUGAL	in progress	yes	partial
REPUBLIC OF MOLDOVA	in progress	yes	partial
ROMANIA	In progress	yes	partial
RUSSIAN FEDERATION	Completed	yes	partial
SAN MARINO	N/A		
SERBIA	yes	yes	partial
SLOVAKIA	In progress	En - route yes Terminal areas in progress	partial

SLOVENIA	in progress	yes	partial
SPAIN	yes	Yes	partial
SWEDEN	yes	yes	partial
SWITZERLAND	yes	yes	partial
TAJIKISTAN	N/A		
THE FORMER YUGOSLAV REPUBLIC OF MACEDONIA	N/A	yes	partial
TUNISIA	yes	yes	partial
TURKEY	yes	by 2018	partial
TURKMENISTAN	N/A		
UKRAINE	yes	yes	partial
UNITED KINGDOM	yes	yes	partial
UZBEKISTAN	in progress	yes	partial

Appendix R – New CNS 4b Table

(paragraph 4.2.26 refers)

(document provided in a separate folder)

Appendix S – Provision of SIGMET and AIRMET for Complex Boundaries

(paragraph 4.2.57 refers)

There are examples of FIRs that partially surround adjacent FIRs and are what might be described as concave or 'horseshoe' shaped. An example is given below.

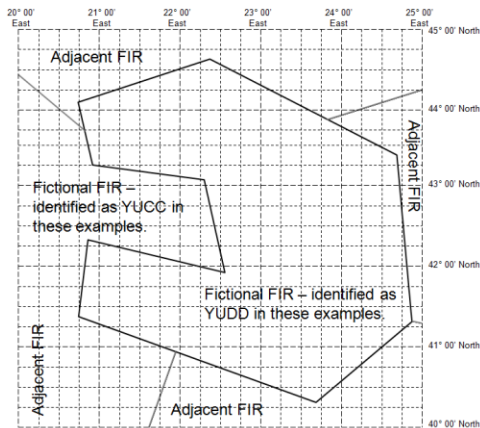


Figure 1: Fictional example of a complex 'concave' FIR – YUDD, partially surrounding FIR - YUCC²

The question arises as to how to encode a SIGMET under circumstances where the hazard affects the outer FIR (YUDD in this case) and the FIR that is partially enclosed (YUCC in this case).

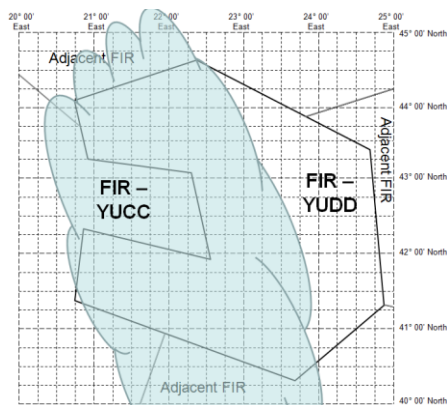


Figure 2: Fictional example of a complex 'concave' FIR – YUDD partially surrounding FIR – YUCC when both are affected by a meteorological hazard

With due regard to removing any possible ambiguity, and also with regard to consistency with protocols for iWXXM versions of SIGMET, the following best practice for the EUR region is provided.

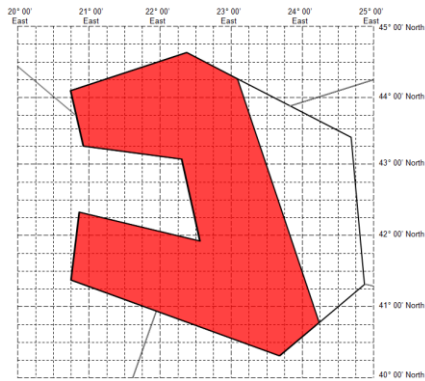
² YUDD and YUCC used in this paper are fictional FIRs

In these examples, it is taken as accepted that MWOs are coordinating their SIGMETs. The clarification sought is how the SIGMET (or AIRMET) should be compiled for an FIR that partially surrounds another FIR.

In the examples below, the area indicated in red is taken as representing the meteorological hazard.

Example 1)

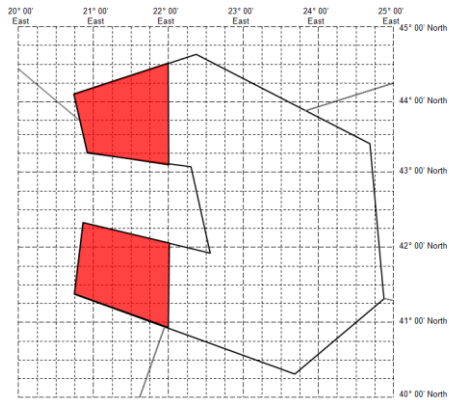
In this example, it is considered that the situation below could be encoded as a single, simple SIGMET. Users would be expected to interpret the SIGMET as indicating the area identified in red was affected by the hazard within the YUDD FIR.



YUDD SIGMET 2 VALID 101200/101600 YUSO–
 YUDD SHANLON FIR/UIR SEV TURB FCST SW OF LINE N4415 E02305 – N4045 E02415
 FL250/370 MOV SW 15KT WKN=

Example 2)

In this example, in order to prevent any possible ambiguity and to prevent complications and inconsistencies with equivalent iWXXM versions of SIGMET then two separate SIGMETs should be issued.



In this case, the following is recommended:

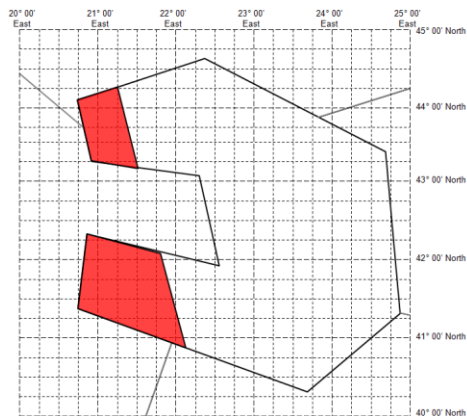
One SIGMET (northern extension of the 'horseshoe' shape)

YUDD SIGMET 2 VALID 101200/101600 YUSO–
 YUDD SHANLON FIR/UIR SEV TURB FCST W OF LINE N4430 E02200 – N4307 E02200
 FL250/370 MOV W 15KT WKN=

AND a second SIGMET (southern extension of the 'horseshoe' shape)

YUDD SIGMET 3 VALID 101200/101600 YUSO–
 YUDD SHANLON FIR/UIR SEV TURB FCST W OF LINE N4203 E02200 – N4058 E02200
 FL250/370 MOV W 15KT WKN=

Where the line delineating the hazard is not a line of latitude or longitude, a similar process should be followed



One SIGMET (northern extension of the 'horseshoe' shape)

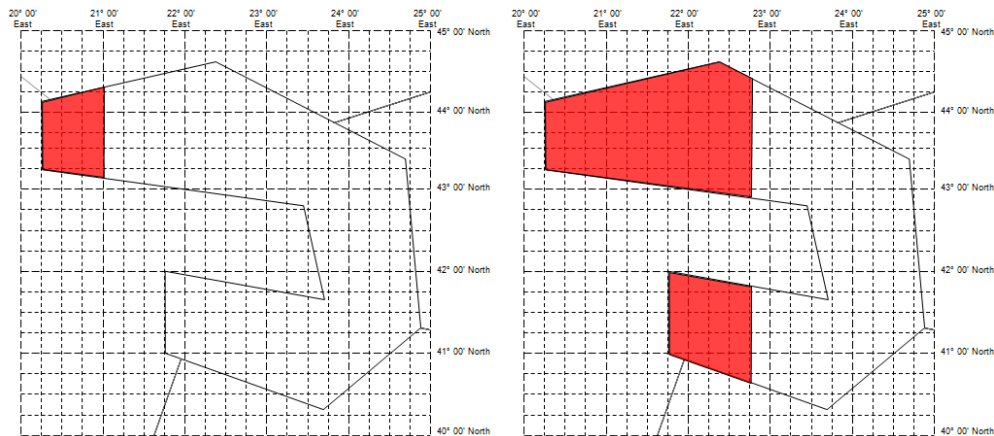
YUDD SIGMET 2 VALID 101200/101600 YUSO–
 YUDD SHANLON FIR/UIR SEV TURB FCST SW OF LINE N4415 E02115 – N4312 E02130
 FL250/370 MOV W 15KT WKN=

AND a second SIGMET (southern extension of the 'horseshoe' shape)

YUDD SIGMET 3 VALID 101200/101600 YUSO–
 YUDD SHANLON FIR/UIR SEV TURB FCST SW OF LINE N4205 E02147 – N4052 E02206
 FL250/370 MOV W 15KT WKN=

Considering a concave, 'horseshoe' shaped FIR partially surrounding another FIR with 'legs' of very different size.

If the southern 'leg' is expected to be affected during the forecasted validity period, as the example below then 2 SIGMETs should be issued.



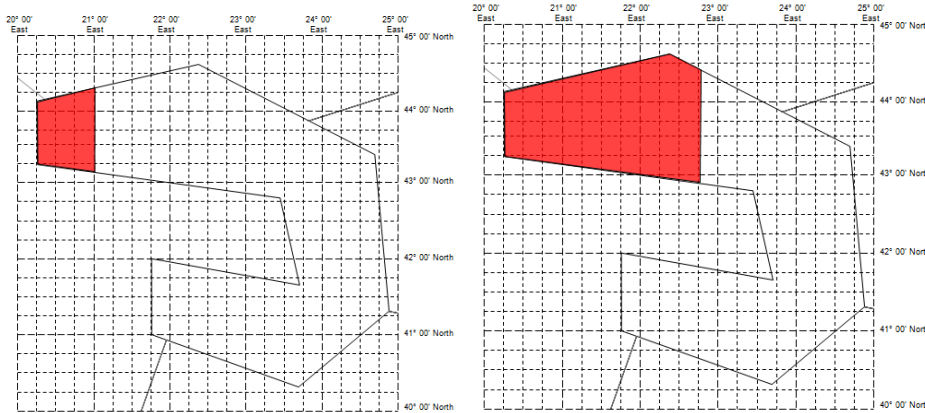
YUDD SIGMET 2 VALID 101200/101600 YUSO–
 YUDD SHANLON FIR/UIR SEV TURB FCST AT 1200Z W OF LINE N4416 E02100 – N4307
 E02100 FL250/370 MOV E 25KT WKN FCST 1600Z W OF LINE N4427 E02245 – N4252 E02245=

And

YUDD SIGMET 3 VALID 101330/101600 YUSO–
 YUDD SHANLON FIR/UIR SEV TURB FCST AT 1330Z W OF LINE N4200 E02145 – N4100
 E02145 FL250/370 MOV E 25KT WKN FCST 1600Z W OF LINE N4147 E02245 – N4038 E02245=

Note, the validity time (highlighted) of the second SIGMET commences some time after that of the first since the southern extension of the horseshoe shape is not as far west.

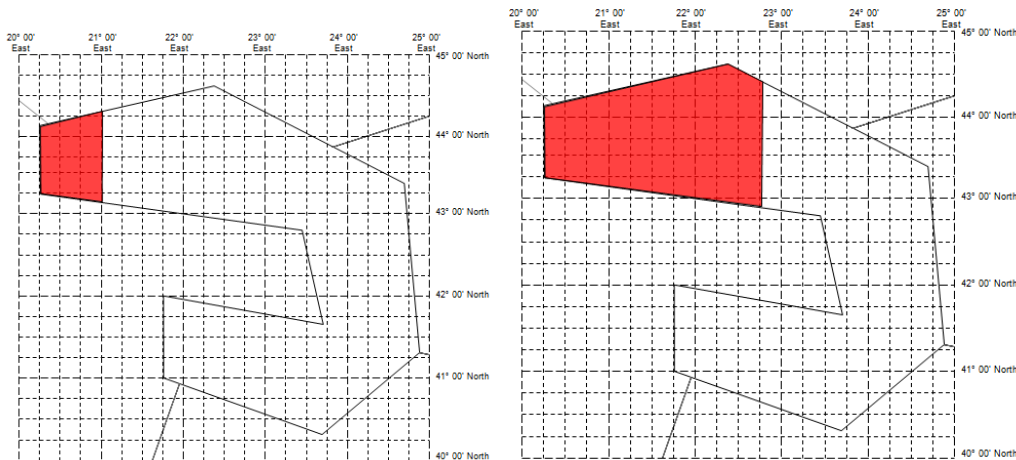
If the southern leg of the FIR is not expected to be affected, as in the example below,



Then a single SIGMET could be issued.

YUDD SIGMET 2 VALID 101200/101600 YUSO–
 YUDD SHANLON FIR/UIR SEV TURB FCST AT 1200Z W OF LINE N4415 E02100 – N4307
 E02100 FL250/370 MOV E 25KT WKN=

However, to remove any possible doubt it is better to include an explicit forecast position,



YUDD SIGMET 2 VALID 101200/101600 YUSO–
 YUDD SHANLON FIR/UIR SEV TURB FCST AT 1200Z W OF LINE N4415 E02100 – N4307
 E02100 FL250/370 MOV E 25KT WKN FCST 1600Z W OF LINE N4427 E02245 – N4252 E02245=

It should also be noted that in all of these examples relating to concave, horseshoe shaped FIRs, polygons could also be used to explicitly define the areas affected. The above examples are intended to show that the principle under such circumstances is that two SIGMETs should be issued. This, as noted, will prevent ambiguity and will permit straightforward translation of alphanumeric SIGMET into iWXXM versions of SIGMET.

Appendix T – Special Implementation Project for All Region

(paragraph 4.2.66 refers)

Workshop on Implementing the ICAO Meteorological Information Exchange Model (IWXXM) for the exchange of OPMET data

SUMMARY	
Project:	An ICAO/WMO workshop involving OPMET data exchange hubs (Regional OPMET Centres - ROCs, Regional OPMET Data Banks – RODBs, and Inter-Regional OPMET Gateways – IROGs) to <ol style="list-style-type: none"> 1) present the <i>Concept of Operations for the Transition of OPMET Data Exchange using IWXXM</i>; 2) identify any issues related to the implementation of IWXXM and develop an associated action list of responsible parties to address these issues with timelines; and 3) develop global implementation plan on the implementation of IWXXM for the centres described above; 4) communicate workshop results to States
Objective:	Harmonize the implementation of IWXXM at the OPMET data exchange hubs
Strategic Objectives:	Safety & Air Navigation Capacity and Efficiency
Performance measurement:	Increased efficiency and enhance the level of safety
Estimated cost:	CDN\$20 000

1. NEED FOR THE PROJECT

1.1 Amendment 76 to Annex 3 applicable November 2013 enabled the exchange of OPMET data in digital form under bilateral agreements between States in a position to do so for METAR and SPECI, TAF and SIGMET (reference Annex 3, Appendix 3, 2.1.3 and 2.1.4; Appendix 5, 1.1.2, 1.1.3, and 1.1.4; Appendix 6, 1.1.6, 1.1.7 and 1.1.8 and *Manual on the Digital Exchange of Aeronautical Meteorological Information* (Doc 10003)).

1.2 The exchange of METAR and SPECI, TAF and SIGMET in digital form will become a recommendation (requirement) in Amendment 77 (78) applicable November 2016 (2018). Other MET elements such as volcanic ash advisories will be exchanged in digital form with the same above step approach beginning with Amendment 77.

1.3 States have expressed significant concern in meeting the recommendation date of November 2016 in this regard. Consequently, the EANPG Programme Coordinating Group (COG/60) agreed to the following Decision.

COG Decision 60/03 – Survey on the EUR States’ implementation plans of ICAO Meteorological Information Exchange Model (IWXXM)

That the EUR Data Management Group (DMG) in co-ordination with the EUR AFSG and the support of the Secretariat:

- a) develop high level requirements for the State implementation plan of IWXXM based on the draft *Concept of Operations for the Transition of OPMET Data Exchange using IWXXM to as a first step towards SWIM*;
- b) develop a questionnaire, in addition to the high level requirements, to gather States’ intentions and capacity building needs to implement IWXXM and the distribution methods, to better inform and facilitate a robust EUR transition plan, before METG/25; and
- c) report back to METG/25 and EANPG COG/63.

1.4 The METG/25, EANPG COG/63 and EANPG/57 reviewed the results of the questionnaire that indicated almost all respondents desired a workshop on the implementation of IWXXM and agreed to EANPG/57 Conclusion 57/23 that is reproduced here within.

EANPG Conclusion 57/23 – Workshop on Implementing IWXXM

That the ICAO Regional Director, Europe and North Atlantic, on behalf of the EANPG, conduct a workshop on implementing the ICAO Meteorological information exchange model (IWXXM) for the exchange of OPMET data in a form of a Special Implementation Project at the EUR/NAT ICAO Regional Office in 2016 that would involve regional OPMET data exchange hubs in all Regions, World Meteorological Organisation, Eurocontrol, other appropriate organisations and any other experts deemed necessary as provided at **Appendix T**.

Note: this proposed workshop is expected to be the first in a series of workshops which will follow in order to consider training and capacity building related to the migration to IWXXM.

The Fourth Inter-Regional Coordination Meeting (IRCM/4, Bangkok, Thailand, 14-16 September 2015) that involved the EUR, MID and APAC Regions also endorsed this proposal (IRCM/4 Action/14 refers) in that it supports a broader interregional workshop planned in 2017 that involves the integration of Digital AIM, MET and ATM information through B1 modules (IRCM/4 Action/16 refers).

2. SCOPE OF THE PROJECT

2.1 The objectives of the workshop would be:

- present the *Concept of Operations for the Transition of OPMET Data Exchange using IWXXM*;
- identify any issues related to the implementation of IWXXM and an associated action list of responsible parties to address these issues with timelines; and
 - e.g. develop plans to
 - define conversion centres
 - define procedures on how to deal with errors in IWXXM-messages
 - define procedures for future translation centres such as how to deal with errors in converted TAC-reports
 - define testing platforms
 - define inter-regional exchanges solely based on required FASID data
 - define the inter-regional data/bulletins to be exchanged
 - develop inter-regional testing
 - develop inter-regional procedure to notify the changes and new IWXXM bulletins
 - develop intra-regional plans to follow the infrastructure AMHS links planned by their ROCs, IROGs and RODBs
 - develop intra-regional plans to follow the infrastructure AMHS links planned and IWXXM data exchange planned by the States to their ROC
 - update contingency plans for ROCs/IROGs by introducing IWXXM
 - identify metadata sources
 - process and notify modifications related to changes to metadata
 - define rules on how to interrogate RODBs that may include web feature services noting no conversion would take place at RODBs
 - define procedure for States who need their OPMET data translated
 - define legal impacts to translation centre in case data translated is wrong or incomplete
- develop draft global implementation plan on the implementation of IWXXM for the OPMET data exchange hubs.

2.2 The target audience consists of ROCs, RODBs and IROGs as well as Eurocontrol, World Meteorological Organization (WMO) and any other experts that may assist in implementation in this regard.

2.3 This event would be held at the ICAO EUR/NAT Regional Office, Paris, preferably in Q2 2016.

3. DURATION OF THE PROJECT

3.1 Three day workshop to achieve the objectives above.

4. COST OF THE PROJECT

4.1 The cost of the project, including travel of necessary experts, is estimated at CDN\$20 000.

Appendix U – EUR Doc 033, Concept of Operations for the Transition of OPMET Data Exchange using IWXXM

(paragraph 4.2.67 refers)

(document provided in a separate folder)

Appendix V – EUR METG ToRs

(paragraph 4.2.72 refers)

EUR MET SG ToRs

METEOROLOGY GROUP (METG)

Terms of Reference and Composition

Establishment Renamed in 1990. EANPG Decision 32/9

Terms of reference

The Meteorology Group (METG) is established by EANPG to pursue the tasks of the Group in the field of aeronautical meteorology in support to the relevant ICAO Strategic Objectives (mostly Safety and Efficiency, and to certain extent, Environment and Continuity) with the following TORs:

- a) a) Ensure the continuous and coherent development of the MET Part of the European electronic Air Navigation Plan (Basic ANP and FASID, Doc 7754) (eANP) and other relevant regional documents taking into account the evolving operational requirements in the EUR Region and the need for harmonization with the adjacent regions in compliance with the Global Air Navigation Plan;
- b) b) Monitor and coordinate implementation of the relevant ICAO SARPs and regional meteorological procedures, facilities and services by the EUR States and where necessary ensure harmonization, taking due account of financial and institutional issues;
- c) ~~e) Review, identify and address any deficiencies and shortcomings problems that constitute major obstacles to the provision of safe and efficient MET service, and recommend remedial actions in the field of aeronautical meteorology in the EUR Region and ensure the development and implementation of relevant action plans by the States to resolve them;~~
- d) d) Foster implementation by facilitating the exchange of know-how and transfer of knowledge and experience, in particular, between the Western and Eastern parts of the Region;
- e) e) Provide necessary assistance and guidance to States to ensure harmonization and interoperability in line with the GANP, the EUR/NAT ANP and ASBU methodology;
- f) Provide input to the work of appropriate ICAO bodies in the field of aeronautical meteorology, according to the established procedures;
- g) Receive and discuss proposals from States for developing new or amending existing ICAO provisions.
- h) Discuss consequences of scientific issues impacting operational aeronautical meteorology including and developments of latest technology from pilot research programmes and findings from local/ regional initiatives with the aim to improve the service provision in the EUR region.

Work Programme

To ensure that the objectives of METG are met in accordance with the TORs, the group shall conduct its work according to a Work Programme endorsed by EANPG and kept under review by the COG. The following are the main principles to be followed in setting up the Work Programme of METG:

a) The work programme shall be composed of tasks and projects with clearly identified deliverables, target dates and responsibilities;

~~b) The tasks/projects should cover the main implementation domains/areas in the of aeronautical meteorology MET~~ which are subject to regional planning and implementation; ~~the tasks/ projects should be realistic and synchronized with other ICAO regional or global tasks/projects, regionally or globally promoted, as necessary, taking into account the available resources of the States required for their implementation;~~

c) The progress on the tasks/projects should be reviewed regularly by METG and reported to COG and EANPG to ensure that the target dates are met and the deliverables are of required quality.

d) To facilitate the execution of its work programme, METG may set up Project Teams, if and when required, charge them with specific tasks and define target dates for their completion. After completion of the task(s), the Project Team(s) will be dissolved.

In conducting its activities, METG should follow the following guidance given to the Group by the EANPG and COG:

- a) Maintain close coordination with relevant EANPG contributory bodies to ensure harmonious development of the EUR air navigation system as a whole;
- b) Conduct periodic reviews and originate, as necessary, proposals for amendment of Part VI - MET of the EUR [electronic Air Navigation Plan \(eANP\)](#). ~~Basic ANP and FASID (Doc 7754)~~ and EUR SUPPs (Doc 7030);
 - ~~Receive proposals from the States in order to develop new provisions, subject to regional implementation, with respect to the need for implementing new requirements or amending the existing ones.~~
 - ~~Disseminate and debate scientific issues of general interest as well as and developments of latest technology on aeronautical meteorology, based on the results of pilot research programmes and findings of local/ regional initiatives.~~
- c) Seek co-ordination and harmonization with the relevant planning and implementation activities in other ICAO Regions;
- d) Use different techniques to monitor implementation in the States (such as, regional surveys, monitoring exercises, regional tests and simulations, etc.) and identify deficiencies; conduct risk analysis to prioritize the identified deficiencies and prepare proposals to EANPG to ensure the urgent resolution of safety-related MET deficiencies;
- e) Identify areas where assistance to individual States or sub-regions is necessary to eliminate deficiencies, ~~to expedite the transition~~ and improve harmonized implementation of the MET facilities and services through the established mechanisms (e.g., SIP or ICAO TCP projects) and prepare proposals thereon;

- f) ~~Ensure close liaison between EANPG and the Meteorology Panel (METP) and its associated MET operations groups established by ANC: working groups (Working Group on MET Requirements & Integration (WG-MRI), Working Group on MET Information and Service Development (WG-MISD), Working Group on Meteorological Information Exchange (WG-MIE) and Working Group on MET Operations Group (WG-MOG)) established by ANC, WAFSOPSG, IAVWOPSG, SADISOPSG, and with relevant ANC study groups and/or panels in addressing MET matters; Relevant tasks associated with the METP and its working groups are provided in the Attachment.~~ Provide feed-back received from States on problems impeding implementation which need to be addressed by appropriate ICAO bodies;
- g) Assist the Secretariat in developing and keeping up-to-date of regional guidance material ~~and provides proposals for new provisions to be consider by ICAO,~~ as necessary, to foster the implementation by the States of the global requirements and regional procedures on aeronautical meteorology;
- h) Prepare proposals and support organization of regional seminars and workshops in the field of aeronautical meteorology with emphasis on implementation issues;
- i) Pay appropriate attention to activities in the field of aeronautical meteorology within other international bodies (WMO, EASA, EUROCONTROL, EC) on regional issues and analyze related implementation aspects;
- j) Identify and refer to COG and EANPG emerging institutional issues related to the planning and implementation of the meteorological services and facilities in order to ensure that such issues are addressed in a coherent manner with the respective ICAO plans, strategies and provisions.

4. Composition of the METG

~~Armenia (on behalf of Armenia, Azerbaijan and Georgia), Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Ireland, Italy, Kazakhstan (on behalf of Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan), Latvia (on behalf of Estonia, Latvia and Lithuania), Netherlands, Portugal, Romania, Russian Federation, Slovakia, Slovenia, Spain, Switzerland, United Kingdom, Representatives from all ICAO Contracting States Representatives from all ICAO Contracting States and who are service providers~~ in the EUR air navigation region and part of EUR ANP, Iceland, United States and International Organisations (CANSO, EUROCONTROL, IAOPA, IATA, IFALPA, WMO)

Attachment – relevant tasks associated with the MET Panel and its' associated working groups

<u>Parent Group</u>	<u>Task</u>	<u>Who</u>	<u>When – completed by</u>
<u>WG-MRI</u>	<u>Activate EUR MET/ATM TF to address regional implementation of provisions (Annex 3, PANS-MET) for MET support to selected ASBU Block 1 modules (e.g. support to trajectory based operations, terminal area operations) that would become applicable in 2018.</u>	<u>COG</u> <u>(METG recomm.)</u>	<u>Late 2016/2017</u>
<u>WG-MISD</u>	<u>Provide WG-MISD input on gaps identified in the nuclear exercises, real events, or other forums.</u>	<u>METG</u>	<u>2015-2016</u>
	<u>Monitor global developments that may assist in the development of EUR/NAT contingency plan for nuclear emergency (COG Conclusion 50/07 and NAT SPG Conclusion 47/07 refers). Proposals for Amendment of ICAO Annex 3 with respect to release of radioactive material into the atmosphere for endorsement by the MET Panel expected in September 2016.</u>	<u>METG, COG, NAT SPG</u>	<u>Sep 2016</u>
	<u>Monitor developments associated with Regional Hazardous Weather Advisory Centres, and where applicable, an implementation strategy needed by EANPG in 2019 for 2020 applicability date.</u>	<u>METG, COG, EANPG</u>	<u>2018-2019</u>
	<u>Monitor developments associated with space weather information and space weather selection criteria. An implementation strategy needed by EANPG in 2016 or 2017 is needed for 2018 applicability date.</u>	<u>METG, COG, EANPG</u>	<u>2016-2017</u>
	<u>Monitor developments associated with volcanic ash information in ASBU Block 1 (2018-2023) since two VAACs reside in the EUR Region and States may have to assist in implementation (e.g. providing VAACs information from sensors located within their State).</u>	<u>METG</u>	<u>2018</u>
	<u>Monitor developments associated with World Area Forecast System, particularly ASBU Block 1 (2018-2023).</u>	<u>METG</u>	<u>2018</u>

<u>WG-MIE</u>	<u>Monitor developments related to testing of the ATS message handling system (AMHS) in relation to the exchange of digital aeronautical meteorological information (global OPMET information and WAFS forecasts). Results may have an impact on implementation and these results may be considered workshops proposed for 2016 (ROCs) and States (2017).</u>	<u>DMG, METG in coordination with AFSG</u>	<u>2016-2017</u>
	<u>Monitor developments related to MET-in-SWIM</u>	<u>METG in coordination with AFSG</u>	<u>2018+</u>
<u>WG-MOG</u>	<u>Assure SADIS 2G users acquire Secure SADIS FTP before termination of SADIS Satellite Broadcast on 31 July 2016.</u>	<u>METG</u>	<u>April 2016</u>
	<u>Monitor feasibility study on making area forecasts for low-level flights issued in graphical form available on Secure SADIS FTP as this may impact exchange of information in this regard by States.</u>	<u>DMG, METG</u>	<u>2015-2016</u>
	<u>Monitor developments related to IAVWOPSG tasks still open (e.g. improving dissemination of aircraft reports on volcanic ash to VAACs that could be included in regional guidance material).</u>	<u>DMG, METG</u>	<u>2015-2016</u>

Note that the Project Team Meteorological Information Services Operations (MET-OPS) manages the harmonization of all aspects related to the operational service delivery of MET information for International Air Navigation in the ICAO EUR Region, excluding elements related to the international MET information exchange in scope of the Data Management Group (DMG).

Appendix W – 2014 ASBU Implementation Monitoring Report

(paragraph 4.3.3 refers)

(document provided in a separate folder)

Appendix X – New ATMGE State Report Format

(paragraph 4.3.4 refers)

(document provided in a separate folder)

Appendix Y – EUR Doc 034 Guidance Material for the Continued Safety Monitoring of the European RVSM Airspace

(paragraph 5.1.5 refers)

(document provided in a separate folder)

Appendix Z – Updated Terms of Reference of the EUR RMA and RMA EURASIA

(paragraph 5.3.3 refers)

**EANPG REGIONAL MONITORING AGENCIES
OF EUROPEAN ICAO REGION****TERMS OF REFERENCE**

The European Regional Monitoring Agency (EUR RMA) and Regional Monitoring Agency Eurasia (RMA Eurasia) were established by the European Air Navigation Planning Group (EANPG) to organize and conduct the RVSM monitoring program within the European ICAO region in accordance with the requirements detailed in Annex 11 (13th Edition) and Doc 9574 (3d Edition).

On request of the EANPG (EANPG Conclusions 43/36 and 45/29 refer), the EUROCONTROL Commission established the European Regional Monitoring Agency (EUR RMA) as part of the EURCONTROL Agency (CN Ad hoc 11/2003 refers).

In agreement with the EANPG (EANPG Conclusion 51/17) during the RVSM implementation in the eastern part of the European ICAO region the Russian Federation took the special obligation to organize and maintain the RVSM monitoring program in this part of European ICAO region. The RMA Eurasia was established in accordance with the Ministry of Transport Order of the Russian Federation No 125 from 3.05.2012.

The RMAs were established to support the European Air Navigation Planning Group (EANPG) for safety maintaining of the RVSM in European ICAO region. RMAs provide the continued monitoring functions within the European RVSM airspace.

The RMA is tasked with the monitoring of operations within a defined region of RVSM airspace by EANPG. The RMA operates on behalf of accredited States within its region for reporting operator non-compliance with RVSM approval and performance requirements and other safety related issues. However it remains the responsibility of the individual States to ensure that corrective or remedial action is taken in response to any incident reported to it by the RMA.

These functions of the RMA, as agreed by EANPG, are as follows:

1. Establish and operate a regional database of RVSM approvals issued by accredited State aviation authorities. Implement configuration (quality) control checks to verify the veracity of the data.
2. Conduct regular audits to verify the RVSM approval status of aircraft operating in RVSM airspace and ensure that flights by non-approved aircraft are reported to the relevant State Authority for appropriate action.
4. Maintain a monitoring infrastructure to provide aircraft technical height keeping performance data.
5. Act as the custodian of all aircraft technical height keeping data collected.

6. Provide approved operators and State aviation authorities with height monitoring results on request³.
7. Evaluate the vertical navigation performances of individual aeroplanes and aircraft type groups and monitor compliance with performance requirements defined in ICAO SARPS and guidance material. Report aberrant and non-compliant aircraft performance to aircraft certification and approval authorities for the application of appropriate remedial action.
8. Assist States to develop remedial action plans to ensure operator compliance with RVSM approval and performance requirements. If necessary the RMA should notify the Director General of the Civil Aviation Authority of the State which exercises operational authority over the aircraft if such remedial actions are considered to be insufficient.
9. Initiate appropriate action through the EANPG/ICAO EUR/NAT Regional Director with States which continue to have not implemented appropriate remedial actions with non-approved or non-compliant operators.
10. Track operator compliance with global and regional minimum monitoring requirements. Report operator non-compliance with fleet monitoring targets to relevant RVSM approval authorities for appropriate action.
11. Establish and amend, as required, mechanisms for the collection and analysis of occurrence data including large height deviations, for contribution towards risk assessment.
12. Liaise with other Regional Monitoring Agencies in order to achieve an exchange of RVSM approval and monitoring data.
13. Investigate and analyze the generic causes of occurrences, including large height deviations and operational errors and report such causes to EANPG to decide on appropriate follow-up action as required.
14. If appropriate the RMA should notify the State aviation authorities and operators of any incident requiring corrective action to flight crew procedures.
15. Establish and maintain a regional bulletin for the general information of States regarding aircraft and operators which are in violation of ICAO RVSM approval, performance and fleet monitoring requirements so that appropriate actions can be taken to preserve safety levels in their sovereign RVSM airspace.
16. Produce, and submit to EANPG for approval, an annual safety RVSM report, including the assessment of the operational and technical risk measured against the published Target Level of Safety. The report shall also include all safety related issues associated with the continued operation of RVSM in the ICAO EUR region..
17. Participate in RVSM related discussions at EANPG and associated sub groups. Implement and/or monitor applicable RVSM related EANPG decisions and conclusions.

³ Data shall not be provided in lieu of recognised engineering substantiation techniques in advance of an initial RVSM approval.

EUR RMA and RMA Eurasia cooperate closely and effort in order to harmonize of methods and procedures used for maintenance of RMA's functions and develop synergies in conducting the monitoring functions within the European RVSM airspace.

Appendix ZA – Updated List of Air Navigation Deficiencies

(paragraph 6.1.18 refers)

(document provided in a separate folder)

Appendix ZB – Revised EANPG COG Terms of Reference

(paragraph 7.2.5 refers)

Establishment

The COG was established by EANPG/37 according to the following Decision 37/26 - *Creation of an EANPG Programme Coordinating Group (COG)*

Mandate⁴

The EANPG Programme Coordinating Group was established to facilitate the on-going work undertaken within the EANPG framework, and to assist the Chairman and the Secretariat and to expedite follow-up work of the EANPG and its working groups between plenary meetings, taking into account the work undertaken by other bodies active in the air navigation field in the EUR Region as well as in adjacent Regions and to ensure that duplication of work does not occur. The EANPG-COG will:

- a) execute its pivotal function as a coordinating and steering organ with highest possible efficiency in accordance with the goals set by the EANPG;
- b) direct the work programmes and tasks of contributory bodies in the best manner commensurate with the overall EANPG work programme;
- c) ensure that contributory bodies have clearly defined tasks, deliverables and target dates in line with the goals of the EANPG; and
- d) review the reports made to COG by the contributory bodies to provide guidance to these bodies as may be necessary and to determine which subjects have matured for submission to the EANPG for conclusion and/or decision.

Major Tasks of EANPG-COG

The EANPG-COG will assist the chairman of the EANPG and the Secretariat in particular:

- a) to prepare the agenda for EANPG meetings, including the background notes;
- b) to provide guidance in the preparation of the documentation for EANPG meetings;
- c) to coordinate and harmonize the work of the contributory bodies of the EANPG;
- d) to review outstanding shortcomings and deficiencies in accordance with the Council approved Uniform Methodology;
- e) to facilitate the on-going work undertaken within the EANPG framework, assist the Chairman and the Secretariat to expedite follow-up work of the EANPG and its contributory bodies between plenary meetings, taking into account the work undertaken by other bodies active in the air navigation field in the EUR Region as well as in adjacent Regions, and ensure that duplication of work does not occur;
- f) to carry out specific tasks given to it by the EANPG to advance its work at the required speed;

⁴ EANPG Decision 37/26 and EANPG Decision 43/2 refers

- g) to review outstanding deficiencies in accordance with the Council approved Uniform Methodology (Appendix A refers);
- h) to ensure that the work programme of the EANPG and the tasks assigned to its contributory bodies cover all air navigation planning and implementation aspects of the entire EUR Region;
- i) to preview draft Conclusions and Decisions emerging from the work of EANPG contributory bodies and other input for the attention of the EANPG;
- j) to prepare and refine EANPG working/information papers to assist and guide the ICAO Secretariat in its work in support of the EANPG, and
- k) in doing so, best advantage will be taken of modern communications methods, particularly electronic mail, facsimile, etc. to keep the Members and the Secretary in permanent touch with each other.

Composition:

The EANPG-COG is composed of:

- a) the Chairman and Vice-Chairmen of the EANPG;
- b) representatives from the Czech Republic, France, Germany, Hungary, Ireland, Italy, Portugal, Russian Federation, United Kingdom and United States;
- c) one representative from each of the following State groupings:
 - i) Denmark and Sweden;
 - ii) Estonia, Finland, Latvia and Norway;
 - iii) Lithuania and Poland;
 - iv) States at the interface with MID/APAC Regions;
 - v) Algeria, Morocco and Tunisia
- d) one representative from each of the following International Organizations: CANSO, EUROCONTROL, the European Commission, IAC/CIS, IATA, IFALPA and IFATCA

The EANPG-COG may invite additional State representatives in those cases when it may discuss matters of particular concern to them.

Appendix ZC – Amendment 2 to the First Edition of EUR Doc 001, *EANPG Handbook* (2013)

(paragraph 7.3.2 refers)

(document provided in a separate folder)

-- END --