



WORKING PAPER

TWELFTH AIR NAVIGATION CONFERENCE

Agenda Item 6: Future direction

6.1: Implementation plans and methodologies

**REGIONAL PERFORMANCE FRAMEWORK – ALIGNMENT OF AREAS OF
APPLICABILITY OF AIR NAVIGATION PLANS (ANPs) AND REGIONAL
SUPPLEMENTARY PROCEDURES (SUPPs)**

(Presented by the Secretariat)

EXECUTIVE SUMMARY

At the global level, the performance framework is composed of the *Global Air Navigation Plan* (GANP, Doc 9750) and the associated procedures as contained in the *Procedures for Air Navigation – Air Traffic Management* and the *Procedures for Air Navigation Services – Aircraft Operations* (PANS-OPS, Doc 8168). Under the umbrella of the global performance framework, the regional performance frameworks are facilitated through formulation of regional air navigation plans (ANPs) and the associated regional supplementary procedures (SUPPs). The regional performance frameworks are managed by the planning and implementation regional groups (PIRGs) established by the Council of ICAO.

Currently, the areas of applicability of the SUPPs do not coincide with those of the ANPs. Based on a review undertaken by ICAO, this working paper presents a proposal to align these areas of applicability. Without changing the accreditation of ICAO regional offices to States, the proposal will integrate within each of the PIRGs the responsibilities for development and upkeep of ANPs and SUPPs for their respective air navigation regions. This proposed alignment of the areas of applicability of ANPs and SUPPs is expected to simplify the procedures for regional performance framework management for PIRGs and will also support more efficient planning and implementation of the aviation system block upgrades (ASBUs).

Action: The Conference is invited to endorse the recommendation in paragraph 3.

<i>Strategic Objectives:</i>	This working paper relates to the Safety and Environmental Protection and Sustainable Development of Air Transport Strategic Objectives by updating, strengthening and simplifying the policy framework for ICAO's activities in the air navigation field.
<i>Financial implications:</i>	The proposed alignment of ANPs and SUPPs has minimal cost impact to States and over time is expected to provide significant cost benefit to the entire aviation system, in particular to ICAO and the PIRGs.
<i>References:</i>	Annex 11 — <i>Air Traffic Services</i> Doc 7030, <i>Regional Supplementary Procedures</i> Doc 8144, <i>Directives to Regional Air Navigation Meetings and Rules of Procedure for their Conduct</i> Doc 7474, <i>Air Navigation Plan — Africa-Indian Ocean Region</i> Doc 7754, <i>Air Navigation Plan — European Region</i> Doc 8733, <i>Air Navigation Plan — Caribbean and South American Regions</i> Doc 9634, <i>Air Navigation Plan — North Atlantic Region</i> Doc 9635, <i>Facilities and Services Implementation Document — North Atlantic Region</i> Doc 9673, <i>Air Navigation Plan — Asia and Pacific Regions</i> Doc 9708, <i>Air Navigation Plan — Middle East Region</i>

1. BACKGROUND

1.1 Under the umbrella of the *Global Air Navigation Plan* (GANP, Doc 9750), the regional air navigation plans (ANPs), referenced in the Executive Summary of this paper, detail the facilities and services required for international air navigation within a specified geographical area, defined as an ICAO air navigation region. The geographical boundaries of the current ICAO air navigation regions are defined in Appendix I to the *Directives to Regional Air Navigation Meetings and Rules of Procedure for their Conduct* (Doc 8144). On the advice of the Air Navigation Commission, proposed amendments to the basic component of the ANPs are submitted to the President of the ICAO Council, who is authorized to approve the amendment on behalf of the Council.

1.2 Similarly, under the umbrella of the *Procedures for Air Navigation Services — Air Traffic Management* (PANS-ATM, Doc 4444) and the *Procedures for Air Navigation Services — Aircraft Operations* (PANS-OPS, Doc 8168), the *Regional Supplementary Procedures* (Doc 7030) detail the operational procedures for air traffic management and aircraft operations for the areas of applicability, specified according to groups of flight information regions (FIRs), shown in the chart on page (xiii) of Doc 7030. SUPPs have a status similar to that of PANS in that they are approved by the Council on the advice of the Commission, but only for the respective areas of applicability described, rather than globally.

1.3 The development and maintenance of ANPs and SUPPs is undertaken by the six planning and implementation regional groups (PIRGs), supported by ICAO's regional offices and the Air Navigation Bureau. In accordance with the PIRG terms of reference approved by Council, each PIRG is composed of the Contracting States providing air navigation services to international aviation within an air navigation region. All other Contracting States have the right to participate with observer status in the activities of a PIRG.

1.4 The six PIRGs are: Africa-Indian Ocean Planning and Implementation Regional Group (APIRG); Asia and Pacific Air Navigation Planning and Implementation Regional Group (APANPIRG); Caribbean and South American Regional Planning and Implementation Group (GREPECAS); European Air Navigation Planning Group (EANPG); Middle East Air Navigation Planning and Implementation Regional Group (MIDANPIRG); and North Atlantic Systems Planning Group (NAT SPG).

1.5 For historical reasons as outlined in Doc 8144, the areas of applicability of the ANPs and the SUPPs do not presently coincide. The groups of FIRs in which specific sets of SUPPs apply have been chosen in reference to ICAO region designators, but the areas of application do not necessarily coincide with the areas of applicability of the ANPs. Figure 1 shows the current areas of applicability of ANPs, and the current areas of applicability of the SUPPs are shown in Figure 2.¹ In consequence of the non-alignment, the formal responsibility for the regional performance framework management is in some cases shared between two PIRGs, leading to unnecessary complexity and considerable duplication of work, time delays due to coordination requirements, inefficiency and potential disharmony in PIRG decisions.

¹ Illustrations in this paper have been produced on the basis of a gallery of interactive tools that has been developed by ICAO with the regional performance framework in mind. The illustrations are not true to scale. The interactive tools can be accessed at <http://gis.icao.int/gallery>, and they are being demonstrated in the exhibition hall during the Conference.



Figure 1. Current areas of applicability of ANP and the responsible PIRGs

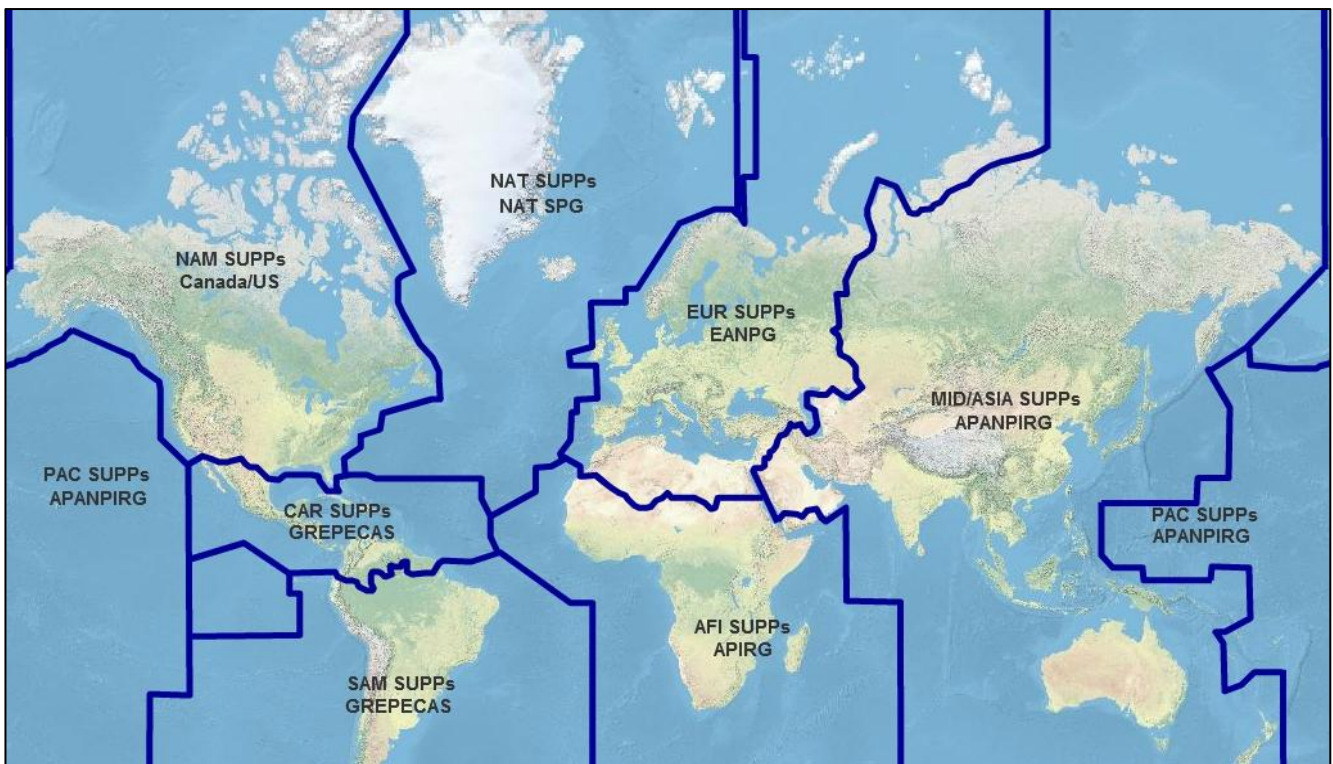


Figure 2. Current areas of applicability of SUPPs and the responsible PIRGs

2. ALIGNMENT OF REGIONAL AIR NAVIGATION PLANS AND REGIONAL SUPPLEMENTARY PROCEDURES

2.1 It is proposed that the ANPs and the SUPPs be aligned in accordance with the following principles:

- a) there will be no change to the current accreditation of the ICAO regional offices to Contracting States;
- b) there will be no change to the obligation of individual States to provide services in accordance with ICAO Annex 11 — *Air Traffic Services*, Section 2.1;
- c) there will be no change to the governance responsibilities of the ICAO Council, including approval of amendments to ANPs and SUPPs;
- d) there will be no change to the current requirements for services and facilities and or to the current supplementary procedures for a given airspace as listed in current ANPs and SUPPs;
- e) there will be no change to the principle that a PIRG is composed of the Contracting States providing air navigation service in the air navigation region and that other Contracting States can participate in the activities with observer status;
- f) there will be no change to ICAO's assistance to the PIRGs from the regional offices;
- g) the responsibilities of the performance framework management for an air navigation region will now be integrated and will rest with the PIRG established for the region; and
- h) to the extent possible, the main traffic flows will be accommodated within homogeneous airspaces in order to minimize changes between different air navigation systems and different operational procedures during flight.

2.2 A review conducted by ICAO proposes that such an alignment could be achieved through:

- a) transfer of some requirements for air navigation services and facilities from one ANP to another;
- b) consequential changes of the membership of PIRGs, still retaining the observer status of any State in any PIRG; and
- c) a re-structuring of ICAO Doc 7030.

2.3 As result of the review, a proposed alignment of the areas of applicability of the ANPs and the SUPPs is shown in Figure 3 together with the associated PIRGs, in which the responsibility for management of the regional performance framework will be integrated as well as the regional offices providing assistance. Further details of the proposal are shown in Appendix to this paper.

2.4 The benefits of the alignment of the areas of applicability of the ANPs and the SUPPs are:

- a) an immediate and collaborative approach to regional performance framework management which will also support the aviation system block upgrade (ASBU) methodology as only

one PIRG will develop and be responsible for upkeep of both the ANPs and the SUPPs for a given airspace; and

- b) in association with the transition to the electronic air navigation plans (eANP), user-friendly, robust, and simplified planning and editing tools for PIRGs and the ICAO Secretariat to ensure centralization and currency of data.

2.5 All rules and procedures, including approval by the Council of amendments, which currently apply to the development and upkeep of the ANPs and the SUPPs will continue without changes. To take maximum advantage of the alignment, ICAO will continue to simplify the workflows related to the amendment processes associated with the data in the ANPs and the SUPPs in order to increase efficiency, accuracy, and accessibility (AN-Conf/12-WP/19 refers).

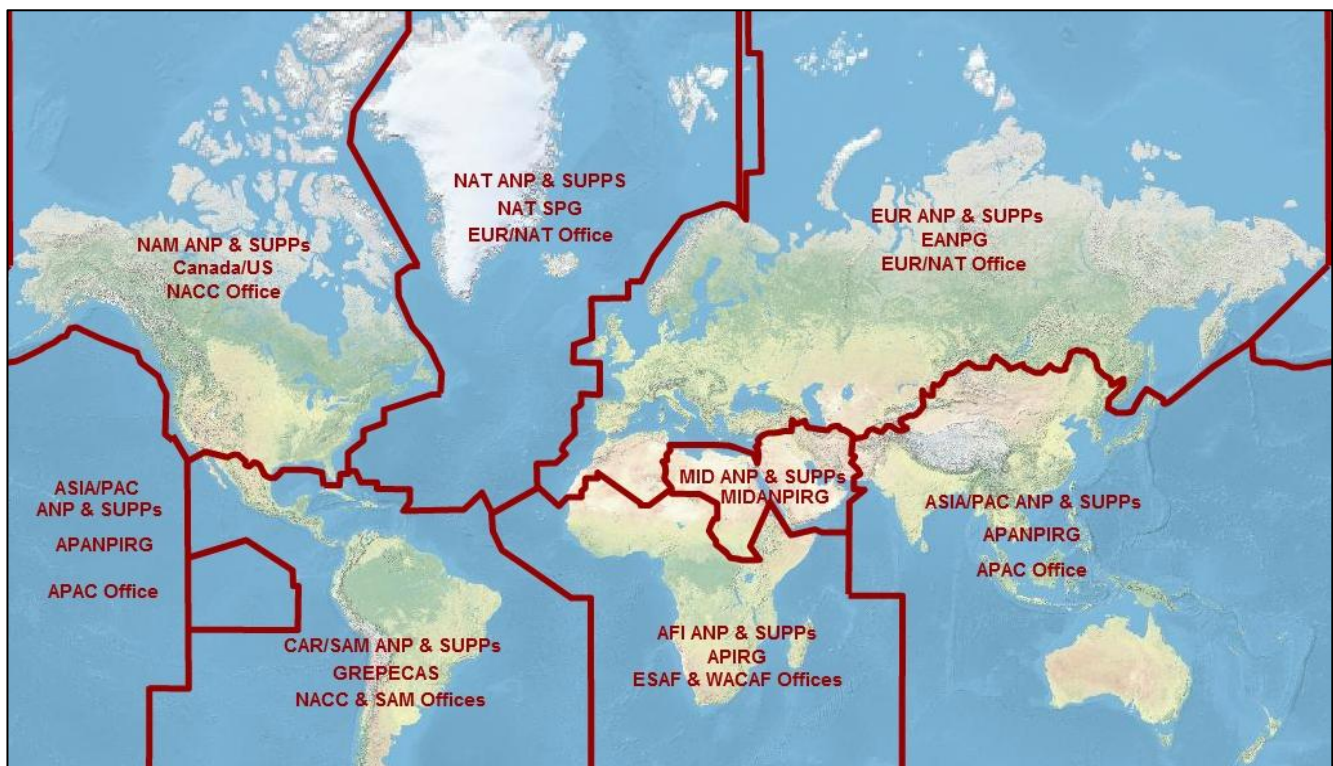


Figure 3. Proposed aligned areas of applicability of ANPs and SUPPs, responsible PIRGS and regional offices providing assistance

2.6 In order to implement the alignment of the areas of applicability of the ANPs and the SUPPs, the following process will apply:

- a) ICAO Secretariat will develop and circulate to States formal proposals for amendments as described in the appendix; and
- b) the proposals for amendment together with comments received from States will be reviewed by the Air Navigation Commission and submitted to the Council for approval.

3. CONCLUSION

3.1 Based on the simplification and the efficiency that this alignment of the areas of applicability of the ANPs and the SUPPs affords, the Conference is invited to agree on the following recommendation:

Recommendation 6/x – Regional performance framework – alignment of air navigation plans and regional supplementary procedures

That the Conference agree that ICAO initiate a formal amendment process, as described in paragraph 2.6, to align the areas of applicability of the air navigation plans and the regional supplementary procedures, using the principles described in paragraph 2.1 and the outcomes of the review described in the appendix.

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APPENDIX

REGIONAL PERFORMANCE FRAMEWORK – ALIGNMENT OF AREAS OF APPLICABILITY OF AIR NAVIGATION PLANS (ANPs) AND REGIONAL SUPPLEMENTARY PROCEDURES (SUPPs)

PROPOSED ACTIONS

1. INTRODUCTION

1.1 This appendix contains the results of the review conducted by ICAO and identifies the actions required to carry out the proposed recommendation in paragraph 3 of this working paper.

2. AFI – EUR INTERFACE

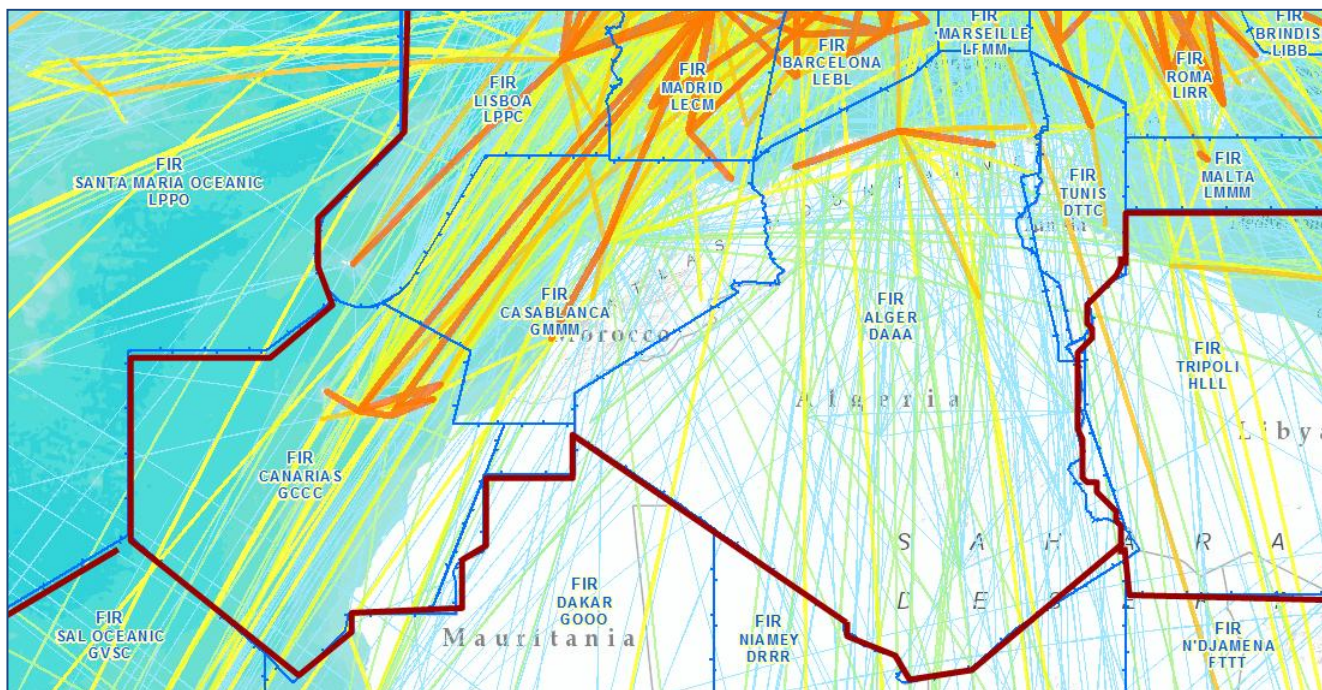


Figure A-1. Proposed AFI – EUR interface

2.1 Transfer from the AFI ANP to the EUR ANP of the current requirements for air navigation services and facilities in the following FIRs:

- a) FIR Alger (DAAA – Algeria);
- b) FIR Casablanca (GMMM – Morocco);
- c) FIR Tunis (DTCC – Tunisia); and
- d) FIR Canarias (GCCC – Spain).

2.2 Transfer from the AFI Section to the EUR Section of Doc 7030 of the regional supplementary procedures for FIR Canarias (GCCC – Spain).

2.3 In consequence, Algeria, Morocco and Tunisia will become members of the EANPG. The SUPPs for the three FIRs are currently part of the EUR SUPPs and the EUR/NAT Office of ICAO in Paris is accredited to Algeria, Morocco, Tunisia and Spain.

3. AFI – ASIA/PAC – EUR – MID INTERFACE

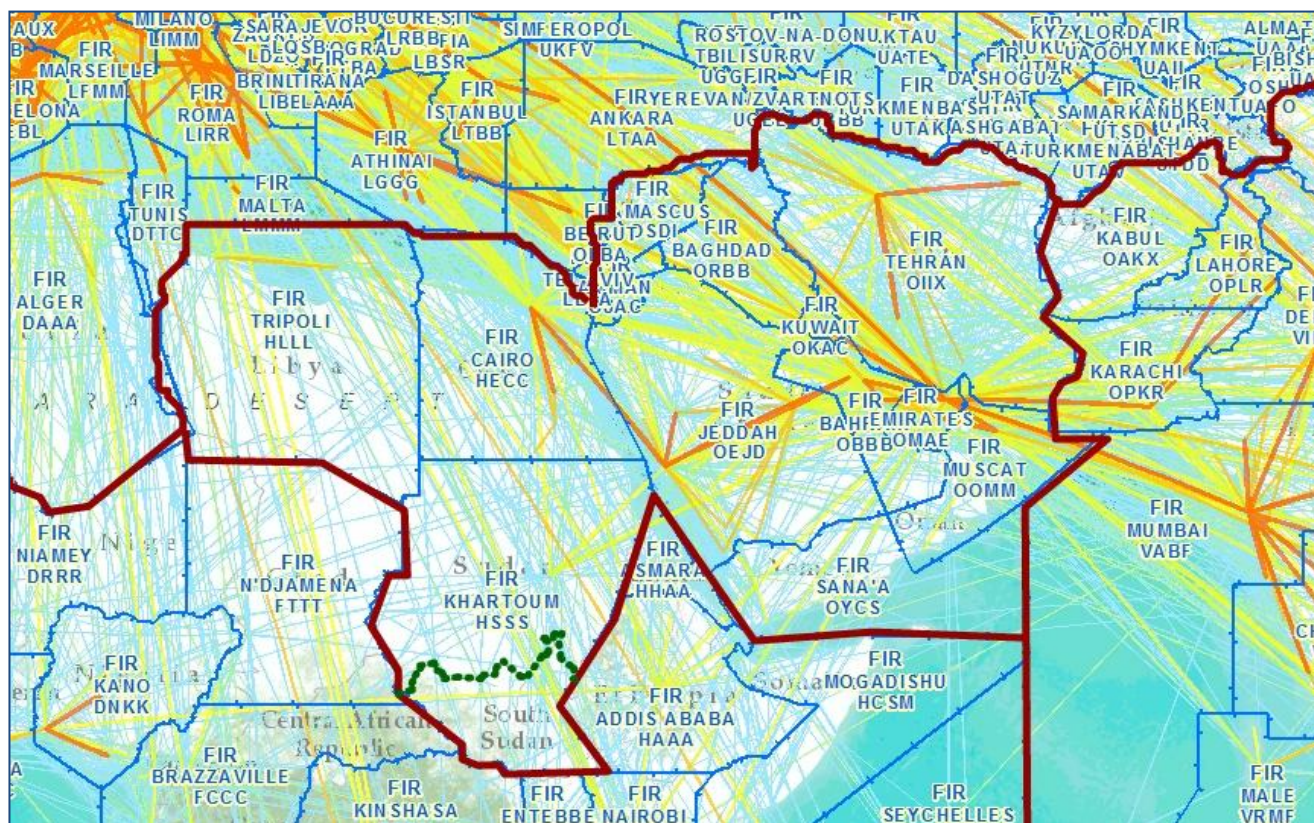


Figure A-2. Proposed AFI – ASIA/PAC – EUR – MID interface

3.1 Transfer from the AFI ANP to the MID ANP of the current requirements for air navigation services and facilities in FIR Tripoli (HLLL – Libya) and FIR Khartoum (HSSS – Sudan). In consequence, Libya and Sudan will become members of MIDANPIRG.

Note.— FIR Khartoum overlays two Contracting States, Sudan to which the MID Office is accredited and South Sudan to which the ESAF Office is accredited. Air navigation services within the entire FIR Khartoum are provided by Sudan. With the assistance of the regional offices involved, authorities of Sudan and of South Sudan are negotiating the establishment of two separate FIRs over the territories. The requirements for air navigation services and facilities in the future FIR over the territory of South Sudan will be listed in the AFI ANP. South Sudan is a member of APIRG. SUPPs for the future FIR over the territory of South Sudan will become part of the AFI SUPPs. The territorial border between Sudan and South Sudan, is indicated in Figure A-2.

3.2 Merge the requirements for air navigation services and facilities in the FIR Cairo (HECC – Egypt) into the MID ANP only since the requirements are currently split between the AFI ANP and the MID ANP.

3.3 The MID Office of ICAO in Cairo is accredited to Libya, Sudan and Egypt.

3.4 Establishment of a new MID section in ICAO Doc 7030 through:

3.4.1 Transfer from the AFI Section to the new MID Section of Doc 7030 of the regional supplementary procedures for Sana'a FIR (OYSC – Yemen), and Khartoum FIR (HSSS – Sudan).

3.4.2 Transfer from the MID/ASIA Section to the new MID Section of Doc 7030 of the regional supplementary procedures for the following FIRs:

- a) FIR Baghdad (ORBB – Iraq);
- b) FIR Bahrain (OBBS – Bahrain/Qatar);
- c) FIR Emirates (OMAE – United Arab Emirates);
- d) FIR Jeddah (OEJD – Saudi Arabia);
- e) FIR Kuwait (OKAC – Kuwait); and
- f) FIR Muscat (OOMM – Oman).

3.4.3 Transfer from the EUR Section to the new MID Section of Doc 7030 of the regional supplementary procedures for the following FIRs:

- a) FIR Amman (OJAC – Jordan);
- b) FIR Beirut (OLBA – Lebanon);
- c) FIR Cairo (HECC – Egypt);
- d) FIR Damascus (OSDI – Syria); and
- e) FIR Tripoli (HLLL – Libya).

4. ASIA/PAC – EUR INTERFACE

4.1 Transfer from the MID/ASIA Section to the EUR Section of Doc 7030 of the regional supplementary procedures the following FIRs of Kazakhstan, Kyrgyzstan, Russian Federation, Tajikistan, Turkmenistan and Uzbekistan:

- a) FIR Aktau (UATE – Kazakhstan);
- b) FIR Aktyubinsk (UATT – Kazakhstan);
- c) FIR Almaty (UAAA – Kazakhstan);
- d) FIR Ashgabat (UTAA – Turkmenistan);
- e) FIR Astana (UACC – Kazakhstan);
- f) FIR Bishkek (UAFM – Kyrgyzstan);
- g) FIR Dashoguz (UTAT – Turkmenistan);
- h) FIR Dushanbe (UTDD – Tajikistan);
- i) FIR Irkutsk (UIII – Russian Federation);
- j) FIR Khabarovsk (UHHH – Russian Federation);
- k) FIR Krasnoyarsk (UNKL – Russian Federation);
- l) FIR Kyzylorda (UAOO – Russian Federation);
- m) FIR Magadan/Sokol (UHMM – Russian Federation);

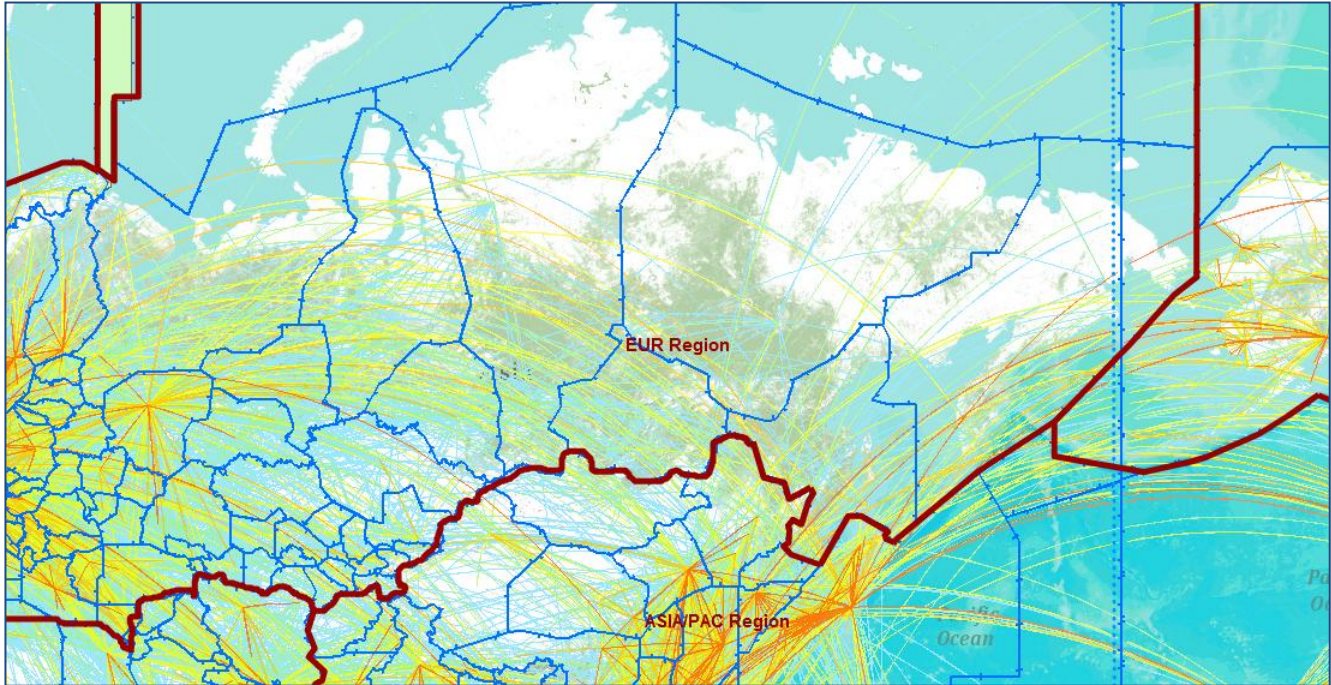


Figure A-3. Proposed ASIA/PAC – EUR interface

- n) FIR Magadan Oceanic (UHMM – Russian Federation);
- o) FIR Novosibirsk (UNNT – Russian Federation);
- p) FIR Nukus (UTNR – Uzbekistan);
- q) FIR Osh (UAFO – Kyrgyzstan);
- r) FIR Samarkand (UTSD – Uzbekistan);
- s) FIR Tashkent (UTTR – Uzbekistan);
- t) FIR Turkmenbashi (UTAK – Turkmenistan);
- u) FIR Turkmenabat (UTAV – Turkmenistan);
- v) FIR Tyumen/Roschino (USTR – Russian Federation); and
- w) FIR Yakutsk (UEEE – Russian Federation).

4.2 The requirements for air navigation services and facilities in the FIRs concerned are currently listed in the EUR ANP. All States concerned are currently members of the EANPG, and the EUR/NAT office of ICAO in Paris is accredited to all States providing air navigation services within the FIRs concerned.

5. ASIA/PAC – CAR/SAM INTERFACE

5.1 Merge the ASIA Region and the PAC Region and merge the regional supplementary procedures applicable to the ASIA Region and to the PAC Region into one ASIA/PAC Section in Doc 7030. The ASIA and the PAC Regions are currently covered by one ANP publication, Doc 9673. All States providing air navigation services within the two regions are currently members of APANPIRG and the APAC Office of ICAO in Bangkok is accredited to the States concerned.

5.2 Merge the CAR Region and the SAM Region and merge the regional supplementary procedures applicable to the CAR Region and to the SAM Region into one CAR/SAM Section in Doc 7030. The CAR and

the SAM Regions are currently covered by one ANP publication, Doc 8733. All States providing air navigation services within the two Regions are currently members of GREPECAS and the NACC Office of ICAO in Mexico City or the SAM Office of ICAO in Lima is accredited to the States concerned.

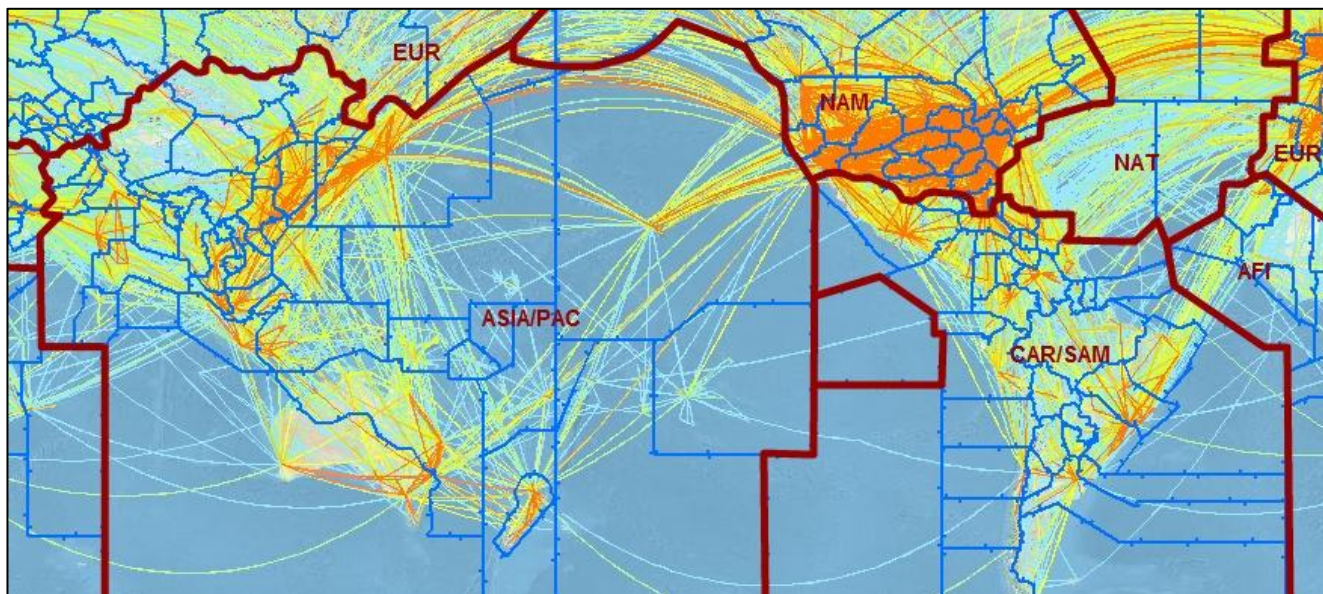


Figure A-4. Proposed ASIA/PAC – CAR/SAM interface

6. ASIA/PAC – NAM INTERFACE

See Figure A-5 on page A-6.

6.1 Transfer of FIR Anchorage Arctic (PAZA – US) and FIR Anchorage Continental (PAZA – US) from the PAC Region to the NAM Region.

6.2 Regional supplementary procedures for FIR Anchorage Arctic (PAZA – US) and FIR Anchorage Continental (PAZA – US) are currently listed in the NAM Section of Doc 7030. Together with Canada, US is managing the regional performance framework in the NAM Region. The NACC Office in Mexico City is accredited to US.

7. CAR – NAT INTERFACE

See Figure A-6 on page A-7.

7.1 Transfer from the CAR Section to the NAT Section of Doc 7030 of the regional supplementary procedures for the southern part of FIR New York Oceanic (KZNY – US).

7.2 All of the FIR New York Oceanic is currently part of the NAT Region, and US is member of NAT SPG.

Note.— It is recognized that FIR New York Oceanic accommodates two main traffic flows with different operational requirements: A North-South traffic flow and an east-west traffic flow. Discussions have been

initiated between GREPECAS and NAT SPG, assisted by the NACC and the EUR/NAT Offices, on the best structure of the airspace in order to accommodate, to the extent possible, the traffic flows in homogeneous airspaces.

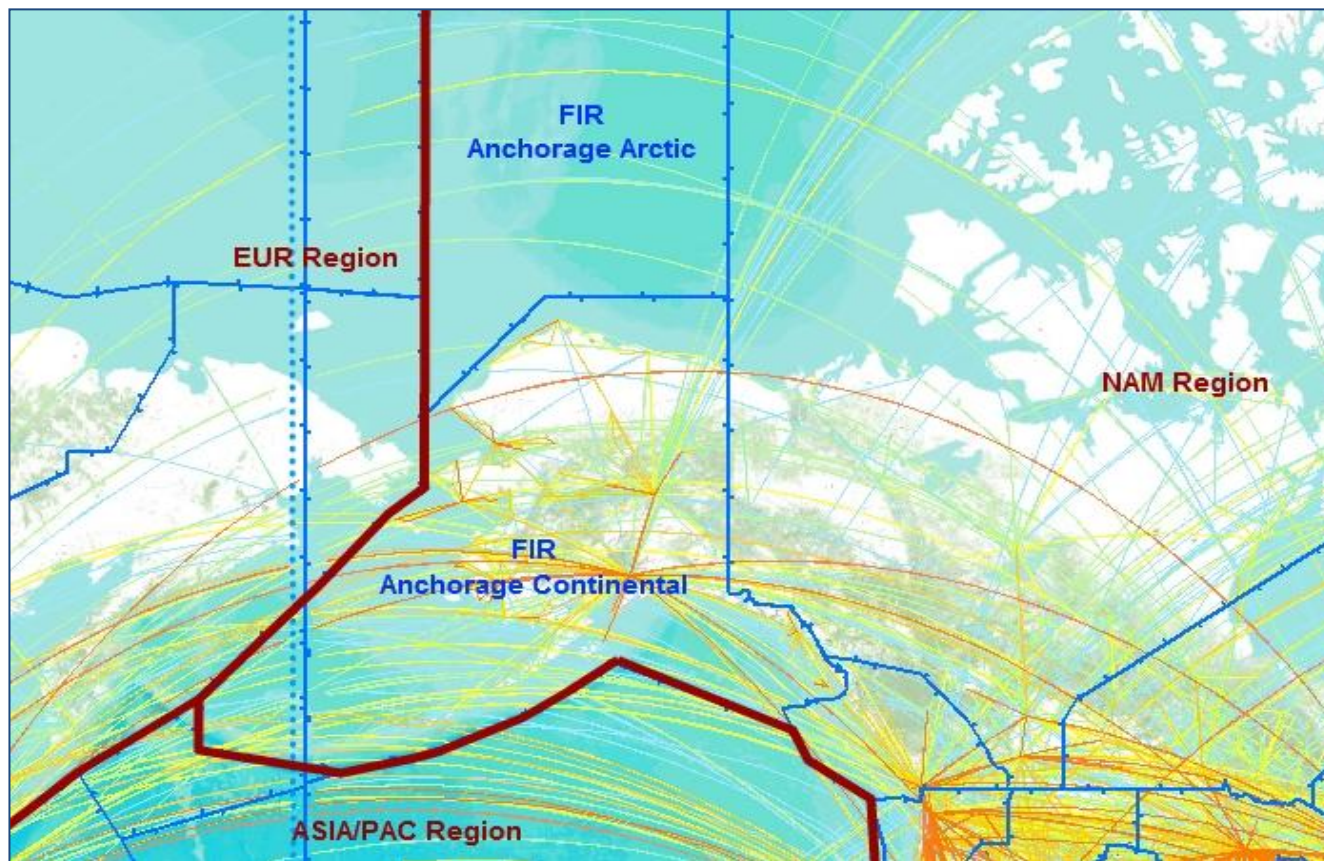


Figure A-5. Proposed ASIA/PAC – NAM interface

8. EUR – NAT INTERFACE

See Figure A-7 on page A-7.

8.3 List the requirements for air navigation services facilities in FIR Bodo Oceanic (ENBO – Norway) in the NAT ANP only and delete it from the EUR ANP since FIR Bodo Oceanic is currently listed in both the EUR and the NAT ANP.

8.4 The SUPPs for FIR Bodo Oceanic are currently part of the NAT SUPPs. Norway is currently member of NAT SPG, and the EUR/NAT Office of ICAO is accredited to Norway.

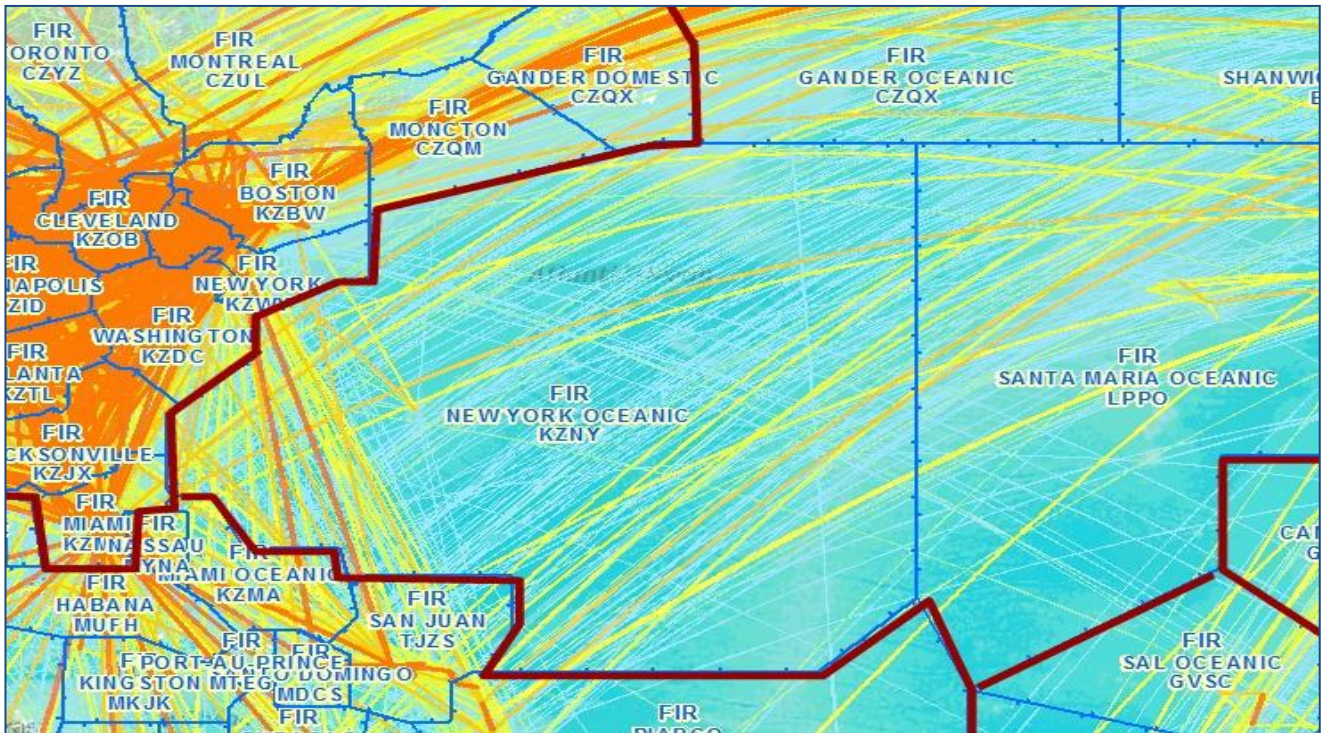


Figure A-6. Proposed CAR – NAT interface

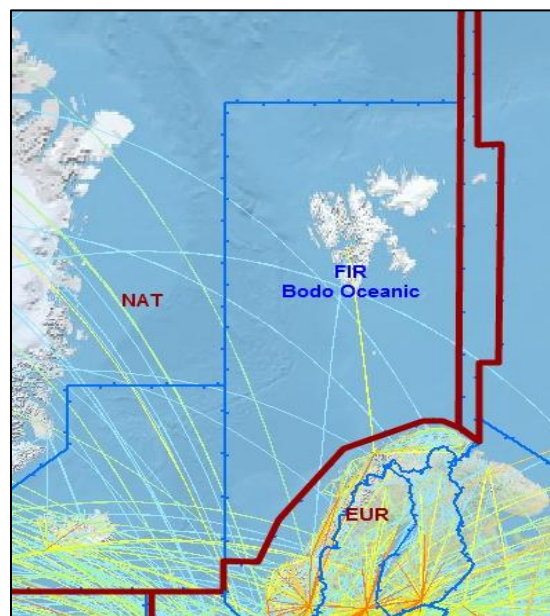


Figure A-7. Proposed EUR – NAT interface