INTERNATIONAL CIVIL AVIATION ORGANIZATION European and North Atlantic Office

ORGANIZACIÓN DE AVIACIÓN CIVIL INTERNACIONAL Oficina Europa y Atlántico Norte



ORGANISATION DE L'AVIATION CIVILE INTERNATIONALE Bureau Europe et Atlantique Nord

МЕЖДУНАРОДНАЯ ОРГАНИЗАЦИЯ ГРАЖДАНСКОЙ АВИАЦИИ Европейское/Североатлантическое бюро

3 bis villa Emile Bergerat, 92522 Neuilly-sur-Seine Cedex, France

When replying please quote

Reference: EUR/NAT 11-0625.TEC (NAE/CUP) 11 October 2011

Subject : Revised Proposal for Amendment of Regional Supplementary Procedures – Doc 7030/5

(Serial No.: EUR/NAT-S 09/18-NAT 3-2)

Action

required : Please reply not later than 25 October 2011

Dear Sir/Madam,

- 1. I wish to communicate to you the attached proposal for amendment of Regional Supplementary Procedures (Serial No.: EUR/NAT-S 09/18-NAT 3-2), which has been originated by the United Kingdom. This amendment has been made in support of Strategic Objectives A Safety and C Environment protection and sustainable development of air transport.
- 2. This revised version amends the original Proposal for Amendment, which was sent to you under cover of letter reference: EUR/NAT 10-0691.TEC (NAE/CUP) of 14 September 2010. This revision was proposed during the final consultations between the originator and the NAT SPG members in order to ensure a higher degree of flexibility in the implementation of the provisions stipulated in the proposal.
- 3. In accordance with the established procedure for the amendment of Regional Supplementary Procedures, I am to enquire whether your Administration has any objection to the proposal.
- 4. Since it is desirable to finalize action on this proposal with the minimum of delay, I shall be grateful if you will let me have your reply by the earliest practicable date, and, in any event, not later than **25 October 2011**.
- 5. In the event that the views of your Administration are not received by that date, it will be presumed that it has no objection to the proposed changes and the proposal will be processed accordingly.

Yours sincerely,

Luis Fonseca de Almeida ICAO Regional Director Europe and North Atlantic

Enclosure

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¹ Strategic Objectives are available on www.paris.icao.int/welcome/pdf/strategic_objectives.pdf



ATTACHMENT

REVISED PROPOSAL FOR AMENDMENT OF THE REGIONAL SUPPLEMENTARY PROCEDURES, NAT REGION (Doc 7030/5)

(Serial No.: EUR/NAT-S 09/18 - NAT 3-2)

a) Regional Supplementary Procedures:

Doc 7030/5 - NAT

b) Proposed by:

The United Kingdom on behalf of the NAT SPG (NAT SPG Conclusion 46/2 refers)

c) **Proposed amendment:**

Editorial Note: Amendments are arranged to show deleted text using strikeout (text to be deleted), and added text with grey shading (text to be inserted).

1. *Insert* the following in NAT SUPPs, Chapter 3 – Communications, paragraph 3.3 - Controller Pilot Data Link Communications (CPDLC)

Nil. Area of applicability

- 3.3.1 All aircraft intending to conduct flights in the airspace defined below shall be fitted with and shall operate controller-pilot data link communications (CPDLC) equipment:
 - a) from 7 February 2013, on specified tracks and flight levels within the NAT organized track system (OTS); and
 - b) from 5 February 2015, in specified portions of NAT minimum navigation specifications (MNPS) airspace.
 - Note 1.— The specified tracks and flight level band within the NAT OTS will be published by the States concerned in national AIPs and identified daily in the NAT track message.
 - Note 2.— The specified portions of NAT MNPS airspace and aircraft equipment performance requirements where applicable will be published by the States concerned in national AIPs.

Means of compliance

3.3.2 Operators intending to conduct flights within the airspace specified in 3.3.1 shall obtain CPDLC operational authorization, where applicable, either from the State of Registry or the State of the Operator. The State of Registry or the State of the Operator shall verify that the equipment has been certified in accordance with the requirements specified in RTCA DO-258/EUROCAE ED-100 or equivalent, capable of operating outside VHF data link coverage.

3.3.3 The services provided within the airspace specified in 3.3.1 shall comply with the Oceanic Safety and Performance Requirements as specified in RTCA DO306/EUROCAE ED122 or equivalent.

Note. – Additional guidance can be found in the ICAO Global Operational Data Link Document (GOLD).

2. *Insert* the following in NAT SUPPs, Chapter 5 – Surveillance, paragraph 5.4 – Automatic Dependent Surveillance – Contract (ADS-C)

Nil. Area of applicability

- 5.4.1 All aircraft intending to conduct flights in the airspace defined below shall be fitted with and shall operate automatic dependent surveillance contract (ADS-C) equipment:
 - a) from 7 February 2013, on specified tracks and on specified flight levels within the NAT organized track system (OTS); and
 - b) from 5 February 2015, in specified portions of NAT minimum navigation specifications (MNPS) airspace.
 - Note 1.— The specified tracks and flight level band within the NAT OTS will be published by the States concerned in national AIPs and identified daily in the NAT track message.
 - Note 2.— The specified portions of NAT MNPS airspace and aircraft equipment performance requirements where applicable will be published by the States concerned in national AIPs.

Means of compliance

- 5.4.2 Operators intending to conduct flights within the airspace specified in 5.4.1 shall obtain an ADS-C operational authorization, where applicable, either from the State of Registry or the State of the Operator. The State of Registry or the State of the Operator shall verify that the equipment has been certified in accordance with the requirements specified in RTCA DO-258/EUROCAE ED-100 or equivalent, capable of operating outside VHF data link coverage.
- 5.4.3 The data link services provided within the NAT airspace shall comply with the Oceanic Safety and Performance Requirements as specified in RTCA DO306/EUROCAE ED122 or equivalent. Conformance monitoring shall provide alerts to the controller when reports do not match the current flight plan and the following ADS contracts shall be used:
 - a) ADS periodic contracts at an interval consistent with safety requirements and published by the States concerned in national AIPs; and
 - b) ADS event contracts that include the following event types:
 - 1) lateral deviation event (LDE) with a lateral deviation threshold of 9.3 km (5 NM) or less;
 - 2) level range deviation event (LRDE) with a vertical deviation threshold of 90 m (300 ft) or less; and
 - 3) waypoint change event (WCE) at compulsory reporting points.

Note. – Additional guidance can be found in the ICAO Global Operational Data Link Document (GOLD).

d) Date when proposal received:

August 2010

e) Proposer's reason for amendment:

1. The CPDLC and ADS-C implementation based on RTCA DO-258A/EUROCAE ED-100A (or ED-100) avionics standards started in the ICAO NAT Region at the end of 1990. The provisions for data link services contained in RTCA DO306/EUROCAE ED122 apply and will provide the guidelines against which actual communication and surveillance performance are measured. Data link service enhances ATM surveillance and intervention capabilities and is seen as instrumental in allowing reduction of collision risk and meeting the NAT TLS. This is particularly vital for the reduction of collision risk in the vertical plane where the NAT TLS is currently not being met. The use of ADS-C for conformance monitoring of an aircraft position in vertical and horizontal plane will help towards resolving this significant safety issue. The use of ADS-C would also greatly facilitate search and rescue operations and location of an aircraft following an accident in oceanic airspace.

In order to achieve the foregoing safety objectives, it is important to increase the level of data link equipage in the NAT. The current level of data link usage in the NAT has reached 45-50% and continues to grow. Introducing mandatory data link equipment carriage requirement will increase the NAT data link equipage level and help in meeting the NAT TLS.

- 2. The European Commission (EC) adopted the Data Link Service Implementing Rule (DLS IR) in early 2009. This requires implementing CPDLC in designated areas within the EUR Region based on the requirements contained in RTCA DO-280B/EUROCAE ED-110B, Interoperability Requirements Standard for ATN Baseline 1 (INTEROP ATN B1). This implementation will not meet the NAT Region operational needs. However, the DLS IR exempts aircraft fitted with RTCA DO-258A/EUROCAE ED-100A (or ED-100) compliant data link equipment and with an individual certificate of airworthiness first issued before 1 January 2014 for the life of that particular airframe. Aircraft commissioned after this date and required to operate in the NAT would also need to equip with DLS IR compliant data link equipment in order to operate in the designated areas within the EUR Region.
- 3. For the purpose of application of paragraphs 3.3.1 a) and 5.4.1 a), the specified tracks within OTS would be typically the two central and most densely populated tracks between FL 360 and F 390, as published by the States concerned in their respective AIPs.

f) Proposed implementation date of the amendment:

Upon approval by the Council.

g) Proposal circulated to the following States and international organizations:

The proposal has been circulated to the following States and International Organizations:

Afghanistan Bangladesh Canada
Albania Belarus Cape Verde
Algeria Belgium Central African Republic

Andorra Benin Chad Chile Angola Bhutan Argentina Bosnia and Herzegovina China Armenia Botswana Colombia Brazil Australia Congo Brunei Darussalam Côte d'Ivoire Austria Azerbaijan Bulgaria Croatia Bahamas Burkina Faso Cuba Bahrain Cameroon Cyprus

Czech Republic Luxembourg Somalia Democratic People's Rep. of Korea Madagascar South Africa Democratic Republic of the Congo Malaysia Spain Denmark Maldives Sri Lanka Diibouti Mali Sudan Dominican Republic Malta Suriname Ecuador Mauritania Swaziland Egypt Mauritius Sweden Eritrea Mexico Switzerland Syrian Arab Republic

Estonia Monaco Syrian Ara Ethiopia Mongolia Tajikistan

Finland Montenegro Thailand

France Morocco The former Yugoslav Republic of Gabon Mozambique Macedonia

Gambia Namibia Togo

Georgia Nepal Trinidad and Tobago

GermanyNetherlandsTunisiaGhanaNew ZealandTurkeyGreeceNigerTurkmenistanGuinea-BissauNigeriaUgandaHaitiNorwayUkraine

HungaryOmanUnited Arab EmiratesIcelandPakistanUnited Kingdom

India Paraguay United Republic of Tanzania

Zimbabwe

Indonesia **Philippines United States** Iran (Islamic Republic of) Poland Uruguay Portugal Uzbekistan Iraq Ireland Qatar Venezuela Israel Republic of Korea Viet Nam Republic of Moldova Yemen Italy Romania Jamaica Zambia

Japan Russian Federation

Kazakhstan Saudi Arabia Eurocontrol Kenya Senegal **IACA** Serbia **IAOPA** Kuwait Seychelles Kyrgyzstan **IATA** Latvia Sierra Leone **IBAC** Lebanon Singapore **IFALPA**

San Marino

Libyan Arab Jamahiriya Slovakia Lithuania Slovenia

h) Secretariat comments:

Jordan

- This proposal for amendment was first reviewed and agreed by the 46th Meeting of the NAT SPG (22-25 June 2010). Following the circulation of the proposal and in response to comments received from one State, changes were reviewed and agreed by the 47th Meeting of the NAT SPG (13-16 June 2011). Additional revisions were made to ensure a higher degree of flexibility in the implementation of the provisions stipulated in the amendment proposal after NAT SPG/47 in coordination between the originator and the NAT SPG members.
- 2. The flight planning provisions related to handling of data link equipped aircraft are being addressed as part of a separate proposal for amendment initiated by the NAT SPG in order to review the NAT SUPPs in view of Amendment 1 to Doc 4444. The foregoing proposal was approved by NAT SPG/47 and submitted to ICAO for global consultation in line with the formal Doc 7030 amendment procedure.