**NAVIGATION APPROVALS – RVSM – NAT HLA / MNPS – FANS – RNP 10 – RNP 4**

**APPLICATION FOR AN OPERATIONAL APPROVAL / RENEWAL**

**Note; AOC holders adding same type of Airframe with equivalent equipment to existing operational approval need only fill out Section A and provide appropriate AFM, TC or STC confirmation.**

Please complete the form in BLOCK CAPITALS using black or dark blue ink after reading the attached guidance.

This form is designed to elicit all the required information from those operators requiring **RVSM**, **MNPS, FANS,**  **RNP 10 and RNP 4** operational approval. Please complete those sections of the form relevant to the approvals required. Sections A and G should be completed in all cases. Completed forms should be submitted to the Flight Operation Section at the address listed on page 8.

Please read the ‘Notes for Completion’ before completing the form and **tick all items that apply.**

**Section A Page 1 Operator/Airframe Details** 

**Section B Pages 2-3 RVSM Operational Approval** 

**Section C Pages 3-4 NAT HLA/MNPS Operational Approval** 

**Section D Pages 4-5 FANS Operational Approval** 

**Section E Page 5 PBN RNP 10 Operational Confirmation** 

**Section F Page 6 PBN RNP 4 Operational Confirmation** 

**Section G Page 6-8 Signature Block/Notes Completion mandatory** 

**Section H Page 9 Fleet Details Continuation Sheet** 

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| **SECTION A OPERATOR/AIRFRAME DETAILS** |
| **APPLICANT´S DETAILS –** required for all Approval requests   1. Please give the official name and business or trading name(s), AOC number, permanent address or mailing address, e-mail address and contact telephone/fax numbers of the applicant. |
| **AIRCRAFT DETAILS –** required for all Approval requests   1. Aeroplane type(s), series, manufacturer(s) serial number(s), registration mark(s), mode “S” address code(s), date(s) of modification or certification of the airframe(s) for RVSM.  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | Aeroplane  Type | Aeroplane  Series | Manufacturer(s)  Serial Number | Aeroplane  Registration | Mode  “S ”code  (hex) | RVSM Modification/  Certification Date | |  |  |  |  |  |  | |  |  |  |  |  |  | |  |  |  |  |  |  | |  |  |  |  |  |  | |  |  |  |  |  |  |   (use continuation sheet provided on page 8 if necessary) |

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| **SECTION B RVSM OPERATIONAL APPROVAL** | |
| Refer to EU Regulation 965/2012 Subpart D of Annex V SPA.RVSM and AMC1/AMC2 SPA.RVSM.105 RVSM operational approval and Eurocontrol Regional Monitoring Agency (<http://www.eurocontrol.int/eur-rma>) | |
| 3. Regional Procedures and areas of applicability are contained in ICAO Doc 7030 If the applicant wishes to operate in other Regions additional approvals may be required.  Ref GM1 SPA.RVSM.105 (d)(9), Operations within NAT HLA / MNPS airspace require RVSM approval. | |
| 4. RVSM **Airworthiness** Documentation **–** Give reference(s) of relevant documentation, which shows that the listed airframes have been modified or certified to the RVSM Minimum Aircraft Systems Performance Specification (MASPS) on the dates given at 2 above. Mention any relevant EASA Type Certificate if the RVSM-compliant aircraft was certified by EASA. | |
| 5. RVSM Training Programs, AMC2 SPA.RVSM.105 (f)  provide details of training programs and syllabi or relevant references; (OM-D)  a) Flight crew initial and recurrent training ,  b) Operational control/Dispatch,  c) Please provide confirmation that training has been conducted –  d) Give references of relevant documentation - | |
| 6. Maintenance Procedures for Continued Airworthiness.  Provide references to specific documentation and processes designed to satisfy the  RVSM Technical Requirements listed in;  *Maintenance Programme………*  *Maintenance Procedures………..* | |
| 7. Operations Manualsand checklists - give reference(s) of operating procedures  Pertinent to RVSM operations. AMC2 SPA.RVSM.105 (a-e) | |
| 8. Minimum Equipment List – reference of MEL where RVSM operations are addressed. | |
| 9. Plan for Participation in Verification/Monitoring Programs – ref AMC1 SPA.RVSM.105(g)  <http://www.eurocontrol.int/articles/rvsm-monitoring-requirements>  Provide details of airframe height confirmation - |

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| **SECTION C NAT HLA / MNPS OPERATIONAL APPROVAL** |
| NAT HLA / MNPS Approval can only be granted to operators who are already RVSM approved or who are applying concurrently for RVSM Approval. Refer to EU Regulation 965/2012 Sub Part C SPA.MNPS and its associated AMC1 and GM1, the latest edition of ICAO Doc 007 available on the Internet - https://www.icao.int/EURNAT/EUR and NAT Documents/NAT Documents/NAT Doc 007/\_Updated NAT Doc 007\_V-2017-1.pdf - excerpts from this manual could be used for an operator’s “operations manual supplement”. NAT HLA / MNPS operations are also subject to PBN (RNP10 or RNP4) refer to ICAO Doc.9613 – <http://store1.icao.int/index.php/performance-based-navigation-manual-pbn-4th-ed-2013-doc-9613-english-printed.html> |
| 11. Operations Manuals;  Give reference(s) of details pertinent to operations in NAT HLA/MNPS Airspace in OM-A, B and D, Flight Crew NAT HLA/MNPS Training Program and syllabi which need prior approval by ICETRA –. Include with submission copies of relevant sections from OM´s.  Ref to EU Regulation 965 SPA.MNPS.105 |
| 12. Minimum Equipment List;  Reference of applicable MEL items where NAT HLA/MNPS operations are Addressed. |
| 13. Give details / samples of accomplished Flight Crew Training for NAT HLA/ MNPS operations,  Required before final approval;   1. Programmed Instructions –CBT -- 2. STD FC Training - 3. Line training -   Having considered Nat Doc 007 latest version. |
| 14. Long Range Navigation equipment details (See ‘Notes for Completion’, Para 14 page 7). |

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| **SECTION D FANS OPERATIONAL APPROVAL** |
| FANS operational Approval can only be granted to Operators who are already RVSM and PBN approved. FANS approval refer to ICAO Doc 10037 Global Operational Data Link Document (GOLD), FAA AC 90-117 and for PBN ICAO Doc 9613, Recommended for Flight Crew training is ICAO CBT <https://www.icao.int/safety/pbn/Pages/default.aspx> (PBN Overview and PBN Airspace Design).  FANS operation requires ADS-C and CPDLC equipment on specific NAT HLA OTS.  Ref to ICAO Doc7030.  . |
| 16. Give details of Related Aircraft SB, TC or STC for Technical Status and capability for SAT Com  Including revision status. |
| 17. Give details of Related Aircraft Capability for PBN, list Equipment and Software Status Ref to  Manufacturers SB and References. |
| 18. Give details of Flight Crew and Maintenance personnel FANS and PBN Training. |
| 19. Minimum Equipment List – Give Reference where FANS Operations are Addressed. |
| 20. Give details how Navigation and Communication Systems integrity is assured during  Preflight. |
| **SECTION E PBN OPERATIONAL CONFIRMATION supporting RNP10** |
| Refer to Regulation 965/2012 Subpart B Performance based Navigation Operations (PBN)  RNP 10 implementation is applied to those Oceanic/Remote phases of flight where ground based navigation aids do not normally exist. Acceptable Means of compliance refers to EASA AMC 20-12, which refers to FAA AC 90-105A as an acceptable means of compliance as well as ICAO Doc 9613-AN/937 for RNP 10 Approval.  See; <http://www.faa.gov/regulations_policies/orders_notices>. |
| 21.Operations Manuals, flight crew training, crew notices – give reference(s) of details pertinent to  Operations in RNP 10 airspace. Include with submission copies of relevant sections from,  OM-B, OM-C and OM-D |
| 1. Minimum Equipment List – reference of MEL where RNP 10 operations are addressed. |
| 1. Long Range Navigation equipment details if different from Para 14, (See ‘Notes for Completion’, Para 14 page 7). |
| 1. Give reference of confirmation of RNP 10 eligibility. Include submission copies of relevant sections from Aircraft Flight Manuals or evidence from navigation system manufacturers. |
| **SECTION F PBN OPERATIONAL CONFIRMATION supporting RNP4** |
| RNP4 is applied to those Oceanic/Remote phases of flight where Airspace Navigational Performance requires its use.  Refer to FAA AC 90-105A and ICAO Annex 6 and Doc 9613 |
| 1. Give Aircraft Manufacturers references/compliances with RNP 4 in AFM, TC or STC. |
| 1. Give references to Aircrafts conformity to PBN System which include “On board Monitoring and Alerting” Function. Dual independent GNSS equipment is required and an approved dispatch fault detection and exclusion (FDE) availability prediction program must be used. Ref.ICAO Doc 9613AN/937 paragraph 1.3.2.2.2 b). |
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| **SECTION G SIGNATURE BLOCK** |
| Signature: ...................................................................................................................................................................... |
| Name (BLOCK LETTERS): ........................................................................................................................................... |
| Appointment request:  Date …………………………………………… |
| Please note that a **minimum** of 30 working days will normally be required to check and confirm the information given above - If data is missing or omitted, the process may take considerably longer. |

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| **FORM FRD 041 – NOTES FOR COMPLETION**  **SECTION A – COMPLETION OF SECTION A IS MANDATORY FOR ALL** APPLICATIONS Paragraph 1 **–** For AOC holders - company name, AOC number and e-mail address of contact person will suffice.  **Paragraph 2 –** This information is required by both the State of Registry for the State RVSM Approvals database and by the verification and monitoring program office(s) of the appropriate ICAO Region(s). Enter Mode ‘S’ code (if assigned) in hexadecimal format.  **SECTION B – RVSM APPROVAL**  **Paragraph 3 –** RVSM Operations have been conducted in the North Atlantic (NAT) region since 1997, in Europe (EUR) since 2001 and in the whole of North America (NAM) since early 2005. RVSM operations are now conducted in all the world’s ICAO regions. Specific details regarding the areas of applicability within each region can be found in ICAO Doc 7030 – Regional Supplementary Procedures.  **Paragraphs 4, 5, 7 and 8 –** Details in these paragraphs are required so that the appropriate flight operations inspector is able to confirm the RVSM compliance data.  **Paragraph 6 –** Further investigation of Continued Airworthiness /Maintenance Procedures **cannot** commence until such time as the information at Paragraph 6 has been provided.  In addition to the information requested, amendments to your company EASA Part-M and Part-145 – CAME/MOE shall be accomplished. These amendments must define the procedures to be followed for initial and continued RVSM approval.  **Paragraph 9 –** linked with paragraph 2. See AMC1 SPA.RVSM.105 (g) A major requirement of the verification and monitoring programs is for the airframe details of an operator’s RVSM approved fleet to be kept up-to-date.  **SECTION C – NAT HLA/MNPS APPROVAL**  **Paragraphs 11, 12 and 13 –** Details in these paragraphs are required so that the appropriate flight operations inspector specialists are able to confirm NAT HLA/MNPS compliance.  **Paragraph 14 –** Suitable Long Range Navigation Equipment for NAT HLA/MNPS RNP10 or RNP4 airspace includes IRS/INS (RNP10) and certain GNSS equipment for RNP4. An AFM statement of A/C capability need to be provided, If the Long Range Nav Equipment has to work through an FMS this must also be included, together with details of the software version, as applicable. |

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| **SUBMISSIONS AND ENQUIRIES** | |
| Address for submissions:    Icelandic Transport Authority / ICETRA  Flight Operations Division  Ármúli 2 108 Reykjavík Iceland | Contact details for enquiries:  **RVSM, NAT HLA/MNPS, FANS, RNP 10 and RNP 4**  Tel: +3544806000  Fax: +3544806003  E-mail: FRD@ICETRA.is |

**SECTION H FLEET DETAILS – CONTINUATION SHEET**

Operator AOC Number ……………………………….

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| Aeroplane  Type | Aeroplane  Series | Manufacturer  Serial Number | Registration | Mode “S” Code (hex) | RVSM Modification/ Certification Date |
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