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|  | Form  Form: AC-GEN021  November 2022 |

# PERFORMANCE BASED NAVIGATION APPLICATION FORM

**PART 1 INFORMATION ON AIRCRAFT AND EQUIPMENT**

**Operator Name and AOC Number: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Aircraft Manufacturer, Model, and Series: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**PBN Navigation Specifications applied for:**

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| **RNAV 10** | **RNP 4** |
| **RNAV 5** | **RNP 2** |
| **RNAV 1 & 2** | **RNP 1** |
|  | **RNP APCH LNAV/VNAV** |
|  | **RNP APCH LP/LPV** |

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| **Registration numbers** | **Aircraft Serial numbers** | **Area navigation systems and manufacturer** | **Model serial number and number of units** |
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**PART 2 APPLICATION DETAILS**

DATE OPERATOR INTENDS TO BEGIN PBN OPERATIONS \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

DATE / SIGN BY RESPONSIBLE POST HOLDER \_\_\_\_\_\_\_\_\_\_\_\_\_/\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

NAME OF RESPONSIBLE POST HOLDER \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

***For Official use***

DATE OF PRE-APPLICATION MEETING \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

DATE APPLICATION WAS RECEIVED \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

NOTIFICATION DATE APPROPRIATE? YES  NO

INSPECTOR NAME & SIGNATURE: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Application Instructions:**

1. *The Operator should conduct an initial assessment so as to determine the navigation specifications required for a specific aircraft.*
2. *The applicant should request a pre-application meeting. During the meeting the applicant shall be briefed on the application package process including PBN guidance material and worksheet completion.*
3. *The application form together with an application letter signed by the responsible post holder or accountable manager shall be submitted after the pre-application meeting. It should be accompanied by the application package listed above.*
4. *An applicant should submit the application 60 days before the planned date of PBN operations commencement.*

**PART 3 SUBMITTED DOCUMENTS**

| **Item No.** | **Required PBN Documentation - attachments** | **Yes / No / N/A** | **Comments by the Inspector** |
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|  | Operator submits pre-application statement of intent (PASI) |  |  |
|  | Airworthiness documents showing aircraft eligibility (airworthiness navigation system capability compliance statement) for the required RNP operations  AFM, AFM revision, AFM supplement, or Type certificate data sheet (TCDS) showing RNP system eligibility/certification standard for the required PBN operations.  Statement by the manufacturer, or Aircraft modification documentation |  |  |
|  | A brief description of the aircraft’s system navigation systems including a list of the of major components installed.  Details of the navigation system, FMS and autopilot including type, number, software version. |  |  |
|  | Maintenance practices   * For aircraft with established PBN operations maintenance practice, the list of references of the document or programme showing navigation system maintenance practices. |  |  |
|  | Minimum equipment list (MEL) - for operators using approved MELs:  Updated MEL showing provisions for applicable PBN systems. |  |  |
|  | Training and competence  Details of Training programmes/curricula (ground training, simulator, line training for flight crews, flight dispatchers and maintenance personnel, as applicable.  Competence assessments for flight crews including details of simulator devices to be used as applicable. |  |  |
|  | Operating policies and procedures including Normal & Contingency Procedures, monitoring & incident reporting)  Relevant operations manual chapters and SOPs. |  |  |
|  | Navigation database Management  Details of the navigation data validation programme including installation of new databases. The database supplier approval status and, where necessary, additional quality assurance/data integrity checks applied by the operator or supplier. |  |  |
|  | Demonstration plan: If required by the Authority. |  |  |
|  | Reporting Process  Outline of error reporting process and procedures for error analysis, prevention and correction, including feedback process to the Authority, navigation database and chart suppliers, as well as OEMs. |  |  |

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| (For official use only) | | |
| Inspector Receiving Application Name: | Signature: | Date Received: |

**ATTACHMENT PBN COMPLIANCE CHECKLIST/WORKSHEET**

1. This compliance checklist ensures that the PBN operations applicant has adequately addressed the regulatory requirements applicable to the operations.
2. The compliance checklist is prepared by the Operator and submitted to the Authority indicating how the relevant applicable regulations to the proposed PBN operations have been addressed. It is required to be submitted together with the formal application package.
3. The applicant should complete the section pertaining to the applicable Part of the Regulations.
4. The applicant should also complete the PBN worksheet and submit it with the required documentation.

| **Regulation No.** | **Regulation Requirement** | **Applicability**  **Yes / No / NA** | **Manual / Document Reference** | **Remarks**  ***CAA Use*** |
| --- | --- | --- | --- | --- |
| The Civil Aviation Aircraft Instruments and Equipment Regulation, 2022 | |  |  |  |
| Part III — International Commercial Air Transport — Aeroplanes | |  |  |  |
| Reg.76 Navigation equipment | (1) An operator shall not operate an aeroplane unless it is equipped with navigation equipment which shall enable it to proceed—  (a) in accordance with its operational flight plan; and  (b) in accordance with the requirements of air traffic services. |  |  |  |
|  | (2) Notwithstanding subregulation (1), the equipment requirements shall not apply in instances where the Authority has authorised visual flight rules by visual reference to landmarks. |  |  |  |
|  | (3) The aeroplane shall be sufficiently provided with navigation equipment to ensure that, in the event of the failure of one item of equipment at any stage of the flight, the remaining equipment will enable the aeroplane to navigate in accordance with this regulation. |  |  |  |
|  | (4) The failure of any single unit required for either communications or navigation purposes or both will not result in the failure of another unit required for communications or navigation purposes. |  |  |  |
| Reg.77. Performance-based navigation | (1) For operations where a navigation specification for performance-based navigation has been prescribed, an aeroplane shall, in addition to the requirements specified in regulation 60: |  |  |  |
|  | (a) be provided with navigation equipment which will enable it to operate in accordance with the prescribed navigation specification; |  |  |  |
|  | (b) have information relevant to the aeroplane navigation specification capabilities listed in the flight manual or other aeroplane documentation approved by the State of the Design or State of Registry; |  |  |  |
|  | (c) have information relevant to the aeroplane navigation specification capabilities included in the minimum equipment list. |  |  |  |
|  | (2) The Authority shall, for operations where a navigation specification for performance-based navigation has been prescribed, ensure that the operator has established and documented: |  |  |  |
|  | (a) normal and abnormal procedures including contingency procedures; |  |  |  |
|  | (b) flight crew qualification and proficiency requirements in accordance with the appropriate navigation specifications; |  |  |  |
|  | (c) a training programme for relevant personnel consistent with the intended operations; and |  |  |  |
|  | (d) appropriate maintenance procedures to ensure continued airworthiness in accordance with the appropriate navigation specifications. |  |  |  |
|  | (3) The Authority shall issue a specific approval for operations based on performance-based navigation authorisation required navigation specifications. |  |  |  |
| Reg.78. Minimum navigation performance specifications | (1) An operator shall not operate an aeroplane in minimum navigation performance specifications airspace unless it is equipped with navigation equipment which: | - |  |  |
|  | (a) continuously provides indications to the flight crew of adherence to or departure from track to the required degree of accuracy at any point along that track; and |  |  |  |
|  | (b) has been authorised by the Authority for the Minimum navigation performance specifications operations concerned. |  |  |  |
|  | (2) The navigation equipment required for operations in minimum navigation performance specification airspace shall be visible and usable by either pilot seated at his duty station. |  |  |  |
|  | (3) For unrestricted operation in minimum navigation performance specification airspace, an aeroplane shall be equipped with two independent long-range navigation systems. |  |  |  |
|  | (4) For operation in minimum navigation performance system airspace along notified special routes, an aeroplane shall be equipped with one long range navigation system, unless otherwise specified. |  |  |  |
| Reg.82. Electronic navigation data management | (1) The operator shall not employ electronic navigation data products that have been processed for application in the air and on the ground unless the State of the Operator has approved the operator’s procedures for ensuring that the process applied and the products delivered have met acceptable standards of integrity and that the products are compatible with the intended function of the existing equipment. |  |  |  |
|  | (2) The Authority shall ensure that the operator continues to monitor both the process and products. |  |  |  |
|  | (3) The operator shall implement procedures that ensure the timely distribution and insertion of current and unaltered electronic  navigation data to all necessary aeroplanes. |  |  |  |
| Part IV— General Aviation - Aeroplanes | |  |  |  |
| Reg.121. Navigation equipment | An aeroplane shall be provided with navigation equipment which  will enable it to proceed—  (a) in accordance with its flight plan; and  (b) in accordance with the requirements of air traffic services except when, if not so precluded by the Authority, navigation for flights under visual flight rules is accomplished by visual reference to landmarks. |  |  |  |
| Reg.122. Performance-based navigation | (1) For operations where a navigation specification for performance-based navigation has been prescribed, an aeroplane shall, in addition to the requirements specified in regulation 104: |  |  |  |
|  | (a) be provided with navigation equipment which will enable it to operate in accordance with the prescribed navigation specification; and |  |  |  |
|  | (b) have information relevant to the aeroplane navigation specification capabilities listed in the flight manual or other aeroplane documentation approved by the State of Design or State of Registry; and |  |  |  |
|  | (c) have information relevant to the aeroplane navigation specification capabilities included in the minimum equipment list, for aeroplane operated in accordance with a minimum equipment list. |  |  |  |
|  | (2) The State of Registry shall, for operations where a navigation specification for performance-based navigation has been prescribed ensure that the operator has established and documented: |  |  |  |
|  | (a) normal and abnormal procedures including contingency procedures; |  |  |  |
|  | (b) flight crew qualification and proficiency requirements, in accordance with the appropriate navigation specifications; |  |  |  |
|  | (c) training for relevant personnel consistent with the intended operations; and |  |  |  |
|  | (d) appropriate maintenance procedures to ensure continued airworthiness, in accordance with the appropriate navigation specifications. |  |  |  |
|  | (3) The Authority shall issue a specific approval for operations based on performance-based navigation authorisation required navigation specifications. |  |  |  |
| Reg.123. Minimum navigation performance specifications | (1) For flights in defined portions of airspace where, based on Regional Air Navigation Agreement, minimum navigation performance specifications are prescribed, an aeroplane shall be provided with navigation equipment which: |  |  |  |
|  | (a) continuously provides indications to the flight crew of adherence to or departure from track to the required degree of accuracy at any point along that track; and |  |  |  |
|  | (b) has been authorised by the Authority for the Minimum navigation performance specifications operations concerned. |  |  |  |
|  | (2) The navigation equipment required for operations in minimum navigation performance specification airspace shall be visible and usable by either pilot seated at his duty station. |  |  |  |
|  | (3) For unrestricted operation in minimum navigation performance specification airspace, an aeroplane shall be equipped with two independent long-range navigation systems. |  |  |  |
|  | (4) For operation in minimum navigation performance system airspace along notified special routes, an aeroplane shall be equipped with one long range navigation system, unless otherwise specified. |  |  |  |

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| **Applicant Submitting Compliance Document** | | |
| Title and Name: | Signature: | Date Received: |