


Irish Aviation Authority The Times Building 11–12 D'Olier Street Dublin 2, Ireland www.iaa.ie	Údarás Eitlíochta na hÉireann Foirgneamh na hAmanna 11–12 Sráid D'Olier Baile Átha Cliath 2, Éire	No. OAM 13 Revision 0 Date 08.03.18	
Safety Regulation Division	Rannán na Rialachán Sábháilteachta		

Title: INTRODUCTION OF PERFORMANCE BASED COMMUNICATION AND SURVEILLANCE (PBCS) IN THE ICAO NORTH ATLANTIC REGION

1. INTRODUCTION

An ongoing trial implementation of 25 nm lateral separation, referred to as Reduced Lateral Separation Minimum (RLatSM), in North Atlantic High Level Airspace (NAT HLA) has established tracks that are spaced by one-half degree of latitude with the inclusion of an extra track between the core tracks of the NAT Organised Track System (OTS) from Flight Level (FL) 350 to FL 390 inclusive. A similar trial has been ongoing in the Shanwick Oceanic Control Area (OCA) to reduce longitudinal separation to 5 minutes between aircraft following the same track. This initiative is referred to as Reduced Longitudinal Separation Minimum (RLongSM). These trials will be terminated on 29 March 2018 with the introduction of Performance-based operations and monitoring in the NAT HLA. The performance of FANS 1/A (and equivalent), Controller-Pilot Data Link communications (CPDLC) and Automatic Dependent Surveillance -Contract (ADSC) are monitored in the NAT HLA against the Required Communication Performance (RCP) 240 and Required Surveillance Performance (RSP) 180 specifications. From 29 March 2018 flights will be required to indicate compliance with these specifications in order to qualify for operations in airspace where reduced lateral and/or longitudinal separation minima are applied. Initially this will apply to the OTS between FL 350 and FL 390 inclusive but will be extended to the whole of the NAT HLA as a re-designation of the airspace formerly known as the “North Atlantic Minimum Navigational Performance Specifications Airspace (NAT MNPSA)”.

This OAM applies to operators holding an Irish Air Operators Certificate that wish to benefit from PBCS derived separations.

2. REFERENCES

ICAO Annex 6, Annex 11, Annex 15,

(EU) 965/2012 (SPA.MNPS),

ICAO Doc 7030 Regional Supplementary Procedures,

North Atlantic Operations and Airspace Manual - NAT Doc 007 (V.2017-1),

ICAO PANS-ATM (Doc 4444),


ICAO PANS-ABC (Doc 8400),

ICAO Doc 9869; Performance-based Communication and Surveillance (PBCS) Manual Second Edition, 2017,

FAA Requirements; 14 CFR 91.225 & 91.227,

NAT OPS BULLETIN 2018_001 (as amended),

FOD.F.206a– PERFORMANCE BASED COMMUNICATIONS and SURVEILLANCE (PBCS) DECLARATION OF COMPLIANCE.

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3. DETAIL

Only those operators that satisfy the requirements of RCP 240 and RSP 180 will be eligible for the reduced separation minima afforded by these specifications in the NAT HLA. Minimum Navigation Performance Specification (MNPS) approval or NAT HLA MNPS approval remains a requirement as per SPA.MNPS.100 MNPS operations.

In order for a flight to be able to indicate its compliance with PBCS operations certain conditions must be met as established in ICAO Annex 6

3.1 Demonstration of Compliance

Operators will be eligible to indicate compliance with RCP 240 and RSP 180 provided:


3.1.1 Aircraft requirements:

- (a) Required Navigation Performance (RNP) 4 compliant;
- (b) Automatic Dependent Surveillance – Contract (ADS-C) equipped; and
- (c) Controller Pilot Data Link Communications (CPDLC) equipped.

The above mentioned equipment must have been manufactured in accordance with the required technical specifications and the installation approved from an airworthiness perspective (normally stated in the Aeroplane Flight Manual as PBCS Statement of Compliance (SOC)) in accordance with the requirements for integrity, availability and continuity set out in the Performance Based Communication and Surveillance Manual (ICAO Doc 9869). The system must also provide flight crew with alerts associated with the RCP 240 and RSP 180 specifications and specific items related to PBCS capability must be included in the minimum equipment list (MEL). EU Regulation 965/2012 CAT.IDE.A.345 refers.

3.1.2 Operator requirements:

- (a) The operator shall ensure that procedures are to be included in the operator’s manuals (both flight and ground operations) using the Global Operational Data Link (GOLD) Manual (ICAO Doc 10037) and the PBCS Manual as Acceptable Means of Compliance. These procedures must include contingency/failure procedures and a process to report problems encountered by flight crews, dispatchers and maintenance personnel.
- (b) Flight crews and other personnel should be trained and qualified for Performance-based Communications and Surveillance (PBCS) operations.
- (c) The required Communications/Navigation/Surveillance (CNS) systems must be operational and flight crews must report any failure or malfunction of GNSS, ADS-C or CPDLC equipment to Air Traffic Control (ATC) as soon as it becomes apparent. The aircraft operator shall ensure that arrangements with the CSPs/SSPs stipulate the RCP/RSP allocations, including any monitoring or recording

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requirements. The aircraft operator shall also ensure that these arrangements include a provision for the CSP/SSP to notify the ATS units appropriate for the route system of the aircraft operator of failure conditions impacting PBCS operations.

- (d) The operator shall establish procedures to report problems encountered by flight crew or other personnel to the regional PBCS monitoring entities associated with the route of flight on which the problem occurred. The operator is also to establish procedures to disclose operational data, including that from its CSPs/SSPs, in a timely manner to the appropriate PBCS monitoring entity, when requested, for the purposes of investigating a reported problem.
- (e) The operator shall participate in ANSP and regional PBCS monitoring programmes which are applicable to its route system and shall provide the following information to regional PBCS monitoring entities specified in the Aeronautical Information Publication (AIP):
 - a. Operator name;
 - b. Operator contact details; and
 - c. other coordination information.

Any changes to the information listed above are to be notified to the appropriate PBCS monitoring entities.

On successful verification, by the IAA, of the FOD.F.206a checklist, IAA will amend the AOC holder’s MNPS Approval specification on the Operations Specifications to reflect “NAT HLA” and “RCP 240, RSP 180” compliance.

Please direct questions relating to the process or regulatory clarifications to Capt. Ronan Verling at ronan.verling@iaa.ie.