INTERNATIONAL CIVIL AVIATION ORGANIZATION

Second Meeting of the Africa - Indian Ocean Aviation System Planning and Implementation Group (AASPG/2)

Livingstone, Zambia, 2 - 6 November 2026

Agenda Item 4: Implementation of safety and air navigation goals, targets and indicators, including priorities set in the Regional Aviation Safety and Air Navigation Plans

IMPLEMENTATION OF ICAO SARPs ON ACR-PCR PAVEMENT STRENGTH REPORTING – NIGERIA'S MILESTONE

(Presented by Nigeria)

SUMMARY	
This paper presents Nigeria's experience in the implementation of the ICAO SARPs on ACR-PCR reporting of aerodrome pavement strength using the Aircraft Classification Rating – Pavement Classification Rating (ACR-PCR) method, applicable from 28 November 2024. The paper also outlines key challenges faced by Nigeria in implementing the new ICAO requirement. Action required by the Meeting is presented in Paragraph 3.	
Strategic Goals	*Every Flight is Safe and Secure*

1 INTRODUCTION

1.1 Following the adoption of Amendment 15 to Annex 14, Volume I, which became effective in July 2020 and applicable on 28 November 2024, States commenced preparations for implementation of the new provisions on reporting aerodrome pavement strength using the ACR-PCR method. The provisions apply to pavements intended to serve aircraft with an apron mass greater than 5 700 kg.

1.2 In compliance with ICAO requirements, Nigeria has implemented a transition from ACN-PCN to ACR-PCR reporting by determining and publishing PCR values using an Aircraft Experience method (U) and updating the relevant aerodrome documentation accordingly.

1.3 Recognizing the limitations of the simplified Aircraft Experience (U) method in fully characterizing pavement structural capacity, Nigeria intends to conduct regular pavement condition surveys (PCI) as a complementary pavement management measure, while mandating aerodrome operators to develop competence required for PCR calculations of aerodrome operators in PCR using ICAO-approved tools.

2. DISCUSSION

2.1. The DGCA - Nigeria, issued an All-Operators Letter (AOL), dated 24 April 2024, and published on the NCAA website, calling for action by concerned aviation stakeholders in readiness for compliance with the SARPs in line with Nigeria's Implementation Action Plan which is attached as Appendix 1 to this Working Paper.

2.2 Nigeria adopted the implementation guidance provided by the ICAO WACAF Regional Office on the implementation of the provisions of ACR-PCR and developed an Advisory Circular (**NCAAAC-ARD22),** which was published on the NCAA website to provide industry guidance.

2.3 Following an ICAO virtual webinar conducted in December 2025, coordinated by the WACAF Office, Nigeria leveraged on the ICAO support provided, and lessons learned from States that had implemented the requirements to achieve compliance with the ACR-PCR reporting format using the Aircraft Experience (U) method.

2.4 The CAA coordinated an implementation task force involving focal persons from aerodrome operators and gathered the required aircraft and pavement-related data to establish the most demanding aircraft operating at each airport and determine the corresponding PCRs using the Aircraft Experience (U) method, with technical support from the Regional Safety Oversight Organization, BAGASOO. The PCR values for five (5) Nigerian international airports have been promulgated in the Nigeria AIP prior to the ICAO Coordinated Validation Mission (ICVM) conducted in April 2026. The following methodology was adopted for determining PCR using the Aircraft Experience method:

a) Determine the aircraft fleet operating at the given airport and the corresponding number of departures
b) Determine the applicable subgrade category. (The ACN-PCN system previously used for Nigerian airports was based on Technical Evaluation, T. Due to limited historical data, the existing subgrade categories were used pending availability of more comprehensive pavement data.)
c) Identify the most demanding aircraft, based on the highest applicable ACR for the given subgrade
d) Determine the PCR based on the most demanding aircraft experience, ensuring that the aircraft loading does not adversely affect the pavement structure.
e) Publish the PCR in State AIP.

2.5 Milestones achieved

a) Issuance of regulatory guidance through NCAA Advisory Circular NCAA-ACARD22.
b) Establishment of an implementation task force involving NCAA and aerodrome operators.
c) Determination of PCR values using the Aircraft Experience (U) method.
d) Publication of PCR values for five (5) Nigerian international airports in the Nigeria AIP before the April 2026 ICVM.

2.6 Challenges

2.6.1 Nigeria's transition from the ACN-PCN method to the ACR-PCR system involves several challenges. The challenges include:

a) Aerodrome operators and other relevant personnel need to become familiar with the assessment, calculation and reporting methodologies introduced under the ACR-PCR system.

b) Adequate training and capacity-building programmes are required to develop the necessary competencies, promote a common understanding of the new system and ensure its consistent application across aerodromes.
c) Implementation of the ACR-PCR system requires comprehensive, reliable and accurate pavement and aircraft-related data. Collecting, validating and maintaining the required data across aerodromes requires resources and is time-consuming.

3 ACTION BY THE MEETING

3.1 The meeting is invited to:

a) note the information contained in this paper; and
b) encourage States and Aerodrome Operators to implement ACR/PCR by provision of resources and appropriate training.

END