Twenty Second Meeting of the Africa-Indian Ocean Planning and Implementation Regional Group (APIRG/22)
(Accra, Ghana, 29 July – 02 August 2019)

Agenda Item 4.4: Initiatives by States & Industry and other air navigation issues

SEAMLESS AIR TRAFFIC MANAGEMENT

(Presented by IATA)

SUMMARY
Harmonized, Interoperable and Seamless Air Traffic Management (ATM) and Systems should form the foundation of a fully integrated aviation eco-system in Africa which, when implemented, will support 'Africa Single Sky' concept as part of the Single African Air Transport Market (SAATM) initiative that will drive the economic development and betterment of air transport in the continent. Africa Single Sky is recognized as one of the drivers towards improving economic integration of African people in that it will address wasteful investment in infrastructure by avoiding duplications of systems/resources. Through a collaborative decision making (CDM) process, the regional economic communities (RECs), States/ANSPs can better share resources in a synergetic approach, that better addresses the high cost of air travel in the continent, thereby availing to the general traveling public, the benefits of air travel and aviation. Therefore, RECs and States/ANSPs must collaborate when designing their ATM plans and the supporting infrastructure for communications navigation and surveillance (CNS). In addition, there should be a clearly defined concept of operations within the States/regions which should take cognizance of future air traffic growth/flows and cost-effectiveness of infrastructure investment. It's imperative that national master plans, regional plans and continentwide plans should be in tandem with the strategy and implementation plans of Africa Planning and Implementation Regional Group (APIRG) and engraved in the Air Navigation Plan (AFI ANP), where applicable. All stakeholders should therefore, work in collaboration with ICAO 'No Country Left Behind' approach and airspace users, to achieve a harmonized, interoperable and Seamless ATM systems and operations.
REFRENCE(S): ICAO Global Air Traffic Management Operational Concept (Doc 9854); ICAO Global Air Navigation Plan (Doc 9750); APIRG 21 2017
Related ICAO Strategic Objective(s): Safety, Air Navigation Capacity and Efficiency, Economic Development of Air Transport and Environmental Protection.

1.   **INTRODUCTION**

1.1.   Africa passenger traffic growth over the next 20 years is expected to more than double. IATA forecasts an even higher growth based on the premise that significant barriers to expansion in aviation are removed, in which case the growth in passenger figures may even triple. One such game changer is the successful implementation of SAATM (Single African Air Transport Market).

1.2.   Aviation has the potential to contribute directly and indirectly to all but one of the seven (7) 'Aspirations of the Africa we want' as envisaged in AU Agenda 2063. For example, aviation contributes to the creation of jobs, movement of passenger/cargo, trade, economic activities, social and economic transformation, tourism, a prosperous continent etcetera. More importantly, aviation can contribute to the implementation of seamless boarders based on the premise of seamless air traffic management (ATM) and aviation systems infrastructure development; that support seamless

movement of people and goods across the continent in order to achieve a fully integrated environment for sustainable economic activities in Africa.

1.3.　　　A harmonized, interoperable and seamless ATM and systems infrastructure implementation is therefore an imperative for aviation development and a prosperous continent. However, this cannot be achieved if we do not pull together the limited resources available. A collaborative decision making (CDM) approach becomes critical, as this can tap in on the potential synergies available from a continentwide collective approach and desire to implement seamless air transport involving all States/ANSPs and industry stakeholders.

1.4.　　　IATA and users have been advocating for a collaborative approach to implementing seamless air traffic management. Several initiatives are on-going for example; SADC, EAC, Roberts FIR, COMESA and ASECNA. Other initiatives have been undertaken by the AU and AU subsidiary bodies, for example; NEPAD, AFCAC, AUC, PIDA etcetera. Also, ICAO has a strategy based on the Global Air Navigation Plan (GANP) under which AFI Air navigation Plan is imbedded. APIRG has had discussions on seamless ATM and have agreed on APIRG 21 Conclusion 21/08, for synergetic implementation of seamless sky. Africa Development Bank (AfDB) has also developed its own aviation policy in recent years.

1.5.　　　To achieve seamless ATM, all the different single sky initiatives by the different stakeholders must be consolidated into one single strategy, a Master ATM Infrastructure Strategy for Africa, that will deliver a unified seamless air traffic management across the continent. None of the initiatives can succeed on their own. Its only when we pool together that we can truly achieve the desired seamless sky and when mature, a Single African Sky that encompasses ATM/CNS and other supporting aviation related infrastructure.

2.　DISCUSSION

2.1　　　As discussed in APIRG 21, a clear and agreed roadmap or strategy needs to be developed in consultation with AU and AU subsidiary bodies, ICAO and ICAO subsidiary bodies, States/ANSPs and aviation stakeholders, including IATA, AFRAA, CANSO, ACI, IFATCA etcetera. It should permeate into regional, sub-regional and national aviation master plans.

2.2　　　The roadmap/ATM master infrastructure plan should be discussed in a platform that will encompass all the stakeholders listed above, followed by sign off meeting/workshop under Air Navigation Services (ANS) Forum or Summit to be hosted by ICAO.

2.3　　　The roadmap/ATM master infrastructure plan should include but not limited to;

    a) Harmonization of standards and procedures and regulation,
    b) Airspace capacity improvements,
    c) Airspace management and airspace concept,
    d) Air traffic flow management (ATFM),
    e) Functional airspace blocks (FABs)
    f) Free routing airspace (FRA)
    g) User preferred route airspace (UPR),
    h) Airport capacity (runway optimization) based on technology,
    i) Safety enhancement tools and data exchange/sharing protocols,
    j) Systems integration and optimization and,
    k) Operational efficiency and environmental protection

2.4　　　As a starting point, all the strategies from the different initiatives should be consolidated without interrupting the implementation of those that have already started, provided they embrace the principles of synergizing infrastructure investment in a collaborative environment. These strategies

shall include those of SADC, EAC, COMESA, ASECNA, Roberts FIR, RECs, NEPAD, AFCAC, AUC, PIDA etcetera.

2.5   The ICAO driven AFI infrastructure Gap analysis report should be used to direct the roadmap/ATM master infrastructure plan starting from current deficiencies.

2.6   The final document should be endorsed by the APCC and approved at an inter-ministerial forum of the AU for implementation by States/ANSPs.

3.   ACTION BY THE MEETING

a) The meeting is invited to take note of the Working Paper

b) Endorse the need for a Master ATM Infrastructure Strategy for Africa

c) Identify aviation stakeholders needed to develop the Master ATM Infrastructure Strategy for Africa in a collaborative environment

d) Agree on a date for the AFI Air Navigation Summit to be held in 2019/2020.

e) Agree on a process, including time frame, on which to present the finalized Master ATM Infrastructure Strategy for Africa through the appropriate channels for endorsement and for approval at AU.

f) Agree on the process and timelines for the implementation of the strategy and the cascading of the strategy to States through the development of National Aviation Master Plans and an agreeable funding model.

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