



# STATUS REPORT ON USER PREFERRED ROUTES (UPR) TRIALS TO SUPPORT FREE ROUTE AIRSPACE IMPLEMENTATION IN THE CONTINENTAL AFI AIRSPACE

*Better Skies for Africa*

Presented by AFRAA on behalf of AAIG at  
APIRG 27 – 4 to 8 October 2024 East London RSA

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# The First African Aviation Air Transport Industry Sustainability Laboratory

- Nairobi from 27 June to 1<sup>st</sup> July 2022
- In four decades, Africa's market shrunk from about 3% to 2% compared to the world
- AAIG brought together air transport, trade, and tourism stakeholders to identify projects:
- **Reducing Costs or Generating Revenues.**



# The Outcome of the Air Transport Sustainability LAB

**THE 5  
PROJECTS  
to Reduce  
Costs and  
Grow Traffic**



**1. Taxes (Fuel and customs)**



**2. High Taxes and Charges**



**3. Navigation – Free Route Airspace (FRA)**



**4. SAATM**



**5. Partnerships - Airlines and Tourism Bodies to improve intra-African Tourism**

# FRA Implementation Background

## APIRG Conclusion 22/36:

- **Free Route Airspace Accra 29 July to 2nd August 2019**

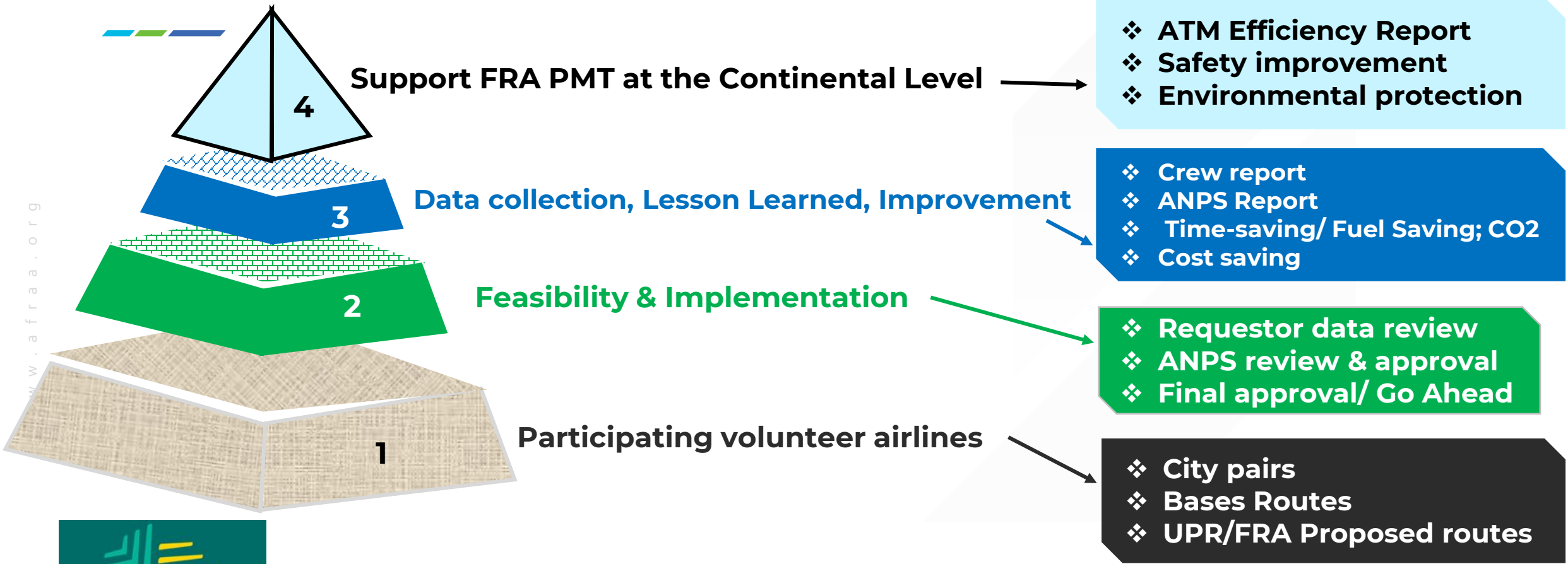
## The FRA Project Management Team established

- **PMT working towards FRA Implementation**

## APIRG Conclusion 26/09:

- **User Preferred Routes (UPR) Trials to Support FRA Implementation in the Continental AFI Airspace**

# UPR Trial Effective Collaboration Process



# Trial Methodology

**One Day – One-Way Trials**

**Three Days – One-Way Trials**

**Three Days – Two-Way Trials**

**Seven Days – Two-Way Trials**

**Thirty Days – Two-Way Trials**

## Engaged Stakeholders

- Ethiopian Airlines
- Kenya Airways
- ECAA
- KCAA
- CAA Uganda
- RVA
- ASECNA
- NAMA
- GCAA
- TCAA
- Zambia ANSP
- Zimbabwe CAA
- ATNS

# LEARNING THROUGH TRIALS

## OVERCOMING CHALLENGES

- ❖ **PLANNING/COORDINATION WITH ALL STAKEHOLDERS**
- ❖ **PILOTS/ATCOs BRIEFING/EFFECTIVE COMMUNICATION**
- ❖ **EFFECTIVE INFORMATION SHARING IN ANTICIPATION [NOTAMEATHER, ETC.]**
- ❖ **EFFECTIVE REPORTING OF OPERATING DATA BY PILOTS AND ATCOs**
- ❖ **DETERMINATION OF THE CROSSING POINTS**
  - ❖ **BETWEEN THE TRIAL TRAJECTORIES WITH EXISTING ROUTES**
  - ❖ **FIR ENTRY POINTS (5LNC, LAT LONG, ABEAM EXISTING POINT)**
- ❖ **200 NM MAXIMUM PERMISSIBLE LENGTH OF A DIRECT SEGMENT BETWEEN TWO POINTS.**
- ❖ **FLIGHT LEVEL RESTRICTION**

# By the End of Thirty Days' Two-Way Trials

The trials attracted participating airlines: RwandAir, EgyptAir, Royal Air Maroc, Airlink, and non-African airlines.

## We have come a long way

- ❖ The trials are well coordinated and implemented.
- ❖ ANSPs sound support and reports, including radar screenshots.
- ❖ ANSPs share practical solutions to overcome challenges
- ❖ Lat Long points to address intermediate reporting points or new FIR entry-exit points.

## Management support to operational staff

- ❖ Cross-border UPR flights reap significant savings; restrictions must be addressed in individual FIRs.

Enhanced stakeholders' collaboration for safe FRA in Africa.

Courtesy Billy DIABASENGA

# Two Airlines Participate Since Nov. 23

- 1 Ethiopian Airlines
- 2 Kenya Airways

Together, they performed:

❖ East-West Nairobi – Accra, Nairobi – Abidjan, Addis Ababa – Abidjan:

❖ More than 100 UPR trial flights saving more than **56,000 tons of fuel** & avoiding **176,500 tons of CO2**

❖ East-South Nairobi – Cape Town and Addis Ababa – Cape Town

❖ At least 10 UPR trial flights with **900 tons of fuel** and avoiding **2,835 tons of CO2**

# FRA Implementation Roadmap

The AFI FRA PMT and the UPR trial team held a workshop from 21 to 25 October 2024 in Nairobi :

- **Trials expected to intensify:**
  - **ANSPs recorded progress made through trials and addressed trial challenges**
  - **ET and KQ to engage in 90-day trials and initiate additional city pairs.**
  - **New participating to bring new city pairs**
  - **ANSPs and air operators to collect real-time data using the CANSO OIS platform**



## During the AFI FRA PMT Nairobi Workshop



### **EgyptAir Cairo –Kinshasa 23 November 2024**

- ❖ Saved 13 minutes.
- ❖ Saved 800 KGs of Fuel
- ❖ Avoided emission of 2,600 KGs

### **Royal Air Maroc Casablanca Banjul 24 Nov. 2024;**

- ❖ Saved 7 minutes
- ❖ Saved 300 KG of fuel
- ❖ Avoided emission of 900 KGs of CO2

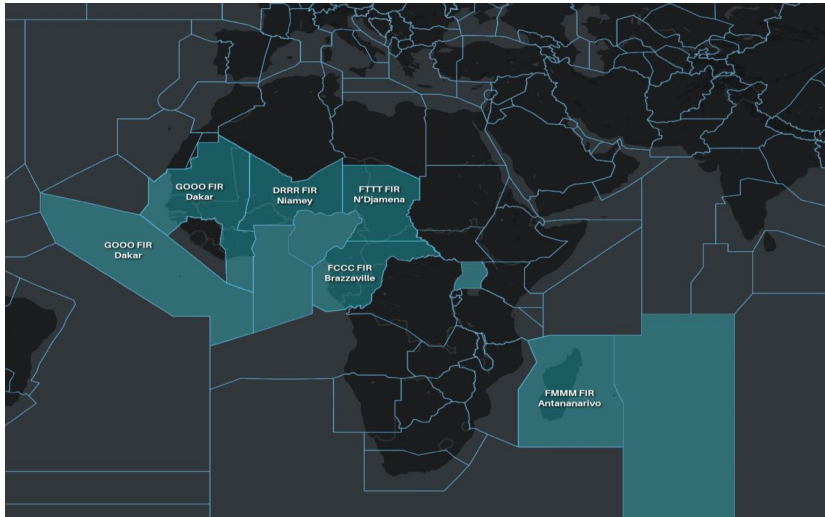
### **By 2nd Nov. 2024**

- ❖ AT & MS achieved three days – two-way trials

# The Meeting Actions

90-day trial (East-West-East)  
Continue North-West-Nort

07-day trial (East - South - East) to 90  
Days and additional city pairs



The Meeting is invited to:

- ❖ Note the trial progress report contained in this working paper
- ❖ Encourage States and ANSPs to fully support UPR trials
- ❖ Request that AFRAA, IATA, and CANSO pursue and intensify the trials
- ❖ Urge the PMT, AFRAA, IATA, and CANSO to plan and implement Free Route Airspace in the Western and Eastern Clusters by 2025.

THANK  
YOU



AFRAA

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