IDM
INTERNATIONAL CONSULTANCY LTD

INTRODUCTION

IDM has over 16 years of experience, Air Traffic Management (ATM) modernization projects in Military and Civilian Aviation in Africa.

Individual IDM experts have experience working with global aviation organizations such as IATA, ICAO, WFP, Governments, ANSPs and private organizations in the following aviation areas;

- ATM; Air Navigation Service (ANS); Performance Based Navigation (PBN)
- Civil Military Cooperation; Flexible Use of Airspace (FUA); ATC classroom/ OJT/ Simulator training; SMS; HF for Air Traffic Control (ATC);
- Infrastructure & Fuel efficiency; Development of Airspace Master Plans; Aeronautical Study; Instrument Flight Procedure Design; ATC Communication; Airspace planning, organization & restructuring; Air Transport & Facilitation; Search & Rescue; Military Aviation & Rescue and Operational Readiness and Airport/ ANS Transfer (ORAT)

MILITARY & STATE CAPABILITY

Using FUA concept we are able to design for our customers airspace continuum strategies to seamlessly share Special Use Airspace (SUA) with civilian air traffic as per the Global Air Navigation Plan (GANP) objectives. We facilitate implementation of the standard ICAO 3-Level Airspace Management Framework to dynamically allocate military restricted zones for civil transit when inactive.

CIVIL AIR NAVIGATION SERVICES (ANS)

Using ICAO Standards & Recommended Practices (SARPS) we offer ANS and planning consultancy, meeting objectives of ANSPs or would be ANSPs in the procedure for the review or formation of an Air Navigation Service Organization, its design and services.

1. AIRSPACE DESIGN & OPTIMIZATION

- Design Airspace & Instrument Flight Procedures (IFP) including Standard Instrument Departures (SIDs)/ Standard Terminal Arrival Routes (STARs) procedures, VFR Routes, Helicopter Routes; PBN route trajectories.
- Integrating trajectories to combine Satellite-Based Augmentation Systems (SBAS) with legacy tactical military networks, Instrument Landing Systems (ILS) & Doppler Very Hight Omni Directional Range (DVOR).
- Establish dedicated, segregated, routing for medical, humanitarian, search & rescue & Cargo Corridors for Unmanned Aircraft Systems (UAS) and Advanced Air Mobility (AAM) vehicles de-conflicting urban commercial air taxi & ensuring real-time tracking of non- cooperative drones.
- Accruing Civil Aviation Benefits such as Shorter routes, less fuel burn, minimized commercial delays, Reduced capital expenditure by sharing infrastructure costs, Standard safety measures.

2. CNS/ATM TECHNICAL SYSTEMS ENGINEERING

- Provide Communications transition strategy consulting for System-Wide Information Management (SWIM) ; Aeronautical Telecommunications Network (ATN)/ATS Message Handling System (AMHS), ATS Inter-facility Data Communication (AIDC) and advanced digital ground-to-air data links like Controller Pilot Data-link Communication (CPDLC).
- Implement Surveillance systems for airspace and airports including primary/secondary surveillance, Automatic Dependance Surveillance-Broadcast (ADS-B), Automatic Dependance Surveillance-Contract (ADS-C), Advanced -Surface Movement Guidance Control System (A-SMGCS) and mitigating hazards affecting surveillance systems.
- We design digital frameworks that safely connect Unmanned Traffic Management (UTM) environments for both Unmanned Aircraft Systems (UAS) & Advanced Air Mobility (AAM), with traditional ATM architectures, enabling shared situational awareness.

3. SYSTEMS INTEGRATION & SERVICES

- Transition strategy consulting for System-Wide Information Management (SWIM) and advanced digital ground-to-air data links.
- For cyber security, we audit and deploy zero-trust architectures to secure critical digital assets, including SWIM networks and IP-based voice communication systems.
- Develop engineering countermeasures against Global Navigation Satellite System (GNSS) jamming and spoofing, ensuring resilient alternate routing for military and commercial flights.
- Review & Modernize Aeronautical Information Services (AIS) documentation and database management to align with global/ regional requirements.
- Accruing Military Defense Benefits such as Un-compromised access to tactical training ranges when needed, Upgraded surveillance picture via shared civil-military data, Assured priority handling for activE military alerts and VIP sorties.
- Dynamic Airspace Management, to ensure Military Airspace readiness Joint CNS/ ATM infrastructure; Joint use Airport Logistics; Tactical Interoperability; and, Secure Data Link Integration.
- Designing terminal airspace procedures tailored for electric Vertical Takeoff and Landing (eVTOL) aircraft operating in Vertiport & Air Taxi Routing in dense urban environments.

SAFETY, REGULATION & COMPLIANCE

- We prepare Civil Aviation Authorities (CAAs) for ICAO Universal Safety Oversight Audit Programme (USOAP) inspections, and build specialized Safety Management Systems (SMS) structures to track and mitigate risks inherent to joint-use aerodromes.
- To ensure regulatory Compliance we align national civil and military infrastructure with ICAO Annex 19 (Safety Management System) and Document 9859 (Safety Management) and global aerospace cyber guidelines.

CORPORATE HEADQUARTERS
P.O. Box 6472-00200
City Sq, Nairobi, Kenya.

WEB PORTAL
www.idm.ac.ke

SECURE PHONE
+254 722 512 939

DIRECT INQUIRY EMAIL
idmconsultancyltd@gmail.com

WHY WORK WITH US?

Decades of Domain Experience: Our consulting staff consists of former military commanders and globally experienced aviation specialists. Secure and Optimize Your Airspace Today.