

DE-RISKING ATC READINESS FOR OPENING OF A GREENFIELD AIRPORT

Development, procurement and implementation support for air traffic control readiness at a greenfield airport in Africa.

Overview

A greenfield airport development in Africa required a structured approach to ensure air traffic control readiness for opening. Starting with capacity and airspace assessment modelling, the work established the future operating concept before defining the operational, technical and programme requirements for the air traffic organisation, CNS/ATM systems, procurement, transition, staffing, training and regulatory approval.

Challenge

Opening the new airport requires close coordination across construction, operational readiness, airspace design, regulatory approvals and system delivery. CNS/ATM equipment had to be specified, procured, installed, integrated, tested and accepted before live operations. This needed to align with manpower planning, recruitment, training, certification and a phased transition from the existing operating environment.

Specific Issues

- **Procurement of ATM/CNS equipment**

Equipment specifications and procurement documentation had to reflect operational needs, capacity requirements and programme constraints.

- **Avoiding a big-bang transition**

Approach/area control, tower operations and the new airspace could not all transition into operation at once.

- **Integration into airport construction timelines**

ATC readiness had to remain aligned with airport construction, systems integration and opening milestones.

Solution

Approach

We started with capacity and airspace modelling to establish the operational requirements and future operating concept. We then used stakeholder consultations to validate technical, operational and programme dependencies. This informed the CNS/ATM equipment specification, procurement documentation and delivery roadmap. To de-risk the programme, the roadmap defined a phased transition: airspace go-live, approach and area control transfer, then tower and airport go-live.

Our Impact

The roadmap established the baseline for delivering ATC at the new airport, giving the client a clear view of requirements, timelines, critical path activities and delivery risks. It supported informed decision-making, procurement readiness and opening preparation. The work is ongoing, with our team now managing the CNS/ATM procurement process and overseeing implementation of the roadmap.