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Civil Aviation
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Development of KNANP

First meeting of of the RNANP/NANP task force

Presented by

Kuwait DGCA

Cairo , Egypt (February 19 -22, 2024)

- **Workshop on GNAP/ NANP conducted in State of Kuwait during peroid May 28 – June 1 , 2023**
- **The workshop reviwed**
 - The latest annemmdment of GNAP and promot the implimnitiation of NANP
 - The six step approches
 - GNAP Portal
- **Workshop outcomes**
 - Creating NANP according to the GNAP amendment
 - KNANP has been developed using the six steps approach to idinify the needs



Ahmad Almousa



The cover of the Kuwait National Air Navigation Plan (KNANP) document features a collage of aviation-related images: an airport terminal, the Kuwaiti flag, an aircraft in flight, a control tower, and a weather radar map. The text on the cover includes the Civil Aviation logo, the title 'Kuwait National Air Navigation Plan KNANP', and the following details:

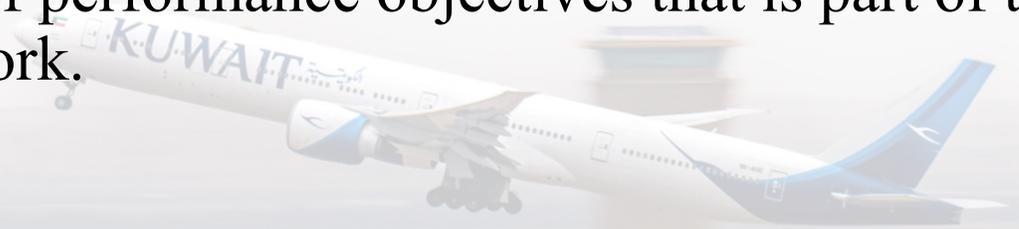
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KNANP on Six steps approach

- **Step 1** Scope , Context and Ambitions
- **Step 2** SWOT Analysis / set objective
- **Step 3** Set target / Caluclation needs
- **Step 4** Optimum soultion idenitification
- **Step 5** Optimum soultion Deplyoment
- **Step 6** Results

Step 1 Scope , Context and Ambitions

Kuwait DGCA decided to implement the performance-based approach on Kuwait FIR and selected the following performance ambitions (Capacity, Efficiency and Safety) from the catalogue of performance objectives that is part of the GANP global performance framework.



KPA	Amibitions
Capacity , throughput and utilization	<ul style="list-style-type: none">• En-route Airspace Capacity• Aerodrome stability
Predictipility	Puntialty
Saftey	Maintain or improve saftey

Step 2 SWOT Analysis / set objective



Strenght	Weaknesess	Oppertiunity	Threats
New Runway	Manpower shortage in ATC and MET Dept.	Kuwait Vision 2035	Low visibilty condition
New Terminal	ATFM Implemntation	Traffic Grouwth is forseen	

Step 3 Set target / Calculation needs

KPA	Performance objective	KPI	Operational Improvements (ASBU Elements/Enablers & Non ASBU)	Target Date
Capacity	Increase Planned En-route Airspace Capacity	KPI 06	Increase maximum sector configuration by Application of vertical sector splitting	2026
			NOPS B0/1 – Initial integration of collaborative airspace management with air traffic flow management Enablers: AMET B0/1 (implemented) FRTO B0/2 (Not implemented)	2026

Step 4 identification opt. solution

Operational Improvements (ASBU Elements/Enablers & Non ASBU)	Target Date	Optimum Solution identification
Increase maximum sector configuration by Application of vertical sector splitting	2026	Current 2 sector
NOPS B0/1 Initial integration of collaborative airspace management with air traffic flow management Enablers: AMET B0/1(implemented) FRTO B0/2 (Not implemented)	2026	ATFM System

Step 5 Deployment Opt. solution

Operational Improvements (ASBU Elements/Enablers & Non ASBU)	Target Date	Optimum Soution identification	Optimum Soution Deployment
Increase maximum sector configuration by Application of vertical sector splitting	2026	Current 2 sector	Additional sectors
NOPS B0/1 Initial integration of collaborative airspace management with air traffic flow management Enablers: AMET B0/1(implemented) FRTO B0/2 (Not implemented)	2026	ATFM System	Establish ATFM team

Step 6 Results

Operational Improvements (ASBU Elements/Enablers & Non ASBU)	Target Date	Optimum Soution identification	Optimum Soution Deployment	Result
Increase maximum sector configuration by Application of vertical sector splitting	2026	Current 2 sector	Additional sectors	<ul style="list-style-type: none"> • ATCOs Workload reduced • Kuwait Airspace Capability increasing
NOPS B0/1 Initial integration of collaborative airspace management with air traffic flow management Enablers: AMET B0/1(implemented) FRT0 B0/2 (Not implemented)	2026	ATFM System	Establish ATFM team	<ul style="list-style-type: none"> • collecting Data to rely on



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- Thank you -

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