

ATM SG/7

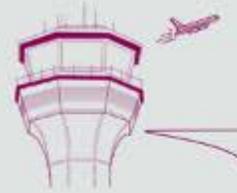
The MIDANPIRG Air Traffic Management Sub-Group, Seventh Meeting

Virtual Meeting 15 – 18 November 2021



Presented by:

State/ANSP/ORG: Egypt/NANSC/NANSC-ECAA



Agenda Item 3:

Planning and implementation issues related to ATM/SAR:

Updates from MID States on ATM/SAR Implementation:

- 1) Latest developments related to ATM/SAR in your State/ANSP/ORG;
- 2) Identified needs and priorities;
- 3) Challenges and difficulties;
- 4) Lessons learnt, and capacity building activities; and
- 5) Ongoing and Planned projects.



1) Latest developments related to ATM/SAR in your State/ANSP/ORG;

a) Establishment of Route L323

Elucidation:

New ATS Route (RNAV5) agreed with Sudan to facilitate traffic flow from/to west and Central Africa.

Status:

- ICARD work done.
- Added in ANP.
- Joint work with Sudan to Send PFA (End of December).

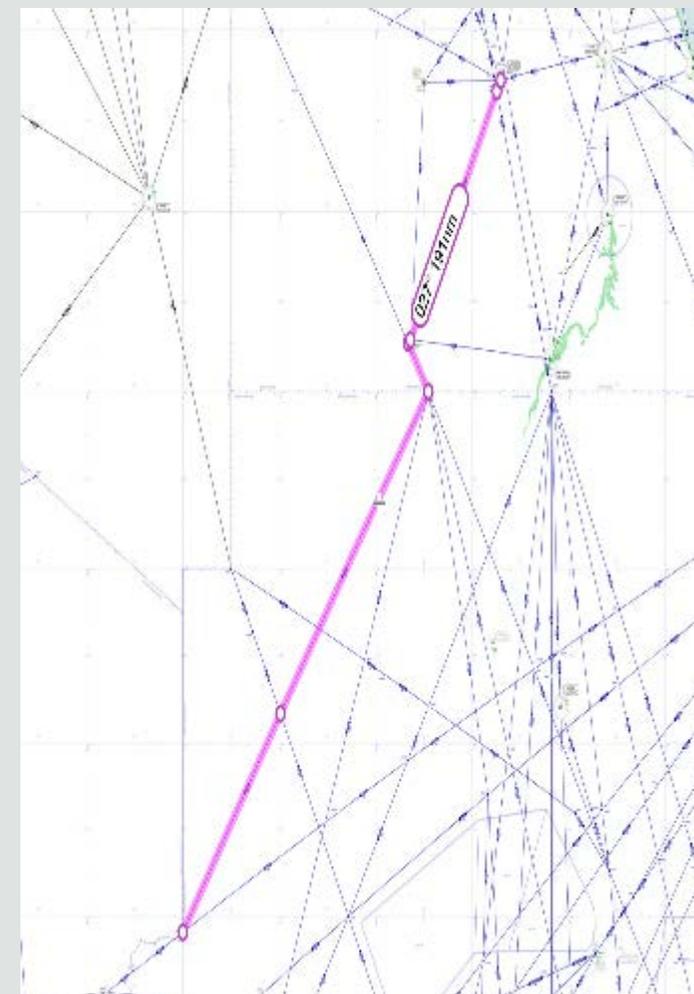
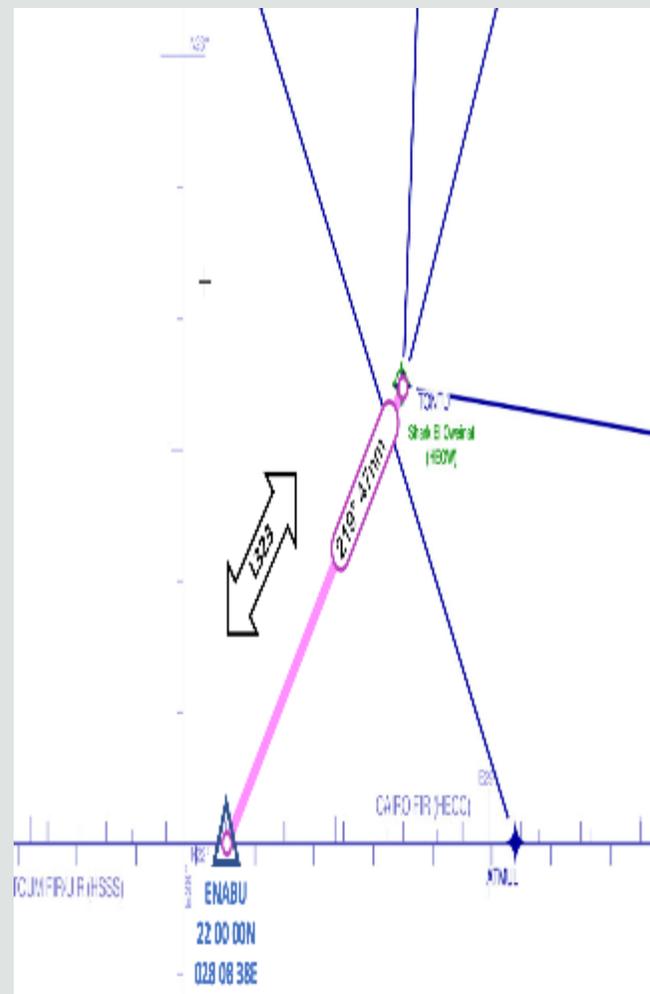


1) Latest developments related to ATM/SAR in your State/ANSP/ORG;

a) Establishment of Route L323

☐ Benefits:

Previous Route	ASKOL – ATMUL – USER POINT TONTU – DESDO - KHG
L323	ASKOL - ENABU – TONTU – DESDO - KHG
Saving	27 NM/Flight





1) Latest developments related to ATM/SAR in your State/ANSP/ORG;

b) Establishment of Route M565

Elucidation:

New ATS Route (RNAV5) agreed with Sudan to facilitate traffic flow from East Africa.

Status:

- ICARD work done.
- Added in ANP.
- Joint work with Sudan to Send PFA (End of December).



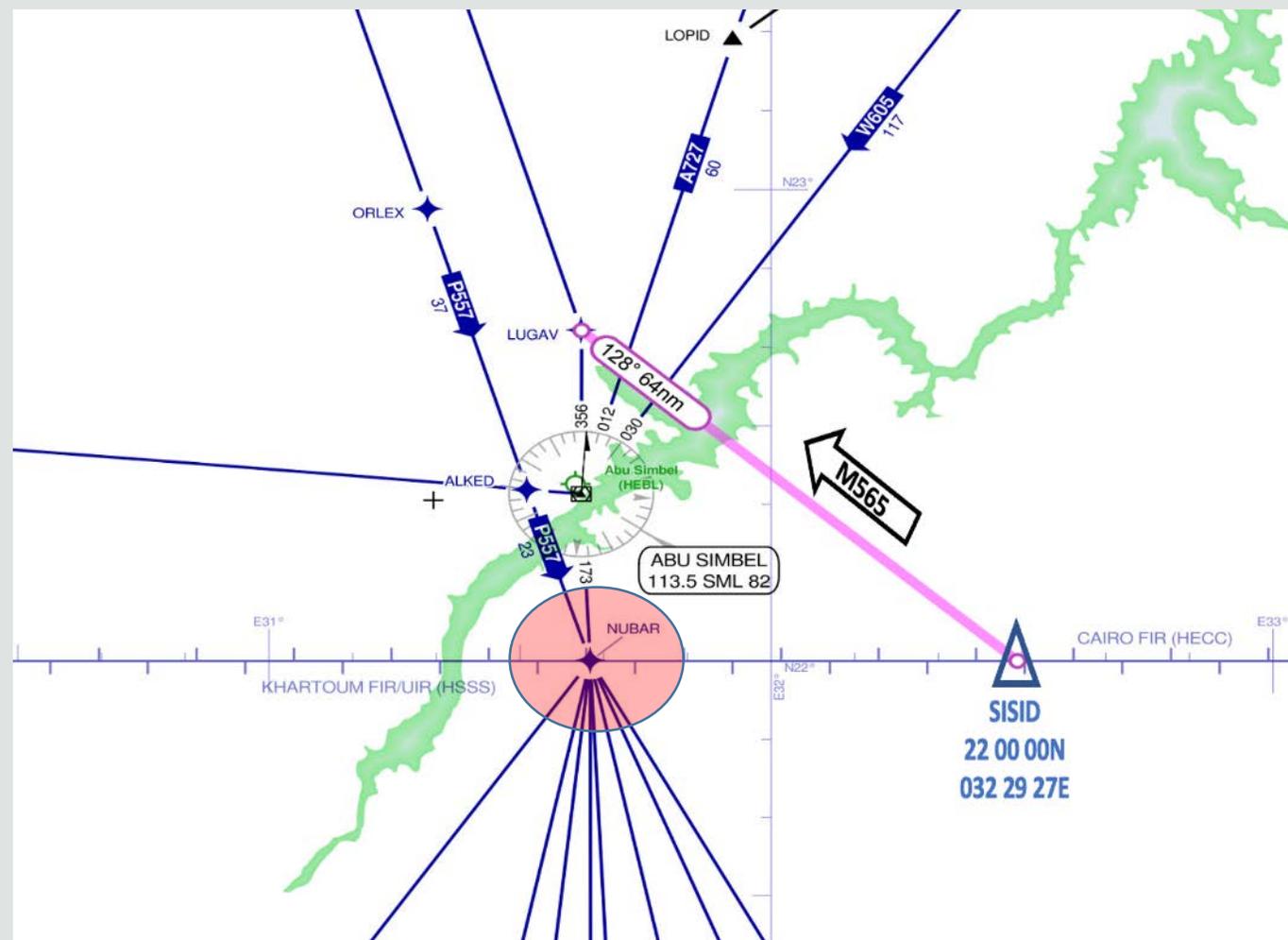
1) Latest developments related to ATM/SAR in your State/ANSP/ORG;

b) Establishment of Route M565

□ Benefits:

M565	SISID - LUGAV
Length	64 NM/Flight

Will redistribute the traffic workload in KHARTUM FIR and reduce the traffic capacity over NUBAR





1) Latest developments related to ATM/SAR in your State/ANSP/ORG;

c) Establishment of Route L324

Elucidation:

New ATS Route (RNAV5) agreed with Cyprus to facilitate traffic flow from/to European Region.

Status:

- ICARD work done.
- Added in ANP.
- Published and implemented.



1) Latest developments related to ATM/SAR in your State/ANSP/ORG;

c) Establishment of Route L324

☐ Benefits:

Previous Route	SAFTA - 333034N0321050E - 331106N0321645E - STEPA -L550 - PASOS - GENIV
L324	SAFTA - L324 -TEZAK -L324 - LAKTO - 321103N0323806E - GENIV
Saving	4 NM/Flight





1) Latest developments related to ATM/SAR in your State/ANSP/ORG;

d) Establishment of Route T55

Elucidation:

New ATS Route (RNAV5) to facilitate traffic flow to Jeddah FIR.

Status:

- ICARD work done.
- Will be added in ANP as temporary ATS Route till further advice.
- Published and implemented.

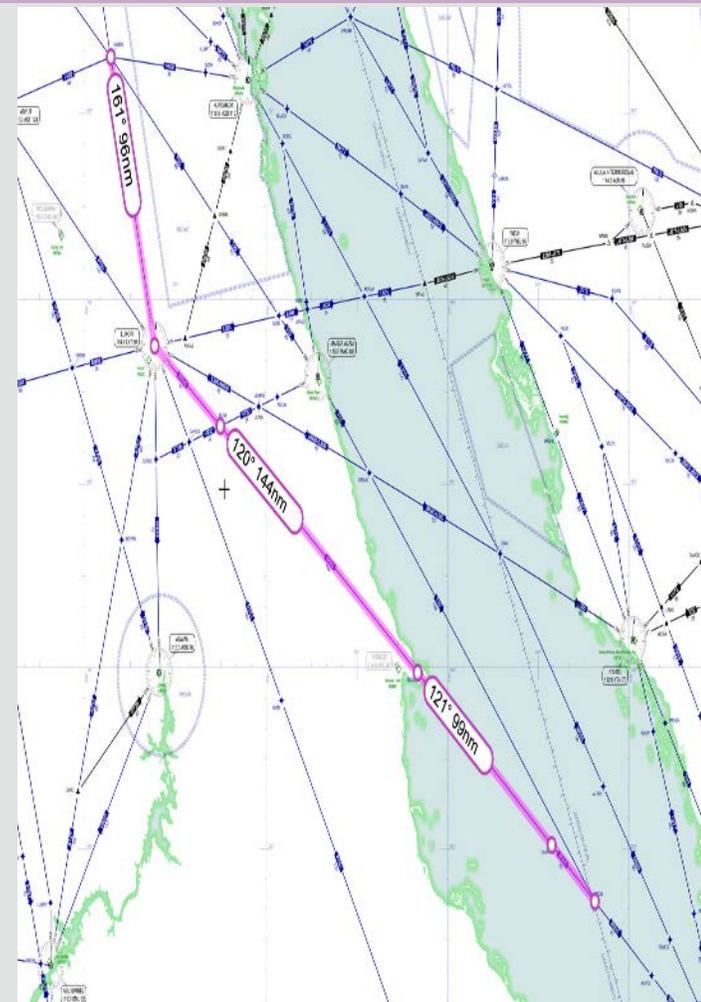
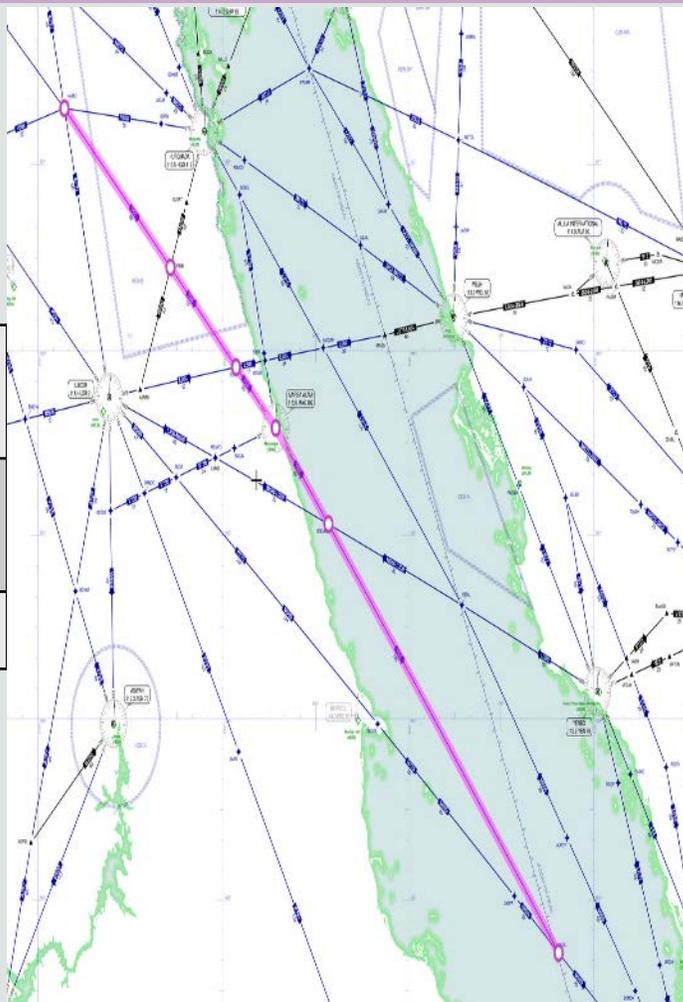


1) Latest developments related to ATM/SAR in your State/ANSP/ORG;

d) Establishment of Route T55

☐ Benefits:

Previous Route	NABED – LXR – ELELI – SEDVA – DASPA - DEDLI
L324	NABED - ORBIB -IVOTI - MAK - OTEMO - DEDLI
Saving	19 NM/Flight





1) Latest developments related to ATM/SAR in your State/ANSP/ORG;

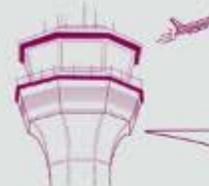
e) Establishment of Route T55

Elucidation:

New ATS Route (RNAV5) to facilitate traffic flow from Necosia FIR to Jeddah FIR.

Status:

- ICARD work ongoing to find an ATS Route name.
- added in ANP.
- Waiting final approval by ICAO on PFA.



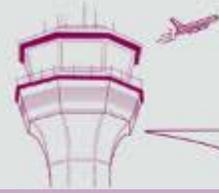
1) Latest developments related to ATM/SAR in your State/ANSP/ORG;

e) Establishment of Route LAKTO
- SILKA

□ Benefits:

Previous Route	RASDA -MELDO -DEGDI -CVO - OBTAV - SOKOT - HGD - SILKA
L324	LAKTO – SERMA – SHM - SILKA
Saving	87 NM/Flight





1) Latest developments related to ATM/SAR in your State/ANSP/ORG;

f) Establishment of ATS Routes network for DBA area

□ Elucidation:

New ATS Routes (RNAV5) network Over DBA area.

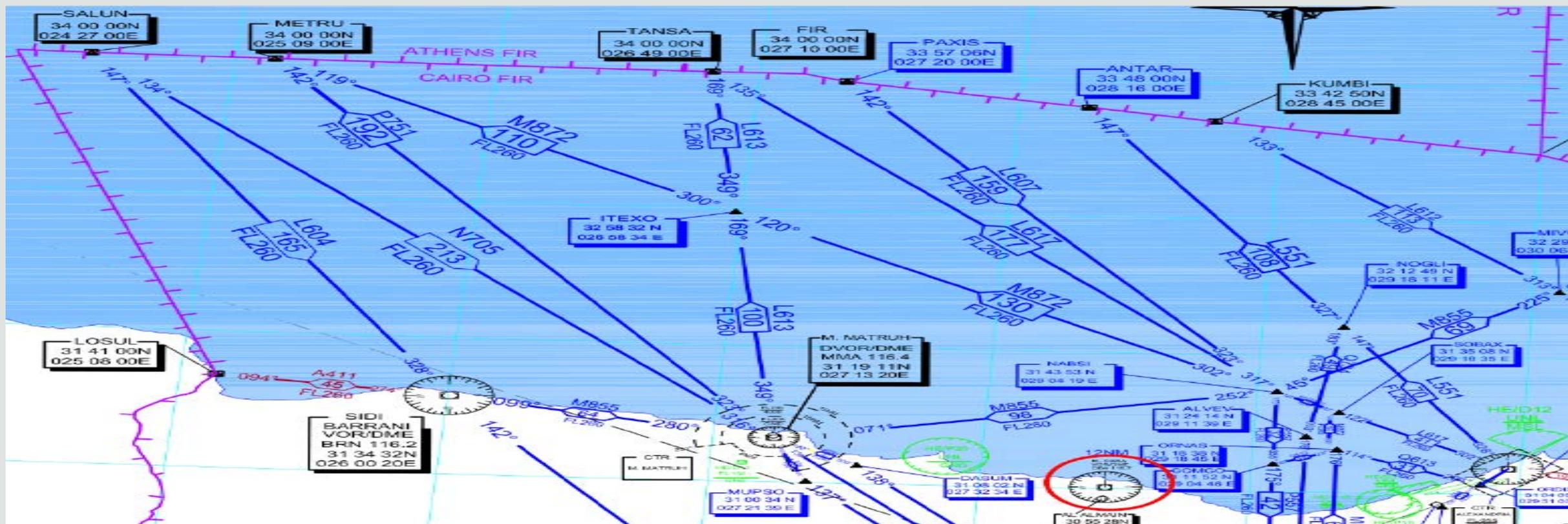
□ Status:

- ICARD work done.
- added in ANP is ongoing.
- PFA done.
- Published and will be implemented by JAN 2022



1) Latest developments related to ATM/SAR in your State/ANSP/ORG;

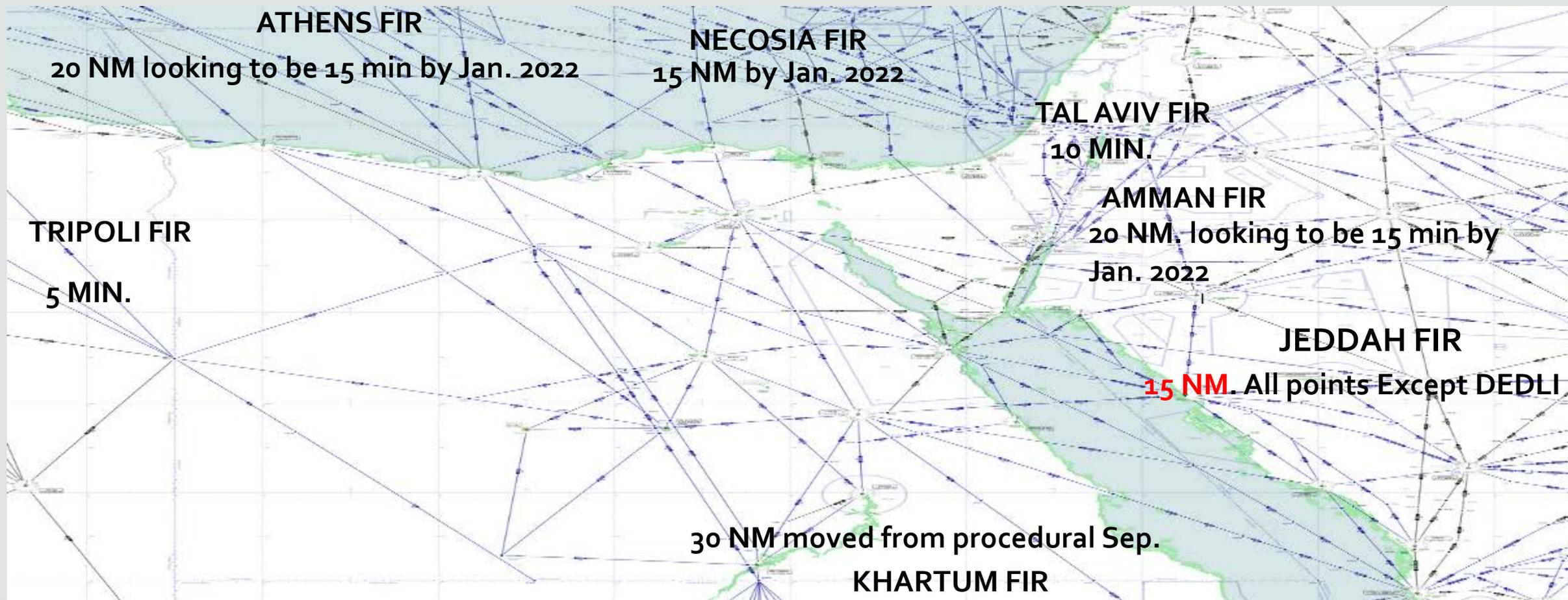
f) Establishment of ATS Routes network for DBA area





1) Latest developments related to ATM/SAR in your State/ANSP/ORG;

g) New longitudinal Sep. minima





1) Latest developments related to ATM/SAR in your State/ANSP/ORG;

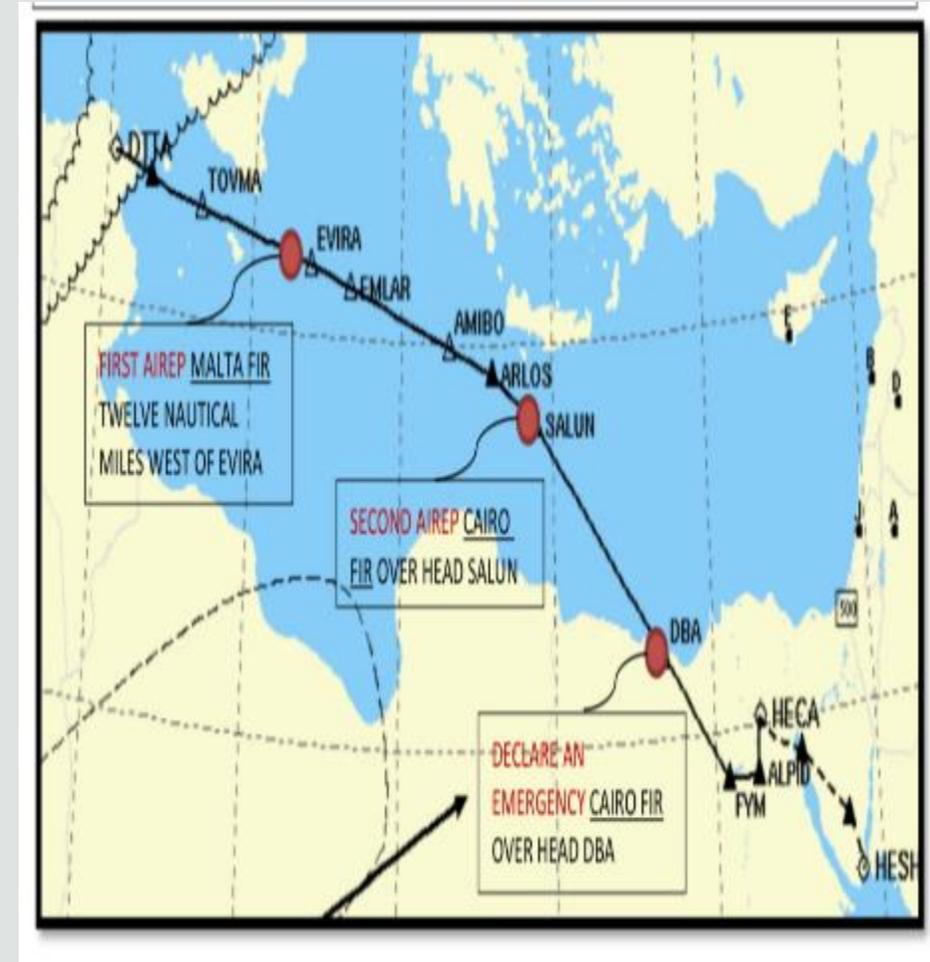
h) Establishment a first volcanic ash emergency response plan

□ Elucidation:

The plan leaded by Egyptair Crisis Centre under cooperation with ECAA, Egyptian meteorological authority, Cairo international airport and NANSC

□ Status:

- The plan is successfully established subject to EUROCONTROL Volcanic Ash doc. Last version 2.0.1
- Volcanic Ash ER trial established on Tuesday 16th. Nov. 2021 for Egptair flight from Tunisia to Cairo.





2) Identified needs and priorities;

- a) Comply with MID DOC 004 (MID region high level airspace concept),
- b) Expedite OLDI/AIDC implementation with all other adjacent FIRs. (MID DOC 006),
- c) Enhance PBN implementation inside Cairo FIR (MID DOC 007),
- d) Working closely with IATA and ICAO to solve all GNSS interference reported by airlines in addition, establish regional DME/DME plan to cover any GNSS Gaps upon GNSS multi- constellations exist (MID DOC 011).



3) Challenges and difficulties;

- a) Establish ATFM on regional basis,
- b) Development SIDs & STARs for 7 primary international Egyptian airports,
- c) Operate different PBN specifications within Cairo FOR (RNAV5 & RNAV1),
- d) Regional ATM systems incompatibilities,
- e) COVID-19 Pandemic.



4) Lessons learnt, and capacity building activities;

- Assessment the performance of Air Navigation Services (ANS) in 7 Egyptian International Airports (HECA, HESH, HEGN, HELX, HESN, HEBA and HEMA) for two months (June and July 2021) for four key performance indicators.

June DEP	
Airport	No. of DEP
HECA	4276
HEBA	468
HESH	821
HEGN	1050
HELX	109
HESN	111
HEMA	198
Total	7033

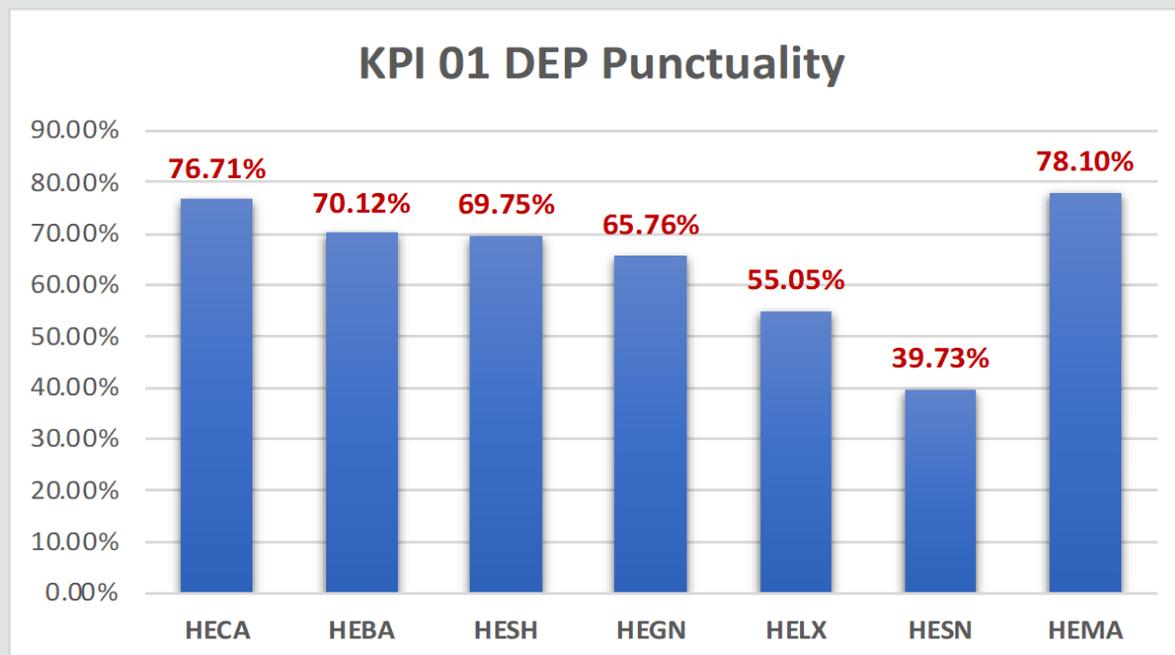
July ARR	
Airport	No. of ARR
HECA	5118
HEBA	692
HESH	982
HEGN	1279
HELX	92
HESN	107
HEMA	247
Total	8517



4) Lessons learnt, and capacity building activities;

a) Calculation of ASBU/KPI 01 Departure Punctuality, Percentage of flights departing from the gate on-time (compared to schedule):

KPI 01	Number of scheduled departing flights	DEP Punctuality
HECA	4011	76.71%
HEBA	415	70.12%
HESH	767	69.75%
HEGN	996	65.76%
HELX	109	55.05%
HESN	73	39.73%
HEMA	160	78.10%

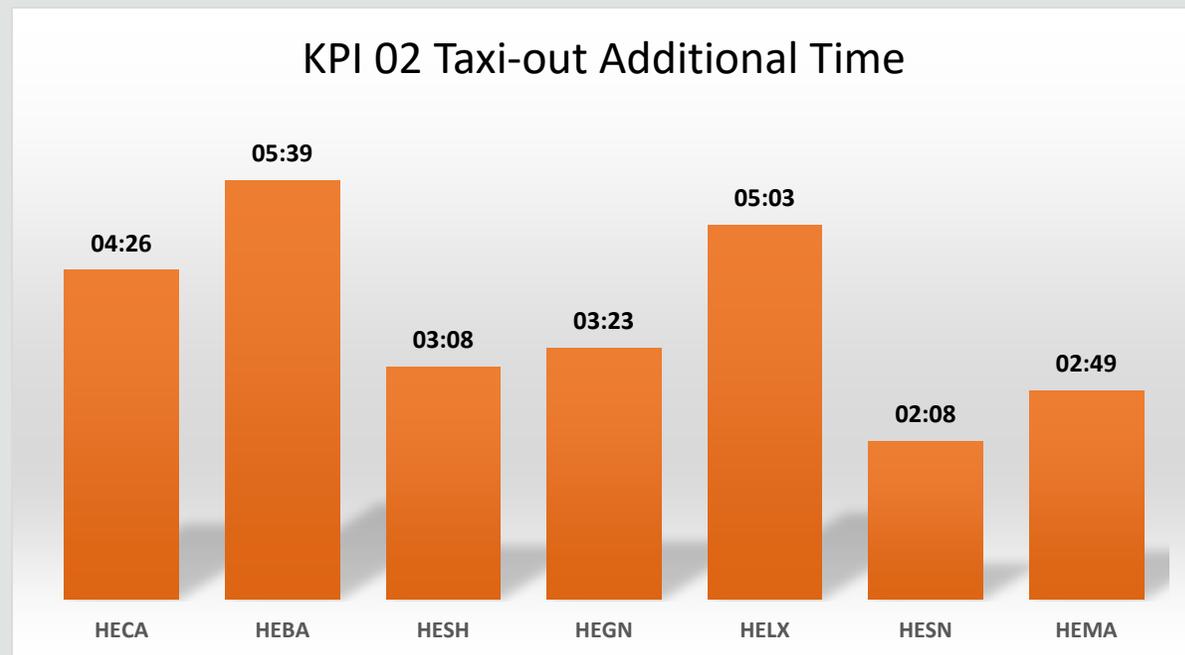




4) Lessons learnt, and capacity building activities;

b) Calculation of ASBU/ KPI 02 Taxi-out Additional Time, Actual taxi-out time compared to an unimpeded/reference taxi-out time (Minutes/flight).

KPI 02	Taxi-out Additional Time
HECA	04:26
HEBA	05:39
HESH	03:08
HEGN	03:23
HELX	05:03
HESN	02:08
HEMA	02:49

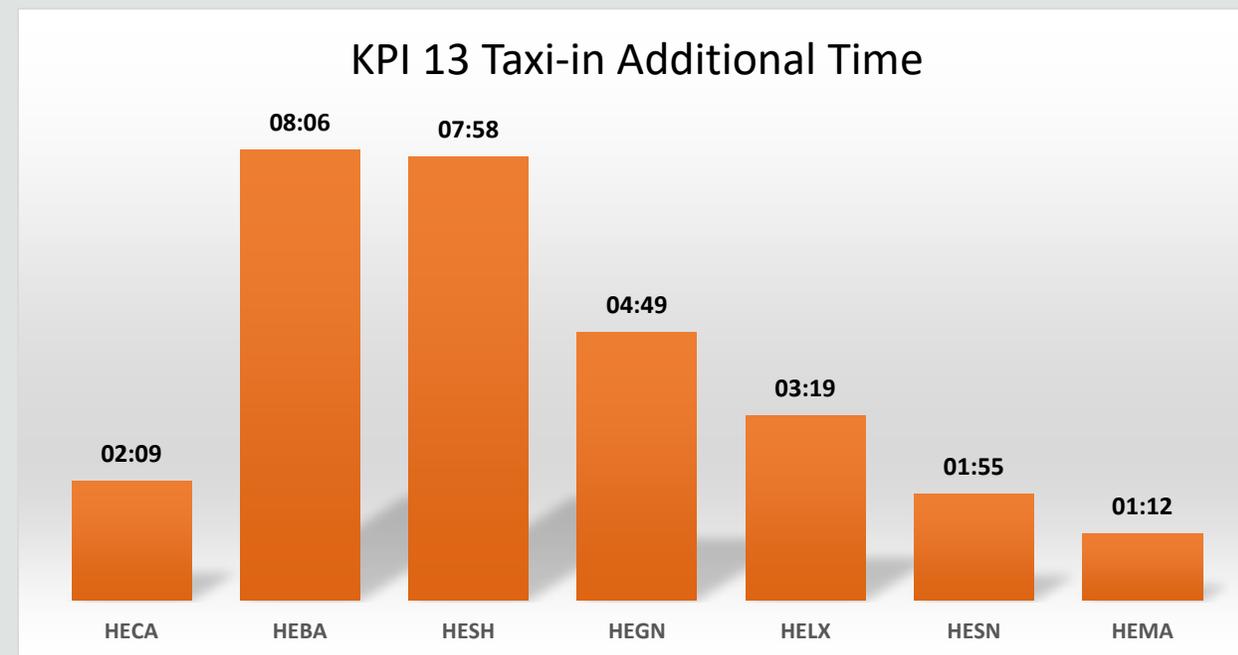


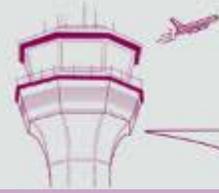


4) Lessons learnt, and capacity building activities;

c) Calculation of ASBU/ KPI 13 Taxi-in Additional Time, Actual taxi-in time compared to an unimpeded/reference taxi-in time (Minutes/flight).

KPI 13	Taxi-in Additional Time
HECA	02:09
HEBA	08:06
HESH	07:58
HEGN	04:49
HELX	03:19
HESN	01:55
HEMA	01:12

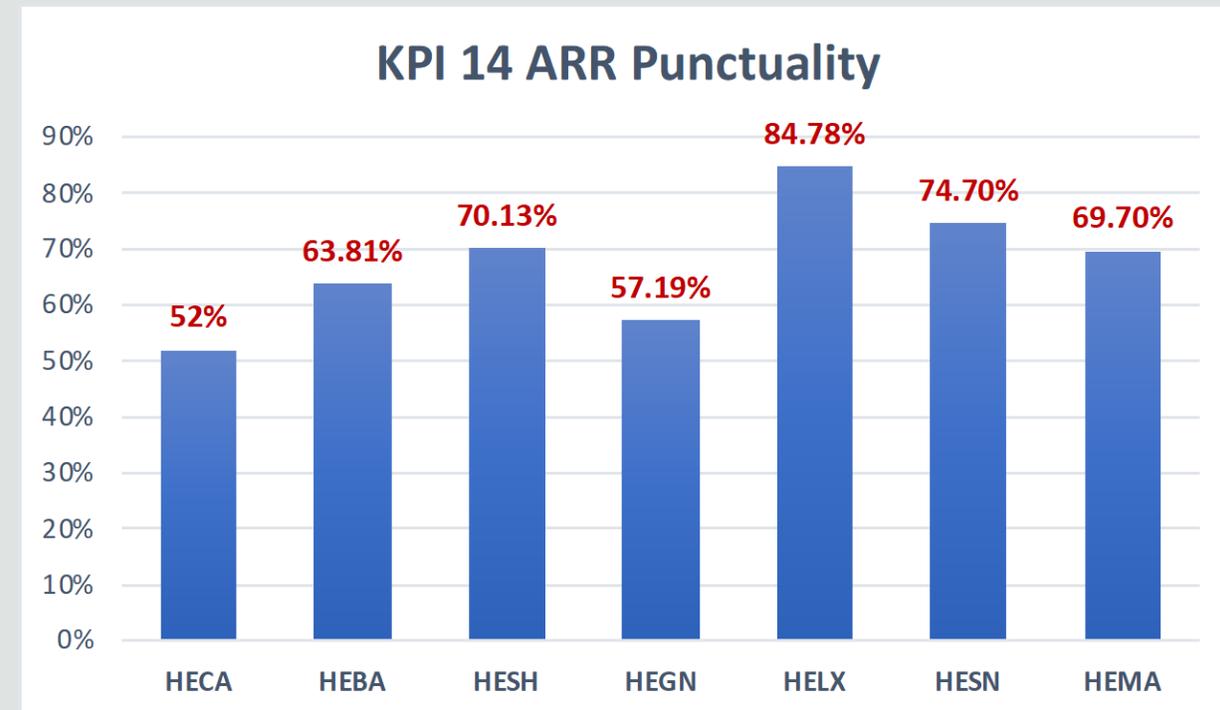




4) Lessons learnt, and capacity building activities;

d) Calculation of ASBU/ KPI 14 Arrival Punctuality, Percentage of flights arriving at the gate on-time (compared to schedule).

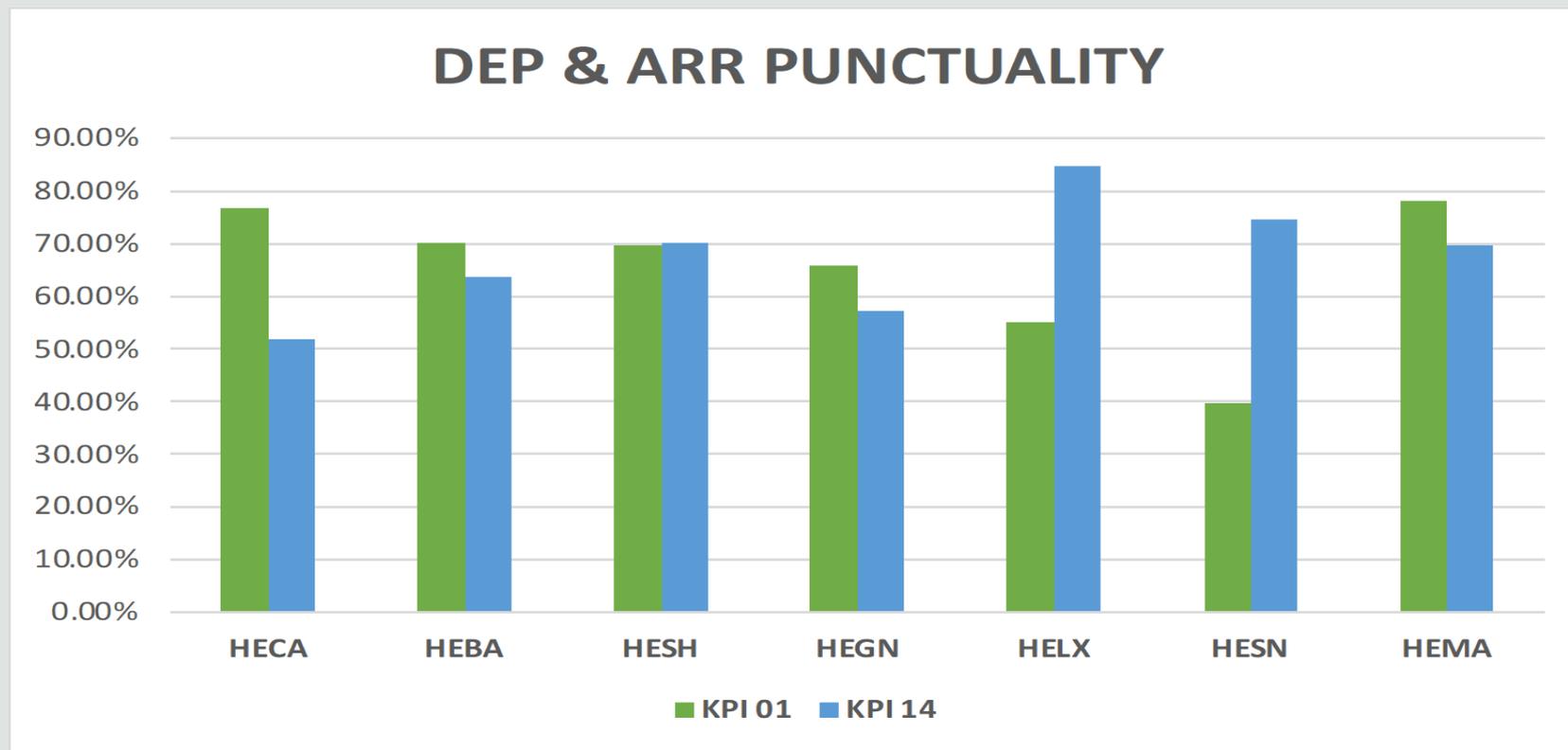
KPI 14	Number of scheduled arriving flights	ARR Punctuality
HECA	4794	52%
HEBA	630	63.81%
HESH	780	70.13%
HEGN	1238	57.19%
HELX	92	84.78%
HESN	83	74.70%
HEMA	243	69.70%





4) Lessons learnt, and capacity building activities;

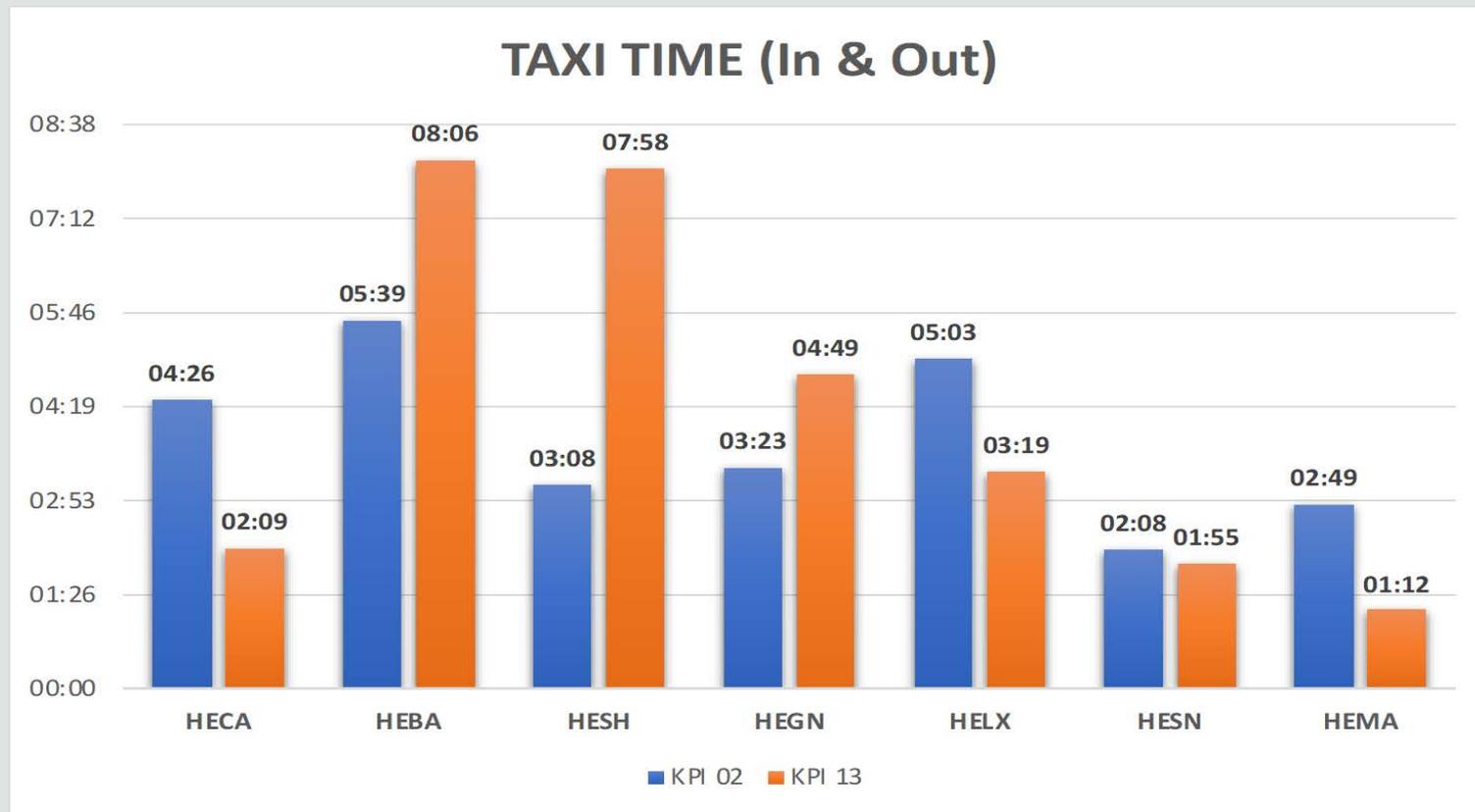
Comparison of Departure and Arrival Punctuality:





4) Lessons learnt, and capacity building activities;

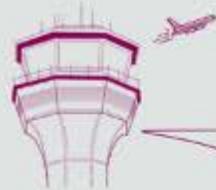
Comparison of Additional Taxi-in and Taxi-out Times:





5) Ongoing and Planned projects;

- a) New Radar system covering Cairo FIR,
- b) ADS-B as backup facility
- c) New ATM system development at Cairo ACC and Cairo int. airport,
- d) New Terminal ATM system: Taba aerodrome & Hughada, Sharm, Borg Alarab, Luxor and Aswan Int. airports.
- e) More ATS Route development project engagements with adjacent FIRs under ICAO and IATA umbrella.
- f) New SIDs & STARs procedures for 7 Egyptian primary int. airports.
- g) Training and technical support for our adjacent FIR to support ICAO NCLB initiatives.



THANK YOU



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