MIDANPIRG/19 & RASG-MID/9

MID Region Air Navigation Priorities and Targets

GACA
الهيئة العامة للطيران المدني
General Authority of Civil Aviation

ICAO • OACI • ИКАО

Revised MID Region Air Navigation Strategy

- MIDANPIRG/18 endorsed the Revised MID Region Air Navigation Strategy (ICAO MID 002) inline with the GANP 6th edition;

- Priority 1 ASBU Element: Elements that have the highest contribution to the improvement of air navigation safety and/or efficiency in the MID Region. These Elements should be implemented where applicable and will be used for the purpose of regional air navigation monitoring and reporting.

- Priority 2 ASBU Element: Elements recommended for implementation based on identified operational needs and benefits by States.

- Priority 1 Thread: Any Thread with at least one priority 1 element

Revised MID Region Air Navigation Strategy

Thread	Element code	Title	Priority	Start Date	Monitoring		Remarks
					Main	Supporting	
Information Threads							
DAIM							
	B1/1	Provision of quality-assured aeronautical data and information	1	2021	AIM SG		It was B0, monitored earlier
	B1/2	Provision of digital Aeronautical Information Publication (AIP) data sets	2				
	B1/3	Provision of digital terrain data sets	1	2021			It was B0, monitored earlier
	B1/4	Provision of digital obstacle data sets	1	2021			It was B0, monitored earlier
	B1/5	Provision of digital aerodrome mapping data sets	2				
	B1/6	Provision of digital instrument flight procedure data sets	2				
	B1/7	NOTAM improvements	2				
AMET							

Priority 1 element

Priority 1 Thread

DAIM

Priority 2 element

Revised MID Region Air Navigation Strategy

COMS							
COMS	**B0/1**	CPDLC (FANS 1/A & ATN B1) for domestic and procedural airspace	2				
	B0/2	ADS-C (FANS 1/A) for procedural airspace	2				
	B1/1	PBCS approved CPDLC (FANS 1/A+) for domestic and procedural airspace	2				
	B1/2	PBCS approved ADS-C (FANS 1/A+) for procedural airspace	2				
	B1/3	SATVOICE (incl. routine communications) for procedural airspace	2				

Revised MID Region Air Navigation Strategy

			As per the applicability area		
NAVS					
NAVS B0/3	Aircraft Based Augmentation Systems (ABAS)	All States	Indicator: % of States requiring Aircraft Based Augmentation System (ABAS) equipage for aircraft with a max certificated take-off mass greater than 5,700 Kg to enable PBN Operations Supporting metric: Number of States requiring Aircraft Based Augmentation System (ABAS) equipage for aircraft with a max certificated take-off mass greater than 5,700 Kg to enable PBN Operations	70%	Dec 2021
NAVS B0/4	Navigation Minimal Operating Networks (Nav. MON)	All States	Indicator: % of States that have developed a plan of rationalized conventional NAVAIDS network to ensure the necessary levels of resilience for navigation Supporting metric: Number of States that have developed a plan of rationalized conventional NAVAIDS network to ensure the necessary levels of resilience for navigation	70%	Dec 2022

New Threads added

Status of Priority 1 ASBU Threads/ Elements

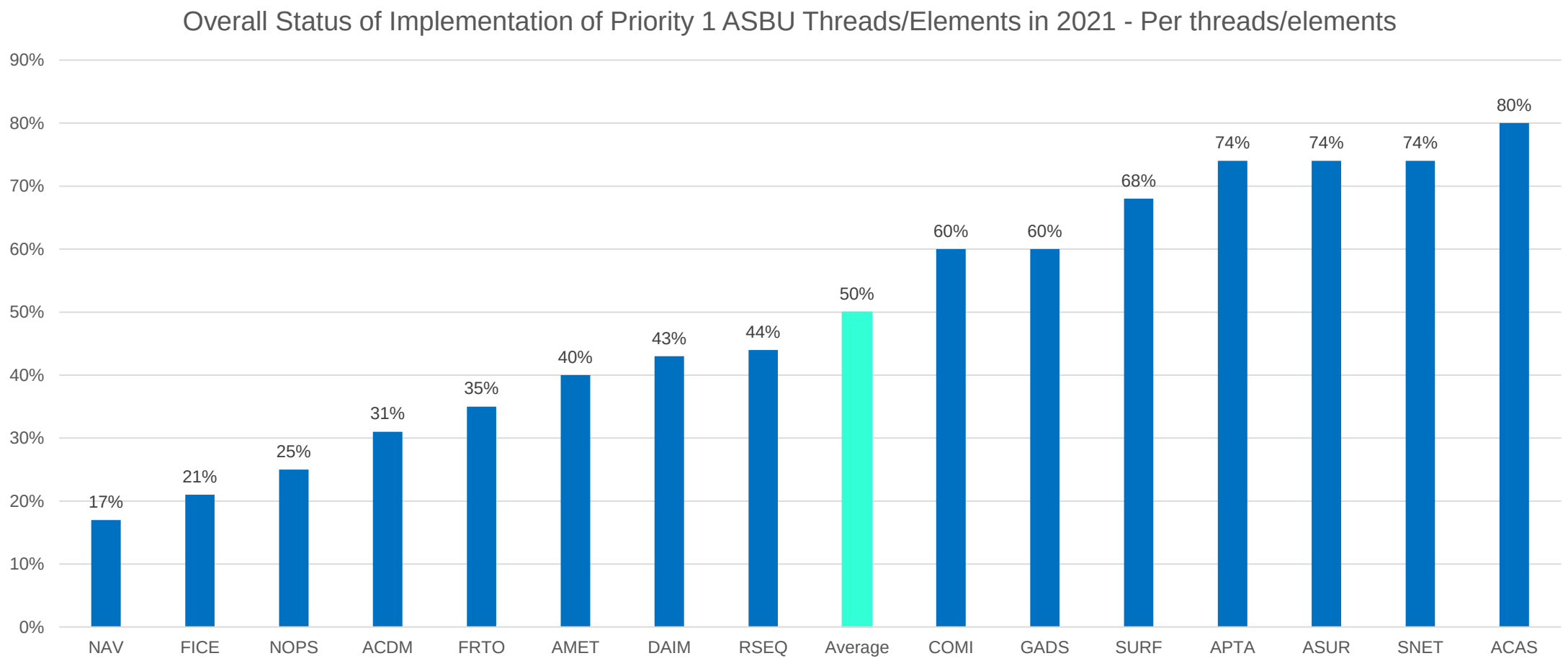
- Web-based report is https://www.icao.int/MIDANReport/Pages/default.aspx
  - ✓ increase users engagement;
  - ✓ improve information accessibility; and
  - ✓ increase visibility

- The MID Air Navigation Report – 2021 has been developed based on:
  - ✓ States' replies
  - ✓ Outcome of relevant Sub-Groups
  - ✓ MID AN Report 2020
  - ✓ Regional Guidance materials/Doc

Status of Priority 1 ASBU Threads/ Elements

Demonstration

Status of Priority 1 ASBU Threads/ Elements



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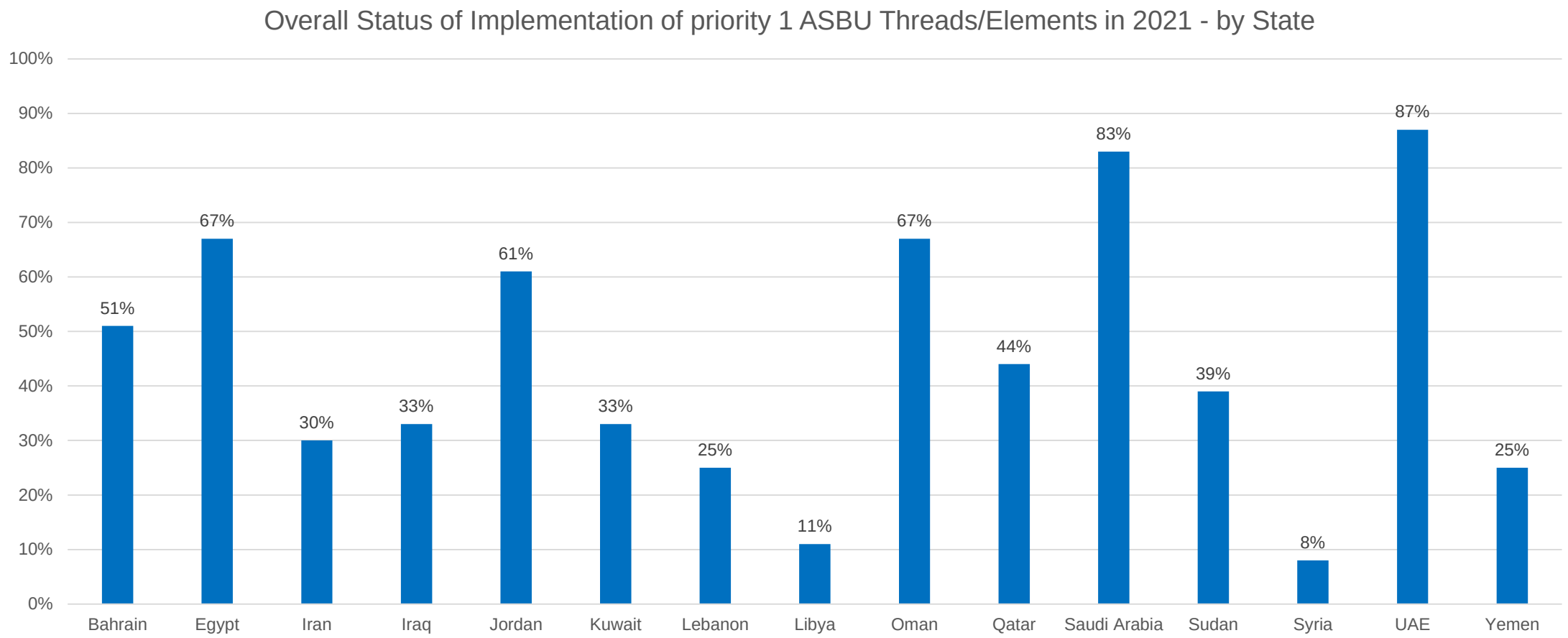

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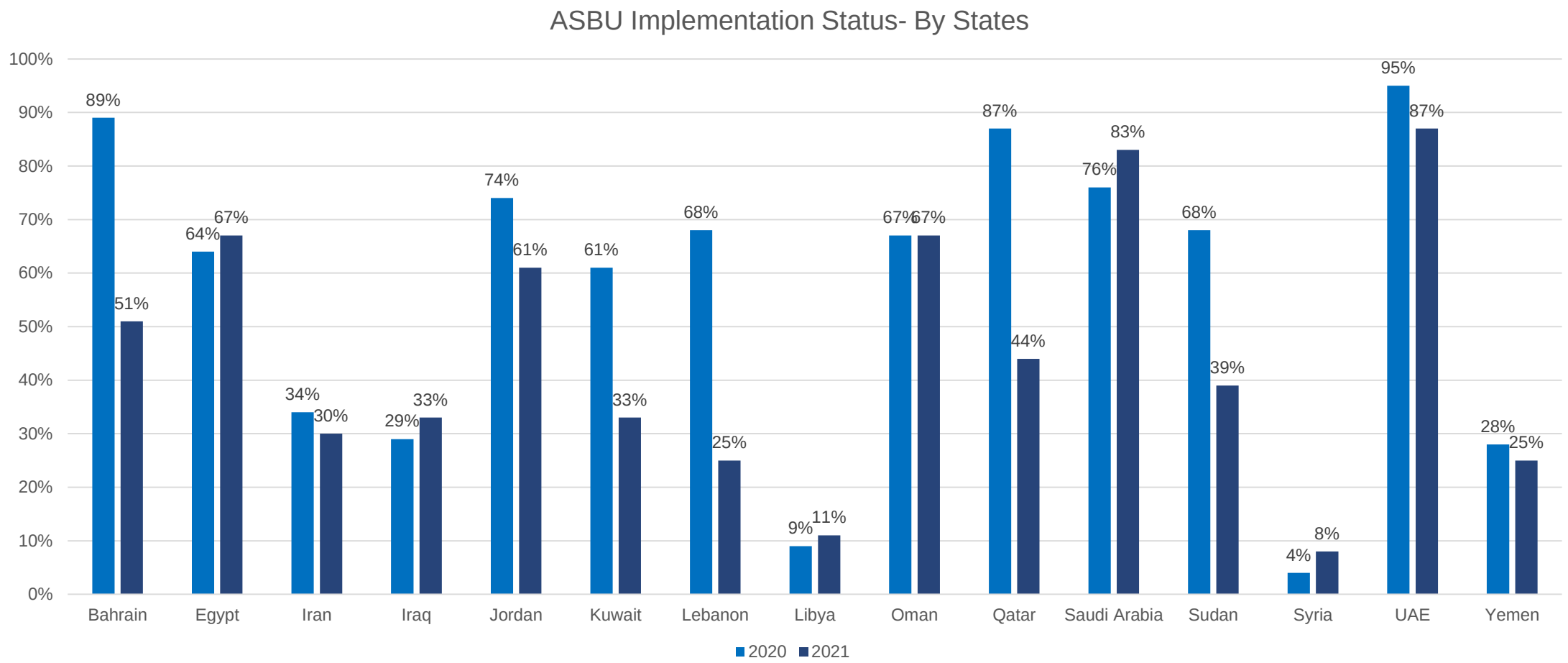
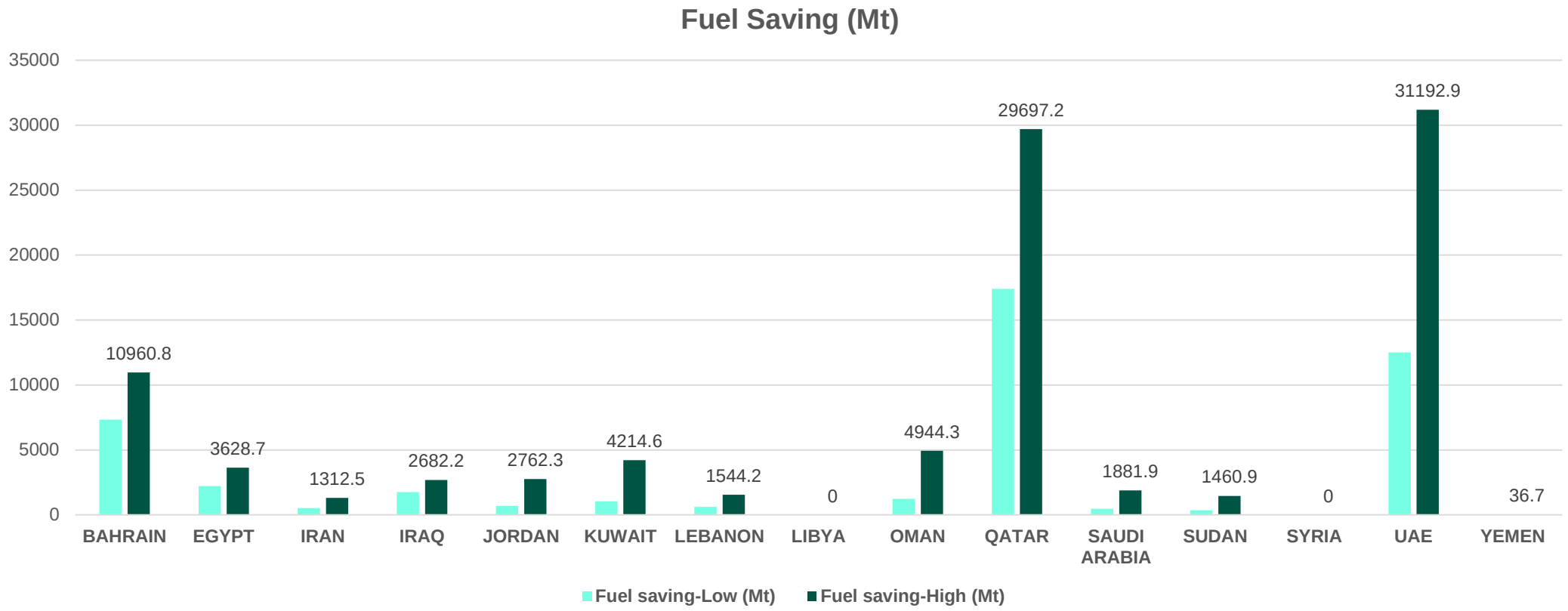


Environment Protection

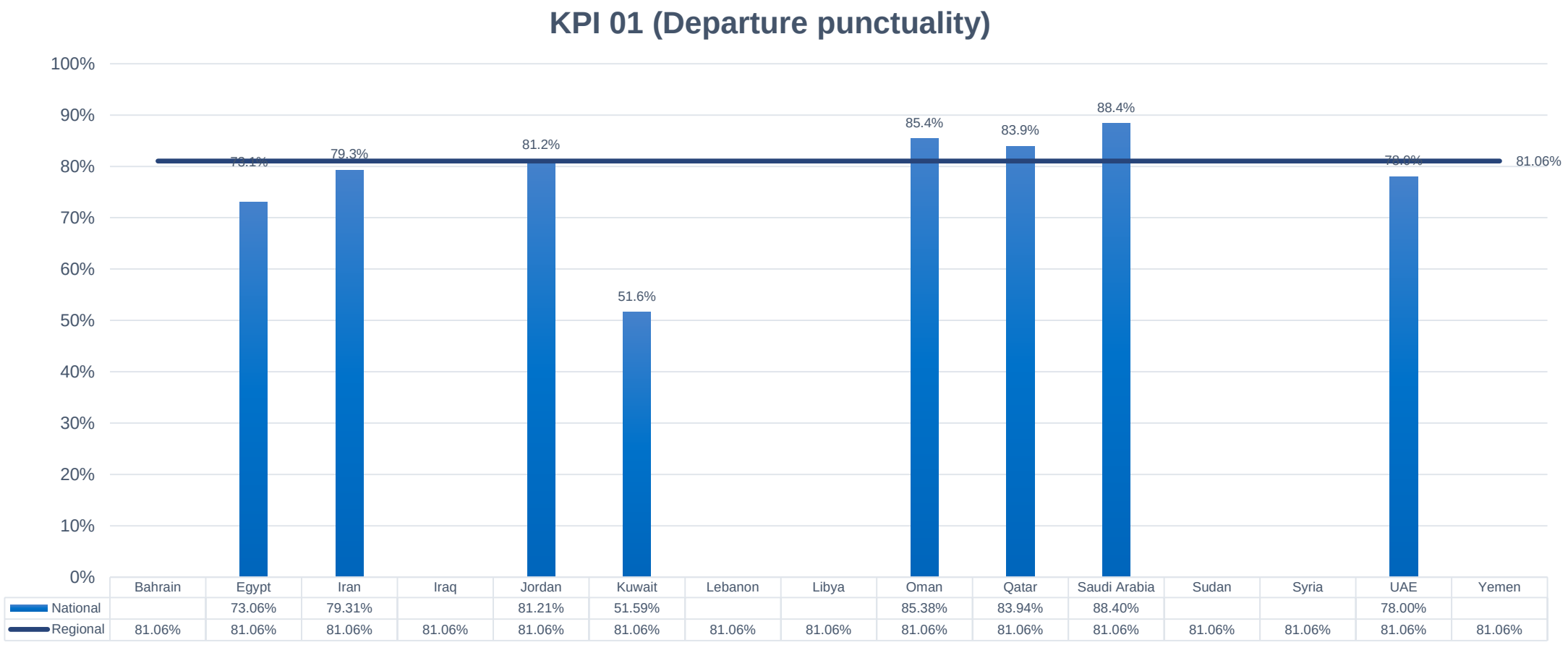


The estimation has shown a **total of 46207.2 Mt to 96319.2 Mt** of fuel saving in the MID Region, as a result of the implementation of the APTA Thread

Performance Monitoring

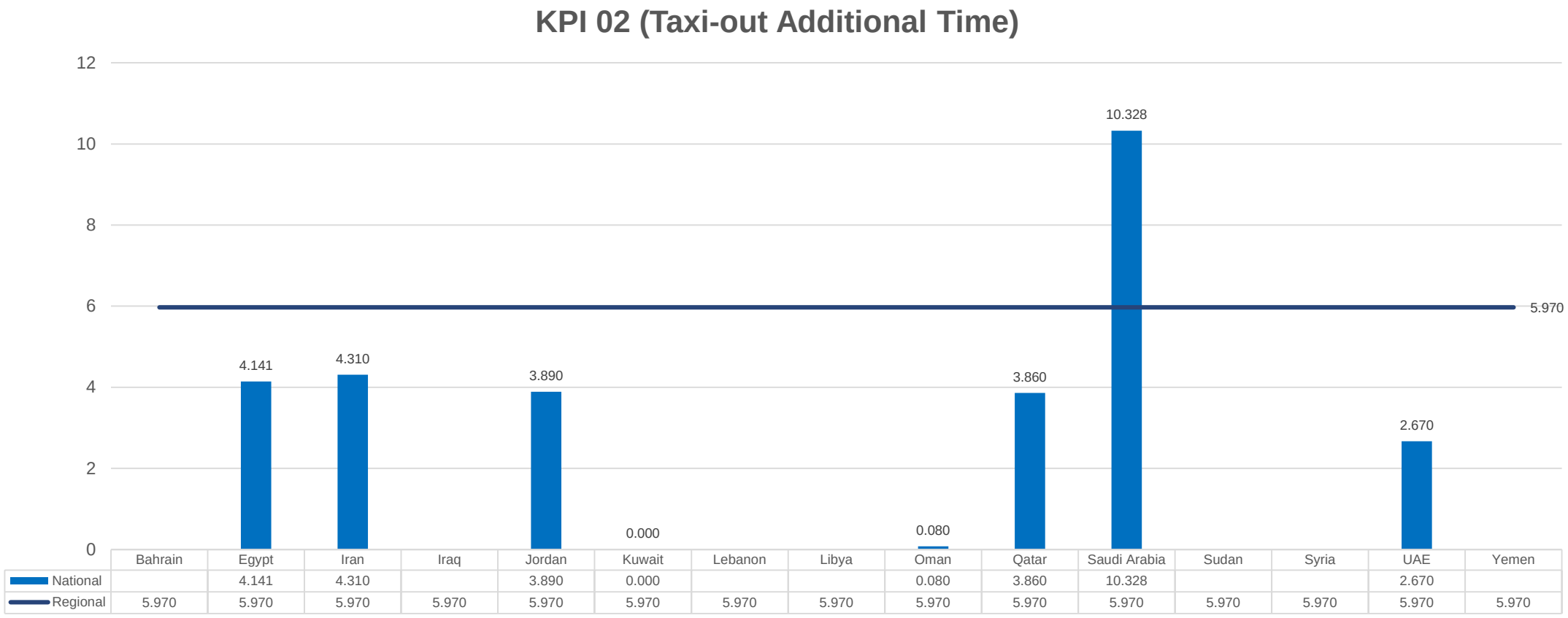
- MIDANPIRG/18 endorsed the measurement of initial list of Key Performance Indicators (KPIs) – KPI 01, KPI02, KPI13, KPI14
- month of June and July 2021 will be used for the collection of required data for measuring the selected KPIs
- Eight (8) States have been provided required data (Egypt, Iran, Jordan, Kuwait, Oman, Qatar, Saudi Arabia and UAE)
- The provided data covered seventeen (17) out of 57 international aerodromes in the MID Region, representing 29.8% (HECA, HEBA, HESH, HEGN, HELX, HESN, HEMA, OIIE, OJAI, OKBK, OOMM, OTHH, OEDF, OEJN, OEMA, OERK and OMDB.

Performance Monitoring (KPI 01)



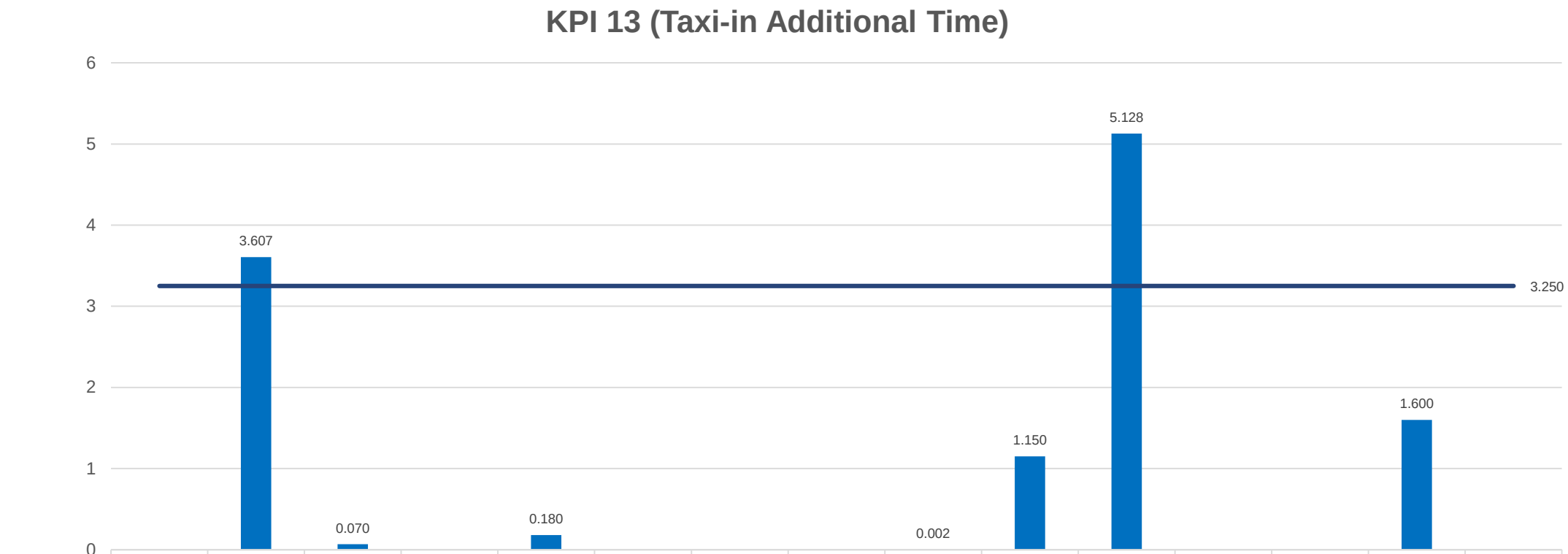
	Bahrain	Egypt	Iran	Iraq	Jordan	Kuwait	Lebanon	Libya	Oman	Qatar	Saudi Arabia	Sudan	Syria	UAE	Yemen
National		73.06%	79.31%		81.21%	51.59%			85.38%	83.94%	88.40%			78.00%	
Regional	81.06%	81.06%	81.06%	81.06%	81.06%	81.06%	81.06%	81.06%	81.06%	81.06%	81.06%	81.06%	81.06%	81.06%	81.06%

Performance Monitoring (KPI 02)



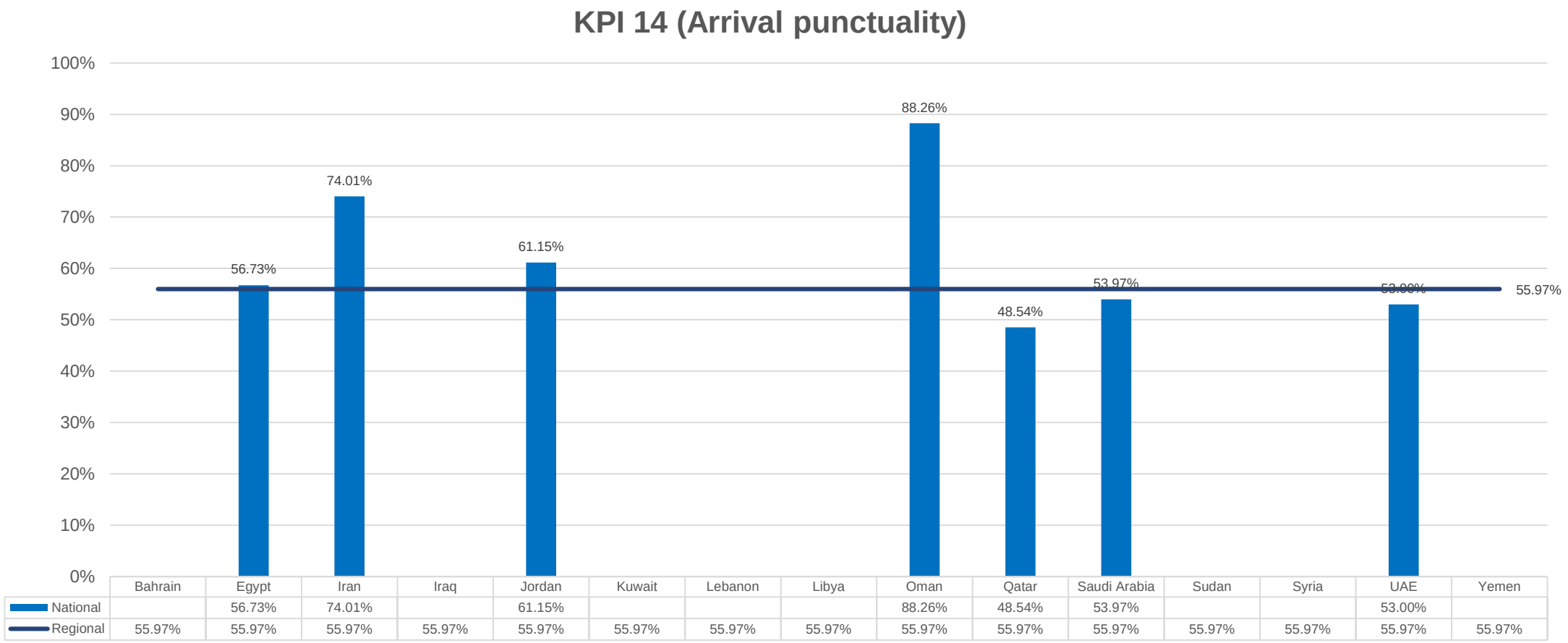
	Bahrain	Egypt	Iran	Iraq	Jordan	Kuwait	Lebanon	Libya	Oman	Qatar	Saudi Arabia	Sudan	Syria	UAE	Yemen
National		4.141	4.310		3.890	0.000			0.080	3.860	10.328			2.670	
Regional	5.970	5.970	5.970	5.970	5.970	5.970	5.970	5.970	5.970	5.970	5.970	5.970	5.970	5.970	5.970

Performance Monitoring (KPI 13)



	Bahrain	Egypt	Iran	Iraq	Jordan	Kuwait	Lebanon	Libya	Oman	Qatar	Saudi Arabia	Sudan	Syria	UAE	Yemen
National		3.607	0.070		0.180				0.002	1.150	5.128			1.600	
Regional	3.250	3.250	3.250	3.250	3.250	3.250	3.250	3.250	3.250	3.250	3.250	3.250	3.250	3.250	3.250

Performance Monitoring (KPI 14)



	Bahrain	Egypt	Iran	Iraq	Jordan	Kuwait	Lebanon	Libya	Oman	Qatar	Saudi Arabia	Sudan	Syria	UAE	Yemen
National		56.73%	74.01%		61.15%				88.26%	48.54%	53.97%			53.00%	
Regional	55.97%	55.97%	55.97%	55.97%	55.97%	55.97%	55.97%	55.97%	55.97%	55.97%	55.97%	55.97%	55.97%	55.97%	55.97%

Performance Monitoring

- MIDANPIRG Conclusion 18/11:

That, in order to optimize allocation and use of resources in the modernization of the air navigation system, States:

a) **be urged to:**

i. embrace a performance based approach in line with the 6th Edition of the Global Air Navigation Plan and the six-step performance management process, as described in the Manual on Global Performance of the Air Navigation System (Doc 9883);

ii. **follow-up a phased approach in the performance monitoring of their air navigation system using as an initial phase the list of KPIs** at Appendix 5.2X; and

iii. provide ICAO with the results of the KPIs monitoring for the agreed period, as part of the data necessary for the development of the Annual Air Navigation Report, starting with the Report for 2021

Performance Monitoring

- **STEP 1: DEFINE SCOPE, CONTEXT AND SET AMBITIONS**

To reach a common agreement on the scope and (assumed) context of the regional air navigation system on which the performance management process will be applied.

The geographical scope is defined in Volume I and in particular in the following tables:

- Table GEN I-1 — List of Flight Information Regions (FIR)/Upper Information Regions (UIR) in the Region
- Table ATM I-1 — Flight Information Regions (FIR)/Upper Flight Information Regions (UIR) of the Region
- Table SAR I-1 — Search and Rescue Regions (SRR) of the Region
- Table AOP I-1 — International aerodromes required in the Region

Performance Monitoring

- **STEP 2: Know your System – SWOT Analysis**

Performance Monitoring

- STEP 3: **QUANTIFY OBJECTIVES, SET TARGETS AND CALCULATE NEEDS (SMART Objective)**

- Select your State's Performance Objectives and associated KPIs

KPA: Efficiency

KPI 02: Arrival Punctuality

KPI 14: Departure Punctuality

Performance Monitoring

- STEP 3 (contd)
- Measure the performance baseline for the selected KPIs

  KPI 01: Arrival Punctuality

  KPI 14: Departure Punctuality
- For example Egypt KPI baseline :

  KPI 01: 73% KPI 14: 57%
- Identify the target performance (KPIs) – in 3 years

  KPI 01: 90% KPI 14: 80%

Performance Monitoring

- STEP 4: **SELECT SOLUTIONS**

  - consider operational improvement within the ASBU framework as potential solution
  - solution(s) could be ASBU or non- ASBU solution
  - conduct CBA

ASBU SOLUTION	START YEAR	END YEAR

Performance Monitoring

- STEP 5: **IMPLEMENT SOLUTIONS**

  - States to report on the status of solution implementation

ASBU SOLUTION	START YEAR	END YEAR	STATUS OF DEPLOYEMNT

Performance Monitoring

- STEP 6: **ASSESS ACHIEVEMENT**

- Measure the actual achieved performance using the selected KPI(s) in step (3)
- Compare with the target(s) in step (3)
- find performance gaps and their causes and take corrective actions if required
- Update the baseline in step (3) -> to be used in next iteration of the performance management process.

Success Stories/ Best Practices

Three (3) Success stories received from UAE

- *Month of Knowledge for future of Air Navigation Services (MOKFANS)*
- *AIM Improvements*
- *ATM Improvements*

Thank You

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