



International Civil Aviation Organization

**MIDANPIRG Air Traffic Management Sub-Group**

**Fourth Meeting (ATM SG/4)**  
*(Amman, Jordan, 29 April – 3 May 2018)*

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**Agenda Item 5:           Airspace Management Issues**

B0-SNET

*(Presented by the Secretariat)*

<b>SUMMARY</b>
This paper presents a draft monitoring table to be used for the monitoring of implementation of the ASBU Module B0-SNET, which should be included in the MID eANP Volume III.
Action by the meeting is at paragraph 3.
<b>REFERENCES</b>
-   MID Doc 002

**1.       INTRODUCTION**

1.1           B0-SNET (Safety Nets) enables the monitoring of flights while airborne to provide timely alerts to air traffic controllers of potential risks to flight safety. Ground-based safety nets make an essential contribution to safety and remain required as long as the operational concept remains human centered.

**2.       DISCUSSION**

2.1           For the purpose of performance monitoring and reporting, two (2) elements have been included in the MID Region Air Navigation Strategy: *Short-term conflict alert (STCA)* and *Minimum safe altitude warning (MSAW)*. Performance Indicators/Supporting Metrics, Targets and status of their implementation are detailed in **Appendix A**.

***Implementation Reporting/Monitoring***

2.2           ATM Sub-Group was assigned by MIDANPIRG as the main Regional monitoring body for the collection of data related to the B0-SNET implementation in the MID Region.

2.3           At the national level, ATM Focal Points are responsible for following-up the B0-SNET implementation issues and forwarding necessary data on the implementation of B0-SNET to the ICAO MID Office, as and when required.

***Data Collection Mechanism***

2.4 Detailed information on the monitoring of B0-SNET should be included in Volume III of the MID eANP, including necessary supporting enablers (i.e. tables, databases, etc.), in order to be used as planning tools for the measurement of the air navigation systems performance.

2.5 The Secretariat is proposing the B0-SNET Monitoring Table at **Appendix A**, for the meeting review.

**3. ACTION BY THE MEETING**

3.1 The meeting is invited to:

- a) discuss and agree on the monitoring table of the B0-SNET at **Appendix A** that should be included in the MID eANP Volume III; and
- b) review and update the status of implementation of the ASBU Module B0-SNET.

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**APPENDIX A**

***B0 – SNET: Increased Effectiveness of Ground-based Safety Nets***

**Description and purpose:**

To enable monitoring of flights while airborne to provide timely alerts to air traffic controllers of potential risks to flight safety. Alerts from short-term conflict alert (STCA), area proximity warnings (APW) and minimum safe altitude warnings (MSAW) are proposed. Ground-based safety nets make an essential contribution to safety and remain required as long as the operational concept remains human centered.

**Main performance impact:**

KPA- 01 – Access and Equity	KPA-02 – Capacity	KPA-04 – Efficiency	KPA-05 – Environment	KPA-10 – Safety
N/A	N/A	Y	N/A	Y

**Applicability consideration:**

Benefits increase as traffic density and complexity increase. Not all ground-based safety nets are relevant for each environment. Deployment of this Module should be accelerated.

<b><i>B0 – SNET: Increased Effectiveness of Ground-based Safety Nets</i></b>			
<b>Elements</b>	<b>Applicability</b>	<b>Performance Indicators/Supporting Metrics</b>	<b>Targets</b>
Short-term conflict alert (STCA)	All States	Indicator: % of States that have implemented Short-term conflict alert (STCA)  Supporting metric*: number of States that have implemented Short-term conflict alert (STCA)	80 % by 2018
Minimum safe altitude warning (MSAW)	All States	Indicator: % of States that have implemented Minimum safe altitude warning (MSAW)  Supporting metric*: number of States that have implemented Minimum safe altitude warning (MSAW)	80 % by 2018

**TABLE B0-SNET**

**EXPLANATION OF THE TABLE**

Column

- 1 Name of the State and ATS Units within a State providing Enroute and Approach services
- 2 Enroute and Approach ATS Units providing Radar services “R”
- 3 Enroute and Approach ATS Units providing Procedural services “P”
- 4 Enroute and Approach ATS Units within a State providing radar services where Short-Term Conflict Alert (STCA) was implemented
- 5 Enroute and Approach ATS Units within a State providing radar services where Minimum Safe Altitude Warning (MSAW) was implemented
- 6 Action Plan for the implementation of STCA and MSAW
- 7 Status of implementation of STCA and MSAW (reference to column 2)

State/ ATS Units (ENR & APP)	ATS		STCA	MSAW	Action Plan	Status
	R	P				
<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>	<i>7</i>
<b>Bahrain</b>	<b>2</b>	<b>0</b>	<b>2</b>	<b>2</b>		
Bahrain ACC	R		Y	Y		<b>STCA 100%</b>
Bahrain APP	R		Y	Y		<b>MSAW 100%</b>
<b>Egypt</b>	<b>8</b>	<b>1</b>				
Cairo ACC	R					<b>STCA %</b> <b>MSAW %</b>
Alex APP	R					
Aswan APP	R					
Cairo APP	R					
Luxor APP	R					
Hurghada APP	R					
Marsa APP		P				
Sharm APP	R					
<b>Iran</b>	<b>4</b>	<b>1</b>				
Tehran ACC	R					<b>STCA %</b> <b>MSAW %</b>
Esfahan APP	R					
Mehrabad APP	R					
Shiraz APP	R					
Tabriz APP	P					
<b>Iraq</b>	<b>2</b>	<b>0</b>				
Baghdad ACC	R					<b>STCA %</b>
Baghdad APP	R					<b>MSAW %</b>
<b>Jordan</b>	<b>2</b>	<b>1</b>				
Amman ACC	R					<b>STCA %</b> <b>MSAW %</b>

State/ (ENR & APP)	ATS		STCA	MSAW	Action Plan	Status
	R	P				
1	2	3	4	5	6	7
Amman APP	R					
Aqaba APP		P				
<b>Kuwait</b>	<b>2</b>	<b>0</b>				
Kuwait ACC	R					STCA %
Kuwait APP	R					MSAW %
<b>Lebanon</b>	<b>2</b>	<b>0</b>				
Beirut ACC	R		Y	Y		STCA 100%
Beirut APP	R		Y	Y		MSAW 100%
<b>Libya</b>	<b>0</b>	<b>4</b>				
Tripoli ACC		P				STCA 0%
Tripoli APP		P				MSAW 0%
Benghazi Centre		P				
Benghazi APP		P				
<b>Oman</b>	<b>3</b>	<b>0</b>				
Muscat ACC	R					STCA 0%
Seeb APP	R					MSAW 0%
Salalah APP	R					
<b>Qatar</b>	<b>1</b>	<b>0</b>				STCA 100%
Doha Radar	R		Y	Y		MSAW 100%
<b>Saudi Arabia</b>	<b>5</b>	<b>0</b>				
Jeddah ACC	R					STCA %
Riyadh ACC	R					MSAW %
Jeddah ACC	R					
Riyadh ACC	R					
Damam APP	R					
<b>Sudan</b>	<b>2</b>	<b>3</b>				
Khartoum ACC	R					STCA %
Khartoum APP	R					MSAW %
Elobeid APP		P				
Nyala APP		P				
Port Sudan APP		P				
<b>Syria</b>	<b>0</b>	<b>4</b>				STCA 0%

State/ ATS Units (ENR & APP)	ATS		STCA	MSAW	Action Plan	Status
	R	P				
<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>	<i>7</i>
Damascus ACC		P				<b>MSAW 0%</b>
Damascus ACC		P				
Aleppo APP		P				
Latakia APP		P				
<b>UAE</b>	<b>7</b>	<b>0</b>				<b>STCA %</b> <b>MSAW %</b>
SZC	R					
Al Ain APP	R					
Abu Dhabi Radar	R					
Al Maktoum APP	R					
Dubai Radar	R					
Fujairah APP	R					
RAS AL KHAIMAH	R					
<b>Yemen</b>		<b>3</b>				<b>STCA 0%</b> <b>MSAW 0%</b>
Sana'a ACC		P				
Aden APP		P				
Sana'a APP		P				
<b>Total</b>	<b>40</b>	<b>17</b>				<b>STCA %</b>
<b>Percentage</b>						<b>MSAW %</b>

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