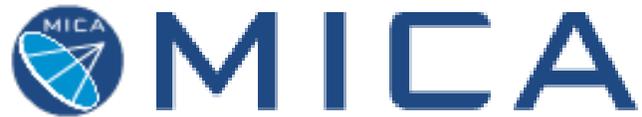


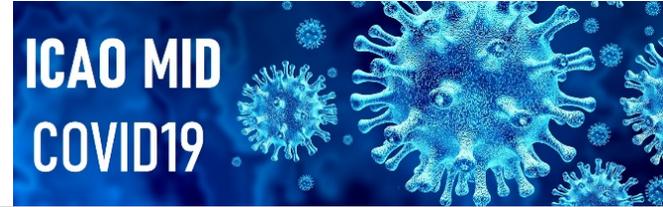


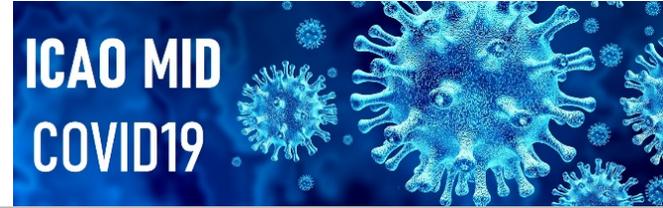
ICAO MID

19-20 October 2021

Mode S Interrogator Code Allocation Webinar





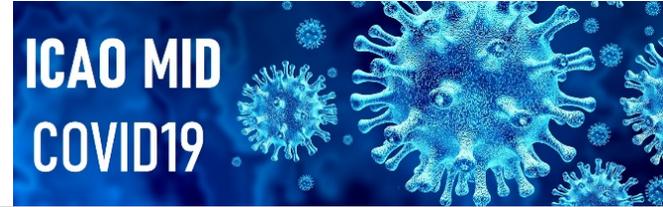


Mr. Jerome BODART

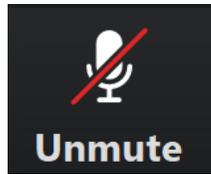
EUROCONTROL MICA Cell Manager/
Surveillance Expert

jerome.bodart@eurocontrol.int





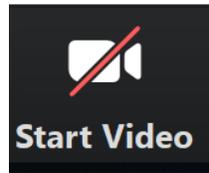
Meeting Notes



Unmute

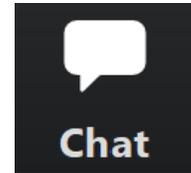
Keep Mic muted

Unmute your mic only when invited to speak



Start Video

Switch off camera if the quality of Internet is not good



Chat

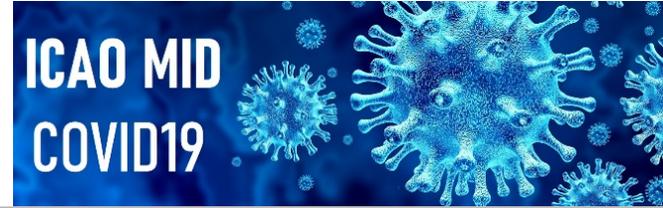
use “Raise hand” or chat box if you wish address question or comment



Raise Hand



Meeting is recorded



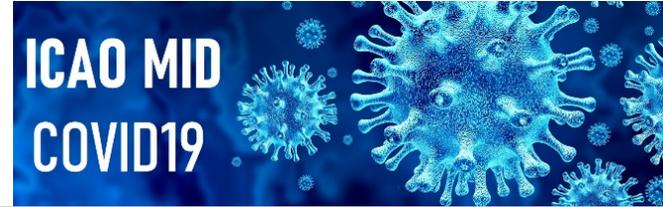
Group Photo



A screenshot of a Zoom meeting grid showing 63 participants. The grid is organized into rows and columns. Each tile contains a video feed of a participant, their name, and a small red 'X' icon indicating that their video is muted. The participants' names are as follows:

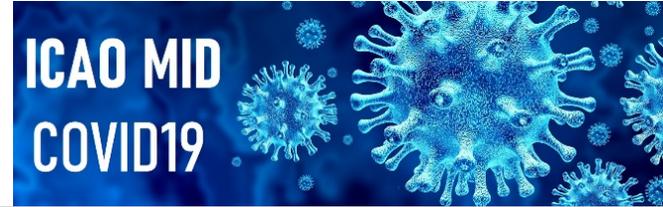
- Row 1: Sharron Caunt, Stefano Baronci, Robert Roxbrou, speed ahmed b., Amer, emasa, Youns, Mohammed Ar...
- Row 2: Rashad Karaky, Walid Elhoss, Mubarak Al-Ghelani, Souhail DALLEL, Gary Leung ACI, Ali Ahmed, Mohermad Hu..., Hussain Alyami, walhammadi, Ahmed Al-Jalaf...
- Row 3: SL Wong ACI, Mohamed Thami, Fateh Bekhti, Shayne Campbe..., Jack Netskar, A.M.R. Arjoub 11..., Ahmad Amireh, nasser al-sowaidi, Mohamed Chakib, Walid Rahmani
- Row 4: Ahmad Amireh, CANSO Nico Vo..., Haitham Misto, manal fares, Hamed Al-Abri, Ahmad Kaveh, Khaled Antar, Bander Almgbel, Mohammed Na...
- Row 5: faqirj, Mr MANAR, Abdul Wahab T..., Manal DIAB, Abdullah Alomair, Dr. Bader Al Sagri, radhouan aissa..., Amany Habashy, Sue Kodsi, Mashhor Alblowi
- Row 6: Mohammed Na..., A.M.R. Arjoub 11..., Hamed Al-Abri, Ahmad Amireh, Kamal Riyadh A..., room-MD@icao.int, Sonia ElSakka, Sharron Caunt, Stefano Baronci, Robert Roxbrou...
- Row 7: Ahmed Al-Jalaf..., Dr. Bader Al Sagri, Abdullah Alomair, Youns, Bander Almgbel, Rashad Karaky, Walid Elhoss, Mubarak Al-Ghelani, Souhail DALLEL, Gary Leung ACI
- Row 8: Haitham Misto, Ali Ahmed, Hussain Alyami, Mohammed Alr..., SL Wong ACI, Mohamed Thami, Fateh Bekhti, Shayne Campbe..., Jack Netskar
- Row 9: nasser al-sowaidi, radhouan aissa..., Amany Habashy, Sue Kodsi, Dr. Bader Al Sagri, Kamal Riyadh ADVI..., Scott F, CANSO Nico Vo..., Haitham Misto, Hamed Al-Abri
- Row 10: Mashhor Alblowi, Ahmad Kaveh, Walid Rahmani, Muna ALNADAF, Khaled Antar, faqirj, Mr. MANAR, Abdul Wahab T..., Manal DIAB, Abdullah Alomair

At the bottom of the grid, there is a control bar with the following icons and labels: Unmute, Stop Video, Participants (63), Chat, Share Screen, Record, Reactions, and Leave Meeting.



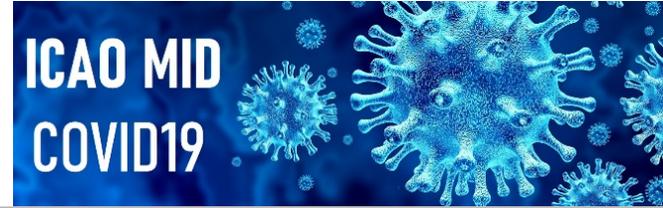
Day 1: 19 October 2021

Time (UTC)	Topic	Duration
11:00 – 11:05	Welcome & Introduction	5 mins
11:05 - 11:15	Introductory presentation on IC Code Allocation in the MID Region	10 mins
11:15 – 12:20	PPT1: Mode S Surveillance Principles	65 mins
12:20 – 12:30	Break 	10 mins
12:30 – 13:00	PPT2: Required Interrogator Code Allocation Coordination	30 mins
13:00 – 14:00	PPT3: Operation on II & SI Codes	60 mins



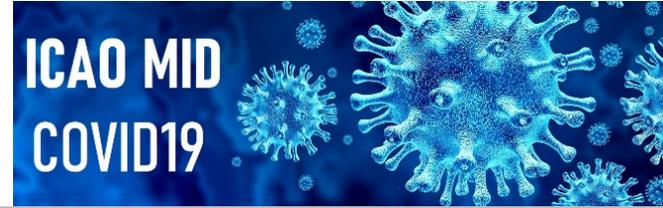
Day 2: 20 October 2021

Time (UTC)	Topic	Duration
11:00 – 11:30	PPT4: Interrogator Code Conflict	30 mins
11:30 – 12:20	PPT5: MICA Website Presentation	50 mins
12:20 – 12:30	Break 	10 mins
12:30 – 13:45	PPT6: Mode S Interrogator Code Allocation Status Cycle 35	75 mins
13:45 – 14:00	Wrap-up & Closing	15 mins



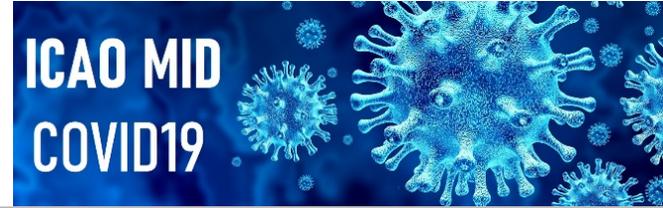
Background on MICA

- The introduction of Mode S Interrogators in the MID Region has identified the need for a coordinated approach to the allocation and implementation of the limited number of Interrogators Codes.
- In 2011, the ICAO MID Office requested EUROCONTROL to formally provide support for MICA in the ICAO MID Region.
- The MSG/6 meeting, through Conclusion 6/32, agreed that a Surveillance/MICA Workshop needs to be organised. The Surveillance/MICA Workshop was convened from 26-28 February 2019.
- The workshop supported by EUROCONTROL.
<https://www.icao.int/MID/Pages/2019/MICA.ASPX.aspx>



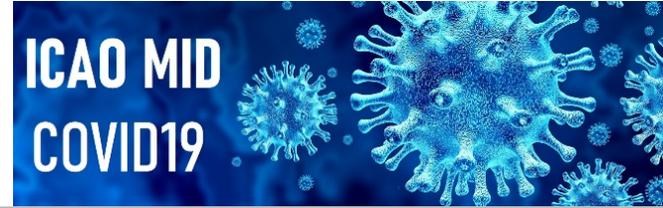
RECOMMENDATIONS

- States shall request coordinated IC code(s) and coverage map(s) (Surveillance and lockout) before start of operation, preferably one year in advance.
- States to plan carefully using active MLAT in order not to generate excess 1030/1090MHz FRUIT; and not to over occupy the Transponder (due to selective interrogations).
- States to monitor, if possible, the transmission on 1030/1090MHz to make sure that Aircraft are not over-interrogated (ICAO annex 10, Vol VI, section 3.1.2.10.3.7.3 & section 3.1.1.7.9.1).
- States to program radar to extract needed BDS register Data and not to extract unused ones.
- For the safety of the air traffic surveillance system, the coverage of two Mode S radars using the same IC shall not overlap.



RECOMMENDATIONS

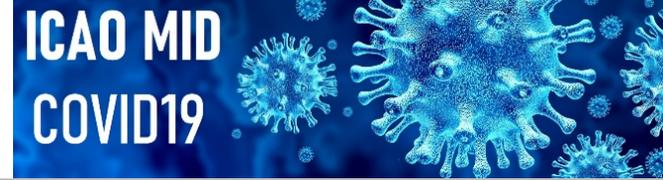
- Target disappearance is a safety related issue, fall-back procedure should be in place including lockout override.
- ICAO MID to coordinate with IATA to get statistics on the percentage of SI equipped aircraft in the MID Region.
- Regulators and Radar Operators are encouraged to register to MICA website.
- ICAO MID to consider addressing the impact of vehicles equipped ADS-B (ex. sUAS, gladder, airports vehicles, etc.) on 1090MHz RF environment in future relevant Workshops.
- CNS SG/9 to consider requiring that Mode S Radars support the use of II/SI code operation. MID Region to consider allocating II code and matching SI for Military



MIDANPIRG Conclusions

MIDANPIRG CONCLUSION 17/35: MID REGION PROCESS FOR MODE S IC CODES ALLOCATION

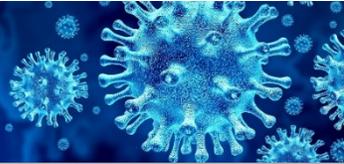
That, the Eurocontrol Document “Requirements process for the coordinated allocation and use of Mode S Interrogator Codes in the ICAO Middle East Region” (Edition 1.03 dated March 2019) is endorsed and be posted on the ICAO MID website, in order to be used for the allocation of Mode S IC Codes in the MID Region.



MIDANPIRG Conclusions

MIDANPIRG CONCLUSION 17/34: PFA TO THE MID ANP VOLUME II- CNS SPECIFIC REGIONAL REQUIREMENTS

That, a Proposal for Amendment to the MID ANP Volume II – CNS Specific Regional Requirements be processed in accordance with the standard procedure to add the following requirement: “States should ensure that all Mode S Radars support SI/II code operation”.



Thank you for your Attention