

**PROVISION OF RADAR DATA DISPLAYS FOR THE EASTERN CARIBBEAN STATES/TERRITORIES'/CAR
RADAR DATA DISPLAYS-RDS'' EASTERN CARIBBEAN RADAR DATA SHARING REQUEST FOR
INFORMATION (RFI)**

QUESTIONS AND ANSWER SET 01

1. Regarding section 5.6 D): The flight plan information will not be available in a radar data display. Position information will be provided only from the ASTERIX Cat 62 track. Please confirm that our understanding is correct.

Answer: Notwithstanding the statement in paragraph 2.2 (*The radar displays will serve as a support to the air traffic control operation, as a radar monitor, and not for actual radar control*) it is envisaged that the radar service will be implemented in phases. For many States the initial requirement is for the system is to be used as situational awareness. However as States acquire proficiency and operational certification they may migrate to full radar control hence a Flight Data Processor (FDP) may be incorporated in a future. The Display shall be capable of presenting flight position from flight plan.

2. Regarding section 5.6 h): We understand “time and distance vector”. Please confirm.

Answer: Predicted track line - Time and distance vector is correct.

3. Regarding section 5.6 l) and m): Can you please provide additional information on these requirements?

Answer: (l) Special use airspace dynamic display – The ability to configure a display assigning an airspace volume or area for special activities (restricted, military, etc).
(m) RADAR coverage volume dynamically displayed – The ability to assign a limited range of radar coverage per display.

4. Please confirm that a commercial off the shelf system employing the Linux operating system is acceptable.

Answer: Yes, Linux operating system is acceptable.

5. Regarding section 5.8: Section 3.2 states that only ASTERIX Cat 62 track messages will be provided by TTCAA. Please clarify this requirement.

Answer: ASTERIX cat 62 tracks are the data to be display initially in the displays, however the display shall be capable of presenting other information as established in Section 5.8 and other ASTERIX categories like the ones related with ADS-B.

6. Regarding section 5.10: We understand that the system will be for monitoring purposes and that no flight information will be available - only tracks in ASTERIX Cat 62. Can you please clarify the requirement for automated coordination?

Answer: Notwithstanding the statement in paragraph 2.2 (*The radar displays will serve as a support to the air traffic control operation, as a radar monitor, and not for actual radar control*) it is envisaged that the radar service will be implemented in phases. For many States the initial requirement is for the system is to be used as situational awareness. However as States acquire proficiency and operational certification they may migrate to full radar control hence the deliverable for automated coordination functionality.

7. Regarding Section 5.11: Section 3.2 states that only ASTERIX Cat 62 track messages will be provided by TTCAA. What will be the source of ASTERIX Cat 21?

Answer: Paragraph 5.11 (Capability to display ADS-B Asterix Category 21 data). While TTCAA will provide MRT in Asterix Cat 62, States may wish to add their own ADS-B input hence the deliverable for ADS-B Cat 21 data. Please confirm that your system includes a Multi Radar Tracker for multiple surveillance inputs.

Note that since the ASTERIX Category 21 version 0.23 was issued in November 2003, it has undergone continuous revisions with some 14 subsequent versions. The ASTERIX Category 21 version 1.0 issued in August 2008 has fully incorporated the DO260A standard while the latest version 2.1 issued in May 2011 has fully incorporated the latest DO260B standard.

Information available is that ADS-B data formats can be in Cat 21, 22, and 23. The MRT shall be able to accept all formats.

8. Regarding Section 5.13, Radar Monitoring: We understand this requirement to mean that at each site the system shall monitor the external link through which the system tracks are received from TTCAA. Is this correct?

Answer: By radar data monitoring is meant that the external link is monitored for availability via a mask on the display (radar feeds supporting the MRT for the system tracks)

9. Regarding Section 5.13, SSR Code correlation: Manual and automatic correlation is possible only if flight plan information is available. The system you are describing here is for radar display only and no flight information will be available. Please clarify.

Answer: Please refer to the answer in question 6. Flight plan information is included in the deliverable.

10. Regarding section 5.13, MTCD: The MTCD calculation is based on 4D profiles. The system you are describing will not have 4D profiles but tracks therefore MTCD will not be possible. Please clarify.

Answer: It is understood as answered in question 6 that flight plan data will be available and that a Flight Data Processor (FDP) may be incorporated in a future, so the radar display shall have the capability to handle MTCDs from the FDP.

11. Regarding Section 5.16: Because only tracks in ASTERIX Cat 62 will be provided, the “extrapolated flight” will not be available. Please clarify this requirement. Also please clarify the meaning of “conflict prediction information areas”.

Answer: It is understood that a Flight Data Processor (FDP) may be incorporated in a future. By extrapolated flight is meant that the system delivered provides flight plan tracks in areas of no surveillance or in the event of surveillance input failure.

Conflict prediction information areas – It is envisaged that a transparent mask “pops up” on the screen that displays all conflict prediction (MTCD, STCA, etc).

12. Regarding Section 5.19: Please clarify “artificial radar targets”

Answer: “artificial radar targets” means surveillance inputs excluding radar, for example ADS-B, MLAT, etc.

13. Regarding Section 5.20: “ADS” refers to ADS-B or ADS-C? What is the source of the ADS data?

Answer: The requirement refers to ADS-B data.

14. Regarding section 5.20 c): As stated in Section 2.2 this project is for a “radar monitor”. Since the system will be used only for monitoring and not control, the controller should not be allowed to change the flight plan data on this system. Any clearance issued by the controller will be on the operational ATM system which provides all actual radar control functionalities. Please clarify.

Answer: Notwithstanding the statement in paragraph 2.2 (*The radar displays will serve as a support to the air traffic control operation, as a radar monitor, and not for actual radar control*) it is envisaged that the radar service will be implemented in phases. For many States the initial requirement is for the system is to be used as situational awareness. However as States acquire proficiency and operational certifications they may migrate to full radar control hence the deliverable as stated in paragraph 5.20.