Fifth Eastern Caribbean Network Technical Group (E/CAR/NTG/5) and Third Eastern Caribbean Radar Data Sharing Ad-hoc Group (E/CAR/RD/3) Meetings
Guadeloupe, France, 22 to 24 October 2014

Agenda Item 4: **Radar Data Display Request for Information (RFI) Process**
4.1 **Presentations of RDS proposals**

PRISMA – COMSOFT'S MODULAR ATM SOLUTION

(Presented by COMSOFT)

EXECUTIVE SUMMARY
COMSOFT's PRISMA is a modular system, providing autonomous Processing of Surveillance Data and Flight Plan Data and for Air Traffic Service (ATS) Units including operation for En-Route, Major Terminal Area and Approach Units.

Strategic Objectives:	• Safety • Air Navigation Capacity and Efficiency • Environmental Protection

1. **Introduction**

1.1 COMSOFT's PRISMA is a modular system, providing autonomous Processing of Surveillance Data and Flight Plan Data and for Air Traffic Service (ATS) Units including operation for En-Route, Major Terminal Area and Approach Units.

1.2 Its modular design allows PRISMA to be adapted to different environments from surveillance data display over stand-alone flight plan processing to support procedural control up to an integrated ATC/ATM automation with integration of Radars, WAM and ADS-B Sensors and fully automatic flight plan data processing including silent coordination and integrated stripless operation.

1.3 PRISMA is a compact solution that allows customers to use a combination of different modules to meet the operational needs. The PRISMA Controller Working Position is the most visible element of the PRISMA family. As the Air Traffic Controller's user interface, the PRISMA CWP is the main interface of the monitoring and executive operation of air traffic control. Additional available modules and features are:

- Surveillance Data Frontend Processing – Conversion of surveillance data from different physical interfaces and a multitude of protocols as well as advanced filtering and monitoring.

- Surveillance Data Processing – Fusion of all kinds of surveillance data sources into an integrated coherent air situation picture.
- Flight Data Processing – Reception, processing and update of flight plans in the area of responsibility, consistent presentation of the individual flights to executive controllers, coordination of flights with adjacent ATS units and automatic updating when new information is received.
- Safety Net Functions – Various modules to identify potentially hazardous situations to the controller. These include Short Term Conflict Alert (STCA), Medium Term Conflict Detection (MTCD), Minimum Safe Altitude Warning (MSAW), Area Proximity and Intrusion Warning (APW), Route Adherence Monitoring (RAM) and Cleared Level Adherence Monitoring (CLAM).
- Recording and Replay – Capturing of all surveillance and flight plan data as well as user inputs in order to allow later replay of a situation for training and investigations.
- Control and Monitoring – Centralised monitoring of the complete system including all software and hardware components including network equipment with the high flexibility and extendibility.
- Aeronautical Billing – Fully integrated automated customizable billing system.

1.4 The following attributes contribute to an attractive tailored solution.

- Advanced design with unique features – The design of the PRISMA satisfies the needs of ATC automation systems of today and tomorrow since it represents the consolidation of collected requirements from the ATC domain and is, therefore, unique in its scope of usage and features. PRISMA is a customised solution based on the features of the standard product range. PRISMA is unique as ATC automation system thanks to its combinability of various features and characteristics in the surveillance field. The integrated solution of radar data processing via a user interface caters for a multitude of advantages in daily use. This adds to the integrated possibility of surveillance, flight plan data processing, safety alerts, recording and monitoring capabilities.
- Easy adaptation to future needs – As an important benefit, PRISMA allows to be configured or reconfigured by the customer himself, with the help of an intuitive and easy user interface which avoids errors or misunderstandings via selection possibilities. Further to this, the customer can change the settings himself without any need of reprogramming or support from the manufacturer. Therefore, PRISMA can be easily adapted to future needs, thus contributing to a high degree of investment security. As the standard volume of the software already includes a multitude of configuration possibilities, adaptation mainly concerns hardware elements.
- Expansion capability at low cost – In the same way it is fairly easy to upgrade PRISMA by adding additional interfaces or additional function modules without changing the design.
- Direct and immediate access to all information – PRISMA supports the direct access to all data in terms of surveillance (plots and tracks) data and flight data with outstanding response times.

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