International Civil Aviation Organization

**MIDANPIRG CNS/ATM/IC Sub-Group
(CNS/ATM/IC SG)**

Seventh Meeting
(Cairo, Egypt, 07 – 09 October 2013)

Agenda Item 5:   **Regional Air Navigation Planning and Implementation**

EQUIPMENT OUTAGE REPORT

Presented by United Arab Emirates

SUMMARY

Further to ICAO's Standards and Recommended Practices (SARPS) in relation to State Safety Programme (SSP) requirements to collect and analyse safety related data, the UAE has extended the requirement to take into consideration the impact of CNS equipment outages and availability on operational safety.

Action by the meeting is at paragraph 4.

1.   **INTRODUCTION**

1.1   To fulfil requirements of the State Safety Program and to develop a systematic approach to safety oversight, the UAE's General Civil Aviation Authority (GCAA) has extended the ROSI System to include provision for the submittal of information relating to Air Traffic Safety Electronic Systems outage and/or degradation of service level. The collection of this data can then be analysed at the national level and produce trend information regarding the provision and availability of the systems.
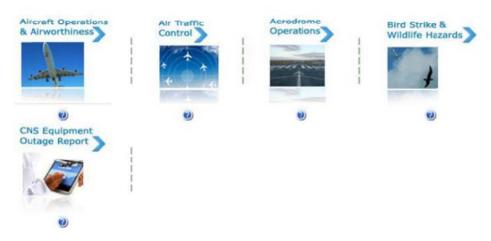
2.   **REGULATORY REQUIREMENTS**

2.1   The UAE regulation requires mandatory reporting of CNS equipment outage report & system availability. This is supported through the UAE's regulations as well as the Reporting of Safety Incidents System (ROSI) which has a dedicated CNS outage reporting module. The UAE Civil Aviation Regulations VIII Sub Part 5.24 States:

2.2   An applicant for a CNS Maintenance Service certificate shall establish procedures to:

   a)   Notify, investigate and report facility malfunction incidents in accordance with the requirements of CAR 5.27.a.

2.3   UAE Civil Aviation Regulations VIII sub part 5.25 states:

   a)   "(**d**) A CNS maintenance unit shall provide statistical information to the Authority to ensure monitoring of SMS performance over time".

2.4   The notification and records required by the authority relate to Mean Time between Outages (MBTO) and system availability given in a percentage. To ensure the prompt delivery of this information all instances of CNS Equipment outages etc. shall be reported within 72 hours of the systems being returned to service.

2.5   CNS maintenance activities provide the ATS function with the technology to enable safe and efficient levels of service. The measurement of safety indicators and subsequent setting of targets has to take into account the change in levels of risk as well as reporting and reacting to incidents or accidents. In order to provide an effective means to be able to predictively or proactively reduce risk on operations, data needs be collected and measured, even if there is no direct impact on operations.

2.6   CNS safety - risk related data shall be provided in the form as required by the system and measured in:

> 1. Agreed percentage of System availability in a time (PAS)
> 2. Mean time between System Outage (MTBO)

2.7   Each system will be assessed for its potential level of impact. The CNS ROSI has been developed to capture this information on a national level.

2.8   The CNS ROSI System is a web enabled data capture system which will allow the analysis of the data over a period of time. The GCAA has just established the system and is currently starting to collect data from CNS maintenance providers. The first year of collection will allow the GCAA to improve the system validity. A report of data collected will be provided to the next meeting. Due to system security requirements an open form may not be submitted after 20 minutes of inactivity. It is not currently possible to save a ROSI which has not been submitted.

3.   DISCUSSION

3.1   The purpose of establishing the CNS outage report is to expand the oversight of CNS maintenance activities and measure impact on operational service provision, with a view to determining and agreeing a potential Minimum Equipment List (MEL) approach to Air Traffic Services.

3.2   Benefits:

> a) Reduce risks through agreed equipment level availability.
> b) Trend, monitor and address CNS equipment life-cycle activities.
> c) Share information between users on the National level.
> d) Strive to improve the effectiveness of the system through on-going evaluation by competent personnel.

3.3   CNS ROSI system submittal process as follow:

3.3.1   The CNS maintenance units will be able to report through GCAA website as shown in figure below:

> a) Aircraft operations & Airworthiness
> b) Air Traffic Control (ATC)
> c) Aerodrome Operations
> d) Bird Strike & Wildlife Hazards
> e) CNS equipment outage report (**New**)

Please select the type of ROSI

(Figure **1)**

3.3.2 **User Steps:**

- Details of the unit are automatically inserted into the submittal based on log in information

- Details of the equipment system type is collected

- Impact on operations is detailed with comments and document/report upload available

- Submittal of supporting document

3.3.3 **Authority Steps**

- Information collected analysed, distributed and discussed at annual CNS Technical meetings with users

4. ACTION BY THE MEETING

4.1 The meeting is invited to note the information contained in this paper.

- END -