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WORKING PAPER

# SATELLITE DISTRIBUTION SYSTEM OPERATIONS GROUP (SADISOPSG)

## THIRTEENTH MEETING

Dakar, Senegal, 27 to 29 May 2008

#### Agenda Item 6: Development of the SADIS 6.3: Report of the SADISOPSG Technical Developments Team

# NEED TO DEFINE THE USER REQUIREMENTS ON DATA AVAILABILITY OF THE SADIS BROADCAST

(Presented by SADISOPSG Technical Development Team)

# SUMMARY

This paper addresses the data loss problem and the availability of the SADIS 2G service since the last meeting and the need for user availability requirements.

# 1. **INTRODUCTION**

1.1 During the last 12 months a number of users observed that there are gaps in the data they received on the SADIS 2G service. Many admin messages were issued, mainly for the 2G service. It seems that data loss appeared more frequent on the 2G service than on the 1G service. No statistic is available to highlight this. Data loss can have a lot of different reasons, which are not always obvious to the user. Apart from the observed data-loss there has never been defined what the user availability requirements are.

1.2 It is widely accepted that service provision and receipt should be governed by an agreement (Service Level Agreement (SLA)). It is essential to define the parameters of the service, for the benefit of both the provider and the recipient.

#### 2. **DISCUSSION**

#### 2.1 **Definition of availability**

2.1.1 There is no agreement defining what is expected from the SADIS provider by the user; it is not even known what the user requirements are. To improve the situation, the expected availability

should be clearly stated to the provider. At the moment no monitoring is in place that can be used as a reference. Data loss can occur for many reasons, and can even be caused by the user equipment. The user has no way to verify if this is caused by his installation or by the service. A clear statement about the availability can only be made if statistics are gathered at a number of geographically dispersed sites. A reasonable number for verification could be three different sites. Only if the same data loss occurred at all the sites, it could be concluded that there was a genuine loss of broadcast data. To minimize the workload and to start, it would be realistic to commence monitoring at one site. The best place seems to be the comparator system. If this system were to be used, the Provider State could act pro-actively and with very little delay.

2.1.2 At the moment there is also no indication available over what data have been lost. To overcome this problem, this working paper proposes to generate an hourly admin messages with all the headers transmitted during the last hour. These hourly messages should be made available to the users. Such basic information can help the user to check in case of data loss.

#### 2.2 **Indication of data loss**

2.2.1 Parameters that are indicators on the user site to check for data loss in real time are:

— CSN check for each channel; and

— Count the number of GRIB bulletin.

There is perhaps no other way at the present time to check the transmission.

#### 2.3 Availability Indicator

2.3.1 For monitoring purposes, availability indicators should be defined from which conclusions could be drawn for the performance of the SADIS-2G data.

2.3.2 The following indicators could be used to assess availability:

— How many time it happened for a time period per channel;

— How many bulletins were lost; and

— How many bulletins were lost per type (GRIB, BUFR, PNG).

#### 3. CONCLUSION

3.1 In view of the above, the group may wish to formulate the following conclusion:

### Conclusion 13/... — Improvements in the availability of data on the SADIS broadcast

That the SADIS Provider State be invited to:

- a) achieve a level of service not exceeding 5 gaps per channel and per month in the data availability;
- b) generate hourly admin messages with the transmitted headers available to the users;
- c) issue admin messages pro actively in the case of a data loss problem; and
- d) report the reason for data loss via an admin message

*Note.* — *The need for SLA for managing SADIS should be considered.* 

#### 4. ACTION BY THE SADISOPSG

4.1 The SADISOPSG is invited to:

- a) note the information in this paper;
- b) decide on the draft conclusion proposed for the group's consideration.

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