



**INTERNATIONAL CIVIL AVIATION ORGANIZATION**

**RLA/03/901 REGIONAL PROJECT  
REDDIG Management System and Satellite Segment Administration**

**REDDIG THIRD TECHNICAL-OPERATIONAL MEETING (RTO/3)**

(Paramaribo, Suriname, 15 to 16 October 2009)

**Agenda Item 3: Spare parts logistics and optimization of current equipment, as applicable**

(Presented by the REDDIG Administration)

**SUMMARY**

This working paper presents the statistics on network operation and spare parts logistics, as well as the FRAD equipment optimization plan at the nodes where this is applicable.

**1. Background**

1.1 The REDDIG Administration has been managing since 2003 the normal operation of the network, providing aeronautical telecommunications services through it with the highest quality and availability standards.

1.2 During this time, REDDIG Administration has compiled statistics on the network operation, referring to equipment and spare parts failures, logistical operations and number of times a service has been given to each of the nodes. This information has permitted us to manage the spare parts logistics and analyze manners for its improvement.

1.3 In addition, said information will permit us to plan an optimization of the FRAD equipment at the nodes where applicable to obtain additional spare parts.

## Description

### *Logistics operations and spare parts management*

1.4 Logistics-related operations, mainly originated due to equipment failures, include remittance of REDDIG equipment or part of the spare parts lot from the storage in the Lima Regional Office, or from any other node having spare parts on loan, to the nodes who require them, coordination with the manufacturer for the repair of the equipment, payment for the transport of the equipment or spares, coordination and support to States for the import/export of the equipment and parts necessary at the nodes. This support also includes the purchase and transport of equipment requested by States for their respective nodes.

1.5 During 2008, twenty-one operations were carried out. To January 2009, two operations have been handled. Following is a summary of equipment and parts failure.

<b>FRAD</b>	<b>Manufacturer: Memotec</b>	
(2)	Power Supply Module	: (1) SBCT, (1) SYGC
(4)	Universal I/O Card	: (1) SYGC, (2) SGAS, (1) SCEL
(1)	Motherboard CX950	: (1) SGAS
(1)	V.35H Card	: (1) SGAS
(5)	Fast Ethernet Card	: (2) SEGU, (2) SVMI, (1) SBCT
(1)	E&M SLIM Card	: (1) SVMI
(8)	Internal Fan	: (4) SYGC, (1) SBRF, (2) SBCT, (1) SAEZ
<b>MODEM</b>	<b>Manufacturer: ViaSat</b>	
(7)	Linkway 2100	: (1) SAEZ, (1) SYGC, (2) TTZP, (2) SBMN, (1) SGAS
<b>SSPA</b>	<b>Manufacturer: Paradise Datacom</b>	
(3)	SSPA units	: (1) SKED, (1) SUMU, (1) SBRF
(11)	External Fan	: (2) SUMU, (4) SYGC, (1) SBRF, (4) TTZP
<b>Others REDDIG</b>		
(1)	Base Band Switch	: (1) SYGC

1.6 **Appendix A** to this working paper presents statistics pertaining to 2008 regarding the number of the requests for attention given to the network nodes, as well as their distribution as regards the type of equipment originating the request.

1.7 In addition, it is recommended that the list of points of contact at each node be updated.

### *Optimization of FRAD equipment at nodes applicable*

1.8 The objective of this optimization is to use only one FRAD MPS equipment, instead of two (MUX + MPS), but to maintain all services passing through the station in a manner such that operation with only one FRAD equipment will be transparent to all the users of these services.

1.9 The REDDIG Administration has carried out an analysis for each network station where two equipment (MUX + MPS) are used, and has arrived to the conclusion that it is feasible to carry out this optimization at the following stations:

SBCT – Curitiba, Brasil  
SBRF – Recife, Brazil  
SCEL – Santiago, Chile  
SGAS – Asunción, Paraguay  
SLLP – La Paz, Bolivia  
SMPM – Paramaribo, Suriname  
SOCA – Cayenne, French Guiana  
SVMI – Maiquetía, Venezuela  
SYGC – Georgetown, Guyana  
TTZP – Piarco, Trinidad & Tobago

1.10 The indicated FRAD equipment optimization has already been carried out at one of the SGAS Asuncion chain stations, and the new FRAD MPS equipment has been operating all its services normally since December 2008.

1.11 The hardware and software tasks necessary for the optimization of the FRAD equipment will be coordinated by the REDDIG Administration with each of the contacts at the stations involved, in order to provide technical directives and corresponding recommendations.

2. **Suggested action:**

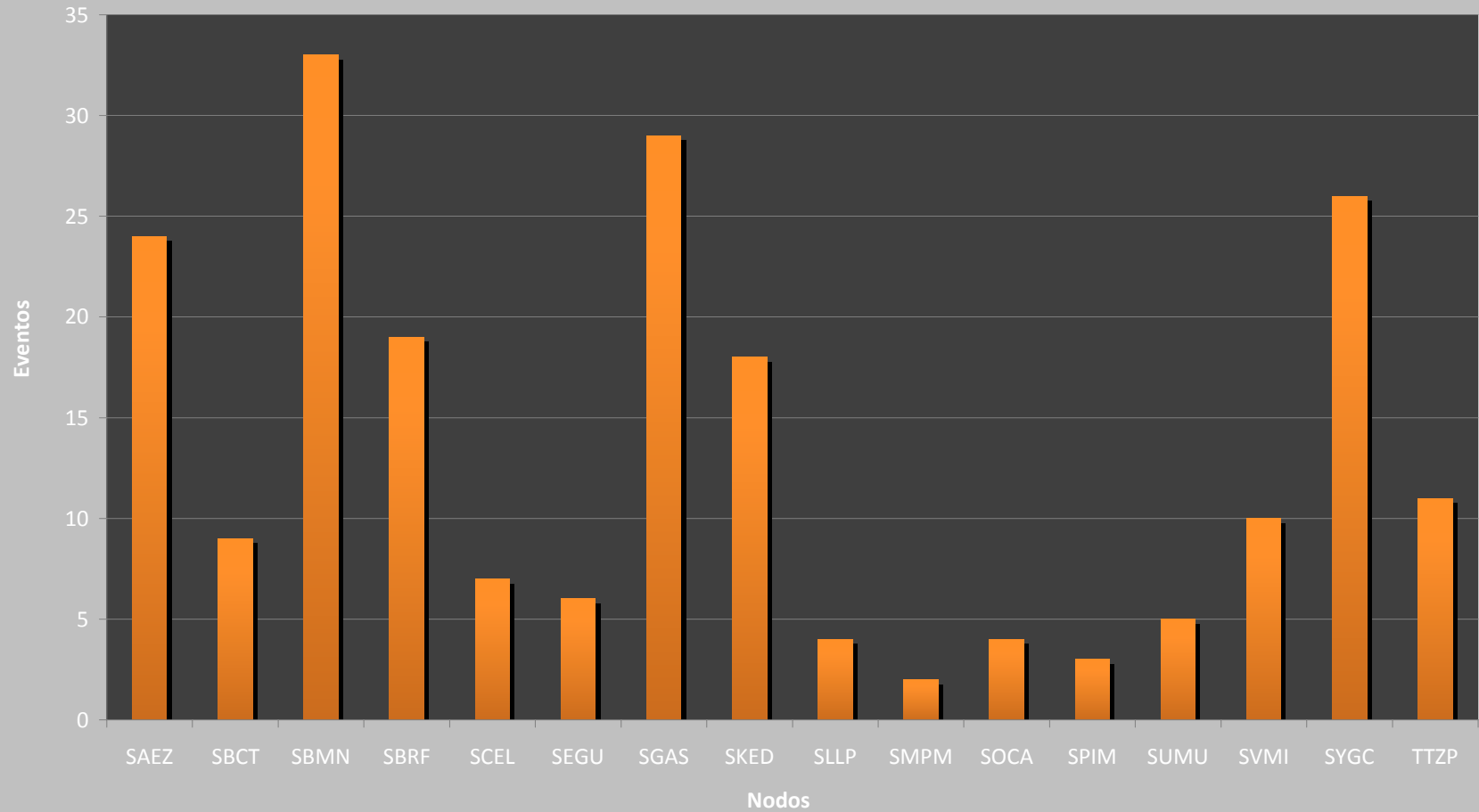
2.1 The Meeting is invited to:

- a) Take note of the information provided in the working paper; and
- b) Analyze any other aspect related with this subject that the Meeting might deem necessary.

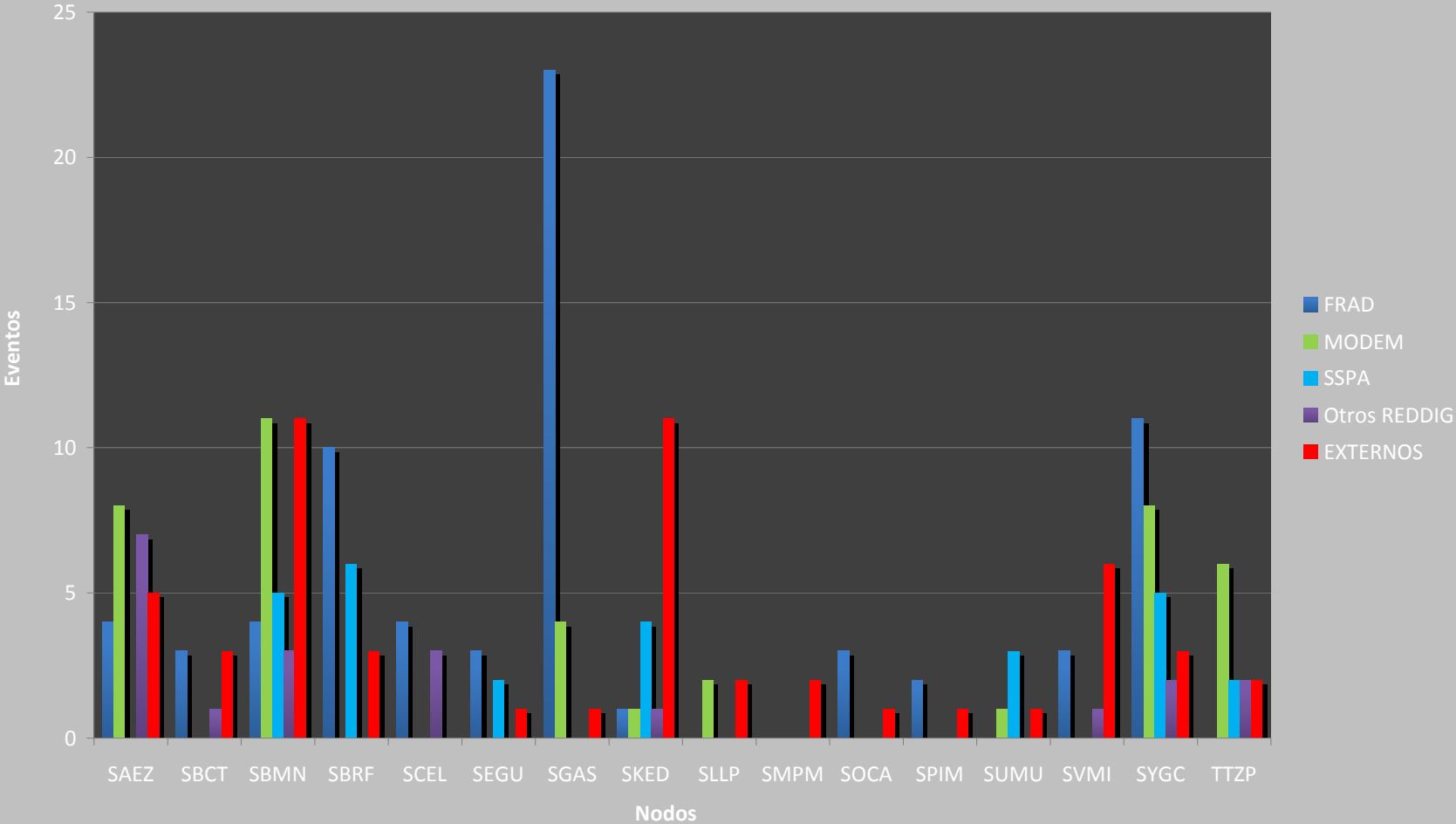
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### REDDIG 2008

#### SERVICE TO NODES / ATENCIONES A LOS NODOS = 210



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