



International Civil Aviation Organization
South American Regional Office - Regional Project RLA/03/901
REDDIG Management System and Satellite Segment Administration
Nineteenth Meeting of the Coordination Committee (RCC/19)
Lima, Peru, 7 to 9 March 2016

Agenda Item 3: Report of the activities carried out to date since the last meeting of the Coordination Committee

FOLLOW-UP TO ACTIONS FOR THE TREATMENT OF REDDIG I EQUIPMENT AND SPARE PARTS

(Nota de estudio presentada por la Secretaría)

SUMMARY	
This paper presents results on the follow-up to Conclusion RCC/18/5 regarding the treatment to be given to the REDDIG I equipment and spare parts.	
Reference	
<ul style="list-style-type: none">• Report of the Eighteenth Meeting of the REDDIG Coordination Committee (RCC/18) (Lima, Peru, 2-4 March 2015)	
ICAO Strategic Objectives:	<i>A - Safety</i> <i>B – Air navigation capacity and efficiency</i>

1. Background

1.1 With the commissioning of the REDDIG II at the end of January 2015, all equipment of REDDIG I stop working. REDDIG II being a fully Protocol IP-based network is not compatible with the equipment of REDDIG I whose technology is based on the Frame Relay Protocol, therefore most of equipment that make up the REDDIG I cannot be used in REDDIG II.

1.2 In this sense, during RCC/18 the Meeting began analysing the treatment that would be given to the equipment and spare parts of the REDDIG I, since in view of its functionality there would be interest in its acquisition.

1.3 After the discussion, the RCC/18 decided to request the Secretariat to evaluate all the possibilities and inform States, in order to decide the actions to be carried out. As a result the Conclusion RCC/18-5 was formulated: *Provision of equipment and spare parts of the REDDIG I.*

1.4 This conclusion stipulates that the Secretariat explore the feasibility of having the equipment and spare parts of REDDIG I for sale or other options, and reports the results to all project RLA/03/901 Member States by the second half of 2015.

1.5 The list of REDDIG I equipment and cards store in REDDIG I warehouse are presented in **Appendix A** to this working paper.

2. **Analysis**

2.1 With the aimed at fulfilling Conclusion RCC/18/5, the Secretariat send on 25 March 2015 letter LT 12/4 - LN 3/20.3 - SA5212. In this letter REDDIG member States were requested to express their intentions regarding REDDIG I equipment and spare parts by sending a reply not later than 15 May 2015.

2.2 Replies were received from Argentina, Bolivia, Brazil, Chile, Ecuador, Paraguay, Peru Suriname, Trinidad & Tobago and Uruguay. A summary of replies are shown as **Appendix B**.

2.3 From the answers it can be observed the different actions proposed such as reusing the equipment and spare parts, selling, exchanging by REDDIG II equipment and cards, dismissing, using in trials or requesting cards used by same equipment of national networks.

2.4 All proposals presented in Appendix B should be analysed during the meeting, and also States that had not replied yet should do so.

2.5 With respect to the selling option, some States informed their difficulties regarding the sale of State's goods and this will probably should apply for most REDDIG member States. One State mentioned that the sale would be possible only through ICAO. Taking into consideration that ICAO selling process is very complicated, the selling option could be dismissed.

2.6 Some States considered to evaluate which REDDIG I equipment and spare part can be reused in REDDIG II. In this sense, equipment that can initially be reused are: RF chain equipment, amplifiers (IBUC), receivers (LNB) and waveguide switches. FRAD and MODEM equipment cannot be used in REDDIG II as they are based on other technology, therefore are not compatible. This solution is considered highly recommended, thus States should store this equipment properly. From this equipment only the LNB can be directly changed, due to the modification that INEO is making in all LNB to fix the freezing problem. For the IBUC and waveguide switches some settings and adjustments are necessary for REDDIG II, therefore it's used can be reserved to real emergencies.

2.7 For the change of equipment (FRAD and MODEM) by REDDIG II equipment or cards, as proposed by some States, it should be analyse which States are interested in such change and how to perform it. By the moment maybe the States that could have interest are those with same equipment in their national networks. Another option to be considered by the Meeting is to donate that equipment to REDDIG States that require it.

3. **Suggested action**

3.1 The Coordination Committee is invited to:

- a) Take note of the information provided;
- b) analyse the facts contained in section 2 of this working paper including Appendixes A and B in order to achieve solutions for the treatment of REDDIG I equipment and spare parts.

APPENDIX A / APÉNDICE A

LIST OF REDDIG SPARE PARTS / LISTA DE REPUESTOS REDDIG I					
	Description	Provider	Model	Quantity	Series #
	REDDIG II SPARE PARTS SEND FROM BRAZIL				
	EQUIPMENT AND GENERAL SPARE PARTS				
	REDDIG I SPARE PARTS				
	EQUIPMENT AND GENERAL SPARE PARTS				
129	Power supply for CX950	Memotec	VLT130-3000S1	1	2634
130	Power supply for CX950	Memotec	VLT130-3000S1	1	2604
131	Power supply for CX950	Memotec	VLT130-3000S1	1	1063
132	Power supply for CX950	Memotec	VLT130-3000S1	1	2434
133	Power supply for CX950	Memotec	VLT130-3000S1	1	1005
134	Power supply for CX950	Memotec	VLT130-3000S1	1	1061
135	Power supply for CX950	Memotec	VLT130-3000S1	1	1067
136	Power supply for CX950	Memotec	VLT130-3000S1	1	1088
137	Dual Analog Voice Card	Memotec	AZ004010	1	052171060
138	Dual Analog Voice Card	Memotec	AZ004010	1	052172487
139	Dual Analog Voice Card	Memotec	AZ004010	1	052172484
140	Dual Analog Voice Card	Memotec	AZ004010	1	052172486
141	Dual Analog Voice Card	Memotec	AZ004010	1	1000339848
142	Dual Analog Voice Card	Memotec	AZ004010	1	90030009411
143	Dual Analog Voice Card	Memotec	AZ004010	1	9003000738
144	Fast Ethernet 10/100 Card	Memotec	AZ001011	1	081830913
145	Fast Ethernet 10/100 Card	Memotec	AZ001011	1	052173027
146	Fast Ethernet 10/100 Card	Memotec	AZ001011	1	052173028
147	Fast Ethernet 10/100 Card	Memotec	AZ001011	1	05273174
148	Fast Ethernet 10/100 Card	Memotec	AZ001011	1	052173175
149	Fast Ethernet 10/100 Card	Memotec	AZ001011	1	061082686
150	Fast Ethernet 10/100 Card	Memotec	AZ001011	1	061082680
151	10 Base-T Ethernet Card	Memotec	AC004150	1	9002000306
152	10 Base-T Ethernet Card	Memotec	AC004150	1	9002000285
153	ISDN Card	Memotec	AC004060	1	1000328415
154	Digital Voice Processor	Memotec	AZ004114	1	1000315047

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	Description	Provider	Model	Quantity	Series #
155	Digital Voice Processor	Memotec	AZ004114	1	1000315043
156	Digital Voice Processor	Memotec	AZ004114	1	061092235
157	Digital Voice Processor	Memotec	AZ004114	1	061091982
158	Digital Voice Processor	Memotec	AZ004114	1	052169078
159	Digital Voice Processor	Memotec	AZ004114	1	052169066
160	E1 Expansion	Memotec	AZ004120	1	052169024
161	V.35 H	Memotec	AZ002312	1	081807596
162	Multi I/O V.24	Memotec	AZ002325	1	062236450
163	Multi I/O V.24	Memotec	AZ002325	1	9002000160
164	Multi I/O V.24	Memotec	AZ002325	1	9002001222
165	Multi I/O V.24	Memotec	AZ002325	1	9002001230
166	Multi I/O V.24	Memotec	AZ002325	1	062236456
167	Multi I/O V.24	Memotec	AZ002325	1	9002000250
168	Module Ram 32 MB			1	040525
169	Module Ram 32 MB			1	045385
170	Module Ram 32 MB			1	07AD00134
171	Module Ram 32 MB			1	07AD00114
172	Module Ram 32 MB			1	07AD00113
173	Module Ram 32 MB			1	07AD00135
174	Slim Card E&M	Memotec	AZ004025	1	1000370325
175	Slim Card E&M	Memotec	AZ004025	1	1000370752
176	Slim Card E&M	Memotec	AZ004025	1	1000370677
177	Slim Card E&M	Memotec	AZ004025	1	1000328561
178	Slim Card E&M	Memotec	AZ004025	1	1000328572
179	Slim Card E&M	Memotec	AZ004025	1	052167044
180	Slim Card E&M	Memotec	AZ004025	1	052167058
181	Slim Card E&M	Memotec	AZ004025	1	052167029
182	Slim Card E&M	Memotec	AZ004025	1	052167041
183	Universal I/O	Memotec	AZ002320	1	082389450
184	Universal I/O	Memotec	AZ002320	1	082389447
185	Universal I/O	Memotec	AZ002320	1	092427151

LIST OF REDDIG SPARE PARTS / LISTA DE REPUESTOS REDDIG I

	Description	Provider	Model	Quantity	Series #
186	Universal I/O	Memotec	AZ002320	1	092427153
187	Universal I/O	Memotec	AZ002320	1	92427152
188	Universal I/O	Memotec	AZ002320	1	92427154
189	Ring Generator	Memotec	AZ009050	1	072294201
190	Ring Generator	Memotec	AZ009050	1	082388103
191	Ring Generator	Memotec	AZ009050	1	92425216
192	Ring Generator	Memotec	AZ009050	1	92425217
193	Ring Generator	Memotec	AZ009050	1	92425210
194	Ring Generator	Memotec	AZ009050	1	052174923
195	Chassis CX950	Memotec	AC001360	1	CA2508
196	Multiplexor CX950e Chassis+Motherboard	Memotec	AC002010	1	092425306
197	Memotec Console Cable	Memotec		1	-
198	Chassis CX950	Memotec	AC001360	1	CA02740
199	Multiplexor CX950e Chassis+Motherboard	Memotec	AC002010	1	072298778
200	Multiplexor CX950e Chassis+Motherboard	Memotec	AC002010	1	082389428
201	Modem Linkway 2100	Viasat	2100	1	B6885
202	MODEM Card	Viasat		1	31910
203	Ethernet card	Viasat		1	00A09400599A
204	FR TIA	Viasat		1	CL000225701
205	Fax CANON H12130			1	DRT0671
206	Analog CONAIRPHONE telephone			1	-
207	SSPA 40 W	Paradise Datacom	HPAC2040ACBX001	1	2360
208	SSPA 40 W	Paradise Datacom	HPAC2040ACBX001	1	2359
209	Power supply for Modem Linkway		CL0003192-01	1	RU140400198
210	Power supply for Modem Linkway		CL0003192-01	1	RU140400196
211	Power supply for Modem Linkway		CL0003192-01	1	RU140400197
212	Power supply for Modem Linkway		CL0003192-01	1	RU140400193
213	Power supply for Modem Linkway		CL0003192-01	1	RU140400194
214	Power supply for Modem Linkway		CL0003192-01	1	RU140400195
215	Power supply for Modem Linkway		AM-120U-S4-916	1	RU082503487

LIST OF REDDIG SPARE PARTS / LISTA DE REPUESTOS REDDIG I

	Description	Provider	Model	Quantity	Series #
216	Power supply for Modem Linkway		AM-120U-S4-916	1	RU082503484
217	Power supply for Modem Linkway		AM-120U-S4-916	1	RU134100215
218	Power supply for Modem Linkway		AM-120U-S4-916	1	RU134100212
219	Power supply for Modem Linkway		AM-120U-S4-916	1	RU134100213
220	Cable Roll ASSy 3 x 2.5 50 m			1	-
221	Cable Roll Multipar 50 m			1	-
222	Cable Roll Multipar 50 m			1	-
223	LNB Banda C	NJS	NJS8477EN	1	00870
224	Cable Patch Cord Ethernet 3m			9	-
225	Cable DB9-DB25 3m			2	-
226	Coaxial Cable Roll 50R 50m			1	-
227	SSPA 40 W	Paradise Datacom	HPAC2040ACBX001	1	2346
228	GPS Datum	Datum	ET6000-RB1	1	5823
229	Cisco Console Cable	Cisco		1	-
230	Management Cable SSPA Paradise	Paradise Datacom		1	-
231	Type N 50R connectors unassembled			4	-
232	Antistatic Wristband			1	-
233	Packs of empty plates for Memotec equipment			1	-
234	RF Combiner-Splitter	Global Profesional		1	-
235	RS232-RS485 Converter	Lindy		1	78680221KGZ0071
236	SUN SOLARIS Installation package	SUN Microsystems		2	-
237	Multiport serial card	COMTROL		1	5850-075665
238	DB25 Multiport Cable for Multi I/O Memotec	Memotec		2	-
239	Cable Patch Cord Ethernet RJ45 5m			2	-
240	Cable for Memotec console			1	-
241	Adapter DB9-DB25			2	-
242	Adapter DB25-M34			1	-
243	Power cable			1	-
244	Coaxial RF Cable N-SMA Male			3	-

APPENDIX B

REPLIES FROM STATES REGARDING REDDIG I EQUIPMENT

State	Date	REDDIG I equipment located in the node	REDDIG I spare parts	Comments
Argentina	23 April 2015 ANAC 323 (Oficial Letter)	Keep equipment for Reusing	Keep equipment for reusing	Nor selling neither other options
Bolivia	7 July 2015	Keep equipment for trials by personnel		
Brazil	19 May 2015 120/CERNAI/2015 (Oficial Letter)			Will provide complete information
Chile	5 May 2015 04/4/278/27 (Oficial Letter)	Properly adjusted for REDDIG II, can be used as spare parts stock, if possible	Properly adjusted for REDDIG II, can be used as spare parts stock, if possible	
Ecuador	13 April 2015 DGAC-YA-2015-0954-0 (Oficial Letter)	It met it useful life and will be discharged	Selling of stock of spare parts and money collected be deposited to RLA/03/901 funds	
Paraguay	E-mail reply from focal point	Feasibility of sending equipment from Paraguay to ICAO SAM Office for sale, auction or exchange spare parts of REDDIG II, otherwise will be discharged		As institution, cannot proceed with equipment selling
Peru	29 May 2015 E-mail reply from focal point		To assign the following cards from MEMOTEC equipment 04 Universal I/O, -04 Multi I/O, 01 V35H, -04 Ethernet	A local network with MEMOTEC series CX equipment is installed which is discontinued by the manufacturer
Suriname	28 de mayo de 2015 E-mail reply from focal point	Will be stored since there is no other possible use		
Trinidad & Tobago	29 May 2015 CAA/122/15/EMANS (Oficial Letter)	Supports selling of node equipment	Supports selling of spare parts	In case of selling, suggests that all cost involved be assumed by the purchaser (from package until collect).
Uruguay	17 July 2015 Letter from the focal point	Change for REDDIG II equipment and cards	Change for REDDIG II equipment and cards	Difficulty for selling State's goods