



International Civil Aviation Organization

CAR/SAM REGIONAL PLANNING IMPLEMENTATION GROUP (GREPECAS)

Fifth Meeting of the CNS Committee of the GREPECAS ATM/CNS Subgroup (CNS/COMM/5)

Lima, Peru, 13 to 17 November 2006

CNS/COMM/5-WP/15

29/09/06

Agenda Item 6: Terms of Reference and Work Programme of the CNS Committee

PROPOSAL OF AMENDMENTS TO THE TERMS OF REFERENCE AND WORK PROGRAMME OF THE CNS COMMITTEE

(Presented by the Secretariat)

SUMMARY

This paper presents to the Meeting updated information on the execution of the work programme of the CNS Committee of the GREPECAS ATM/CNS Subgroup. Likewise, it proposes amendments to the Term of Reference and Work Programme of the CNS Committee.

References:

- Report of the Fourth Meeting of the CNS Committee of the GREPECAS ATM/CNS Subgroup (Mexico City, Mexico, 11 to 18 August 2005).
- Report of the Thirteenth Meeting of GREPECAS (Santiago, Chile, 14-18 November 2005).
- Report of the Sixth Meeting of the ACG (Lima, Peru, 2-3 March 2006).

1. Introduction

1.1 In accordance with the provisions of the GREPECAS Procedural Handbook, all GREPECAS Contributory Bodies should review and update their terms of reference and work programme during their last meeting held prior to the next GREPECAS meeting.

1.2 Based on the results of the Fourth Meeting of the CNS Committee, held in Mexico City, Mexico, 11 to 18 August 2005, the GREPECAS/13 Meeting, held in Santiago, Chile, 14-18 November 2005, in its Decision 13/97 – *Terms of Reference, Work Programme and composition of GREPECAS Contributory Bodies* approved the proposed amendments to the work programme of the CNS Committee.

1.3 Subsequently, based on the GREPECAS decisions, the Sixth ACG Meeting (ACG/6), held in Lima, Peru, 2 and 3 March 2006, updated the work programme of the CNS Committee, as well as the tasks execution programme, which has been prepared in the Project Management MS software. This is shown in **Appendix A** to this paper.

2. Discussion

Terms of Reference and Work Programme

2.1 Bearing in mind the background and agreements expressed hereunder, it is suggested that the Meeting review the terms of reference and work programme in which several proposal of amendments are shown in **Appendix B** to this Working Paper. In doing so, the CNS Committee should consider that the terms of reference define the scope of the tasks of the Committee and/or Task Forces and that the work programme establishes the list of items to be analyzed in accordance with the scope established in the terms of reference.

3. Suggested Action

3.1 The Fifth Meeting of the CNS Committee is invited to:

- a) note and review the information contained in this working paper;
- b) note and review the Work Programme of the CNS Committee in MS Project Management reviewed by the ACG/6 as shown in Appendix A of this Working Paper;
- c) review the Terms of Reference of the Work Programme of the CNS Committee, considering the proposal of amendments contained in the Appendix B to this paper; and
- d) consider and propose any other pertinent actions.

**APPENDIX A
CNS Committee Work Programme**

CNS/COMM/5 - WP/15

ID	Section	Task Name	Responsibility	Priority	Contribution	Start	End	%	2004			2005			2006			2007								
									tr	tr	tr	tr	tr	tr	tr	tr	tr	tr	tr	tr						
1	CNS/1	GENERAL MATTERS				20/07/2001	31/08/2007	54%																		
2	CNS/1-1	Review, identify, evaluate and recommend solutions with the necessary priority assignment on the deficiencies of the CNS systems, based on the methodology standardized by ICAO Council.	CNS Committee & Regional Offices	A	Safety, Efficacy & Regularity	20/07/2001	31/08/2007	25%																		
3		Review of deficiencies in the CNS systems until CNS/COMM/1				20/07/2001	20/07/2001	100%																		
4		Review of deficiencies in the CNS systems until CNS/COMM/2				09/09/2002	20/09/2002	100%																		
5		Review of deficiencies in the CNS systems until CNS/COMM/3				08/03/2004	11/06/2004	100%																		
6		Review of deficiencies in the CNS systems until CNS/COMM/4				08/08/2005	26/08/2005	100%																		
7		Review of deficiencies in the CNS systems until CNS/COMM/5				24/07/2006	31/08/2007	0%																		
8	CNS/1-4	Review the development and implementation of CNS systems regarding other regions, with aim of contributing to a coordinated development, reducing interregional interphases problems.	CNS Committee & Regional Offices	A	Safety, Efficacy & Regularity	01/03/2004	30/04/2007	60%																		
9	CNS/1-5	Suggest measures for the protection of the aeronautical radio freq. spectrum management.	CNS Committee & Regional Offices	A	Safety, Efficacy & Regularity	08/03/2004	30/11/2006	73%																		
10	CNS/1-5.1	Suggest measures to support ICAO's position at ITU's WRC.		A		08/03/2004	30/11/2006	56%																		
11	CNS/1-5.1.1	Suggest preparation measures to WRC-2007(CNS/COMM/3)				08/03/2004	11/06/2004	100%																		
12		Suggest preparation measures to WRC-2007(CNS/COMM/4)				01/09/2005	30/11/2005	100%																		
13	CNS/1-5.1.2	Review status reg. measures to WRC-2007(CNS/COMM/5)				10/07/2006	30/11/2006	0%																		
14	CNS/1-5.2	Suggest regional guidelines on radio freq. spectrum management		A		08/03/2004	11/06/2004	100%																		
15	CNS/1-5.2.1	Improvement of the radio-freq. Spectrum management				08/03/2004	11/06/2004	100%																		
16	CNS/1-5.2.2	Protection against harmful interference in CNS systems				08/03/2004	11/06/2004	100%																		
17	CNS/2	COMMUNICATIONS SYSTEMS DEVELOPMENTS				02/07/2001	19/09/2008	48%																		
18	CNS/2-1	Develop digital data communication systems	CNS Committee & Regional Offices	A	Safety, Efficacy & Regularity	02/07/2001	19/09/2008	52%																		
19	CNS/2-1.1	Guide the development and interconnection of digital COM networks		A		31/05/2002	30/11/2006	79%																		
20	CNS/2-1.1.1	Provide guidelines on the development of communication networks				10/06/2002	19/09/2003	100%																		
21	CNS/2-1.1.2	Develop regional guidelines on digital network interconnection				31/05/2002	25/11/2005	100%																		
22	CNS/2-1.1.3	Follow-up the develop and inteconnection of digital networks				26/01/2004	30/11/2006	45%																		
23	CNS/2-1.2	Regional development on VDL & HF DL data link implementation	CNS Committee & Regional Offices	B		08/04/2003	19/09/2008	72%																		
24	CNS/2-1.2.1	Review perspectives of implementation VDL and HF data links				08/04/2003	29/11/2006	100%																		
25	CNS/2-1.2.2	Develop guidelines on the implementation of VHF & HF data links				27/09/2004	01/11/2007	54%																		
26	CNS/2-1.2.3	Develop a VDL implementation plan and its applications				01/11/2007	19/09/2008	0%																		
27	CNS/2-1.3	Provide guidelines on ATN development and its applications	ATN Task Force, CNS Committee & Regional	A		07/04/2003	30/11/2007	30%																		
28	CNS/2-1.3.1	Develop strategy for the transition to Inter/network ATN services				08/04/2003	28/02/2005	100%																		
29	CNS/2-1.3.2	Review, refine and complete the Initial Regional ATN Plan				07/04/2003	30/11/2006	45%																		
30	CNS/2-1.3.3	Complete the development of an ATN addressing plan				02/02/2004	28/11/2006	20%																		

CNS Committee Work Programme Date: 01/11/2006	Task		Summary		Rolled Up Progress		Project Summary	
	Progress		Rolled Up Task		Split		Group By Summary	
	Milestone		Rolled Up Milestone		External Tasks			

**APPENDIX A
CNS Committee Work Programme**

CNS/COMM/5 - WP/15

ID	Section	Task Name	Responsibility	Priority	Contribution	Start	End	%	2004			2005			2006			2007								
									tr	tr	tr	tr	tr	tr	tr	tr	tr	tr	tr	tr						
31	CNS/2-1.3.4	Plans for implementation of ATN ground portion and applications				08/07/2003	28/09/2006	10%																		
32	CNS/2-1.3.5	Develop an ATN initial operational and managerial use				08/07/2003	30/11/2007	16%																		
33	CNS/2-1.3.5.1	a) ground-ground applications				08/07/2003	29/11/2006	25%																		
34	CNS/2-1.3.5.2	b) air-ground applications				02/02/2004	30/11/2007	7%																		
35	CNS/2-1.3.6	Review proposals for data communication infrastructure to support ATFM implementation	CNS Committee & Regional Offices	B		05/06/2006	31/10/2007	0%																		
36	CNS/2-1.4	Study the possibilities of using the Internet services	CNS Committee & Regional Offices	B		02/07/2001	23/09/2005	100%																		
37	CNS/2-1.4.1	Initial study the possibilities of using the Internet services				02/07/2001	11/06/2004	100%																		
38	CNS/2-1.4.2	Guide the use of Internet services, as ICAO guidelines				01/04/2005	23/09/2005	100%																		
39	CNS/2-1.5	Recommend a COM system for support MET messages exchange in BUFR code.	CNS Committee & Regional Offices	A		18/04/2005	22/09/2006	10%																		
40	CNS/2-2	Regional development of voice communication systems	CNS Committee & Regional Offices	A	Safety, Efficacy & Regularity	02/07/2001	25/10/2006	30%																		
41	CNS/2-2.1	Continue the development of AMS VHF & HF voice and data communications. Review, refine and complete the Table CNS 2A-FASID	CNS Committee & Regional Offices	A		02/07/2001	25/10/2006	30%																		
42	CNS/3	NAVIGATION SYSTEMS DEVELOPMENTS				02/07/2001	20/05/2008	35%																		
43	CNS/3-2	Regional Development on GNSS augmentation	GNSS Task Force, CNS Committee & Regional Offices	A	Safety, Efficacy & Regularity	02/07/2001	29/06/2007	27%																		
44	CNS/3-2.1	Review the results of SBAS augmentation trials carried out in the CAR/SAM Regions.		A		02/07/2001	30/01/2007	38%																		
45	CNS/3-2.2	Develop regional guidelines on GNSS augmentation systems		A		10/11/2003	29/06/2007	28%																		
46	CNS/3-2.2.1	develop the regional GNSS revised guidelines				10/11/2003	29/06/2007	28%																		
47	CNS/3-2.3	Studies on a Regional GNSS augm. implementation plan		A		02/06/2003	22/06/2007	15%																		
48	CNS/3-2.3.1	Considerations on the feasibility of regional GNSS augmentation		B		02/06/2003	22/06/2007	15%																		
49	CNS/3-2.3.2	Evaluate implementation alternatives of a SBAS/GBAS system		B		14/03/2005	22/09/2006	15%																		
50	CNS/3-3	Development of the Regional GNSS Implementation Plan	GNSS Task Force, CNS Committee & Regional Offices	A	Safety, Efficacy & Regularity	02/02/2004	11/10/2007	72%																		
51	CNS/3-3.1	Amendment to the "Regional Guidelines for the transition to the GNSS" and the "Regional Strategy for the Introduction and application of non-visual aids to approach, landing and departure"		A		02/02/2004	31/08/2006	100%																		
52	CNS/3-3.2	Review/update guidelines/strategies on the migration towards GNSS		B		01/09/2006	21/12/2006	20%																		
53	CNS/3-3.3	Develop a Regional GNSS augmentation implementation plan		B		22/12/2006	11/10/2007	0%																		
54	CNS/3-4	Review, fine-tune Table CNS3 - Regional navigation plan, of the FASID	CNS Committee & Regional Offices	B	Safety, Efficacy & Regularity	12/10/2007	20/05/2008	0%																		

CNS Committee Work Programme Date: 01/11/2006	Task		Summary		Rolled Up Progress		Project Summary	
	Progress		Rolled Up Task		Split		Group By Summary	
	Milestone		Rolled Up Milestone		External Tasks			

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CNS Committee Work Programme**

CNS/COMM/5 - WP/15

ID	Section	Task Name	Responsibility	Priority	Contribution	Start	End	%	2004				2005				2006				2007			
									tr	tr	tr	tr	tr	tr	tr	tr	tr	tr	tr	tr	tr	tr	tr	tr
55	CNS/4	SURVEILLANCE SYSTEMS DEVELOPMENTS				04/06/2001	08/04/2009	49%																
56	CNS/4-1	Development of surveillance radar systems	CNS Committee & Regional Offices	A	Safety, Efficacy & Regularity	13/05/2002	30/11/2006	32%																
57	CNS/4-1.1	Develop a radar regional implementation guidelines		A		13/05/2002	19/09/2002	100%																
58	CNS/4-1.2	Studies and recommendations of action on the SSR Mode S		B		01/07/2005	30/11/2006	15%																
59	CNS/4-2	Studies on regional radar data sharing				04/06/2001	18/11/2005	100%																
60	CNS/4-2.1	Studies on radar data sharing feasibility		A		04/06/2001	19/09/2002	100%																
61	CNS/4-2.2	Proposal for a regional common protocol use		A		20/09/2002	07/05/2003	100%																
62	CNS/4-2.3	Development of regional guidelines on radar data sharing		A		28/06/2002	19/09/2002	100%																
63	CNS/4-2.4	Studies on a regional ASTERIX assignment codes		A		08/09/2003	18/11/2005	100%																
64	CNS/4-3	Development of the ADS-C and ADS-B Systems	CNS Committee & Regional Offices	B	Safety, Efficacy & Regularity	09/03/2004	08/04/2009	21%																
65	CNS/4-3.1	Review and improvement of ADS regional guidelines		B		09/03/2004	25/02/2005	60%																
66	CNS/4-3.2	Studies on regional implementation of ADS-C & ADS-B systems		B		07/11/2005	29/11/2006	25%																
67	CNS/4-3.3	Development of a regional plan for ADS-C & ADS-B implementation		B		01/07/2005	08/04/2009	3%																
68	CNS/4-4	Develop target dates and strategies for the development of the ACAS sy		B		01/07/2005	29/09/2006	35%																
69	CNS/4-5	Update and follow-up FASID Table CNS 4A	CNS Committee & Regional Offices	B	Safety, Efficacy & Regularity	02/01/2004	30/03/2007	35%																
70	CNS/5	REGIONAL ATM AUTOMATION DEVELOPMENTS				01/04/2002	29/09/2006	35%																
71	CNS/5-1	Develop a regional strategy for ATM automation	CNS Committee & Regional Offices	A	Safety, Efficacy & Regularity	01/04/2002	29/09/2006	35%																
72	CNS/5-1.1	Develop functional levels and a regional strategy on ATM automation				01/04/2002	22/09/2006	35%																
73	CNS/5-3	Develop guidance material and regional guidelines for data exchange among ATM Units taking into consideration the communication platform.	CNS Committee & Regional Offices	A	Safety, Efficacy & Regularity	17/10/2005	26/05/2006	40%																

CNS Committee Work Programme Date: 01/11/2006	Task		Summary		Rolled Up Progress		Project Summary	
	Progress		Rolled Up Task		Split		Group By Summary	
	Milestone		Rolled Up Milestone		External Tasks			

APPENDIX B

**AIR TRAFFIC MANAGEMENT/COMMUNICATIONS,
NAVIGATION AND SURVEILLANCE SUBGROUP (ATM/CNS/SG)**

**COMMUNICATIONS, NAVIGATION AND SURVEILLANCE COMMITTEE
(CNS/COMM)**

1. Terms of Reference

Review, fine-tune and complete the planning of the CNS systems, recommending its incorporation in the CAR/SAM FASID ANP, based on the application of planning principles developed by the CAR/SAM/3 RAN Meeting, in the global Plan of air navigation for the CNS/ATM systems, on the results of the inter-regional planning and co-ordination and on ICAO SARPs and technical guidelines, related with the coordinated implementation and harmonization of CNS/ATM systems. Also, to study, review and propose measures for the implementation of the CNS systems recommended in the ANP CAR/SAM FASID.

2. Work Programme

TASK NUMBER	TASK DESCRIPTION	PRIORITY	DATE	
			START	END
CNS/1	General Matters			
CNS/1-1	Review, identify, evaluate and recommend solutions with the necessary priority assignment on the deficiencies of the CNS systems.	A	Permanent	
CNS/1-4	Examine of the CNS systems in other regions, with the aim of contributing to a coordinated and harmonious interregional development, in accordance with the specified guidelines in the CNS/ATM Global Plan.	B	Permanent	
CNS/1-5	Suggest measures for the protection of the radio frequency spectrum management.	A	Permanent	
CNS/2	Communications Developments			
CNS/2-1.1	Continue the guidance <i>and follow-up to</i> the development of the aeronautical digital communication networks and develop regional guidelines for the inter operability between the communication networks of the CAR and SAM Regions and neighbouring areas.	A	31/05/02	29/09/06 01/04/07
CNS/2-1.2.2	Develop regional strategies on the implementation of VDL and HFDDL data links.	B	27/06/04	29/09/06
CNS/2-1.2.3	Develop the regional plan for the implementation of VDL and air-ground applications.	B	02/05/05	19/10/07
CNS/2-1.3.1	Develop a strategy for the transition to inter/network ATN services.	A	08/04/03	28/11/05

TASK NUMBER	TASK DESCRIPTION	PRIORITY	DATE	
			START	END
CNS/2-1.3.2	Review, fine-tune and complete the initial transition plan for the evolutionary development of the ATN and of its applications.	A	07/04/03	29/09/06
CNS/2-1.3.3	Guide the development of the ATN addressing plan in accordance with the ICAO principles and technical provisions.	B	02/02/04	28/11/06
CNS/2-1.3.4	Develop plans for the evolutionary implementation of the ground infrastructure of ATN and the development of ground-ground applications such as AIDC and AMHS.	A	08/07/03	29/09/06
 CNS/2-1.3.5	Develop recommendations on the initial operational and managerial use of ATN with regard to the implementation of:	A	08/07/03	29/09/06
	a) ground-ground applications; and	A	08/07/03	28/11/06
	b) air-ground applications.	B	02/02/04	30/11/056
CNS/2-1.3.6	Review proposals for data communications infrastructure to support ATFM implementation	B	06/03/06	31/10/07
CNS/2-1.5	Develop a CAR/SAM plan to provide the communications system required for the migration toward the exchange of aeronautical MET messages (METAR/SPECI and TAF) in BUFR code form.	A	18/04/05	22/09/06
CNS/2-2.1	Development of the VHF and HF voice and data communication. Review, refine and complete the VHF and HF Regional Plan (FASID Table CNS 2A).	A	07/01/01	25/10/06
CNS/3	Navigation Developments			
CNS/3-2.1	Review the results of SBAS augmentation trials carried out in the CAR/SAM Regions.	A	02/07/01	30/01/07
CNS/3-2.2	Update the regional strategy for the deployment and implementation of the GNSS augmentation systems.	A	10/11/03	30/06/07
CNS/3.2.3.1	Considerations on the feasibility of regional application, technical aspects, operational benefits, related costs, implementation, implications for the on-board equipment and other relevant aspects.	A	02/06/03	22/06/07
CNS/3.2.3.2	To lead studies on regional implementation alternatives of a SBAS/GBAS system, taking into account the evolution of GNSS.	A	14/03/05	22/09/06
CNS/3-3.1	Update the regional strategy for the migration towards GNSS.	A	03/02/04	29/09/06
CNS/3-3.2	Develop a nav aids transition plan and introduce pertinent target dates for the GNSS augmentation systems.	A	07/02/05	29/09/06
CNS/3-3.3	Prepare a Regional Plan for the deactivation of NDB stations	A	02/10/06	30/11/07
CNS/3-3.34	Review, fine-tune and complete the regional navigation plan suggesting the relevant amendments to FASID Table CNS 3.	B	02/10/05	09/05/07

TASK NUMBER	TASK DESCRIPTION	PRIORITY	DATE	
			START	END
CNS/4	Surveillance Development			
CNS/4-3.1	Develop target dates and strategies for the deployment of the ADS and ADS-B systems.	A	01/07/05	30/11/06
CNS/4-3.2	Studies and recommendation of actions for the sub-regional and regional implementation of the ADS and ADS-B systems.	B	09/03/04	29/09/06
CNS/4-3.4	Develop target dates and strategies for the deployment of the ACAS systems.	B	01/07/05	29/09/06
CNS/4-4.1.1	Studies and recommendations of actions for the SSR in Mode S, sub regional/regional implementation.	B	01/07/05	30/06/06
CNS/4-5	Update and follow-up of the regional plan on surveillance systems. Update FASID Table CNS 4A.	B	01/02/04	30/03/07
CNS/5	ATM Automation Developments			
CNS/5-1	Develop functional levels and a regional strategy for the implementation of ATM automation.	A	01/04/02	22/09/06
CNS/5-3	Develop guidance material and regional guidelines for data exchange among ATM units taking into consideration the communications platform.	A	17/10/05	26/05/06

3. **Priority**

- A** High priority tasks, on which work should be speeded up.
- B** Medium priority tasks, on which work should commence as soon as possible, but without detriment to Priority **A** tasks.
- C** Tasks of lesser priority, on which work should commence as time and resources allow, but without detriment to Priority **A** and **B** tasks.

4. **Composition**

Antigua, Argentina, Barbados, Bolivia, Brazil, Chile, Colombia, Cuba, Dominican Republic, Ecuador, France, Haiti, Jamaica, Mexico, Panama, Paraguay, Peru, Spain, Trinidad and Tobago, United States, Uruguay, Venezuela, ARINC, COCESNA, IATA, IFALPA and SITA.

The Chairperson and Vice-chairperson designated by the CNS Committee elected in the Fourth Meeting are: Ricardo Bordalí (Chile) and Mrs. Veronica Ramdath (Trinidad and Tobago) respectively.