



International Civil Aviation Organization
CAR/SAM Regional Planning Implementation Group (GREPECAS)
**Second Meeting of the Communications, Navigation and Surveillance / Air
Traffic Management Subgroup (CNS/ATM/SG/2)**
(Mexico City, Mexico, 16 to 19 November 2010)

**Agenda Item 3: Review to the progress achieved in the implementation of the CNS/ATM
Subgroup Work programmes**

**3.3 Follow-up to the activities taken into account in the automation and ATM
situational awareness programme**

**Project C2 : PROGRESS REPORT OF ACTIVITIES AND WORK PLAN UPDATE PROJECT
TO IMPROVE ATM SITUATIONAL AWARENESS**

(Presented by C2 Project Coordinator)

SUMMARY

This working paper presents to the CNS/ATM/SG/2 Meeting progress in the activities of the working group assigned to C2 Improve Project Situational Awareness ATM and updating the work plan and schedule project deliverables.

1. Introduction

1.1 During the first meeting of the Sub Group-Communications, Navigation and Surveillance / Air Traffic Management (CNS/ATM/SG/1), held in Lima, Peru, in March 2010, was presented a methodology to define and implement projects address the implementation of tasks assigned by GREPECAS to the Subgroup CNS / ATM and considered in its terms of reference. This project continues the work of the former Task Force Surveillance (TF SUR), whose last meeting was held on 10 and 11 September 2009.

1.2 The development of the work program is through the implementation of a set of four programs, among which is the Automation and situation awareness, and within this program is the Project C2 - Improving the ATM situational awareness.

1.3 dated 6th October 2010 is integrated as part of the membership of the project as coordinator of Project C2, COCESNA.

2. PROGRESS AND FOLLOW-UP TASKS

2.1 The monitoring and reporting progress of the project is presented in **Appendix A** to this Note Work detailed as follows:

- a) Updated and Communication of the work plan proposed project C2 containing the project deliverables.
- b) Updating and communication of the list membership C2 Project Situational Awareness.
- c) Development and updated review schedule in MS Project for C2 project activities and deliverables.

Updating and communication of the work plan C2

2.2 Was distributed to members of group project work, The Proposed Plan, for their knowledge, review and inclusions in case of considering new deliverables for their respective programming.

2.3 On 28 October 2010 was received communication from SITA, recommending the inclusion of factors within the item C 2.6 related to the Development of a regional plan for the implementation of ADS-C and ADS B described below:

- a) Study for the implementation of a Common Center for ADS-C and CPDLC (CRFA) for the region, bringing together all relevant information of the ANSP and regional, would also be able to investigate the incidents, the consolidation and harmonization of statistics operational procedures.
- b) Harmonization with the GOLD initiative (related with manual's documentation FANS).
- c) Interaction with other C projects, such as optimization in Europe, by the oceanic airspace.

2.4 These recommendations were included in the deliverables schedule in MS Project attached as **Appendix B**.

Updating and communicating the project membership list C2 Improvement Situational Awareness ATM

2.5 Was made communication with members on the list proposed CNS / ATM / SG, completing the information related to the participant in the FAA. Updated list Members Project is displayed under **Appendix C**.

3. Others Considerations

3.1 We present for your consideration the recent formation of the working group for the project C2 Improvement Situational Awareness ATM in the present year, for the respective support to this Working Note and working group meeting, as they constitute a starting point for the development of the proposed activities.

4. Suggested Action:

4.1 The Meeting is invited to:

- a) Take note to the information provided;
- b) Review the progress reported in this Work Note and in Appendix A,
- c) Approve or complement the work plan presented in this Work Note in Appendix B, and,
- d) Review and update the membership of this Committee, assigning and completing the same basis as described in paragraph 4.1.

APPENDIX A / APENDICE A

PROJECT WORK PROGRAMME / PROGRAMA DE TRABAJO DEL PROYECTO

PROGRAMME/PROGRAMA: ATM AUTOMATION AND SITUATIONAL AWARENESS / AUTOMATIZACION ATM Y COMPRESION SITUACIONAL

PROJECT/PROYECTO: C2. IMPROVE ATM SITUATIONAL AWARENESS / MEJORA A LA COMPRESION SITUACIONAL ATM

**PROJECT COORDINATOR/
COORDINADOR DEL PROYECTO:** Alejandro Romero

| No. | Tarea/Task | Inicio Fin / Start End | Responsible / Responsible | Estado/Status | Deliverable/Entregable |
|-------|--|---------------------------|---|----------------------|--|
| 1 | 2 | 3 | 4 | 5 | 6 |
| C 2.1 | Identify parties concerned Identificación de las partes interesadas | 2009 | GREPECAS | Completed/Finalizada | Identification of parties concerned Identificación de las partes interesadas |
| C 2.2 | Evaluation of surveillance infrastructure and Identification of Surveillance system improvements to support continental en-route and terminal Airspace in CAR/SAM Regions, airspace classification, PBN and the ATFM Evaluación de la infraestructura de vigilancia e identificación de mejoras a los sistemas de vigilancia para apoyar los espacios aéreos en ruta y terminal en las regiones CAR/SAM, la clasificación del espacio aéreo, la PBN y el ATFM | 2009-2012 | Project C2 / Proyecto C2 | Valid/Válida | Regional surveillance system implementation strategy (surveillance system infrastructure analysis for PBN and ATFM implementation) Estrategia regional para la implantación del sistema de vigilancia (análisis de la infraestructura del sistema de vigilancia para la implantación de PBN y ATFM) |
| C 2.3 | Develop situational awareness training programmes guidelines for pilots and controllers and technical/maintenance personnel. Desarrollar programa de instrucción sobre comprensión de la situación para pilotos y controladores y personal técnico/mantenimiento | 2008-2012 | States/ Territories/ International organizations Estados/ Territorios/ Organizaciones internacionales Project C2 / Proyecto C2 | Valid/Válida | Proposal on training content to develop situational awareness training programmes guidelines for pilots and controllers and technical/maintenance personnel Propuestas de contenido de entrenamiento para desarrollar directrices sobre programa de entrenamiento sobre comprensión situacional para pilotos y controladores y personal técnico/mantenimiento |

| No. | Tarea/Task | Inicio Fin / Start End | Responsible / Responsible | Estado/Status | Deliverable/Entregable |
|-------|--|---------------------------|------------------------------|---------------|--|
| 1 | 2 | 3 | 4 | 5 | 6 |
| C 2.4 | Monitor the implementation of ATM surveillance systems for situational traffic information and associated procedures Monitorear la implantación de sistemas de vigilancia ATM para la información de la situación del tránsito y procedimientos asociados | 2010-2015 | ICAO/OACI | Valid/Válida | |
| C 2.5 | Monitor the implementation of ground and air electronic warnings, as needed • Conflict prediction • Terrain proximity • MSAW • DAIW • Surveillance system for surface movement Monitorear la implantación de avisos terrestres y aéreos electrónicos, según sea necesario • predicción de conflictos • proximidad en el terreno • MSAW • DAIW • Sistema de vigilancia para el movimiento en la superficie | 2008-2014 | Project C2 / Proyecto C2 | Valid/Válida | Guidelines for improvement to ground and air electronic warnings Directrices sobre la mejora de avisos terrestres y aéreos electrónicos |
| C 2.6 | Elaboración de un plan regional para la implantación del ADS- C y ADS B Elaboration of a Regional Plan for the implementation of ADS –C and ADS B | 2008-2014 | Project C2 / Proyecto C2 | Valid/Válida | Guidelines for an operational ADS-B implementation and data exchange (initial steps to the operational implementation of ADS B) Directrices para la implantacion operacional del ADS B y el intercambio de datos (pasos iniciales para la implantación operacional del ADS B) |
| C 2.8 | Monitor the regional activities to optimize the use of radio frequency environment Monitorear las actividades para optimizar el uso del entorno de radio frecuencia | 2009/2011 | ICAO/OACI | Valid/Válida | |

APPENDIX B

CNS/ATM/SG/2-WP/12

| ID | Task Name | Start | Finish | f | 1st Half | | 2nd Half | | 1st Half | | 2nd Half | | 1st Half | | 2nd Half | | 1st Half | | | | | |
|----|--|--------------|--------------|---|---------------------|-------|----------|-------|----------|-------|----------|-------|----------|-------|----------|-------|----------|-------|--|--|--|--|
| | | | | | Qtr 1 | Qtr 2 | Qtr 3 | Qtr 4 | Qtr 1 | Qtr 2 | Qtr 3 | Qtr 4 | Qtr 1 | Qtr 2 | Qtr 3 | Qtr 4 | Qtr 1 | Qtr 2 | | | | |
| 1 | C2 IMPROVE ATM SITUATIONAL AWARENESS | Mon 3/22/10 | Thu 12/20/12 | | [Summary bar] | | | | | | | | | | | | | | | | | |
| 2 | C 2.2 Evaluation of surveillance infrastructure and Identification of Surveillance system improvements to support continental en-route and terminal Airspace in CAR/SAM Regions, airspace classification, PBN and the ATFM | Tue 11/2/10 | Thu 12/20/12 | | [Summary bar] | | | | | | | | | | | | | | | | | |
| 3 | DELIVERABLE: Regional Surveillance System implementation Strategy(Surveillance system infrastructure analysis for PBN and ATFM implementations | Tue 11/2/10 | Thu 12/20/12 | | [Summary bar] | | | | | | | | | | | | | | | | | |
| 4 | Gather information related to aspects of Regional Servillance System Implen | Tue 11/2/10 | Wed 3/16/11 | | [Task bar] | | | | | | | | | | | | | | | | | |
| 5 | Draft Plan 1 | Thu 3/17/11 | Wed 5/18/11 | | [Task bar] | | | | | | | | | | | | | | | | | |
| 6 | Monitoring of Plan 1 | Thu 5/19/11 | Wed 12/19/12 | | [Task bar] | | | | | | | | | | | | | | | | | |
| 7 | Deliverable C 2.2 | Thu 12/20/12 | Thu 12/20/12 | | [Milestone diamond] | | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | | | | | | | | |
| 9 | C 2.3 Develop situational awareness training programmes guidelines for pilots and controllers and technical/maintenance personnel | Mon 3/22/10 | Thu 12/20/12 | | [Summary bar] | | | | | | | | | | | | | | | | | |
| 10 | DELIVERABLE: Proposal on training content to develop situational awareness training programmes guidelines for pilots and controllers and technical/maintenance personnel. | Thu 5/27/10 | Thu 12/20/12 | | [Summary bar] | | | | | | | | | | | | | | | | | |
| 11 | Gather information related to aspects of operational and technical programs of situational awareness | Thu 5/27/10 | Wed 3/16/11 | | [Task bar] | | | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | | | | | | | | |
| 13 | Monitoring of Plan | Thu 5/19/11 | Wed 12/19/12 | | [Task bar] | | | | | | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | | | | | | | | | | | |
| 16 | C 2.5 Monitor the implementation of ground and air electronic warnings, as needed | Mon 3/22/10 | Thu 12/20/12 | | [Summary bar] | | | | | | | | | | | | | | | | | |
| 17 | DELIVERABLE: Guidelines for improvements to ground and air electronic warnings | Mon 3/22/10 | Thu 12/20/12 | | [Summary bar] | | | | | | | | | | | | | | | | | |
| 18 | Draft of the Plan | Thu 3/17/11 | Fri 5/20/11 | | [Task bar] | | | | | | | | | | | | | | | | | |
| 19 | Monitoring of the Plan | Mon 5/23/11 | Wed 12/19/12 | | [Task bar] | | | | | | | | | | | | | | | | | |
| 20 | | | | | | | | | | | | | | | | | | | | | | |
| 21 | Deliverable C 2.5 | Thu 12/20/12 | Thu 12/20/12 | | [Milestone diamond] | | | | | | | | | | | | | | | | | |
| 22 | | | | | | | | | | | | | | | | | | | | | | |
| 23 | C 2.6 Elaboration of a Regional Plan for the implementation of ADS -C and ADS B | Tue 11/2/10 | Tue 12/18/12 | | [Summary bar] | | | | | | | | | | | | | | | | | |
| 24 | DELIVERABLE: Guidelines for an operational ADS-B implementation and data exchange (Initial Steps to the operative implantation ADS B) | Tue 11/2/10 | Tue 12/18/12 | | [Summary bar] | | | | | | | | | | | | | | | | | |
| 25 | Study for Implementation a common Central Agency for ADS C and CPDLC (CRFA) for the region that would gather all relevant info from regional ANSP and also would be able to investigate incidents, consolidate statistics and harmonize operational procedures | Tue 11/2/10 | Mon 12/17/12 | | [Task bar] | | | | | | | | | | | | | | | | | |
| 26 | Draft Plan | Thu 3/17/11 | Wed 5/18/11 | | [Task bar] | | | | | | | | | | | | | | | | | |
| 27 | Gather information related to aspects of operational and technical programs, new implementation or improvments in sistems relative to warnings. | Mon 3/22/10 | Wed 3/16/11 | | [Task bar] | | | | | | | | | | | | | | | | | |
| 28 | Deliverable C 2.3 | Thu 12/20/12 | Thu 12/20/12 | | [Milestone diamond] | | | | | | | | | | | | | | | | | |
| 29 | Harmonization with GOLD initiative (related to FANS manual documentation) | Tue 11/2/10 | Mon 12/17/12 | | [Task bar] | | | | | | | | | | | | | | | | | |





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|---|----------|--|-----------------|--|-------------------|--|
| Project: CNSATMSG02_NE12 ApnB Date: Thu 11/11/10 | Task | | Milestone | | External Tasks | |
| | Split | | Summary | | External MileTask | |
| | Progress | | Project Summary | | Split | |

APPENDIX B

CNS/ATM/SG/2-WP/12

| ID | Task Name | Start | Finish | f | 1st Half | | 2nd Half | | 1st Half | | 2nd Half | | 1st Half | | 2nd Half | | 1st Half | | |
|----|--|--------------|--------------|---|----------|-------|----------|-------|----------|-------|----------|-------|----------|-------|----------|-------|----------|-------|---------------|
| | | | | | Qtr 4 | Qtr 1 | Qtr 2 | Qtr 3 | Qtr 4 | Qtr 1 | Qtr 2 | Qtr 3 | Qtr 4 | Qtr 1 | Qtr 2 | Qtr 3 | Qtr 4 | Qtr 1 | Qtr 2 |
| 30 | Interaction with other ADS C projects such as OPTIMI in Europe, for oceanic airspace | Tue 11/2/10 | Mon 12/17/12 | | | | | | | | | | | | | | | | Adriana Matto |
| 31 | Deliverable C 2.6. | Tue 12/18/12 | Tue 12/18/12 | | | | | | | | | | | | | | | | 12/18 |

Project: CNSATMSG02_NE12 ApnB
Date: Thu 11/11/10

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|----------|---|-----------------|--|-------------------|---|
| Task |  | Milestone |  | External Tasks |  |
| Split |  | Summary |  | External MileTask |  |
| Progress |  | Project Summary |  | Split |  |