INTERNATIONAL CIVIL AVIATION ORGANIZATION

Review Meeting of the
Task Force on the Development of a Regional Project on an AFI Integrated
Aeronautical Telecommunication Infrastructure
(Dakar, Senegal, 3-5 October 2011)

Agenda item 3: Review of Progress made by the Task Force Teams

REVIEW OF PROGRESS MADE BY THE TECHNICAL TEAM OF THE TASK FORCE

(Presented by ATNS, South Africa, Team Leader)

SUMMARY
This working paper provides discussion documents on the work of the Technical Team of the Task Force.

Action by the Meeting

The meeting is invited to:
1) review the Technical Team discussion documents attached to this working paper;
2) identify the interrelations, mutual expectations, areas of coordination and information/data to be exchanged with the Administrative and the Financial Teams; and
3) review and provide inputs to the questionnaire prepared by the Task Force Technical Team.

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DISCUSSION DOCUMENT
FOR
AFI VSAT MANAGERS REVIEW MEETING
DAKAR, SENEGAL
3-5 OCTOBER 2011

Introduction

This document details the project plan for the AFI VSAT Managers Technical Task Force work to be completed before the scheduled APIRG meeting in November 2011. The detail provided describes the Work Breakdown Structure (WBS) and Statement of Work (SOW) for those work packages as identified. A high level project schedule is included for discussion purposes.

STATEMENT OF WORK

Current Network Detail (WP1000)

This work package builds on the information gathered during the ICAO 1st VSAT Managers meeting. A set of questionnaires will be developed and sent to the individual VSAT Network Managers for completion. The questionnaires will gather additional VSAT network infrastructure, VSAT network management and VSAT network operational detail required to clearly identify the current status of the individual VSAT networks i.e. CAFSAT, AFISNET, SADC 2 and NAFISAT. The questionnaires will be distributed to the individual VSAT Managers and team members for completion and return. The additional information will be collated into a draft "Current Network Detail and Status" report. The draft report will be circulated for comment, updated and then incorporated into the final APIRG 18 submission as an annexure.

"Best Practices" (BP) Framework and Criteria (WP2000)

A basic set of best practice criteria was developed and agreed upon during the 1st VSAT Managers meeting. The basic criteria parameters will be reviewed, refined and compared to other typical VSAT technology performance criteria. A measurement methodology will be developed that will be applicable during the "Gap Analysis" as described below in WP3000. The updated BP framework and criteria will be collated in a report format and circulated to the VSAT Managers and team members. Any comments received will be incorporated into a draft "Best Practices Framework and Criteria" report. This report will be annexed to the final APIRG 18 submission.

Comparison and GAP Analysis (WP3000)

The individual status of the different VSAT networks will be compared with the best practice framework and measured according to the criteria specified. For each gap identified, a specific technical description of the gap as it exists within the individual VSAT network will be formulated in a draft report. The draft report

will be circulated for comment, updated and then incorporated into the final APIRG 18 submission as an annexure.

Architecture Design (WP4000)

The list of VSAT network infrastructure and operational deficiencies, as determined through the gap analysis conducted under WP3000, will be circulated to the individual VSAT Managers. The individual VSAT Managers will conduct a VSAT network infrastructure and operations design to address the identified gaps. The level of design will be based on the extent of the requirements identified to update the individual VSAT networks to conform to the best practice framework as agreed upon. The additional VSAT network infrastructure and operational design detail for each VSAT network will be collated into a draft report. The draft report will be circulated for comment, updated and then incorporated into the final APIRG 18 submission as an annexure.
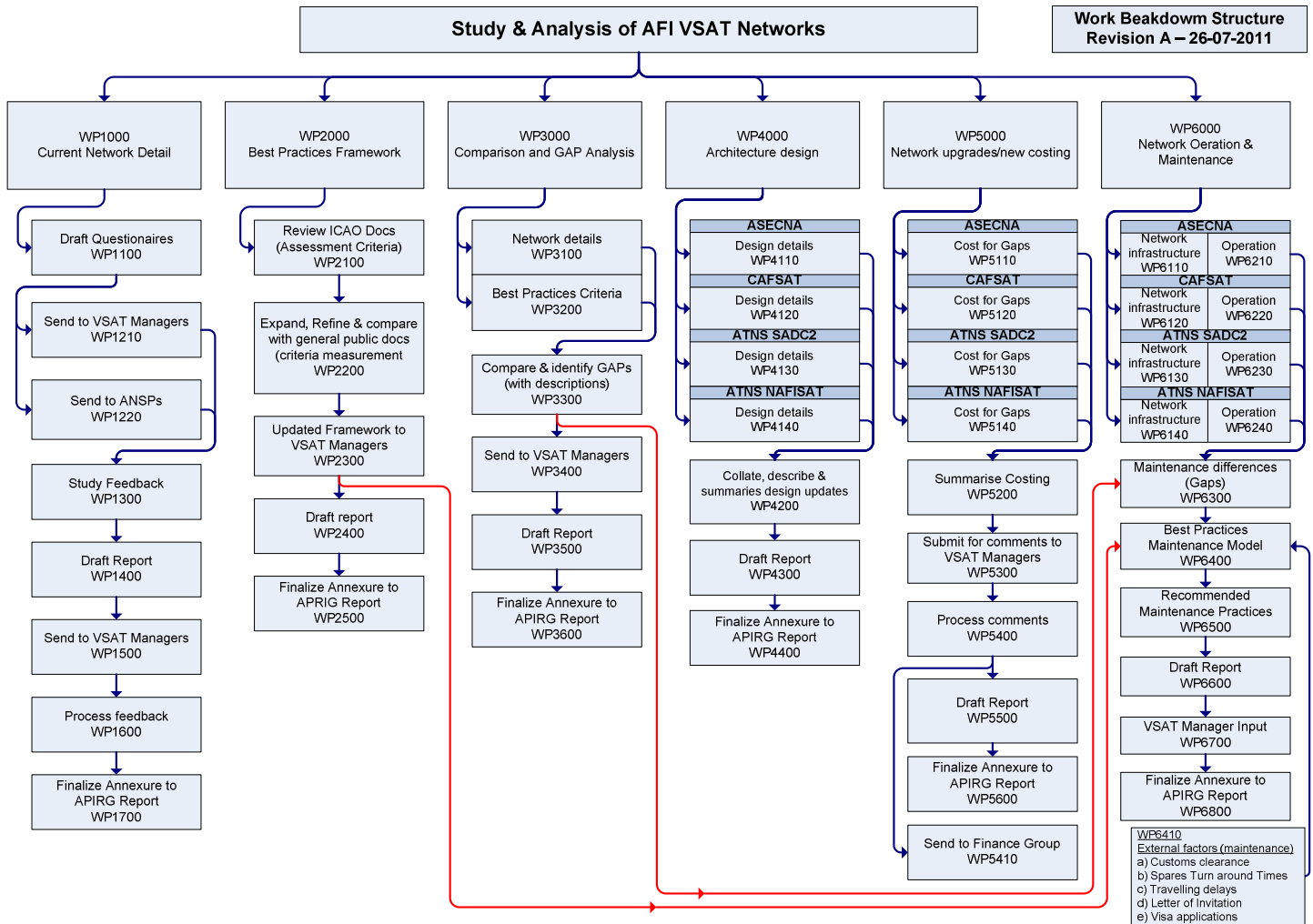
Network Upgrades/New Costing (WP5000)

The additional VSAT network infrastructure and operations design detail for each individual VSAT network will be costed by the VSAT Managers and submitted. The cost detail will be summarised in a draft report. This report will be circulated for comment and updated accordingly. The processed draft report will be submitted to the Finance Group for further action. The processed draft report will be incorporated into the final APIRG 18 submission as an annexure.

Network Operation and Maintenance (WP6000)

From the individual VSAT network detail design and operations documentation, the maintenance and maintenance management differences will be identified for each of the individual VSAT Networks. The maintenance differences or gaps will be determined from the agreed upon best practice framework completed under WP2000. As a further evaluation of the maintenance differences and gaps, maintenance of the VSAT networks will be compared against external factors influencing any maintenance actions required during the operations of the individual VSAT networks. The most suitable maintenance practice framework as determined from the maintenance analysis will be incorporated into a draft report. The draft report will be circulated to the VSAT Managers for comments. The comments received will be processed. The processed draft report will be incorporated into the final APIRG 18 submission as an annexure.

WORK BRAEAKDOWN STRUCTURE

Study & Analysis of AFI VSAT Networks

**Work Beakdowm Structure
Revision A – 26-07-2011**

**WP1000
Current Network Detail**

- Draft Questionaires WP1100
- Send to VSAT Managers WP1210
- Send to ANSPs WP1220
- Study Feedback WP1300
- Draft Report WP1400
- Send to VSAT Managers WP1500
- Process feedback WP1600
- Finalize Annexure to APIRG Report WP1700

**WP2000
Best Practices Framework**

- Review ICAO Docs (Assessment Criteria) WP2100
- Expand, Refine & compare with general public docs (criteria measurement WP2200
- Updated Framework to VSAT Managers WP2300
- Draft report WP2400
- Finalize Annexure to APRIG Report WP2500

**WP3000
Comparison and GAP Analysis**

- Network details WP3100
- Best Practices Criteria WP3200
- Compare & identify GAPs (with descriptions) WP3300
- Send to VSAT Managers WP3400
- Draft Report WP3500
- Finalize Annexure to APIRG Report WP3600

**WP4000
Architecture design**

- **ASECNA** Design details WP4110
- **CAFSAT** Design details WP4120
- **ATNS SADC2** Design details WP4130
- **ATNS NAFISAT** Design details WP4140
- Collate, describe & summaries design updates WP4200
- Draft Report WP4300
- Finalize Annexure to APIRG Report WP4400

**WP5000
Network upgrades/new costing**

- **ASECNA** Cost for Gaps WP5110
- **CAFSAT** Cost for Gaps WP5120
- **ATNS SADC2** Cost for Gaps WP5130
- **ATNS NAFISAT** Cost for Gaps WP5140
- Summarise Costing WP5200
- Submit for comments to VSAT Managers WP5300
- Process comments WP5400
- Draft Report WP5500
- Finalize Annexure to APIRG Report WP5600
- Send to Finance Group WP5410

**WP6000
Network Oeration & Maintenance**

- **ASECNA** Network infrastructure WP6110 | Operation WP6210
- **CAFSAT** Network infrastructure WP6120 | Operation WP6220
- **ATNS SADC2** Network infrastructure WP6130 | Operation WP6230
- **ATNS NAFISAT** Network infrastructure WP6140 | Operation WP6240
- Maintenance differences (Gaps) WP6300
- Best Practices Maintenance Model WP6400
- Recommended Maintenance Practices WP6500
- Draft Report WP6600
- VSAT Manager Input WP6700
- Finalize Annexure to APIRG Report WP6800

WP6410
External factors (maintenance)
a) Customs clearance
b) Spares Turn around Times
c) Travelling delays
d) Letter of Invitation
e) Visa applications

High Level Project schedule

ID	Task Name	Duration	Start	Finish	2011 August	2011 September	2011 October	2011 November	2011 December
1	Study & Analysis of AFI VSAT Networks	106 days?	Mon 11/08/01	Mon 11/12/26					
2	WP1000: Current Network details	32 days	Mon 11/08/01	Tue 11/09/13					
12	WP2000: Best Practices Framework	19 days	Mon 11/08/01	Thu 11/08/25					
18	WP3000: Comparison & GAP Analysis	20 days	Mon 11/09/12	Fri 11/10/07					
25	WP4000: Architecture Design	31 days	Thu 11/10/06	Thu 11/11/17					
34	WP5000: Network Upgrades/new costing	27 days?	Fri 11/11/18	Mon 11/12/26					
46	WP6000: Network Maintenance	32 days	Thu 11/10/06	Fri 11/11/18					