

**ATNP/WG3/WP6-3**  
**March 17, 2000**

**AERONAUTICAL TELECOMMUNICATION NETWORK PANEL**  
**Working Group 3**

**Bruxelles, 15-26 April 1996**

**ATNP/WG3/SG3 Chairman's Report**

(Presented by Steve Van Trees)

Summary
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ATNP/WG3/SG3 presents accomplishments and prospects for approval by WG3.
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## 1. Introduction

The paper reviews progress and deliverables produced by ATNP/WG3/SG3 in the period between the Gold Coast and Bruxelles meetings of WG3. The paper then presents activities scheduled through the Munich WG3 meeting in June 1996.

## 2. Membership

Mr. Steve Van Trees (USA) has chaired the group since the Banff meeting. Dr. Tony Kerr (Eurocontrol), Mr. Frederic Picard (France), Mr. Stephen Pearce (Australia), and Messrs. John Day and Jim Moulton (USA) have contributed great time and effort to the group.

## 3. Subgroup 3 Meetings

ATNP/WG3/SG3 has held one meeting since the Banff WG3 meeting.

### 3.a. Toulouse

The SG3 meeting on 19-21 March 1996 completed work on version 2.0z of the Upper Layers SARPs, based on WG3 direction. The group then created version 3.0p of the Upper Layers SARPs, based on a number of defect reports from SITA and the USA. The majority of the changes were clarifications. The group then created the Upper Layers Defect Report register. The group then concentrated on DAM comments to the just-concluded ISO efficiency work.

## 4. Deliverables

As detailed below, SG3 maintains the schedule agreed in San Diego in October 1994. No schedule problems are foreseen for Munich delivery in June 1996.

### 4.a. CNS/ATM-1 Upper Layer SARPs

The draft SARPs 2.0z are completed as approved. They are under configuration control.

### 4.b. CNS/ATM-1 Upper Layer Guidance Material

The draft GM is again available at this meeting. Minor editorial cleanup has been done between WG3 meetings. It will be reviewed further by SG3 based on WG3 guidance.

### 4.c. CNS/ATM-1 Upper Layer Validation

The revised validation plan is available at this meeting. As detailed in the paper, multiple validation implementations are under way.

#### 4.d. CNS/ATM-2 Upper Layer SARPs

A CNS/ATM-2 UL paper is available at this meeting. The next SG3 meeting (June 1996 at SFO) will be largely devoted to CNS/ATM-2 UL SARPs.

### 5.0 External Dependencies

#### 5.a. International Organization for Standardization (ISO)

SG3 is actively involved in work incorporating ATN requirements into ISO standards. All CNS/ATM-1 base standards are at international standard status. CNS/ATM-2 requires further ISO work on efficiency enhancements and the next edition of the association control service element (ACSE). These standards were the subject of an ISO meeting held in Paris in February 1996. As a result of the meeting, the efficiency enhancements were progressed to DAM status; the ACSE edition 3 work will be progressed to DIS status based on the SC21 meeting in Kansas City in May 1996.

WG3 Action: SG3 recommends that the ISO documents be the governing documents for SUB-Volume 4 at ATNP/2. The documents will not yet have finished the DAM cycle.

SG3 work in Toulouse proposed a change in the handling of user-data on the response in the session efficiency enhancements. In order to maintain consistency with the Paris texts already submitted to ITU-T, the work will be progressed as a US DAM comment, rather than incorporated in the PDAM text.

Mr. Van Trees is the ISO editor of the six efficiency enhancement standards. Mr. Day is the ISO editor of the three ACSE standards.

#### 5.b. International Telecommunication Union (ITU-T)

The ATN community has also been active in support of ITU-T. The ITU-T upper layer efficiency enhancement ('fast-byte') standards were approved in April 1995. An ICAO defect report will be applied this week. ITU-T is involved in maintenance of these standards, and will converge with the ISO efficiency standards in Geneva this week. The ATN community also supports the OSIEFF technical report on efficiency.

### 6. Conclusion

WG3 is invited to note the schedule and deliverables accomplished and forecast by SG3.

**ATNP/WG3/SG3  
Upper Layer Architecture  
19-21 March 1996  
Toulouse**

Attendance

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1. Introduction

Steve Van Trees welcomed the group to Toulouse. In accordance with WG3 instructions and schedule, the meeting determined to produce CNS/ATM-1 Upper Layers SARPs, v2.0 final, CNS/ATM-1 Upper Layers SARPs, v3.0 proposed, CNS/ATM-1 guidance material, CNS/ATM-1 Upper Layers validation material, and CNS/ATM-2 SARPs introduction, for the WG3 meeting in Bruxelles.

2. CNS/ATM-1 Upper Layers SARPs, v2.0 final

The group completed v2.0 final SARPs based on Gold Coast comments. Tony Kerr published the document.

The group clarified the following picture of application QOS mapping to transport QOS or local means:

<u>Application</u>	<u>ULA</u>	<u>Internet (5.1.2)</u>
Traffic Type	Session	Security Label (6.2.2.1)
Priority	8072 QOS	TC Priority
RER	8072 QOS	LOW (checksum)
Expedited	Session	No Expedited
Peer ID	8072 Address	Called/Calling TSAP Address

The group also clarified the SARPs use of Application Version in the Application Context Name. When no version is supplied by the D-START, 0 is used as a null value, used to fill out the OID.

The user may use 1-255 as a version.

Tony Kerr implemented the initial UL defect register at the meeting.

### 3. CNS/ATM-1 Upper Layers SARPs, v3.0 proposed

The group reviewed defect reports from SITA (Fif Edem) and the USA (CSC (Ed Dirago/Vlad Rosenzweig) and MITRE (Jim Simpkins)). The major resolution was to specify in the state machine (as the text already specified) that the user can send data until the D-ENDcnf+ is issued. Several clarifications were added in Notes. These include CNS/ATM-1 requirements for orderly release even without session, and CNS/ATM-1 clarifications of requirements for mandatory session PDUs. The Defect Report register is current through Toulouse.

### 4. CNS/ATM-1 guidance material

The document was not progressed at the meeting. Steve Van Trees has the action.

### 5. CNS/ATM-1 Upper Layers validation material

The document was not progressed at the meeting. Tony Kerr has the action.

### 6. CNS/ATM-2 SARPs

The document was not progressed at the meeting. Steve Van Trees has the action.

### 7. Other Organizations

#### 7.a ATNP/WG3/SG1

SG3 had a pleasant joint lunch meeting with SG1.

#### 7.b ISO/SC21/WG8

The group spent over a day reviewing the ISO upper-layer efficiency DAM texts. The group addressed the scenario of user-data fitting on the request, but not fitting on the response. In the current standard, this has the additional semantics of refusal of the efficiency negotiation. Frederic Picard indicated that he wished to reconsider the AFNOR ballot comment (calling for an abort in such a case). SG3 developed a solution similar to the continue mechanism in the current DAM text.

SG3 Note -- After the meeting, it was determined that this would be brought to ISO as a DAM comment, rather than being included in the DAM text, as the Paris text had already been submitted to ITU-T and ISO.

8. Bruxelles WG3 Meeting

Steve Van Trees has the action to draft the SG3 chairman's report for Bruxelles.

9. Action Items

All Toulouse (January) actions were completed. All new actions are noted in the drafting assignments.

10. Meeting Input Papers

- a. Toulouse Agenda
- b. CNS/ATM-1 Upper Layers SARPs, v2.0 proposed (Gold Coast)
- c. SITA Comments
- d. Requirements Problem Reports (RPRs)
- e. ISO Efficiency DAM texts

11. Meeting Output Papers

- a. CNS/ATM-1 V2.0 final Upper Layers SARPs
- b. CNS/ATM-1 v3.0p Upper Layer SARPs
- c. Flimsy 1, ISO DAM comments on null-encoding excess user-data handling.
- d. Flimsy 2, SG3 Flimsy to WG2
- e. Flimsy 3, SG3 Flimsy to WG3
- f. June 1996 SG3 Calling Notice

12. Next Meeting

The group agreed 3-7 June 1996 as the next meeting opportunity. The meeting will focus on preparation of Munich inputs. The US has offered to host in San Francisco.

Flimsy 1

SG3 Comments on ISO 8327-1/DAM1, Session Protocol Efficiency Enhancements  
(Available on <ftp.stel.com> ~/pub/atnsarps/Svolume4/P2)

Flimsy 2

SG3 matters of interest to WG2

21 March 1996

1. Editorial Matters

- a. We clarify that ISO 9646-7, 9.1.2 allows M/m in PRLs.
- b. In your 5.1.2 d) Table 2.2 should read 2.3.

2. Technical Matters

- a. If ULA is not passed a traffic type (null parameter value), ULA inserts a 'No Traffic Type' Security Tag. SG3 seeks clarification on how this might be implemented. Its semantics are such that a path of any performance is acceptable. Thus, the NTT security tag should not map to a discrete DPA.
- b. If ULA provides a security label value referring to a traffic type for which no DPA exists, presumably IDRP discards the NPDU containing the CR TPDU. What mechanism exists for the sending TS-User to be notified of 'no network path of the requested quality exists'. An implicit failure on timer expiration does not seem adequate.
- c. 5.1.2 specifies TS-User selection of RER to trigger DT TPDU checksum on/off. However, V makes checksum support optional. Currently, a conformant TP4 implementation may not support CNS/ATM-1 applications, all of which require low RER.
- d. We would like to discuss the ARS field use of the 3-character ICAO location ID, and other possible overlaps in the naming and addressing schemata.
- e. We will forward the Dakar ADSP replacement for your Table 2-2.
- f. In the security label suggestion (6.2.2.1), SG3 suggests source-specific rather than global security, thereby eliminating the OID, and reducing the preamble from four to two octets.

Flimsy 3

SG3 matters of interest to WG3

1. Technical Matter

All ISO Efficiency PDAMs went to DAM in Paris. Should we use these rather than ITU-T Recommendations? They fix several defects.

2. Editorial Matters

1. What is final decision on indent for Sub-volume number (and part number)

2. Is it Subvolume IV or Sub-volume 4?

3. What is the standard font and type size?

4. How are references called out, ISO XXXX or []?

5. Both M and m are allowed in 9646-7, clause 9.1.2. We used m from PICS per MHS for ISO column, and M from V for ATN support column. What is final decision?