AERONAUTICAL TELECOMMUNICATION NETWORK PANEL
WORKING GROUP 3
(APPLICATIONS AND UPPER LAYERS)

Langen, Germany
23-26 June 1997

Subgroup 3 Chairman´s Report

(Presented by Steve Van Trees (USA))

SUMMARY
Subgroup 3 accomplishments since the Phuket WGOW meeting are presented.

1. Planning Report

The paper presents plans after the Langen WG3 meeting.

2. Group Membership

Norman Goodacre (USA)
Tony Kerr (Eurocontrol) (Editor)
Gerard Mittaux-Biron (France)
Jim Moulton (USA)
Steve Van Trees (USA) (Chair)

3. SARPs and Guidance Material

The SARPs are part of the Phuket 1.1 release. The Guidance Material is presented at this meeting in a greatly improved form.

4. Base standards

All ISO ITU-T upper layer efficiency enhancements are complete and have been delivered for publication.

The ACSE, edition 3 texts are in need of dedicated work to meet the 1 August 1997 editorial deadline for ITU-T approval.

5. Future work

WP10-27 details future work on upper layers.

6. Next meeting.

September 1997, Toulouse

ATNP/WG3/SG3
Upper Layer Architecture
Annapolis, MD, USA
20-22 May 1997

1. Attendance

ATNP/WG3/SG3 met in Annapolis, Maryland, USA on 20-22 May 1997. The following attended:

Norman Goodacre (USA)
Tony Kerr (Eurocontrol) (Editor)
Gerard Mittaux-Biron (France)
Jim Moulton (USA)
Steve Van Trees (USA) (Chair)

2. Input Papers

The following papers were considered:
ISO Upper Layer Efficiency Final Texts
ULCS SARPs (post-Phuket)
ULCS Guidance Material (v4.0)
Articles on Information Objects, Efficient Encoding by Nilo Mitra
X.500 and X.509 Standards
Connectionless Upper Layer Profile
WG1 Planning Documents (post-Reston)
ULCS Defect Reports
ACSE, edition 3 texts
ISO PER, ASN.1 Corrigenda

3. Review of Phuket WGOW Meeting

The group reviewed the Phuket meeting report.

4. Review of Geneva ITU-T SG7 Meeting

The group reviewed the Geneva output. Steve Van Trees reported on his new task as ITU-T Rapporteur for OSI upper layers. He noted that the upper layer efficiency amendments were complete and provided to ISO and ITU-T.

The ACSE, edition 3 texts still require seroius work. The group discussed the question of how an orderly release would work for the outermost association over fast-byte since the IA-Release maps onto P-Release rather than P-Data. The group will complete the ACSE, edition 3 texts for the 1 August 1997 ITU-T editorial deadline.

5. Maintenance of ULCS SARPs

It was noted that the Phuket text contained two errors.
DR 113 was implemented incorrectly, such that the OID length should be 6.
DR 115 disappeared from the printed text.

The group wrote two DRs in Annapolis.

DR 117 reopens DR 114, reconsidering the possible effects of a higher and lower effect of an ACSE Abort. The action was to put a STA0 P-U-ABT trap.
DR 118 collects various Phuket corrections not considered in DR 106.

6. Drafting of ULCS GM

The group gladly accepted Tony Kerr´s offer to edit the Guidance Material. The group then reviewed the guidance in detail.
The following actions were taken:
1. Steve Van Trees will describe at the end of Chapter 1 the subset of classical OSI supported by the ATN ULA.
2. Tony Kerr will integrate the data flow diagrams in Chapter 1.
3. Norman Goodacre will describe the dialogue service.
4. Tony Kerr will annotate the ACSE CF diagrams.
5. Jim Moulton will update the encoding charts.
6. Tony Kerr will update the OSIEFF guidance material
7. Steve Van Trees will describe the CNS/ATM-2 ULA in Chapter 7.
8. Tony Kerr will update Chapter 8 (Implementor´s Questions)
9. Tony Kerr will discuss OID encoding (Integer must be encoded in least number of bits)
10. Tony Kerr will discuss the new extensibility markers.

7. Review of Implementation Results

Jim Moulton discussed a possible DR. He received an AARQ. and wished to respond with an AARE- on a positive presentation and session response. The TES system crashed on receipt. Guidance Material should state that the AARE- be conveyed on negative presentation and session response.

The US and Eurocontrol discussed interoperability scenarios. The US has implemented the Montreal SARPs, while Eurocontrol has implemented the Munich SARPs. This indicates that simple ADS, simple CM, and no CPDLC are possible.

Both groups discussed an August 1997 upgrade to the Geneva ACSE abstract syntax. The Langen GM will reflect a hand-coded Geneva ACSE abstract syntax and the Phuket upper layers.

8. CNS/ATM-2 Planning

The group discussed the results of the WG1 meeting held the previous week. The group proposed technical contributions to WG1/SG2 (Security) and WG1/SG3 (System Management).

Security

X.509

The group discussed the use of X.509 in Security Authentication. It discussed the use of bilateral agreements between certificate authorities. The group also discussed key management. Gerard Mittaux-Biron has the action on directory security (particularly X.509)

CM-X.500 (X.500 Schema)

Jim Moulton has the action to provide an X.500 schema.

ACSE Information Object

Jim Moulton has the action to indicate how ACSE carries CNS/ATM-2 authentication information.

GULS

No action.

System Management

CMIP over ATN ULA

The ATN ULA fully supports ISP 11583-1 on CMIP support.

CMIP ...

Steve Van Trees has the ISO action to update the CMIP syntax to eliminate ROSE and add extensibility markers. The new ISO CMIP text is also available.

ULMO

Steve Van Trees has worked on ISO 10165 parts 8 and 9, the managed objects for upper layers, and the system management.

9. Generation of CNS/ATM-2 ULCS SARPs

The group discussed motivating principles of new SARPs development. First, the group could update the dialogue service in response to new application requirements. Second, investigation of ATN ULA support of OSI applications is in order. The ATN ULA can support non-RTSE Directory implementations, as well as non-scope/filter CMIP applications. This can be validated by checking directory and CMIP ISPs (the CMIP ISP is completely supported by the ATN ULA). Third, the group could upgrade the CF to new user requirements.

It was noted that the ULCS CNS/ATM-2 editorship is open.

Active CNS/ATM-2 Items:

ULCTXTID for ACSE

Tony Kerr will provide a paper on possible elimination of static ACSE initialisation information.

Connectionless ULA

Steve Van Trees will update his CL ULA paper to the current ULCS SARPs, and also include an overhead calculation

Implicit D-START

The group was informed of a requirement to support CPDLC with an implicit D-START, i.e., the application wished to immediately send off CPDLC messages without waiting for the D-START round trip. Steve Van Trees and Gerard Mittaux-Biron are studying the ASO template work in this regard.

The group also discussed possible optimisations in application support. For example, could CM or FIS use a connectionless service?

Inactive CNS/ATM-2 Items:

ASO Template

Application Mobility

Common ASEs

Session ASOs
CL D-Service (CDSE)
CORBA

10. Preparation for Langen WG3 Meeting

SG3 will provide SARPs, GM, CCB DRs, and CNS/ATM-2 Material for the Langen WG3 meeting.

11. Next Meeting

SG3 has accepted M. Mittaux-Biron´s kind invitation to meet in Toulouse, likely in September 1997.