

**ATNP WG2
18-21 May 1999
Naples, Italy
Agenda Item 7**

Enhancements to Sub-Volume V and ICS Guidance Material

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Summary

ATNP WG2 is expected to propose to ATNP/3 a number of enhancements (i.e., Package-2) to the ICS Sub-Volume V and guidance material. This working paper reviews the progress that WG2 had made on each work programme item from ATNP2 and requests that WG2 identify the enhancements that are to be proposed to ATNP/3 for the next edition of Doc 9705 Sub-Volume V and the ICS guidance material.

1. INTRODUCTION

ATNP WG2 is expected to propose to ATNP/3 a number of enhancements (i.e., Package-2) to the ICS Sub-Volume V and guidance material. This working paper reviews the progress that WG2 had made on each work programme item from ATNP2 and requests that WG2 identify the enhancements that are to be proposed to ATNP/3 for the next edition of Doc 9705 Sub-Volume V and the ICS guidance material.

2. BACKGROUND

The progress of ATNP WG2 against the work programme items defined by ATNP/2 has resulted in certain proposed changes to Doc 9705, Sub-Volume V and related ICS guidance material. The following table summarizes the actions of WG2 relative to each ATNP/2 assigned work programme item:

No .	Work Items as defined by ATNP/2 Work Programme	WG2 Activity with respect to Work Items	WG2 Key Meeting Discussed	Reference Document/Actions
0		Overall outline /table of contents for Package-2 Sub-Volume V	16 th (Bordeaux)	WP466
1	Enhancements to the ATN SARPs and guidance material based on new or revised user requirements	Additional requirements for mobile subnets issuing Join and Leave events (e.g., latency requirements, handling of link fading conditions, etc.). Also potential enhancements to the mobile SNDCF for handling of changing mobile subnet connectivity.	16 th (Bordeaux) and 17 th (Honolulu)	WP471, WP484, WP485, Flimsy 17-6, Action 16/6 for Naples
2	Enhancements to the SARPs and guidance material based on operational experience	Enhancements to the connection oriented transport service to better cope with the loss of TPDU's that will result from changes in mobile subnet connectivity	17 th (Honolulu)	WP486 – Action 17/11 for Naples
3.	Provision of security mechanisms within the ATN internet communications service consistent with the security strategy and mechanisms defined by ATNP Working Group 1	Enhancements for IDRPs security (authentication) consistent with the ATN security architecture defined in Sub-Volume VIII	16 th (Bordeaux) and 17 th (Honolulu)	WP488, WP492, WP493, draft SV-VIII (WG1)
4	Provision of subnetwork dependent convergence functions (SNDCEs) within the ATN SARPs for additional subnetwork types (e.g. asynchronous transfer mode, frame relay, VDL Mode 3/4 HF data link, etc.)	Coordination with AMCP on needed support for new mobile subnetworks (e.g., VDL Mode 3)	15 th (Utrecht), 16 th (Bordeaux) and 17 th (Honolulu)	WP451, WP466, AMCP WG-D inputs at joint session in Honolulu WG2-17 Meeting Report agenda item 6.4, Action 17/10 for Naples
5	Investigation of the provision of quality of service (QoS) management functions service	QoS Routing and performance management enhancements (Package 2 or beyond ?)	12 th (Langen) and 14 th (Rio de Janeiro)	WP400, WP409, WP438
6	Provision of systems management capabilities within the ATN internet communications service consistent with the system management strategy and mechanisms defined by ATNP Working Group 1	Enhancements, as necessary, to Sub-Volume V for systems management (including cross reference to Sub-Volume VI)	various	Draft Sub-Volume VI, various WG2 WPs
7	Definition of financial accounting mechanisms including the identification of network cost parameters	ATN accounting management elements and requirements – closely tied with systems management provisions	14 th (Rio de Janeiro) and 17 th (Honolulu)	WP436, WP501
8	Investigation of the provision of multicast/broadcast functions in the ATN	Preparation of a WP for ATNP/3 on multicast architecture – Doc 9705 changes deferred until beyond ATNP/3	16 th (Bordeaux)	WP476, Action 17/9 for Naples
9	Investigation of the provision of network and transport layer fast byte protocol (ISO draft international standard (DIS) 14699 and ISO DIS 14700)	An analysis of the Fast Byte provisions for network and transport layers shows that they are not applicable to the ATN. The working group agreed to not pursue this work programme item any further	12 th (Langen)	WP395
10	Investigation of the provision of broadband transport	WG2 agreed on its 12 th meeting to not pursue this work programme item further unless operational requirements are forthcoming that would benefit from a broadband transport capability.	12 th (Langen)	Flimsy 5, Langen
11	Investigation of the provision of data/voice service integration	WG2 agreed on its 12 th meeting to not pursue this work programme item further unless operational requirements are forthcoming that would benefit from data/voice service integration.	12 th (Langen)	Flimsy 5, Langen
12	Investigation of the provision of air-to-air communications	WG2 agreed on its 12 th meeting to not pursue this work programme item further unless operational requirements are forthcoming that would benefit from an air-to-air communications capability.	12 th (Langen)	Flimsy 5, Langen
13	Ensuring backwards compatibility of SARPs enhancements with existing ATN SARPs	Working paper needed for ATNP/3.	16 th (Bordeaux), 17 th (Honolulu)	
14	Investigation of the provision of ATN subset(s) consistent with constrained network topologies (e.g. single mobile subnetwork, single airborne and system, full ground connectivity, etc.)	No proposals have been forthcoming.		

3. RECOMMENDATIONS

- a) It is proposed that ATNP WG2 review the above work programme items from ATNP/2 and determine for which of these enhancements validated technical provisions will be forthcoming in the form of proposed drafts to ATNP/3 of the second edition of Doc 9705 Sub-Volume V and/or proposed updates to the ICS guidance material.
- b) It is proposed that WG2 member(s) be identified as the technical expert(s)/editor(s) for each specific enhancement to Sub-Volume V and for the update to the ICS guidance material.
- c) It is proposed that an ICS drafting group be formed, as proposed by WP511, for the production of the overall red-lined 'Package-2' Doc 9705 Sub-Volume V and the corresponding ICS guidance material.