

ATNP/WG3/WP3-17/49
September 30, 1999

INTERNATIONAL CIVIL AVIATION ORGANIZATION
AERONAUTICAL TELECOMMUNICATION NETWORK PANEL
Working Group 3

Gran Canaria, 28 September – 1 October 1999

Sub-Volume IX
Registration

(Presented by Stephen Van Trees (USA))

Summary
I can call spirits from the vasty deep. Why so can I, or so can any man, but will they come when you do call? -- The Tempest.

1. Introduction

ATNP/WG3 is responsible for Sub-Volume IX (Registration). This paper offers an introduction to the problem, extant work to be imported into the sub-volume, current work to be included in the sub-volume, and suggestions for current work.

2. The Problem

In any system, entities have names. The name is not required to be unique¹, but it must be unambiguous². That is, each name must point to only one thing, although other names may also point to that thing.

3. Extant Work

WG3/SG3 has maintained the naming registry as the AE-qualifier arc chart in ICAO Doc 9705 4.3.2 . Anyone wanting a new name in ATN has filed a PDR with SME4, who has updated Sub-Volume IV. This inflates the PDR count, and also unnecessarily conceals the naming authority from developers. There are also isolated assignments throughout the SARPs, e.g., Sub-Volume V assigns itself an Object Identifier (OID) value for system management. This particular item was incorporated in 4.3.2.

4. Current Work

The three current Sub-Volumes (i.e., IV, Upper Layers (4.8 Security ASO), VI, System Management, VII, Directory, and VIII, Security) all require the use of globally unambiguous OIDs. All currently assign their own OIDs themselves³. This is a recipe for confusion.

5. Future Work

In coordination with RTCA SC-189/EUROCAE WG 53, the need for an “ATN Doc 7910” has been noted. Such a document would register known ATN addresses, e.g., the USA CM address.

6. Recommendation

WG3 is invited to approve the work plan provided for Sub-Volume IX..

¹ You may call be Steve, Van Trees, or El Guardameta.

² I do not call my brothers Van Trees.

³ With a hint of Schadenfreude, the present author notes that Sub-Volumes VI and Sub-Volume IV (4.8) have both assigned themselves the “next” arc from 4.3.2, so both sport identical OIDs.