

ATNP/WG3/ WP 17-41

27 September 1999

AERONAUTICAL TELECOMMUNICATION NETWORK PANEL

WORKING GROUP 3 (APPLICATIONS AND UPPER LAYERS)

Gran Canaria, Spain, 28 September – 1 October 1999

Agenda Item 4: WG3 SG2

CPDLC Permitted Responses

Prepared by: Mike Harcourt

SUMMARY

This paper highlights the issues related to CPDLC permitted responses and recommends how they should be resolved.

1. INTRODUCTION

The SARPs specify that for messages with a "Y" response attribute **any** message may be used as a response or closure. This is in line with the Doc 4444 (PANS-RAC) rules.

For operation in a datalink environment WG3 SG2 introduced a set of message pairings which now appear in the CPDLC PICS/OICS proforma.

2. ISSUES

SG2 has classified the support of the responses for the ATN profile as mandatory (M) in the current versions of the PICS/OICS proforma. However, this is going beyond the SARPs or any higher level definition of specific responses. It is therefore more correct if the ATN profile classifies the responses as "preferred" or "recommended" rather than "mandatory".

The development of specific operational profiles which only require the support of a subset of messages has introduced additional responses to some messages which are different to those originally foreseen by SG2. This raises the issue of how such responses should be classified for the ATN profile.

The choice is between "Prohibited" (X) or "Out of Scope" (I) for the ATN profile classification of non-preferred responses (they are shown as I in the latest version of the PICS/OICS). Prohibited cannot be justified on the grounds that the SARPs allow any message in a response.

To date there have been no new responses to uplink messages which come into the category of non-preferred; the downlink messages which have non-preferred responses are listed in the next section.

3. RESPONSES TO DOWNLINK MESSAGES (TABLE M-7)

The downlink messages which have non-preferred responses are:

DM: 9, 10, 11, 12, 15, 16, 22, 23, 25 and 27

4. RECOMMENDATION

It is recommended that:

1. ATN Profile responses should be classified as "preferred/recommended" by introducing a new classification letter "R".
2. Making it a rule that if operational profiles introduce additional response messages the ATN Profile classification for the additional response messages is set to "Out of Scope" (I).