

AERONAUTICAL TELECOMMUNICATIONS NETWORK PANEL (ATNP)
WORKING GROUP 3 - APPLICATIONS AND UPPER LAYERS

AGENDA ITEM 5.4: REVIEW PROPOSE SARPS CHANGES

DIFFERENCES BETWEEN ATSMHS SARP AND SPANISH IMPLEMENTATION

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SUMMARY

THIS DOCUMENT REPRESENTS SOME DIFFERENCES FOUND BETWEEN THE ATSMHS SARP AND THE SPANISH GATEWAY IMPLEMENTATION. AFTER THE EXPERIENCE ADQUIRED IN THE DEVELOPMENT OF THE SPANISH SYSTEM, IT COULD BE VERY INTERESTING TO PROFIT FROM THIS EXPERIENCE IN ORDER TO IMPROVE THE ATSMHS SARP SPECIFICATION.

1.- INTRODUCTION.

DURING THE IMPLEMENTATION OF THE SPANISH GATEWAY MOCK-UP, IT HAS BEEN POSSIBLE TO ACQUIRE A VERY LARGE EXPERIENCE ABOUT THE ANALYSIS OF THE SHALL'S COLLECTED IN THE SARP DOCUMENT. ALSO, IT HAS BEEN COMPLETED THE OVERALL VALIDATION TRIALS OF ITS ATSMHS GATEWAY DEVELOPMENT (SEE WP-) AS WELL AS A FIRST STAGE OF INTEROPERABILITY TESTS TOGETHER WITH SITA.

DERIVED FROM THIS CONTEXT, THERE HAVE BEEN FOUND SOME DISCREPANCIES BETWEEN THE MENTIONED ATSMHS SARP AND THE SPANISH GATEWAY DEVELOPMENT.

THIS DOCUMENT HAS BEEN EDITED WITH THE GOAL OF TAKING PROFIT FROM THIS EXPERIENCE IN ORDER TO IMPROVE THE ATSMHS SARP SPECIFICATION.

2.- DISCUSSION.

IN THIS POINT, IT IS SHOWN THE SET OF ABOVE MENTIONED DISCREPANCIES. EACH POINT IS IDENTIFIED WITH TWO FIGURES SEPARATED BY SLASH: FIRST, REFERS TO THE 'REF#' IDENTIFIED IN THE SHALL TABLE; AND, SECOND, REFERS TO THE SARP'S PARAGRAPH IDENTIFIER.

THE GENERAL STRUCTURE OF EACH DISCREPANCE WILL BE A BRIEF DESCRIPTION OF IT AND, AFTER, A PROPOSAL WHICH TRIES TO ADVISE A POSSIBLE SOLUTION TO BE AGREED.

FOLLOWING, THEY ARE PRESENTED THE DIFFERENT DISCREPANCIES:

- 197/3.1.2.3.5.2.2.4

- DESCRIPTION:

DIFFERENT COMMERCIAL UAS (MARBEN) DO NOT MANAGE THE 'SOH' CONTROL CHARACTER. FOR THIS REASON, SPANISH AFTN/AMHS GATEWAY IMPLEMENTS AUTOMATICALLY THE GENERATION OF THIS CONTROL CHARACTER IN THE IPM MESSAGE FOR THE NEXT CONVERSION TO AN AFTN MESSAGE.

- PROPOSAL:

CHANGE IN THE TABLE 3.1.2-10 THE ACTION FOR THE START-OF-HEADING-CHARACTER COMPONENT FROM 'X' TO 'G'.

• 29/3.1.2.2.1.1.1**- DESCRIPTION:**

DIFFERENT COMMERCIAL UAS DO NOT SUPPORT GENERAL-TEXT-BP. ALSO ARE NOT SUPPORTED THE FOLLOWING CHARACTER REPERTOIRES: ISO 8859-1 AND ISO 846, AT LEAST IN A FORWARDING MODE.

- PROPOSAL:

WHICH COMMERCIAL UAS DO YOU KNOW THAT SUPPORT THESE CHARACTER REPERTOIRES ?. IF THE ANSWER WERE 'FEW' OR 'NONE', IT WOULD BE ADVISABLE TO REVIEW THE SHALL DESCRIPTION.

• 30/3.1.2.2.1.1.2**- DESCRIPTION:**

THE PRIORITY ELEMENT OF AN AMHS MESSAGE GENERATED AT OUR COMMERCIAL UA IS ABLE TO TAKE THE VALUE <<URGENT>> NOT ONLY IF THE VALUE OF THE PRIORITY-INDICATOR IN THE ATS-MESSAGE-PRIORITY IS 'SS' BUT IN ANY ANOTHER CASE. THE REASON FOR THIS BEHAVIOUR IS DUE TO THE IMPORTANCE TO AVOID THE USE OF NON COMMERCIAL UAS. TO BE IN ACCORDANCE WITH THIS SHALL, WE WOULD HAVE TO DEVELOP A PROPIETARY UA THAT COULD READ THE TEXT OF THE IPM-MESSAGE IN ORDER TO LOOK FOR THE ATS-MESSAGE-PRIORITY AND, AFTER THIS OPERATION, TO CHECK THE CORRESPONDANCE BETWEEN THIS PRIORITY AND IPM-ENVELOPE ONE.

- PROPOSAL:

IT IS NECESSARY TO CLARIFY IF THE ASSOCIATION BETWEEN 'SS' PRIORITY AND THE

'URGENT' VALUE IN THE PRIORITY-INDICATOR MUST BE DONE BY EITHER THE IMPLEMENTATION OR OPERATIONAL PROCEDURES.

● 46/3.1.2.2.3.3

- DESCRIPTION:

IN THE SPANISH IMPLEMENTATION IS POSSIBLE TO TAKE THE NOTIFICATION-REQUESTS ELEMENT IN AN IPM HEADING SETTED TO THE ABSTRACT VALUE 'RN' WITHOUT HAVING THE VALUE OF THE PRIORITY-INDICATOR TO 'SS'. THE REASON OF THIS BEHAVIOUR IS THE SAME THAT BEFORE: TO AVOID A PROPIETARY UA DEVELOPMENT.

- PROPOSAL:

IT IS NECESSARY TO CLARIFY IF THE ASSOCIATION BETWEEN 'SS' PRIORITY AND 'RN' FLAG ACTIVATION MUST BE DONE BY EITHER THE IMPLEMENTATION OR OPERATIONAL PROCEDURES.

● 168/3.1.2.3.4.3.4.3

- DESCRIPTION:

THE SPANISH GATEWAY IMPLEMENTATION DOES NOT MAP EXACTLY THE ELEMENT PRIORITY OF THE 'RN' WITH THE VALUE OF THE SUBJECT IPM. IF AS CONSEQUENCE OF THE SUBJECT IPM MESSAGE, AN ACK AFTN MESSAGE IS GENERATED, THERE WILL BE DONE IN ACCORDANCE WITH A 'SS' AFTN MESSAGE; THEN ITS X.400 PRIORITY HAS TO BE 'URGENT'. FOR THIS REASON, THE SPANISH GATEWAY IMPLEMENTATION ALWAYS SET THE 'RN' PRIORITY TO THE VALUE 'URGENT', WITHOUT TAKING INTO ACCOUNT THE REAL SUBJECT IPM PRIORITY.

- PROPOSAL:

THE CLAUSE MUST SAY: "THE ELEMENT PRIORITY SHALL TAKE THE VALUE 'URGENT'".

● 189/3.1.2.3.5.2.1.4**- DESCRIPTION:**

THE MOST COMMERCIAL APIS SOFTWARE (XMT BASED ON X/OPEN SPECIFICATION) USED IN THE GATEWAY DO NOT SUPPORT THE FOLLOWING EXTENDED BODY PART TYPES:

- EXTENDED IA5-TEXT-BODY-PART.
- EXTENDED GENERAL-TEXT-BODY-PART.
- EXTENDED MESSAGE-BODY-PART.

- PROPOSAL:

STUDY THE NEED OF SO MANY BODY PART TYPES IF COMMERCIAL IMPLEMENTATIONS DO NOT SUPPORT THEM.

● 204/3.1.2.3.5.2.2.9**- DESCRIPTION:**

THE SPANISH GATEWAY IMPLEMENTATION DO NOT CHECK ALL THE CHARACTERS IN THE TEXT DUE TO THIS OPERATION IS AUTOMATICALLY PERFORMED BY THE COMMERCIAL UAS WHEN A 'IA5-TEXT' VALUE IS SETTED IN THE MESSAGE PARAMETERS. BESIDES, THIS ACTIVITY WOULD DECREASE THE GENERAL SYSTEM PERFORMANCE.

- PROPOSAL:

DELETE THE C) ITEM OF THIS PARAGRAPH.

● 209/3.1.2.3.5.2.3.5**- DESCRIPTION:**

THE GENERAL-TEXT-BODY-PART IS NOT SUPPORTED BY THE COMMERCIAL API USED IN THE SPANISH IMPLEMENTATION (MARBEN).

- PROPOSAL:

STUDY THE NEED OF THESE BODY PART TYPES IF COMMERCIAL IMPLEMENTATIONS DO NOT SUPPORT THEM.

- 215/3.1.2.3.5.2.4.6, 218/3.1.2.3.5.2.4.9, 220/3.1.2.3.5.2.4.11

- DESCRIPTION:

EXTENSION-FIELDS ARE ATTRIBUTES DEFINED BY THE X.400 (VERSION 88) AS NEW FUNCTIONALITIES ENLARGED OF THE X.400 (VERSION 84). THEY ARE ADDED NEW PARAMETERS (CRITICITY) TO ACHIVE THE GOAL OF THE CORRECT INTERCONNECTION BETWEEN MTAS AND UAS SUPPORTING SEVERAL STANDARDS (84, 88, 92, ...). THESE EXTENSIONS ARE SUPPORTED BY THE APIS USED IN THE SPANISH GATEWAY DEVELOPMENT AS STANDARD PARAMETERS AND THIS IS WHY WE CAN NOT DISCARD MESSAGES ACCORDING TO THE CRITICITY OF ANY EXTENDED PARAMETER. BESIDES, WE RECKON THAT FUTURE ATN NETWORK WILL ONLY COMPRISE OF MTAS (88).

- PROPOSAL:

COMMERCIAL APIS SUPPORT THESE EXTENSIONS AS STANDARD PARAMETERS (NON AS CRITICITY). IT WOULD BE ADVISABLE TO REVIEW THE SHALL DESCRIPTION.

3.- PROPOSAL.

ALL THE SOLUTIONS PROPOSED IN THE ABOVE PARAGRAPH ARE SUBMITTED TO THE GROUP FOR THEIR ADOPTION.