

## AMHS Workshop 2023

### P2 PROTOCOL

Protocol P2 carries units of information called User Agent Protocol Data Units (UAPDU). There are two types of UAPDU:

- a) IP-message UAPDU that carries interpersonal messages; and
- b) Status-report UAPDU which consists of state information generated by one UA Entity for another.

The structure of UAPDU is defined in ASN.1 as follows:

UAPDU ::= CHOICE {

[0] IMPLICIT IM-UAPDU,

[1] IMPLICIT SR-UAPDU }

IM-UAPDU ::= SEQUENCE {Heading, Body}

Heading ::= SET {

IPMessageId,

originator [0] IMPLICIT ORDescriptor OPTIONAL,

authorizingUsers [1] IMPLICIT SEQUENCE OF ORDescriptor OPTIONAL,

primaryRecipients [2] IMPLICIT SEQUENCE OF Recipient OPTIONAL,

copyRecipients [3] IMPLICIT SEQUENCE OF Recipient OPTIONAL,

blindCopyRecipients [4] IMPLICIT SEQUENCE OF Recipient OPTIONAL,

InReplyTo [5] IMPLICIT IPMessageId OPTIONAL,

obsoletes [6] IMPLICIT SEQUENCE OF IPMessageID OPTIONAL,

crossReferences [7] IMPLICIT SEQUENCE OF IPMessageID OPTIONAL,

subject [8] CHOICE {T61 String} OPTIONAL,

expiryDate [9] IMPLICIT Time OPTIONAL,

replyBy [10] IMPLICIT Time OPTIONAL,

replyToUsers [11] IMPLICIT SEQUENCE OF ORDescriptor OPTIONAL,

Importance [12] IMPLICIT INTEGER {low(0), normal(1), high(2)}

DEFAULT normal,

sensitivity [13] IMPLICIT INTEGER {personal(1), private(2),

companyConfidential(3)} OPTIONAL,

autoForwarded [14] IMPLICIT BOOLEAN DEFAULT FALSE

Body ::= SEQUENCE OF BodyPart

BodyPart ::= CHOICE {

[0] IMPLICIT IA5Text, [1] IMPLICIT TLX, [2] IMPLICIT Voice,

[3] IMPLICIT G3Fax, [4] IMPLICIT TIF0, [5] IMPLICIT TTX,

[6] IMPLICIT Videotex, [7] NationallyDefined, [8] IMPLICIT Encrypted,

[9] IMPLICIT ForwardedIPMessage, [10] IMPLICIT SFD, [11] IMPLICIT

TIF1 }

SR-UAPDU ::= SET {  
    [0] CHOICE {  
        nonReceipt [0] IMPLICIT NonReceiptInformation  
        receipt [1] IMPLICIT ReceiptInformation },  
    reported IPMessageId,  
    actualRecipient [1] IMPLICIT ORDescriptor OPTIONAL,  
    intendedRecipient [2] IMPLICIT ORDescriptor OPTIONAL,  
    converted P1.EncodedInformationTypes OPTIONAL }

NonReceiptInformation ::= SET {  
    reason [0] IMPLICIT INTEGER {uaeInitiatedDiscard(0),  
        autoForwarded(1) }  
    nonReceiptQualifier [1] IMPLICIT INTEGER {expired(0), obsolete(1),  
        subscriptionTerminated(2) } OPTIONAL,  
    comments [2] IMPLICIT PrintableString OPTIONAL,  
    returned [3] IMPLICIT IM-UAPDU OPTIONAL,

ReceiptInformation ::= SET {  
    receipt [0] IMPLICIT Time,  
    typeOfReceipt [1] IMPLICIT INTEGER {explicit(0), automatic(1)} DEFAULT  
        explicit,  
    [2] IMPLICIT P1.SupplementaryInformation OPTIONAL }