Host-Host Control Message Formats

NWG/RFC 11 has been modified at UCLA; and will be republished. In
the meantime, it seems important to report a new control message
format which does not use 7-bit ASCII character mode of transmission.

All Host-Host control messages consist of sequences of 8-bit bytes of
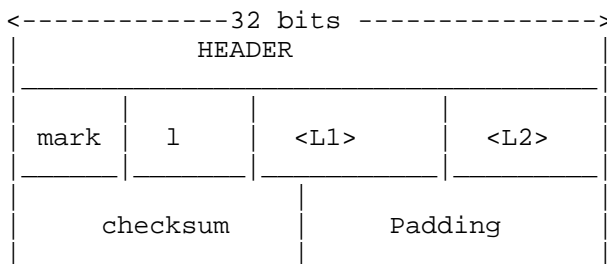the form:

<control byte> <parameter byte l> ...

It is reasonable to transmit more than one control message in any
given packet, although this is not mandatory.

Presently, 9 control messages have been defined by UCLA these are
given in the table below along with their parameters. The
interpretation is given from the point of view of the transmitting
host. ("L" or "Li" mean Link#, and are binary values.)

Control byte	Parameter	Interpretation
<0>	<L>	Please establish primary connection; our output link # is L
<1>	<L,> <L2>	Please establish auxiliary connection parallel to our primary output link L. The auxiliary output link is L2.
<2>	<L1> <L2>	DK primary. Your primary output link to us was L; our primary output link to you is L2.
<3>	<L1> <L2>	OK auxiliary. Your auxiliary output link is Li, our auxiliary output link is L2.
<4>	<L>	Not OK primary. We cannot establish a primary connection. Your primary output link number was L.
<5>	<Li> <L2>	Not OK auxiliary. We cannot establish an auxiliary connection. Your primary output link no was L2.

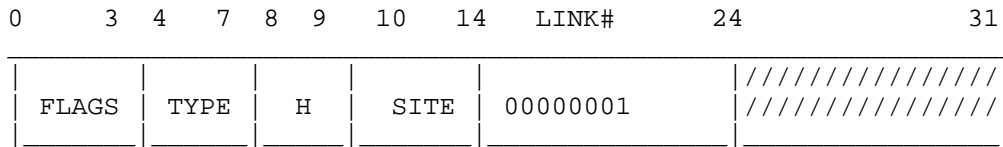<6>   <L>   Please stop transmitting over link
                                     number L. This is called the CEASE
                                     directive.

<7>   <L>   We are CLOSING our output link number
                                     L. You may get this message before
                                     the last message arrives over this
                                     link since control messages are higher
                                     priority than regular data messages.

<8>   <L>   UNCEASE: that is, you may resume
                                     transmitting over output link number
                                     L.

Each control message is embedded in the appropriate message structure
e.g.:

```
         <-------------32 bits --------------->
        |                HEADER                |
        |_____|
        |      |        |            |         |
        | mark |  l     |   <L1>     |  <L2>   |
        |_____|_____|_____|_____|
        |               |                      |
        |    checksum    |       Padding       |
        |_____|_____|
          typical control message (please
          establish auxiliary link #L2
          parallel to our primary link #l)
```

The header for all HOST-HOST control messages is given below:

```
0    3 4   7 8 9  10   14   LINK#      24                31
_____
|       |      |     |      |            |////////////////|
| FLAGS | TYPE |  H  | SITE | 00000001   |////////////////|
|_____|_____|_____|_____|_____|_____|
```

where   FLAGS - 0000
        TYPE - 0000 (regular message)
        H   - host #(0-3) at SITE (usually 0 for single HOST sites)
        SITE - Site #
        LINK# - 00000001 (HOST-HOST control link)

     [This RFC was put into machine readable form for entry]
    [into the online RFC archives by Alison De La Cruz 12/00]