INTERNATIONAL TELECOMMUNICATION UNION

ITU-T G.8040/Y.1340

TELECOMMUNICATION
STANDARDIZATION SECTOR
OF ITU

Amendment 1

(01/2005)

SERIES G: TRANSMISSION SYSTEMS AND MEDIA, DIGITAL SYSTEMS AND NETWORKS

Digital networks – General aspects

GFP frame mapping into Plesiochronous Digital Hierarchy (PDH)

Amendment 1

CAUTION !

PREPUBLISHED RECOMMENDATION

This prepublication is an unedited version of a recently approved Recommendation. It will be replaced by the published version after editing. Therefore, there will be differences between this prepublication and the published version.

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Draft Amendment 1 to ITU-T Recommendation G.8040/Y.1340

GFP frame mapping into Plesiochronous Digital Hierarchy (PDH)

Summary

This amendment changes the specification of frame formats from nibbles to octets.

Change the following text in clause 6.3:

6.3 Mapping into *N* x 44 736 kbit/s

6.3.1 Frame format

The multiframe format at 44 736 kbit/s, as described in ITU-T Rec. G.704, shall be used. As illustrated in Figure 6-3, each 44 736 kbit/s subframe (M-subframe) contains 672 bits, which may be regarded as ~~168 nibbles, with 21 nibbles~~ 84 octets, with octets #11, #32, #53 and #74 straddling the F1, F2, F3, and F4 bits, respectively. ~~between each frame overhead bit position.~~ The first octet ~~(two nibbles)~~ following the first framing bit (X1) of the multiframe is used to carry the concatenation overhead, as defined in G.7043/Y.1343 and illustrated in Figure 6-4. This octet is reserved for all values of *N*, (*N*=1…8).

~~GFP octets are mapped into the nibbles of the subframe with the GFP octet boundaries corresponding to a nibble boundary. At the receiver, the GFP frame delineation must be performed for each of the two possible nibble alignments of the octets in order to identify the proper alignment. Individual GFP frames can cross subframe boundaries, as illustrated in Figure 6-4. This mapping is similar to the HEC-based mapping of ATM into 44 736 kbit/s signals described in ITU-T Rec. G.804, which also uses an octet to nibble mapping.~~

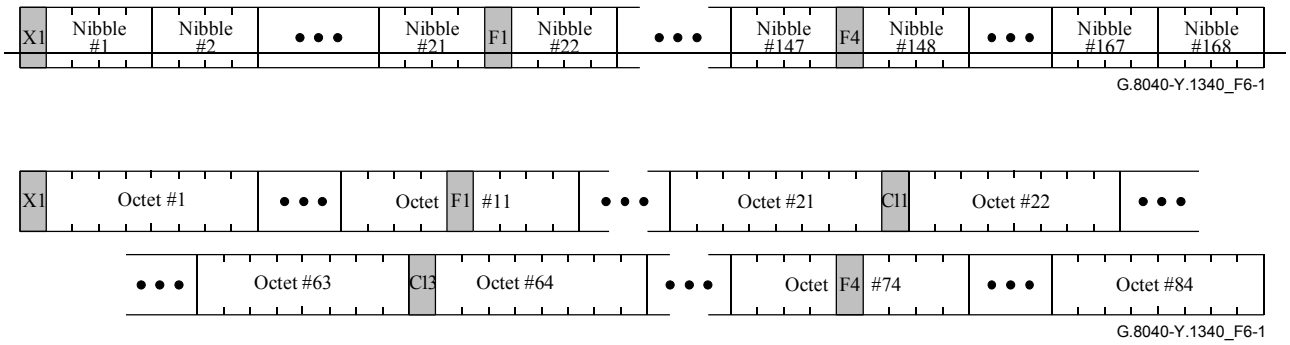

Figure 6-3/G.8040/Y.1340 – ~~Nibble~~ Octet structure for the 44 736 kbit/s signal subframe