                    HOST/IMP Interface Documentation

   On 25 June 1971 we put a new version of the IMP system, Version 2500,
   up in the network. Among other changes, the new system corrected the
   problem of Hosts receiving spurious "Destination Dead" [Type 7]
   messages. The correction involved making the IMP refuse to accept
   any messages from its Host for about 30 seconds after the Host
   indicated its intention to come alive. This delay has caused trouble
   to a number of NCPs because they had imposed an upper limit on the
   time an IMP may take to accept a message, and when that time was
   exceeded the IMP was declared inoperative and the NCP shut itself
   down, leaving the site personnel annoyed and perplexed.

   We're sorry to have caused so much trouble, but we thought that the
   new version modified no advertised property of the system. To
   prevent misunderstandings of this type in the future, the IMP/Host
   interface should be well documented, well understood and invariant.
   The only way to set up and maintain such an interface is to presume
   that BBN Report No. 1822 is complete and correct. We understand that
   it is neither, but operating on the basis of this assumption is the
   best way to force 1822 to improve. In our view, the Hosts should
   proceed under the constraint that anything not specifically
   guaranteed by 1822 does not exist and should not be used. If there
   are problems using this approach, please don't "code around" the
   problem or treat your IMP as a "black box" and extrapolate its
   characteristics from a series of experiments. Instead, send your
   comments and problems to the NCC at BBN, and we will fix the IMP
   system, or 1822, whichever is necessary.

   We are, at the moment, working n an update to 1822. It will reflect
   the deletion of the "cease" mechanism [as per RFC #107].

   We are also considering augmenting the IMP/Host protocol with a
   mechanism to allow a Host to detect a change in the "version" of the
   IMP system, and to provide the Hosts with status information as to
   who is alive in the net.

          [This RFC was put into machine readable form for entry]
             [into the online RFC archives by Ryan Kato 6/01]