

EARN EXECUTIVE

Proposal for Italian G-box

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S Trumpy
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This document integrates and partially replaces the technical information contained in the letter written by Stefano Trumpy to Odd Jorgensen and Giorgio Berini on January 27th, 1989, about "plans for integration of DECNET and SNA and for OSI migration of the Italian international node of EARN". The letter contained the following declaration: "we presume that if we use NJE/SNA/X.25 on the present 9.6Kbps line (between CNUCE and CNUSC) we are going to face serious traffic problems". This was said before the activation of NJE/SNA between CNUCE and CNUSC. Now we realize that with the adoption of SNA the link has greatly improved its throughput: with the BSC line the rate of transmission of a file was sensibly reduced when another file was flowing in the opposite direction, while with SNANJE the throughput remains the same. This difference is quite meaningful on a link where most of the time files are transmitted in both directions. The most visible result is that, after the adoption of SNA, the queues on the ICNUCEVM-FRMOP22 link have almost disappeared. These considerations encourage us to try to use NJE/SNA/X25 even before the upgrade of the line. Our experience with SNA/X25 indicates that the reliability of such a solution depends very much upon the type of X25 switches that are used. We had a very bad experience while we were using our Dynatech Multiswitch 12, but all problems disappeared when we replaced it with a Dynatech CPX20. We don't know how the CPX20 interoperates with the NT switch, therefore this connection should be tested as soon as possible. As soon as the SNA link CNUCE-CNUSC will use the PVC through the two switches, it will be possible to interconnect the G-boxes through a similar technique. As it was pointed out in the letter to Digital, we intend to use the G-box as an aid for the OSI transition as well as for the networking functions that now are performed by our VAX 8200. In order to make the replacement as smooth as possible, we would like to keep the G-box in the Italian HEPNET area (number 38). Of course, the choice of the most suitable area number can be discussed, but it should be remembered that the conservation of the connectivity with the rest of the Italian HEPNET is of primary importance.