## **European Computer Network**

I wish to comment on David Dickson's article "Europeans look IBM gift horse in the mouth" (News and Comment, 5 Oct., p. 27), which discusses the European Academic Research Network (EARN).

The main goal of EARN is to provide the European academic community with a computer network for academic and public research institutions throughout Europe. The emphasis of EARN is on science, research, and education rather than on networking technology. We seek to interconnect the European universities rapidly and let the choice of network technology evolve in whatever way makes the most sense for the academic users.

Dickson's article emphasizes the obstacles and tensions in creating a Europe-wide computer network for the academic community. The problems encountered in this endeavor are not surprising and would arise with any European-scale project, which by definition crosses many borders and requires agreement among different national and European agencies. No serious argument with this enterprise has been presented by any informed European agency, nor have any of them said that IBM support of EARN is an attempt to promote the time-honored protocols of IBM's Remote Spooling Communication Subsystem. These have been the basis of the IBM internal network for the past 10 years and are also used by the U.S. university network BITNET.

Contrary to the statement in the article, IBM machines are capable of using public telecommunication networks, including X21 and X25. IBM was, in fact, one of the first manufacturers to offer X25 packet-switched network support and has once again recently reiterated its support for Open Systems Interconnections (OSI).

The Conference of European Post and Telecommunications has taken a positive position with respect to EARN, as

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have many of the national post and telecommunications authorities. They have described it as a starting point for an important European computer network that will evolve in the direction of public packet-switched networks and OSI protocols.

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European universities should no longer be deprived of the same networking tools as their U.S. colleagues, and their response to EARN is impressive. In Germany alone, for example, more than 75 mainframes have been interconnected in 6 months, and the traffic is described as heavy.

We share the enthusiasm and sense of urgency of the European academic community and expect that before the end of the year all academic institutions throughout the Western world will be able to work together through EARN. This is clearly an important project for the European scientific and technical community-at-large.

We hope that the EARN-BITNET link will provide a significant contribution to European-American academic cooperation.

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## Salmonella Food Poisoning

Marjorie Sun (News and Comment, 5 Oct., p. 30) has written a colorful story that recapitulates information readily available in the New England Journal of Medicine (1) and adds some speculations. She says that evidence "almost conclusively shows that the uncle's cattle became biological factories of drugresistant Salmonella newport because they were fed low doses of antibiotic." Actually, the uncle's cattle were never tested, the feeding of antibiotic to them was not verified, and the shedding of Salmonella by farm animals has often been found to be decreased by antibiotics. The occurrence of Salmonella food poisoning long preceded the use of antibiotics and is controlled by appropriate sanitation and adequate cooking. Feeding antibiotics to animals has increased meat production by millions of pounds annually for more than 30 years. Sun refers to the report in Science by Holmberg et al. (24 Aug., p. 833). This report lists 18 outbreaks investigated between 1971 and 1983. Two outbreaks were investigated in 1982, one attributed to beef short ribs and the other to homemade ice cream. These may be viewed in the light of the fact that, in 1982, 4.2 billion pounds of hamburger were produced in the United States (2).

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## **References and Notes**

 S. D. Holmberg, M. T. Osterholm, K. A. Senger, M. L. Cohen, N. Engl. J. Med. 311, 617 (1984).

American Meat Institute, *Meat Facts* (1984), p. 19.

## **Expendable Launch Vehicles**

R. Jeffrey Smith, in his briefing about the National Research Council's report on candidate expendable launch vehicles (News and Comment, 2l Sept., p. 1375), implies that the panel supports a proposal by the Air Force to build expendable launch vehicles based upon "20-year-old technology as a competitor to the space shuttle." With respect to the technology of all candidate vehicles, the panel supports the prudent use of "proven" technology in all of the proposed candidates. The use of proven technology substantially reduces the development risk and increases the system reliability, a key requirement for military systems. Further, the panel does not view the proposed expendable launch vehicles as competitive to the Space Transportation System (STS), but, as noted in the findings, supports "continued strong efforts to develop the STS into a mature operational system." On the other hand, the panel does cite the advantages of an expendable launch vehicle as a means to more assured access to space complementing the shuttle, which by national policy remains the primary launch system.

Smith states that the authoring panel "included several former Pentagon officials and only one NASA official." In actual fact, the panel included two former NASA research center directors as well as a number of experts from the