vite readers to offer specific suggestions for the committee to consider. Each suggestion will be evaluated seriously and action considered in the context of our mandate and the limits of time and budget. Please write to Richard Scribner at the AAAS (1776 Massachusetts Avenue, NW, Washington, D.C. 20036).

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Note

1. The committee was formed in the late spring of 1981. Its membership includes Elise Boulding, Dartmouth College; Anne H. Cahn, Committee for National Security; Ruth M. Davis, Pymatuning Group, Inc.; Brewster Denny, University of Washington; Sidney Drell, Stanford University; Lloyd Dumas, University of Texas; Roger Fisher, Harvard Law School; Patricia McFate, American Scandinavian Foundation; Rodney W. Nichols (chair), Rockefeller University; William J. Perry, Hambrecht and Quist; George W. Rathjens, Massachusetts Institute of Technology; Herbert Scoville, Arms Control Association; Charles Zraket, MITRE Corporation; William D. Carey, AAAS (ex officio); and Richard A. Scribner, AAAS (staff officer). Recent past members are Bernard Feld, Massachusetts Institute of Technology, and Everett Mendelsohn, Harvard University.

Information Services

In his editorial "Essential federal information services" (28 May, p. 937), Philip H. Abelson raises the important question of the proper role of the government in marketing computerized information services. The editorial, however, presents only one side of this controversial issue. I would like to comment on some of the statements in the editorial and to briefly explain the position of the Information Industry Association (IIA) on government competition.

First, the pricing policies of the National Library of Medicine (NLM) are of concern to many companies, foreign and domestic. The IIA, which represents a broad cross section of private sector database producers and information vendors, has created a task force on the NLM. We have presented our views regarding the problems posed by the NLM and other government information producers and vendors to Congress and to other appropriate government decision-makers on many occasions.

Second, the private sector is not trying to force the NLM to "increase it charges sharply." Rather, is it asking the NLM, and other government agencies, to charge the full cost of their products and services to domestic commercial and private foreign users. NLM's prices to domestic nonprofit users would not increase.

The dispute between the private sector and the NLM and other government information services is not a matter of increasing the charges for use of government services to bring a windfall to the government and the private sector. The core of the dispute is whether government institutions, such as the NLM, should subsidize the price of bibliographic products sold in the course of business to commercial entities and thereby disrupt the natural workings of the marketplace.

Under the pricing policies of the NLM, for example, 20 commercial users of the NLM's computerized MEDLARS system received, in effect, a $1-million subsidy from the NLM over a recent 18-month period. That is, they paid $1 million less in fees for searching the NLM's databases than they would have paid for searching comparable databases produced by the private sector. There is, we believe, a legitimate question of social policy concerning the appropriateness of such a subsidy, particularly in the current economic climate.

Requiring the NLM or other government information services to charge full-cost fees to commercial and foreign customers would not diminish their value to the medical or scientific communities. By allowing the marketplace to function and promoting the growth of more diversified sources of information, they would be acting in the best interests of the people whom they are meant to serve.

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Sulfur Emissions

In the editorial "Science advisers to the government" (19 Feb., p. 921), Jean Mayer reports on the 7 January meeting of the Advisory Committee on Oceans and International Environmental and Scientific Affairs. In discussing acid rain, Mayer reports, the committee concluded that oxidizing agents, particularly NO_x, were "the limiting factor in the formation of acids, including sulfuric acid, in acid rain" and that this finding "dictates a different strategy from that recommended by the Canadian government." The "strategy" referred to aims to reduce acidic sulfur deposition by reducing regional sulfur dioxide emissions in eastern North America.

A detailed account of the committee's deliberations and findings appears to be unavailable to the public, so it is difficult to understand the basis for these conclusions or to confirm Mayer's interpretation of the proceedings. However, Mayer's brief synopsis presents a view that does not reflect the current understanding of acid deposition and its implication with regard to policy alternatives.

Various investigators have concluded that oxidants formed from copollutants are largely responsible for the transformation of SO_2 to aerosol and rainwater sulfates (*1*). However, there exists little direct evidence about the degree to which the oxidants limit the amount of SO_2 that can be oxidized. Indirect evidence based on the regional sulfur budget provides the only current quantitative estimate of the rate-limiting role of the oxidants (*2*). This evidence indicates that regional reductions in atmospheric sulfur dioxide concentrations on the order of 50 percent will generate significant regional reductions in sulfuric acid deposition in rainwater ($\gtrsim$40 percent). Therefore, oxidant rate limitation of the sulfur dioxide transformation may not be a critical factor in selecting a policy to deal with regional acidification. Furthermore, reduction of total deposition of acidic material, rather than reduction of rainfall acidity alone, is an appropriate goal of an acid deposition reduction strategy. Sulfur dioxide gaseous dry deposition is the other large component of the sulfur deposition problem, and this component appears to be comparable to the wet component on a regional basis (*3*). The only identified strategy for reducing gaseous dry deposition is reduction of airborne SO_2 concentrations by SO_2 emissions reductions. On the related issue of the direct contributions of SO_2 and NO_x to acidity, we note that sulfate equivalents in rainwater in the Northeast exceed nitrate equivalents by a factor of 2 and total SO_2 emissions substantially exceed total NO_x emissions in eastern North America in terms of potential acid equivalents of oxidation products (*4*).

NO_x emission reductions are a desirable component of an acid deposition reduction program. However, if our goal is to reduce total regional acid deposition, the focus on sulfur emissions reductions remains entirely justified.

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