

Science and the News

The Consortium Proposal: Private Industry Offers a Plan for Developing Satellite Communications

A consortium of American corporations handling international telephone and telegraph traffic submitted a proposal last week for organizing a nonprofit corporation to own the United States interest in a satellite communications system. The corporation would be financed, initially, by a \$50 million investment by American Telephone and Telegraph, and by much smaller contributions from other members of the consortium. The corporation would be governed by a board made up of two members from each company contributing \$500,000 or more, three members appointed by the government, and one member to represent the interests of companies which would like to share in the use of the satellites but which are not in a position to invest a substantial amount of money.

The central idea for this type of directorship was to allay concern that the corporation would be dominated by A.T.&T., which would be, by far, both the greatest investor and the greatest user of the satellite network.

Western Union, though, submitted a minority report arguing that even with A.T.&T. limited to two members on the board, it would still dominate the corporation through its investment and volume of business, which would amount to something like twice that of all the other companies involved. Western Union, principally on this ground, asked that participation be opened to anyone who wished to invest, and not limited to companies in the international communications business. This idea commands wide support among manufacturers of communications equipment and other firms which have a stake in the policies of a satellite corporation.

The question of just how the satellite venture will be organized remains very much up in the air, and only in

part because of the domestic problem which caused Western Union to submit a minority report. This domestic problem centers on the question of how to organize the privately owned corporation in a way that will satisfy the antitrust division of the Justice Department and smaller companies that A.T.&T. will not dominate the venture. Assuming this can be settled, there remains the problem of how to organize *any* satellite venture, other than one owned by the government, in a way that would assure that the very substantial national interest in the venture, and the manner and speed with which it is developed, will be properly safeguarded.

Official Policy

The U.S. policy, announced at the beginning of the summer when the consortium was invited to submit a proposal, is that private ownership is preferred, provided that both the domestic (antitrust) and the international problems can be worked out. Among the international conditions that had to be met were that the system should offer world-wide service, rather than concentrate on the more profitable high-traffic transatlantic communications, and that participation in the ownership and use of the system should be available to any country that wishes to participate. These conditions imply that the corporation, particularly in providing service for the less-developed countries, would have to develop policies quite different from those which would be dictated if profit-and-loss considerations were the sole concern of the management.

Last week's consortium proposal increased the likelihood of a privately owned system, if only in the negative sense that the proposal accepted all the conditions laid down by government. There had been a good deal of talk, some of it coming from the companies involved in the consortium, that the conditions that the government had laid down were such as to make it

impossible for the satellite system to be developed under private ownership. But the proposal offered by the consortium last week accepted all of the government's conditions without reservation, and so suggested that the companies involved felt they could handle the special burdens that the international problem would place on the enterprise.

What would happen under the proposal would be that the satellite venture itself would be nonprofit, but with the companies involved including their investment in the satellites as part of their expenses in justifying their rates to the Federal Communications Commission. The companies would thus receive a return on their investment, including the extra expense involved in providing world-wide service. Presumably, if these additional expenses should prove great enough to make the rates excessive, the satellite corporation would ask the government for a subsidy to cover all or part of the additional expenses. But the companies did not suggest that they would need a subsidy, and if the optimistic forecasts that are generally made about the costs of satellite communications prove correct, the system might well be able to operate privately, without a subsidy, and still provide rates as cheap as, or cheaper than, current transatlantic cable and wireless rates.

Yet the problems involved remain extremely complex, and the proposal submitted last week, while increasing the chance of private ownership, does not assure such ownership.

Though the consortium accepted, in principle, the government's conditions, the question of how well the arrangement would serve, in practice, what the Administration sees as a great national interest in the way the operation is run is impossible to answer, and on the domestic problem, as the Western Union minority report suggested, there is, as yet, no general acceptance even within private industry of any particular arrangement for private ownership.

A good many basic questions about the technical nature of the system will remain unanswered until at least late next year, when some data will become available on the effectiveness of several kinds of trial satellites that will be placed in orbit. At the moment, even the most basic technical question of whether the system should use a small number of satellites orbiting at high

altitudes or a fairly large number at moderate altitudes is still unresolved, although this decision will determine the kind of ground stations that will be necessary, and to a considerable extent, the ease with which the system can be engineered to provide worldwide coverage, and television as well as radio communications.

Without this basic technical information, and a good deal of nontechnical information as well, no one can be sure just how well the consortium, with the best of intentions, might be able to live up to the government-imposed conditions they have offered to accept, or how much of a conflict might develop between the government's and the consortium's views on specific policies required to carry out the conditions in a specific situation. The consortium and the government have agreed on general principles, but agreement on general principles is rarely much assurance that there will be agreement on how to put the principles into practice when concrete situations have to be faced, and very little assurance at all in this matter of satellite communications since neither the government nor the consortium can have more than a general idea about the nature of the concrete situations that will have to be faced.

At the moment, the consortium proposal is, in any case, only a skeleton, which will take on a definite shape in the course of further negotiations, assuming, of course, that the government finds the proposal basically acceptable. But the greatest question in the negotiations will be over the extent of control the government will retain in order to assure that the conditions that have been accepted will be satisfactorily carried out.

On this issue, the consortium proposal grants the government a voice on the board of directors larger than any individual participant, but smaller than any two of the private companies involved, and of course much smaller than all the private companies together. The government did not specifically ask for even this much of a formal voice in the management, but as the consortium recognized, the peculiar nature of the venture implied that the government would have to have a voice in its management.

So far, the Administration has not spelled out the degree of control over the venture it feels it must have. The private companies have not spelled out

the degree of control they would be willing to live with. The issue of how great a voice the government should have, and the mechanisms for making its voice heard, remains not only unresolved, but almost untouched.

The Test Ban Again

Khrushchev's announcement that the current Soviet test series will be climaxed on 31 October with a 50 megaton explosion raised the question of how the U.S. will handle its response to a likely Soviet announcement, after the conclusion of the series, that it is now prepared to resume the 3-year-old moratorium it broke at the end of August. The response is almost certain to be a negative, and hence an unpopular one to the world at large.

Both the Soviet Union and the U.S. have taken firm positions on the question of underground testing. Last week, Arthur Dean, our chief negotiator at Geneva, and now representing us at the U.N. test-ban debate, said he still believed the Russians would come to terms on an enforceable ban, since it is, he said, in their own interest to do so. But the Russians themselves have been saying nothing to encourage this view. Instead they have been talking, publicly, of how it would be easy to reach agreement on the test ban question *after* agreement has been reached on general and complete disarmament, and, privately, that they realize that the controls necessary for an enforceable ban are just too great for them to accept to get an agreement that involves no real disarmament.

As for the United States, the course of the American handling of the test ban issue since last spring, when the hardening of the Russian attitude first became apparent, makes it most unlikely that the Administration would agree to another unpoliced moratorium on underground tests. The assumption in the Administration all along had been that the United States would, sooner or later, have to break the moratorium, in view of the apparent lack of any Soviet interest in a controlled ban so long as they could have all the advantages of a ban without having to accept any controls, simply by dragging out the talks indefinitely.

There has been some criticism in this country, and more in friendly nations abroad, that we did not put off the resumption of underground tests

long enough following the Soviet resumption of atmospheric tests. The reasoning, in most cases, was not based on a belief that the U.S. could abstain from testing indefinitely in the face of the Soviet resumption, or even in the face of an obvious lack of interest by the Russians in accepting controls for underground tests. The arguments, in the main, have been merely that we could have produced a better propaganda effect by holding off for a while longer. The difficulty with this is that the Administration, feeling it would have to resume underground testing in any case, had no desire to let the Russians complete their current series of atmospheric tests, announce they were ready to resume the moratorium, and put the U.S. in the position of having to break the ban after the Russians had announced they were resuming it. As long as testing had to be resumed, the time to do it was during the Russian series, whose duration was unknown. Thus the resumption could not be delayed very long without risking a major propaganda loss in return for a marginal propaganda gain.

If that the Russians do soon announce they are ready to resume the ban, one of several propaganda problems the U.S. will face is that there is a tendency among people whose sympathy we would like to win to assume, simultaneously, (i) that underground testing is just as much an acceleration of the arms race as atmospheric testing and (ii) that the United States can afford to accept a moratorium on underground testing because the Russians could not make sufficient weapons progress through underground testing to upset the balance of power even if they were to conduct secret tests in violation of an unpoliced moratorium. This allows some of our friends, to argue that a ban limited to atmospheric testing is not really much more desirable than no ban at all, that U.S. testing underground, therefore, is as bad as Soviet testing in the atmosphere, and at the same time that the United States has no good reason to be concerned that the Russians could gain any real advantage from secret underground tests. These contradictory views are often bolstered by an assumption that we could really detect underground tests anyway. This assumption, presumably, is based on our failure to point to any secret Russian tests we have failed to detect in order to prove we couldn't detect them.—H.M.