

U.S. Government, that it therefore appears that the fundamental questions have been settled and the Commission's determination to entertain formal applications for authority to construct the cable, subject to certain conditions, is tantamount to a tentative decision in the matter. Insofar as this decision is tentative, Comsat requests that its earlier submissions be incorporated herein by reference.

13. Comsat then states that there appears to be some misunderstanding of the significance of the revenue requirement data filed by the interested parties in response to our informal inquiry, pointing out, as an example, statements in a concurring statement by Commissioners Cox and Loevinger to our February 16 letters. It believes that a correct evaluation of costs would clearly favor satellite facilities.

14. Comsat also comments on the response of applicants to the three conditions set out in our letter of February 16, and requests that any authorization we may grant to applicants herein clarify questions raised in its statement, and include appropriate conditions to assure implementation of the conditions stated in our February 16 letters. In the alternative, it requests that the applications be denied.

Need for additional facilities

15. We have reviewed the circuit growth estimates submitted by the applicants; those submitted in our informal inquiry; those used by the Intelsat partners in estimating satellite circuit requirements; and those developed at the Mexico City world plan meeting in 1967. Our analysis indicates that, for communication between the United States and Europe, Africa, and the Near East, some 800 circuits will be required in 1970 and some 1,500 circuits will be required in 1972, above those now available in transatlantic cables, and that even greater quantities may be required as a result of traffic stimulation by rate decreases and other factors.

16. According to information furnished by Comsat, the only firm additional facilities contemplated to be available for the Atlantic Basin service by early 1969 are two Intelsat III satellites (replacing then-existing satellites). These are expected to have a theoretical capacity of about 1,000 circuits each. However, because of the need to serve a number of earth stations, some with relatively few circuits each, and because of the technical inability to assign satellite capacity on a circuit-by-circuit basis, it appears that only 75 to 80 percent of this theoretical capacity may be realized. Moreover, all of the additional capacity provided by these satellites will not be used for U.S. transatlantic traffic. According to our analysis, some 450 circuits may be required for United States-Latin American traffic; traffic between non-United States points may require some 350 circuits, and the U.S. Government will have special requirements for about 170 circuits. In addition, considerable capacity will be required for television, and possible wide-band data service.

17. Thus, on the basis of the foregoing, it appears that, absent any additional capacity in the Atlantic Basin other than that added by the two Intelsat III's, there will be a shortage of several hundred circuits in 1970. This shortage will become greater as time goes on.

18. Comsat itself indicates that these two satellites may become saturated by 1970 and that plans are being formulated to augment Atlantic Basin satellite capacity through even larger capacity satellites—the Intelsat III-1/2's and/or the Intelsat IV series to replace one or both of the Intelsat III satellites (earth station limitations and the need to cross-haul traffic indicate that the use of more than two satellites is not feasible or economically sound). These plans, however, are not presently definite and require agreement of the Intelsat partners before work can go forward. This uncertainty exists not only as to the technical parameters of the satellites to be used, but also as to their operational dates. It is conceivable that such satellites could be delayed until well beyond the time frames set forth above when additional capacity will be urgently required. These and other matters will have to be resolved before we can act on any application that may be filed by Comsat with us for necessary authorizations relating to the construction, placing in orbit, and use of such satellites.

19. There exists, therefore, no assurance that satellite facilities will be available to meet all 1970 circuit requirements. On the other hand, authorization of the instant applications will provide reasonable assurance of this. Applicants state that the cable to be used is beyond the development stage, and support their views by a detailed timetable of proposed manufacture, construction, and cable-laying schedules. They are, therefore, confident that the cable can be available early in 1970, with a tentative service date of March 15 for the system.