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COMPTROLLER GENERAL'S REPORT TO THE CONGRESS

SECURE VOICE TELEPHONE SYSTEMS--HOW DEPARTMENT OF DEFENSE CAN SAVE MILLIONS

D I G E S T

A narrowband secure voice technique is being planned to protect civil agencies' telephone conversations from intelligence exploitation, if they are monitored or intercepted by unintended listeners. A pilot program is currently in operation. (See pp. 1, 4, and 21.)

Defense selected a wideband secure voice technique to protect its own nontactical telephone conversations. Defense did this primarily so the same wideband technique could be used for communicating between nontactical and tactical secure voice systems. (See p. 13.)

In general, narrowband systems require more complex terminals which require more space and power and are more costly than wideband terminals. Conversely, in general, wideband systems require more costly transmission facilities. Most Defense tactical users require wideband facilities at the present time due to weight, size, and power constraints. Nontactical users generally are located in an office environment which is more suitable to the overall lower-cost narrowband system. (See pp. 2, 3, 7, and 21.)

Defense has not fully evaluated the benefits of the narrowband alternative for its nontactical system. GAO estimated that the wideband alternative could cost about $300 million more to protect nontactical telephone conversations than if a narrowband system was used. (See pp. 24 and 25.)

The narrowband system:

--Permits existing voice grade Federal and commercial telephone lines and networks to

be used and provides the advantages of survivability and restoration (more alternate routes are available than with the the wideband system). (See pp. 2, 3, and 33.)

--Permits use of the same technique for civil and Defense nontactical users and can be used to communicate with wideband tactical systems. (The narrowband technique has promising potential to achieve the ultimate goal of providing a standard capability for communicating between tactical and nontactical systems.) (See pp. 15 to 18.)

The benefits of having the same wideband technique for the Defense nontactical and tactical systems appear to GAO to be outweighed by the above-described benefits of the narrowband alternative. In addition to these economic and survivability advantages, a narrowband Defense system would also provide the means for direct communication with other narrowband users, such as ambassadors, and most naval ships. This is a significant benefit, especially in crisis situations. (See pp. 14 to 16.)

If allowed to continue as planned, combined cost of both systems would be about $1.5 billion or more. Are they set up to best serve total Federal secure voice requirements? There is no assurance of this. (See pp. 18, 31, and 32.)

The House and Senate Appropriations Committees recently directed that a single narrowband secure voice system be developed as a common-user system, rather than continuing with the development of dual systems. The information which led to these actions included congressional committee hearings, reports by the House Appropriations Committee's Surveys and Investigations Staff, and GAO's draft of this report. (See pp. 42 and 43.)

Before this congressional guidance was provided, Defense planned to keep its wideband secure voice equipment throughout the system's 20-year life cycle. This would have delayed the Government's objective of achieving a common secure voice technique for all nontactical users during this time frame. (See pp. 13 to 16.)

Defense has been developing requirements and costs of various alternatives for the Defense nontactical system in response to this congressional guidance. These evaluations were not completed until December 1977 and were not fully evaluated by GAO. Based on its limited review of these studies, received in mid-December 1977, GAO's position has not changed. The studies address some of the deficiencies noted in this report, but do not include consideration of a single narrowband secure voice system for all nontactical Federal users, as directed by the congressional guidance. They also indicate that economic and survivability considerations still favor a worldwide narrowband nontactical Defense system, and that required capability for communicating with wideband tactical systems, would be provided. GAO plans to further evaluate these studies. (See pp. 46 and 47.)

GAO recommends that the Director, Office of Management and Budget, take steps to see that there is a common narrowband secure voice technique for all Government nontactical use (civil agency secure voice and Defense Communications System) worldwide.

In fulfilling that task the Office of Mangement and Budget, with the assistance of the Federal agencies involved, should

--define total (civil, military, and international) requirements;

--identify the most appropriate methods and means for complying with congressional guidance for achieving a single

common-user nontactical narrowband system for both military and civil users;

--develop the transition strategy which best meets both immediate secure voice requirements and future objectives; and

--identify the most economical and feasible way of satisfying these requirements and objectives. (See p. 47.)