

MAY 25 1977

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77-4420

MEMORANDUM FOR Zbigniew Brzezinski  
Assistant to the President for  
National Security Affairs

SUBJECT: Communist Access to Western Computer Facilities

A potential broad problem -- concerning communist country access to computer facilities in the West -- has surfaced during our consideration of an export control license matter. Quite apart from the particular license case, this broader issue may be important to national security and has not previously been addressed directly by the government, and so I wanted you to be aware of the matter.

The Particular Case

Control Data Corporation (CDC) sought permission of the Department's export control authorities to demonstrate and sell its "Technotec" service in Eastern Europe and the Soviet Union. Technotec is a computerized data base containing abstracts of technology available for sale. For a fee, a Technotec subscriber located anywhere in the world can obtain any of the information in the data base, or can insert information into the data base for sale to other subscribers.

Although Technotec's own data base is relatively innocuous, our serious concerns stemmed from Technotec's being a part of a much larger CDC system called Cybernet. Cybernet, essentially a time-sharing computer service, is comprised of high-powered computers and 5,000 terminals in over 150 cities in 15 countries. CDC rents portions of Cybernet to companies that utilize it for complex calculations and for information storage and retrieval. Technotec was incorporated into the existing Cybernet system so that Technotec could have the benefit of all of Cybernet's extensive equipment at little additional cost to CDC.

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SUBJECT TO GENERAL DECLASSIFICATION  
SCHEDULE OF EXECUTIVE ORDER 11652  
AUTOMATICALLY DOWNGRADED IN TWO  
CALENDAR YEARS AND DECLASSIFIED ON  
DEC. 31, 1983 (insert year)

25 MAY 1977

Not referred to DOC. Waiver  
applies.

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U.S. government computer experts (particularly at NSA) advised that any subscriber to Technotec could gain illicit access both to perform calculations on Cybernet's powerful computers and to retrieve any data stored in Cybernet. There are no safeguards yet devised that can effectively prevent such illicit intrusion into and manipulation of such a computer system. The largest Cybernet computer is 17 times more powerful than any Western computer approved for export to a communist country, and the content of Cybernet's data bases may contain sensitive (though unclassified) information.

Therefore, the Commerce Department has denied CDC permission to demonstrate and sell Technotec in those countries. We consulted closely with State, Defense (including NSA), ERDA, and the CIA, and all recommended denial (except CIA whose practice is to take no position). We have told CDC that its Technotec application would receive more sympathetic consideration if Technotec were separated from Cybernet and based on an independent, dedicated computer system. Any Technotec subscriber could then potentially have access only to the computers and data bases in Technotec. CDC, however, believes that Technotec at present is not a large enough service to be profitable if operated on a dedicated computer system.

#### The Broader Problem

Even though the decision on this application has been taken, there remains the broad problem of the degree of control that can and should be exercised, in the interest of national security, over communist country subscription to computer time-sharing services installed in the West. Any such communist subscriber could conceivably have at its disposal the full range of computer facilities on the Western system to which it has subscribed. Until now, U.S. licensing policy has not focused on communist access to computer systems installed in the West, but rather on the sale and transfer to communist countries of computers made in the West.

Matters that now require study include the extent to which a subscriber to computer systems located in the West illicitly can obtain the benefit of all the system's facilities and, if effective safeguards against such access are in fact impossible, the most practical manner in which legal regulation can control subscriptions. An integral part of any such regulation would be the need for coordinated action by all the countries in CoCom with respect to computer systems in those countries.

An answer had to be given CDC on its Technotec proposal before these broader matters were explored. (Commerce was under a U.S. district court instruction to reach an early decision.) It is possible that

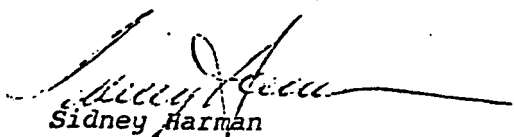
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a full review of the broader situation will establish that communist access to Technotec, even if it is part of Cybernet, would pose no threat to U.S. national security. But, based on what has been learned so far, it is also conceivable that steps will have to be taken to foreclose the opportunity for access to any Western computer services having significant capability, such as Cybernet.

I am initiating an interagency study of communist country access to Western computer facilities and will keep you informed.

  
Sidney Harman

cc: Members of the Export Administration Review Board

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THE SECRETARY OF COMMERCE  
Washington, D.C. 20230

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