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ADVISORY MEMORANDUM ON SECURE TERMINAL EQUIPMENT (STE) - A STRATEGY FOR EVOLUTION TO SECURE DIGITAL CAPABILITIES

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National Security Telecommunications And Information Systems Security Committee

NATIONAL MANAGER

FOREWORD

1. Over the last several decades, the U.S. Government has made great strides in securing its telephone communications networks. The success of this effort is, in large part, attributable to the development and utilization of the Secure Telephone Unit (STU-III), and its predecessor devices. With over 370,000 equipment in service, the STU-III has played and continues to play a critical role in ensuring the success of government peacetime and wartime operations.

2. As communications technologies continue to evolve in the direction of all digital networks, it has become increasingly clear that improved secure telecommunications products and services will be necessary to support the needs of both the policy makers and the warfighters. To that end, the National Security Agency (NSA) has undertaken the development of the Secure Terminal Equipment (STE) as a replacement for the aging STU-IIIs. I encourage your full cooperation in supporting these initiatives by initiating the necessary planning and programming actions to acquire sufficient quantities of STEs and Crypto Cards to achieve an orderly phase-out of your STU-III inventories over the next five years.

3. Representatives of the National Security Telecommunications and Information Systems Security Committee (NSTISSC) may obtain additional copies of this instruction from the address listed below.

4. U.S. Government contractors are to contact their appropriate government agency Contracting Officer Representative (COR) regarding distribution of this document.

KENNETH A. MINIHAN
Lieutenant General, USAF

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(b) (3)-P.L. 86-36 [redacted]

ADVISORY MEMORANDUM ON SECURE TERMINAL EQUIPMENT (STE) - A STRATEGY FOR EVOLUTON TO SECURE DIGITAL CAPABILITIES

SECTION

SECTION I - PURPOSE

1. This Advisory Memorandum serves to provide user information on the details of a new equipment, the Secure Terminal Equipment (STE). It also addresses the planning and programming actions required to achieve the phaseout of the existing inventories of STU-IIIs, and facilitate the transition to the new equipment.

SECTION II - SCOPE

2. This guidance is applicable to all departments and agencies of the U.S. Government who handle, distribute, account for, store, or use the STU-III.

SECTION III - GENERAL BACKGROUND

3. The Secure Terminal Equipment (STE) is the next generation desktop security instrument which provides high quality secure voice and secure data for digital telecommunications networks. The STE supports the capability to automatically "Go Secure", providing toll quality secure voice and secure data capabilities at rates up to 128 kbps through an Integrated Services Digital Network (ISDN). Designed to utilize pluggable cryptography, known as FORTEZZA Plus-KRYPTON, the STE is highly adaptable from a cryptographic standpoint to provide the capability for secure interoperability with a multitude of international partners.

4. The Secure Telephone Unit (STU)-III has served the U.S. Government well over the past 14 years; however, its capabilities are not comparable to today's technology and it is approaching the end of its operational life cycle.

SECTION IV - STE GUIDANCE

5. All U.S. Government departments and agencies should immediately begin planning for the procurement and implementation of STEs and the replacement of their existing inventories of STU-III equipment. As a point of departure, it is recommended that the following be accomplished:

a. A review of all department or agency secure voice requirements should be conducted;

b. Future planning and programming initiatives should support an incremental replacement of STU-IIIs with STEs at a recommended rate of at least 20% per year;

c. Implementation planning should focus on those key requirements which can readily take advantage of the STEs digital capabilities; and

d. Any requirements for STE interoperability with foreign counterpart agencies or organizations should be documented and provided to the National Security Agency (NSA), ATTN: [redacted] (b)(3)-P.L. 86-36

6. For those departments and agencies who cannot immediately transition to digital switches and technologies, the initial deliveries of the STEs will offer a mode of operational use which ensures backward compatibility with the STU-III and analog Public Switched Telephone Networks (PSTNs).

SECTION V - STU-III PHASE-OUT

7. [redacted] STU-III equipment and sales have diminished to a point where it is no longer economically feasible to maintain production. With the end of the current production contract on 31 December 1999, there will be no further sales of STU-III equipment.

8. By the year 2005, it is estimated that the ability of STU-III vendors will have diminished (due to lack of retention of skilled manpower, as well as parts inventories) to a point whereby it will no longer be cost effective or feasible for them to provide repair services for fielded equipment. Accordingly, users should be aware that repair actions on STU-III equipment should cease on 31 December 2004.

9. The infrastructure which supports the electronic keying of the STU-IIIs has been in place and functioning since the introduction of the equipment. Although preventive maintenance and planned upgrades have allowed this system to function at acceptable levels, deterioration in system capabilities have already been observed. Keying support for existing STU-IIIs will end on 31 December 2009, at which time all operational usages of the STU-III will be expected to cease.

SECTION VI - STE FOR FOREIGN USES

10. The STE was developed to provide for releasability to foreign nations to ensure continued secure interoperability with authorized nations or international organizations. This will be accomplished via the use of a cryptocard which will be responsive to the cryptography and key management requirements appropriate for each recipient country or organization.

11. NSA is currently developing the Cryptographic, Policy and Key Management strategy to provide an STE capability to other nations to provide secure interoperability with the United States. When completed, necessary release authorizations will be forwarded to the full NSTISSC membership for review and approval.

SECTION VII - SUMMARY

12. The transition to an all digital network environment and the associated STE equipment will not be an easy one. A significant expenditure of both manpower and dollar resources will be required to ensure the success of these programs. These expenditures, however, will be offset by an improved secure communications posture for the U.S. Government, and will facilitate the transition to state-of-the-art wireless, mobile satellite digital technologies that will be introduced and widely marketed in the future.

13. Any questions on this memorandum, or the costs, capabilities and delivery schedules of the STEs should be directed to the Director, National Security Agency (DIRNSA), ATTN: [redacted]

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