

**SECRET**

COINS PROGRAM MANAGEMENT MEMORANDUM

UNITED STATES INTELLIGENCE BOARD

COINS COMPUTER AND COMMUNICATIONS INTERFACE PANEL

REFERENCES:

- a. "DIA COINS Test Facilities and Implementation Guide", dated Mar 68, Technical Report No. RADC-TR-67-665
- b. COINS Technical Memorandum of Agreement No. 1, "Data Communications."

I. INTRODUCTION

The Community On-Line Intelligence System (COINS) 1 (Experiment) is a network of remote access computer systems interconnected through a central switch. Selected data files maintained in the computer systems of participating agencies will be accessible for data retrieval by analysts at all other agencies. Computer systems in the network will be operated by the Central Intelligence Agency, (two systems: *one at Headquarters and NPIC*), Defense Intelligence Agency, and the National Security *Agency*. The National Indications Center and Department of State will have a remote terminal capability through the DIA system. System design currently provides for security protection of information classified TOP SECRET SI. DIA will operate the network switch.

II. PURPOSE

The purpose of this memorandum is to formally constitute the Computer and Communications Interface Panel, and to delineate its tasks and responsibilities.

GROUP-1  
Excluded from automatic  
downgrading and  
declassification

**SECRET**

*Excl 1<sup>4</sup>*  
*ex 9 of 19 cyp*

~~SECRET~~

III. MEMBERSHIP

1. Panel membership will be comprised of principal representatives from each of the COINS participating agencies operating a computer system in the network, and such other persons as may be required to assist the panel in the execution of its responsibilities.

2. The principal representatives will form the deliberative and decision making body, and will provide liaison between the panel and their respective agency on all matters within the Panel's purview.

3.  DIA is appointed Panel Chairman. Other principal members at this time are:

IV. TASKS AND RESPONSIBILITIES

The principal Panel tasks are:

1. To develop and coordinate a plan for the interface of the hardware, software and communications of the COINS network including network operating procedures and conventions. The initial plan and conventions for the COINS I Experiment are contained in reference "a" to this memorandum.

2. To implement and monitor the plan in reference "a" and subsequent modifications or plans.

3. To conduct reliability studies of the technical operations of the network, recommending necessary improvements.

~~SECRET~~

25X1

25X1

SECRET

4. A currently identified major task assigned the Panel is to develop the specifications for a standard network language to provide a bridge between individual agency user languages (i.e., agency language would be translated into the network language prior to transmission. The network language would be translated into the local language by the receiving system).

5. Each Panel Member is responsible for:

- (1) Assisting in the formulation of the interface design concept in the plan, and conduct of network reliability studies.
- (2) Coordinating the plan within their respective agencies. All agency non-concurrences should be thoroughly documented to include specific objections.
- (3) Effecting and monitoring the implementation and operation of the approved plan within their respective agencies.
- (4) Recommending changes.
- (5) Determining specific dates that approved plans can be effected by their agency.

#### V. REPORTING

Periodic reports of Panel projects and status, actions and network operation are required for purposes of system management and evaluation as follows.

SECRET

**SECRET**

1. Provide such information and statistical data to the COINS Test and Analysis Panel as may be required.
2. Monthly reports to the COINS Program Manager of panel meetings to include the topics of discussion, conclusions or actions, problems and recommendations requiring resolution by higher authority, or any other matters which the Chairman may wish to include.
3. Following circuit activation to all currently participating agencies, the COINS Program Manager will be informed of each links current operational schedule (e.g., NSA/DIA link currently scheduled operational Monday through Friday, 0900 - 1500 hours).
4. Comprehensive semiannual report of major Panel projects and status, actions, problems, recommendations, etc.

#### VI. AGREEMENTS

All arrangements and procedures currently set forth in the references are binding on all COINS participating agencies. Recommended changes to these agreements will be documented, coordinated among all agencies affected and submitted to the COINS Program Manager for approval. Non-concurrences will be indicated.

**SECRET**

*CHANGES  
BEEN  
MADE  
HARD  
TO  
READ  
SOME  
OF  
THE  
TEXT*

COINS I - MEMORANDUM OF AGREEMENT #1

SUBJECT: COMMUNICATIONS

I. Background

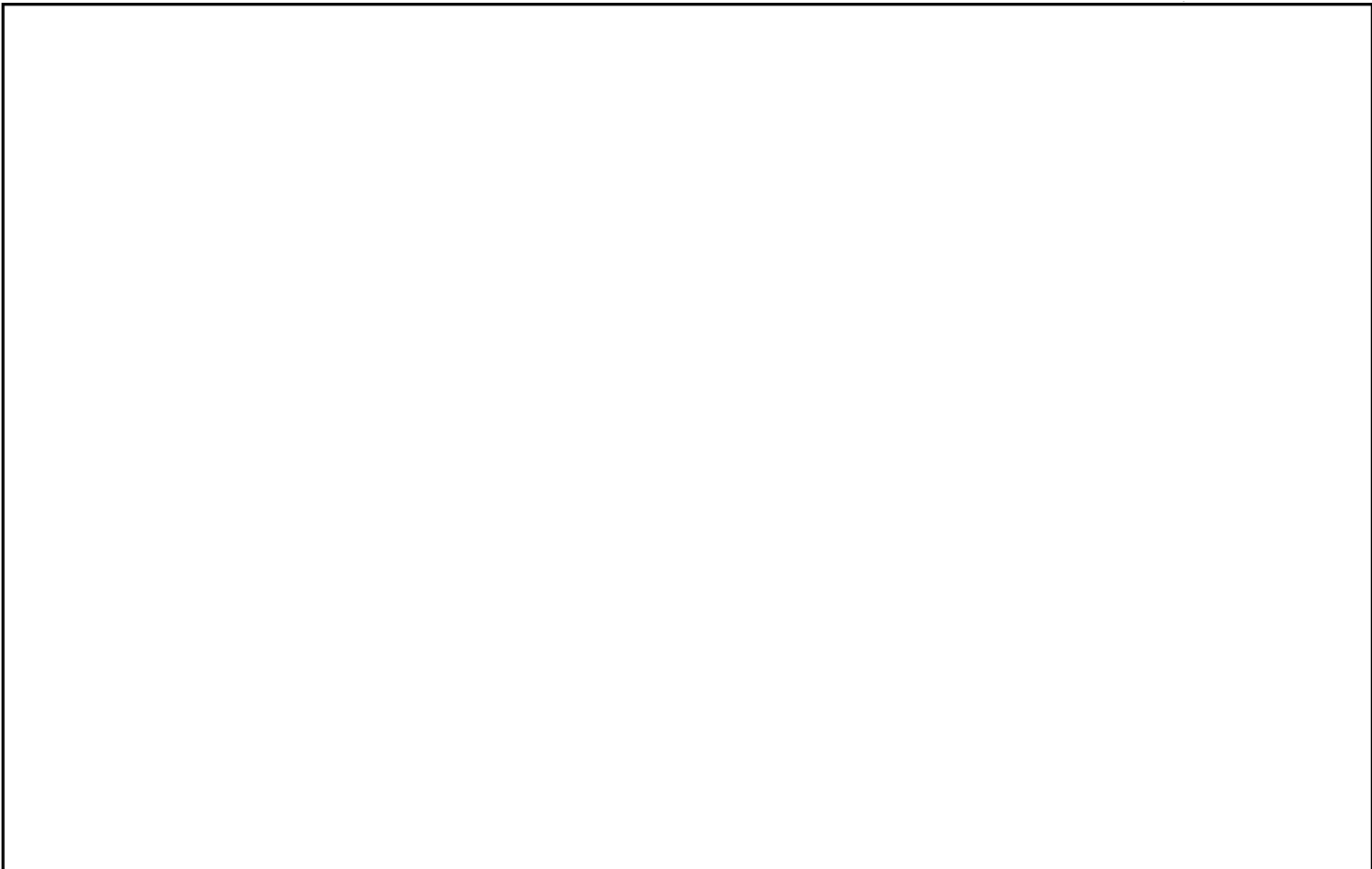
A. In order to determine the feasibility of implementing COINS I by 1 December 1966, it was mutually agreed between the participating Agencies that a site survey of existing area facilities of the participants was a prerequisite.

1. This survey was conducted in accordance with the following schedule:

- |             |                            |
|-------------|----------------------------|
| 1 June 1966 | 1000 - DIA<br>1300 - STATE |
| 2 June 1966 | 1000 - NPIC<br>1300 - CIA  |
| 3 June 1966 | NSA                        |

2. The team of Computer/Communications engineers and planners from NSA/DIA consisted of the following representatives:

25X1



4. The visit to each site was aimed at ascertaining the availability of the requisite equipment and space, plus what related action had to be undertaken by each participant to resolve any problems associated with obtaining full operational capability by 1 December 1966.

5. Space availability at NSA, DIA, CIA and STATE was assured, while the NPIC allocation of the required space was still unresolved. The primary reason for this space difficulty at NPIC was that their communications facility was saturated to the point where the incorporation of additional facilities had been determined, by the NPIC representatives, to be impractical. The only assurance that the NPIC representatives provided at that time was that additional space had been promised somewhere within the facility and that it would be allocated at such time as the associated in-house decisions regarding approval of the project and its budgetary considerations are made. NPIC has since received the approval and will go ahead with the new facility immediately.

6. Another significant area reviewed during this survey was the capability of each site to undertake the supporting site conditioning requirements related to the establishment of a COINS terminal at their facility. Outside of the NPIC situation, already covered in paragraph 5 above, the only major problem area appeared to be the establishment of a new communications center at DIA to satisfy all of DIA's on-line computer communications requirements. There were several coordinated actions involving this requirement which had to be accomplished before fulfillment of COINS I could be achieved. Among these critical factors were the construction and installation schedules involved in conditioning the space DIA had allocated to the communications area required to support their on-line computer requirements. Construction is now scheduled to be completed by 15 August 1967 with installation of equipment by 15 October 1967.

7. In the discussions which took place as part of this survey, it was ascertained that CIA is investigating the possibility of their assumption of the switching function via an adaption of the KY-3 switch at their facility in Langley. Current plans call for DIA to act as the focal switch in COINS I, utilizing the IBM 7740 to act as the communications interface. The CIA communications representatives, however, indicated that they needed time to determine the feasibility of employing a KY-3 switch to accommodate COINS switching requirements. The CIA ADP representatives appeared to prefer a store and forward capability at DIA in lieu of the line switching capability that the KY-3 switch would provide.

B. Sometime after the site survey, the problem of malfunctioning of communications hardware came up. As a result, a meeting was held on 19 October 1966.

1. The purpose of the meeting was to accomplish the following:

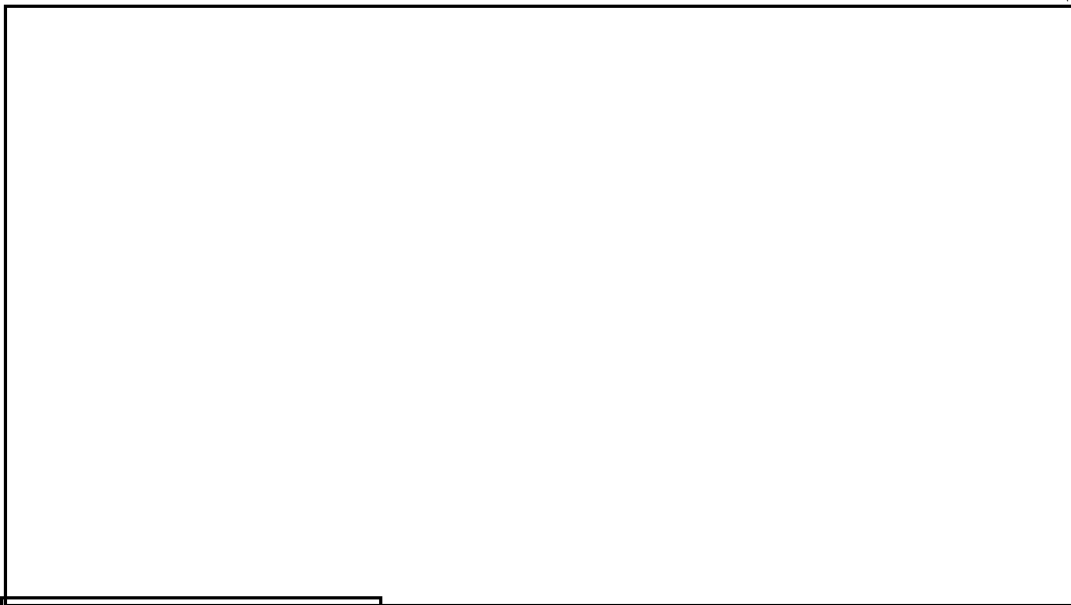
a. Make certain that all Agencies participating in the COINS experiment are:

(1) Aware of the problem of loss of communications between COINS I participants due to the malfunctioning of the communications hardware.

(2) Capable of recognizing this situation promptly.

b. Set up procedures for re-establishing communications when a malfunction is discovered or suspected.

2. This meeting was attended by the following:



25X1

25X1

25X1

GROUP 3  
Excluded from automatic  
downgrading and  
automatic declassification



25X1

25X1



7. This seems like a reasonable possibility for the COINS experiment, but COINS I will undoubtedly not start with this equipment, and even if it should a manual backup system is mandatory for instances when the CCU's fail to put the equipment back in set. It was therefore decided to establish a manual procedure as planned.



d. Responding to conversation (service messages) relating to the suspicion of malfunction.

2. The operator, upon being informed of the suspected condition, will immediately call computer maintenance personnel who will try and determine the cause of the trouble. If it is determined that the [redacted] i.e., maintenance personnel determine the difficulty cannot be corrected at his level, the Communications Center will be so informed immediately by telephone.

25X1

3. Communications Center personnel will take whatever corrective action is necessary and, if required, will call the Communications Center at the other end of the line by telephone and steps will be taken to put the KG-13's back in set.

4. Since STATE and NIC will be operating an outstation on the DIA computer system in COINS I, an out-of-set condition will have to be recognized by an individual noting that incoming information does not read. When such is the case, the individual at the outstation will call his own Communication Center, who will contact the DIA Communications Center.

CENTRAL INTELLIGENCE AGENCY

DEPARTMENT OF STATE

DEFENSE INTELLIGENCE AGENCY

NATIONAL PHOTOGRAPHIC  
INTERPRETATION CENTER

NATIONAL SECURITY AGENCY

NATIONAL INDICATIONS CENTER

GROUP 3  
Downgraded at 12 year  
interval  
automatically declassified

25X1

Approved For Release 2005/07/01 : CIA-RDP80B01139A000100110019-1

Next 3 Page(s) In Document Exempt

Approved For Release 2005/07/01 : CIA-RDP80B01139A000100110019-1

DRAFT

CCIP MEMBERS DISCUSSION PAPER ONE

The COINS Security Panel has established a method of providing minimum common need-to-know controls of SI information within COINS responses. Procedures and responsibilities for HOST systems are outlined in reference (2). As specified in the memorandum each HOST agency will be responsible for implementing the procedures required for implementing the need to know validity checking. The memorandum of the security panel will be used as the basis for the CCIP discussion.

2. In order to provide the capability of exchanging file maintenance transactions within the COINS network it is necessary to establish guidelines for the method of update and a means of transaction accounting.

3. It is suggested that the method of control be off-line batch update. Off-line batch update provides an easily controllable update with a minimum of HOST system degradation. The method of update, however, will be determined by the HOST.

4. To facilitate update transaction exchange there are a number of considerations which must be addressed. First of all a new message type must be established. This message type must identify the transaction as an update as well as contain the file to be updated and the update transaction. It is suggested that a message format similar to the current INTG format be used. The only differences between this format and the INTG format will be the message type CODES in the header and receipt and the transaction. In place of the INTG message type 'UPDT' will be placed in the header and 'U' will be placed in the receipt. The transaction will, of course, be dependent on the requirements of the HOST system, and will begin in column 67 of the header.

Need to identify source of update -  
How update made  
validity?

5. Initiation of this message will allow for the exchange of update transactions, but is not sufficient as a means of control. A method of providing the originator with information concerning the status of his update must be established. It is recommended that the user be notified of update acceptance or rejection, and of successful or unsuccessful update completion. There does not exist within the COINS experiment message types which allow for this type of user notification, it is therefore recommended that additional message types be added.
6. HOST system-generated current awareness reporting <sup>encompasses</sup> generate many areas of consideration. Current awareness reporting addressed to specific terminals at the receiving system is not an effective means of reporting because it places too much overload on both the originating and receiving systems. Perhaps a more feasible approach to current awareness reporting would be for the originating system to identify the report with a subject code, and have the receiving system determine which of its terminals are concerned with this area of interest. If this approach were taken the format of the Awareness report could be substantially similar to the SRVC message. The awareness report would be identified by a message type of 'AWRE' in the header and a message type code of 'W' in the receipt. The sub type field would contain the subject code.
7. Security in this scheme is, of course, a consideration. It is recommended that the feasibility of implementing the Security Panel's controls for responses be studied for implementation into current awareness reporting.

*How farmed out  
rise aware? to dev't  
sub-type?  
for by subject  
code?  
How far for SRVC  
type terminals?*

*Members Send resume of ideas on ~~the~~ <sup>update to dev - in 2 wks -</sup>*

E-

*DRAFT*

**SECRET**

AS  
TOTAL  
SUMMARIZING  
EFFORT

Objectives

*from comp  
connected*

1. Design, develop and implement a system for the COINS Experiment which will produce the necessary data to determine the feasibility and permit an evaluation of the utility of an interconnected computer based information system with remote access capability. A design objective will be to provide an average response time of fifteen minutes or less to all interrogations.

a. How is the Achievement of the objective to be identified and measured?

(1) The first part of the objective has already been partially achieved; i.e., the system has been designed, the hardware installed and connected, and some intelligence information files are available in some agencies for remote interrogations by users at all participating agencies. This demonstrates that it is feasible to exchange information from various computer based sources. When all elements of the network are functioning together as planned and users can access any COINS file in reasonable time during a reasonable period of each working day, the first part will have been achieved.

(2) Experience and data cannot be acquired regarding utility unless the system is used by valid users in a few agencies as a better way to meet day to day tasks.

**SECRET**

GROUP 1  
Excluded from automatic  
downgrading and  
declassification

**SECRET**

Approved For Release 2005/07/01 : CIA-RDP80B01139A000100110019-1

(3) A data collection plan has been formulated to gather statistics on network activity and user opinions and attitudes toward COINS. Data will be collected on system utilization and performance, and user reaction.

b. What constitutes success or failure of this objective?

(1) Success or failure of the objective will depend first upon the technical capability of the system to operate. Since such interconnection among computers is being accomplished through communications lines and a computer based communication switch, this at least denotes a measure of success in the employment of hardware.

(2) The experiment will prove successful if it evokes a favorable user reaction among a cross-section of users in the participating agencies. This favorable reaction need not necessarily be in terms that COINS provided useful information in support of analysts' work, but it could include judgements that an efficient COINS-like system containing more suitable data bases would have high utility in support of the intelligence analytical function.

(3) The experiment will prove a failure if a sufficient number users do not react favorably to their exposure to COINS. Adverse reaction could result from a variety of causes either singly or in combination. For

example, Approved For Release 2005/07/01 : CIA-RDP80B01139A000100110019-1

**SECRET**

E'')  
**SECRET**

Approved For Release 2005/07/01 : CIA-RDP80B01139A000100110019-1

(a) Inefficient operation of the network or excessive down time.

(b) Differences in interrogation methods and lack of data standards.

(c) Poor orientation and training.

(d) Lack of user interest in COINS data bases

(e) Excessive interrogation response time.

(4) The number of interrogations and responses can be tallied and are quantitative reflections of both system activity and the users' participation. Less easy to evaluate are the qualitative judgements of the users as to the effectiveness of the system, the pertinence of the data available, or the use which is made of the data. Presumably, after a period of time, increased outputs either in the form of finished reports, improved files, and/or enhanced validity of data elements could be counted and attributed to the system. However, the basis for a determination of this kind has not been established. Nor is it likely that such definition could or should be attempted until the system has operated for a sustained period of time. The system may have considerable impact on traditional intelligence production methodology regardless of the efficiency of the system in its early stages. But for this phenomenon to be obvious a considerable history of completed interrogations will have to have been accumulated.

Approved For Release 2005/07/01 : CIA-RDP80B01139A000100110019-1

**SECRET**

~~SECRET~~

MEMORANDUM FOR: COINS Manager  
Office of the Director  
National Security Agency  
Fort Meade, Maryland

SUBJECT: Management of the COINS Experiment

REFERENCE: USIB-

1. With the concurrence of the Director, National Security Agency (DIRNSA), who has designated you as the manager of the COINS system responsible for conducting the COINS experiment, the Director of Central Intelligence (DCI) has approved the following instructions to guide you during the remaining period of the experiment.

2. The purpose of the COINS experiment is a feasibility test of interagency information handling, making use of interconnected computer-based files, and the determination of the value of this system to intelligence analysts and other users.

3. Certain intelligence organizations are now or will be participants in the COINS experiment. In accordance with reference, each of these organizations will designate a sub-system manager responsible for his agency's portion of the system. He will operate under your general guidance in those matters which concern the COINS system as a whole. Any matters which you are unable to resolve with the sub-system managers and which in your opinion have an adverse impact on the experiment will be referred to me.

~~SECRET~~



4. Working together with the COINS sub-system managers, you are expected to:

- a. Coordinate COINS budgets, plans and programs of each participating organization to achieve the approved objectives within the desired time frames.
- b. Prepare and submit to the DCI through me a COINS master plan which integrates into a single package the budget, plans, programs, implementation schedules and resources of the COINS experiment for the participating organizations. This should be accomplished as soon as practical and no later than the end of October of this year.
- c. Monitor and analyze the program on a continuing basis, particularly with respect to technical performance, schedules and costs.
- d. Prepare recurring or special progress reports as required, identifying successful milestones or problem areas indicating proposed remedial action to be taken to resolve identified problems.
- e. Assign technical responsibilities for specific tasks to a participating organization through a technical memorandum of agreement acceptable to that organization.
- f. Organize working groups from personnel of participating organizations to investigate problem areas and make recommendations.

g. Identify COINS R&D requirements and refer them to me for consideration and assignment to one of the participating agencies for action.

h. Recommend an interagency COINS training program as may be required, making maximum use of existing training facilities.

i. Develop a security program consistent with existing regulations.

j. Draft, coordinate with the sub-system managers and publish directives, conventions and guidelines, and procedures with respect to the operation of the COINS experiment.

5. You will be provided a set of objectives for the COINS experiment and guidance on the substantive intelligence requirements for the system, including a list of files to be included in the system for the purpose of the test, analysis and evaluation. Files, other than those on the list provided you, may be nominated by sub-system managers for use on the system. These additional files may be added to the system with my approval for use under bilateral arrangements outside of the experiment and they may also be used by the evaluation panel under IHC for purposes of technical test and evaluation, but they must not be permitted to adversely affect the evaluation of the COINS experiment as a whole.

6. Some committees of USIB are engaged in the development of data bases and data standards which may affect COINS. At this

time COMIREX and the SIGINT Committee are so engaged, and you will be kept informed of any of their work which may be of interest to you. Establishment of liaison with appropriate subcommittees of the committees is encouraged.

7. A COINS Evaluation Panel has been established by the Intelligence Information Handling Committee (IHC). This Panel will be working very closely with your office and it is desired that they receive every assistance in their test, analysis and evaluation work. Their principal effort will be during the period July 1968 to July 1969 with a report to the IHC as soon as practical thereafter.

8. The IHC will establish in the near future a subcommittee, under the chairmanship of a member of the IHC Support Staff, one of whose tasks will be the preparation of a long-range program for a COINS-type system to be presented to USIB for approval should the COINS experiment prove successful and a follow-on system is directed by USIB. You should work closely with this subcommittee, furnishing such information as they may desire.

9. You will receive your administrative and technical support from NSA as agreed by DIRNSA.

10. As the DCI's designated representative for the COINS experiment, I will, with his concurrence, issue additional instruction and guidance as required. Any matters which have an effect on the conduct of the experiment should be brought to my attention at once.

**SECRET**

MEMORANDUM FOR THE UNITED STATES INTELLIGENCE BOARD

SUBJECT: The Community On-Line Intelligence System (COINS)  
Experiment

An important project which the DCI must undertake as part of the intelligence information program approved by USIB on 4 April 1968 and forwarded to the President is the Community On-Line Intelligence System (COINS) experiment and the evaluation of the usefulness of this system to the intelligence community. The development of the system itself has been under way since late 1965. The test, analysis and evaluation phase is planned to begin on 1 July 1968 and continue for one year.

The Director of the National Security Agency has been requested to assign a manager to operate the system for the period of the balance of the experiment. The manager will be expected to carry out his duties in accordance with instructions which will be issued to him (copy attached hereto).

It is requested that CIA, DIA and NSA designate the managers of their portion of the COINS experiment to act as sub-system managers for the experiment under the general guidance of the manager of the COINS experiment. The Department of State and NIC are requested to designate similar personnel as appropriate to the

**SECRET**

level of their participation. All are requested to nominate qualified personnel to technical panels, working groups and the like as may be required and requested by the COINS manager.

25X1 My designated representative to supervise all aspects of the COINS experiment is  of the NIPE staff. He will use the newly formed Intelligence Information Handling Committee, of which he is Chairman, for staff support and will consult the Committee for advice and guidance as appropriate. The manager of the COINS experiment will report to my representative.

Periodic reports will be submitted to USIB as the experiment progresses.

Richard Helms