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15 April 1968

CODIB-M-101
ATTACHMENT 1

MEMORANDUM FOR: Chairman CODIB

25X1 ATTENTION : [redacted] CODIB Support Staff

SUBJECT : Alteration of CODIB Minutes (CODIB-M-100)

I would appreciate the following changes in the reporting of my comments for the meeting of CODIB on 13 March 1968.

2.g. .... [redacted] replied 25X
that activity against files was available in the present system but that the programming for the switch probably had no present way of identifying the impact of individual files on system performance. Thus, there would be no present means of distinguishing the selected COINS files from other files in terms of system performance. Nor would there be any means selectively to reduce the file load on the COINS network if the voluntary additions of files should overload the system. The problem .... switch.

2.l. .... He asserted that standardization of file elements for the purpose of the COINS experiment would introduce a considerable additional delay in the experiment, would significantly increase the cost of the experiment, and was not necessary to the fundamental objectives of the experiment, there already being mixed coding, mixed query languages etc. contained in the system.

3.b. last sentence Mr. .... documents, CIA participation was to provide content control code on documents as they were distributed which provided not only for a test of the ability to affix the code but also for a test of the code as an assist to dissemination which he understood to be the objective of the test.

/S/

[redacted] 25X
CIA Member
CODIB

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CODIB-M-101
ATTACHMENT 2

COINS EVALUATION PANEL

Comments on Report of the CODIB Panel on Files for Use in COINS

The COINS Evaluation Panel was asked by CODIB to review the subject report and to indicate whether the plan for gathering and analyzing data on the performance and use of COINS could be restricted to the set of ten files recommended by the CODIB Panel for inclusion initially in the COINS "experiment", although other files will also be available in the system. The Evaluation Panel agreed unanimously on the following response to CODIB:

1. In order to evaluate the performance of the COINS hardware/software subsystem, all the activity in the system must be considered. It is not technically feasible to make statistical analyses and estimates of performance characteristics on the basis of partial knowledge of the input to, and traffic within, a system.

2. Data on any restricted set of files can be presented separately if desired. But data on the other files in the system will also be available.

3. The planned in-depth interview study of system utilization and user reaction could be limited to users of the restricted set of files, but the Evaluation Panel believes that decisions on the composition of the interview samples should be deferred until some data on actual use of the files in the system are available. At present, we know relatively little about what constitutes a useful file; we would not wish, therefore, to restrict the field of view too soon.

4. With respect to the CODIB Panel's criteria 2 and 3, it would appear to be most important in selecting a file for inclusion in COINS to examine the present interagency communication relative to the data in question and to develop estimates of the numbers of queries that might be expected from interested agencies.

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CODIB-M-101
ATTACHMENT 3

COINS EVALUATION PANEL

Plan Framework

1. Statistical analysis of performance and of minimal data on utilization and user reaction. Data on the performance of the hardware/software system will be gathered systematically for a year beginning in July of 1968 in two ways -- by the system itself in a log maintained by the switch on all traffic through the switch and by means of user log forms completed by users at each terminal. The switch log is already functioning and maintaining a record of the present DIA/NSA activity. The user log form will serve to gather data on the identity of the user and his office, the times at which queries are placed and responses received at the terminal, the user's satisfaction or dissatisfaction with the response, the principal reason(s) for dissatisfaction, and an indication as to whether the same information could have been obtained in some other way in time to serve the user's purposes. The data from the log forms will be coded and together with the data from the switch log will be analyzed at the end of each two-month period throughout the year, in order to obtain statistics on use of each file, response times, reasons for delays, non-responses and reasons for them, and user reactions. The user log form will be tried out on some present users before a final version of the form is recommended for use throughout COINS.

2. More intensive analysis of utilization and user reaction. An interview guide is being developed for in-depth interviews of selected users in order to learn more about the circumstances of use, with attention to both favorable and unfavorable experiences with the system, and to obtain user's views on deficiencies, needed improvements, training, potential use of such a system, and alternatives to COINS. Selection of the sample of users to be interviewed will be based largely on the bimonthly statistical data on use and user reaction.

3. Description of environmental conditions affecting use. In order that the data on use and user reaction may be properly understood, participating agencies will be asked to describe the environmental conditions in each agency that may affect use of COINS, such as training, assistance provided, steps taken to encourage or urge potential users to try the system, locations of terminals in relation to potential users, and previous experience with on-line querying of computer-based files.

CODIB-M-101
ATTACHMENT 4

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1 April 1968

25X1 [redacted]

EVALUATION OF COINS I

The purpose of this brief paper is to further the process of clarifying the meaning and the purpose of "evaluation" with respect to COINS I. Ever since my appointment as chairman of the COINS Evaluation Panel, I have been bothered by the semantic ambiguity in the terms "experiment" and "evaluation" as applied to COINS, and I believe it would be helpful to all concerned with COINS if we could agree on what is to be understood when we use these terms.

It has seemed clear to me from the COINS documents that "experiment" has been used all along in the broader sense of a "trial," and not in the narrower sense of a scientific or controlled experiment. The community has developed and will be trying out a system that allows analysts to access information in selected files in other agencies. I suspect that there would be little disagreement with this understanding of the nature of the COINS "experiment."

The term "evaluation," however, causes more difficulties. I would argue that "evaluation," like "experiment," should be understood in the broader sense of "learning as much as we can from the COINS experiment, or trial," in order to determine whether we are on the right track with this approach to a community system and to decide on the most promising next steps; it should not be understood in the narrower sense of measuring the performance or use of the system against some standard, or base line, or set of evaluative criteria. I shall try to explain why I believe former interpretation of "evaluation" is the more realistic one.

Since COINS was not planned as a controlled experiment, the groundwork has not been laid for comparison in any quantitative sense of the effectiveness of COINS with whatever informal arrangements for exchange of information constituted the community "system" before COINS. In other words, comparison of the "before" and the "after" is not feasible because we have no data on the "before," -- no base line against which to measure the changes brought about by the introduction of the new system. We cannot "evaluate" performance and use data on COINS against criteria that must be met, because no such criteria have been established; nor do we have any statement of precise requirements or design objectives that would constitute a sound basis for developing such criteria now. And we cannot compare the effectiveness of COINS

with any alternative new means of accomplishing the same objective, because only one of the alternatives was implemented. I am not implying that things should have been done that were not done, for I think that in many instances a good case can be made for introducing a new system in order to give the users experience with it and to learn how they use and how it might be made to serve them better.

What we can do in the present circumstance is to learn as much as possible about the community's experience in attempting to use COINS and about the technical performance of the system; and this is the objective of the plan the COINS Evaluation Panel was asked to develop -- namely, a plan for acquiring, analyzing and presenting data on system performance, system utilization, and user reaction.

The data on the performance on the COINS hardware and software will be quantitative in nature and should be useful in indicating what needs to be done to make the system perform better and to overcome user dissatisfaction caused by inadequacies in technical performance. I would say that such data will give us performance measurements, but not evaluation in the strict sense of meeting certain standards or criteria.

The more significant question of potential value or utility of such a system to the community and decisions as to where we go from COINS I will depend more on the response of the users. I believe the main goal of our analysis of utilization and user reaction should be <u>understanding</u> of the factors that account for differing levels of use, users' reactions, and their views as to the potential utility of such a system. I would expect that conclusions as to what has been learned from the COINS experiment and decisions as to the next steps will have to be products of informed judgement -- informed, I would hope, by the data we plan to present. In this connection, it would be helpful to the COINS Evaluation Panel to understand more clearly what kinds of decisions must be made, and when, on the basis of the data to be presented.

In the last analysis, use is the best indicator of the value, or utility, of an information system, but as of now there is no basis for saying how much use must occur before the COINS system or any file within it has demonstrated its utility. Statistics on use must be treated with considerable care. Even if a new kind of information system has reached the operational stage, and COINS has not, it still may take quite a long while for the community of users it

serves to learn to make effective use of it and to adjust their work habits to it. We shall be proposing, therefore, to gather and analyze not only quantitative data on use but also detailed information from selected users on the reasons for their actions and views and descriptive information on the differing conditions in the participating agencies that may help to explain different patterns of use.

We shall propose to gather and analyze data on both performance and use for a full year, because we understand that the system will continue to evolve. Performance data may change somewhat as equipment changes are made and as software is improved in order to achieve better performance. Use patterns should change as users learn more about the system. Changes in both performance and use data should occur if new files are added, or if files are removed from the system. COINS has to be viewed, therefore, as a dynamic system, and changes in it should be reflected in the data presented.

The COINS Evaluation Panel was also asked to recommend other data gathering and analysis activities that would be desirable in connection with system evaluation. We have not yet turned our attention to this task, but we may well give further thought to the fourth point made in our response to the COINS files question. In the case of any file recommended for inclusion in COINS, it may be desirable to require that data be presented on the extent of present file activity, on interagency communication with respect to such data, and on unmet demands for such data throughout the community. There would then be a base line for comparison with community use of the file after it becomes available through COINS.