DD/S 66- 3271

D D / S REGISTRY

F I L E *O-M 2-2(DDP)*

24 June 1966

MEMORANDUM FOR: Chief, Applications Division, OCS

SUBJECT : 501 Applications Conversion Planning

1. The subject planning will be carried out by a team headed by Mr. [ ] Other members are Messrs. [ ] [ ] This activity is first priority for team members for 50% of their time. No other work is to interfere without your approval. Schedules for other work should be adjusted accordingly.

2. The team is to be guided by the assumptions and guidelines presented in Attachment 1. The product of the planning is to be an integrated plan for conversion of all 501 applications; the plan is to be described in a paper which is to cover the points shown in the proposed outline of Attachment 2.

3. The planning effort is to begin no later than 27 June 1966 and the final report is to be completed on or before 15 August 1966.

4. One CSC contractor should be made available to the team. He may be used as advisor, critic, sounding board, etc.; he may be tasked; or, he may be made a member of the team. The MIS project officer, Mr. [ ] is to be kept advised of the progress of the planning effort.

5. Resources of OCS are to be made available to the team as follows:

a. The Chief, Technical Staff, is to provide assistance in the form of information on S/360 hardware and software and OCS plans for same. He should immediately identify for the team those papers which provide a current accurate statement of hardware and software implementation plans, configurations, and software capabilities.

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    b. The Chief, Operations Division, will assist the team by advising when and in what amounts S/360 machine time will be available for debug and test of new programs and systems.

    c. The Chief, Program Development Branch, Development Division, will provide information on S/360 experience and CHIVE program system planning and design as requested by the team leader.

/s/

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Deputy Director of Computer Services

Attachments: 2 a/s

cc: Ch/Oper Div
    Ch/Tech Stf
    Ch/Prog Dev Br/Dev Div
    Ch/Spt Sys Grp/DD/S

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Attachment 1
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501 Applications Conversion Planning

Guidelines

1. Assume conversion to S/360 with the configurations already planned.

2. Minimize impact on customers.

    a. Do not plan system changes which will require effort in selling the changes to customers.

    b. Where customer's known desires for change fit changes the team would like to make, take advantage of the opportunity.

3. No new inputs. Do not get involved in the problems which would arise from building new files or adding new data elements to existing files.

4. New functions should be added to existing systems only where there is a clear net payoff. The same is true of new reports.

5. Reorganization of files and of processing is not discouraged within the restriction of 2. above.

6. The S/360 hardware and software schedules should be assumed to be valid.

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7. Use of Direct Access Storage Devices (DASD) is not encouraged except where there is a clear need and implementation would be relatively easy.

8. The objectives in the conversion planning, in descending order of importance, are:

a. to minimize maintenance costs in the new system (the system is assumed to last until 1970),

b. to minimize conversion programming costs,

c. to minimize design time,

d. to maximize object program efficiency.

When choices have to be made in the conversion planning, the consequences of the alternatives are to be measured against these priority-ranked objectives.

9. It is an objective of OCS management to develop the minimum number of data management systems required to handle file maintenance, record selection, and output writing functions. Every effort should be made to develop common record and file structures so that common routines may be employed wherever possible and so that communication among personnel and systems is facilitated. This is in line with objectives a. and b. above. The team should study structures and ideas already developed and those now being considered in OCS. As an example, it should acquaint itself with the record and file structure concepts and terminology and the plans of the CHIVE programming group and determine whether, within the guidelines given the team, anything applicable to the conversion plan and implementation can be learned and applied.

10. The team is to estimate resources required for conversion (and describe the rationale used in arriving at the estimate) For this a target date is required. Assuming resources are available 1 August 1966, the target date for implementation of the converted system is 1 July 1967. The team should also say if it is possible to meet a date earlier than that and what would be required to do so.

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Attachment 2
24 July 1966

501 Applications Conversion Planning

Proposed Outline for Conversion Plan Paper

Conversion Methodology Objectives

Major Decisions

Assumptions and Their Effects

Description of Proposed System

System Design Philosophy

Operating System (OS) Interface

File Structure

Facilities for System Maintenance

Process Monitoring Facilities

File Identification

Major

Minor

System Flow

Sub-system Boundaries/Interfaces

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Program Identification

Differences from Present Systems

Schedule

Tasks (system design, programming, system test, file conversion, etc.,--in some detail if possible)

Task Resource Requirements

Personnel Requirements

Methodology of Personnel Estimate

Software Requirements

Task Relationships

Schedule - Milestones and Time

Alternative Plans (if appropriate)