REVIEW PROCEDURES FOR THE CONVERSION AND OPERATIONS IMPACT OF CENTRALLY DEVELOPED SYSTEMS

| | CONTENTS | PAGE | | | |
|---------------------------------------|--|----------|--|--|--|
| 1. | GENERAL | . 1 | | | |
| 2 . | INFORMATION FOR THE REVIEW | . 2 | | | |
| 3. | PROJECT MANAGER AND DEVELOPMENT TEAM RESPONSIBILITIES | г . З | | | |
| 4. | REVIEWERS RESPONSIBILITIES | . 4 | | | |
| 5. | RELATED 007 SECTIONS | . 6 | | | |
| · · · · · · · · · · · · · · · · · · · | | | | | |

Attachments

- 1. Review Documentation
- 2. Review Team Questionnaire
- 3. Technical Review Questionnaire

4. User Review Questionnaire

1. GENERAL

1.01 This section provides procedures for the review of a Centrally Developed System (CDS)* by those organizations planning to use the system as a means of identifying potential conversion and operational problems. The review(s) take place at the end of the Total System Development (TSD) Preliminary and/or Detail Design Phase(s) in order to facilitate early corrective action on design deficiencies. Specifically these reviews are used to:

(a) Determine if the developmental assumptions about the conversion requirements are valid,

*Includes all information systems centrally developed and maintained by organizations such as AT&T, Bell Laboratories, and vendors under contract. Information systems is a general term used to include all computer-based systems except those internal to the Western Electric Company and Bell Laboratories and integrated into the switching and transmission components of the network or into customer products. eg, no extraordinary or unanticipated conversion requirements are necessary to install the system.

(b) Determine if the developmental assumptions about the operation of the system in an operating environment are valid, eg, the file sizes/data bases and print volumes are within the range of what was expected. The system can be processed within the proposed schedule. The system outputs satisfy the user requirements with respect to achieving the system objectives.

1.02 This section is being reissued to make it applicable to all CDSs. Issue 1 was never given general distribution.

1.03 This section is a guideline to be used by American Telephone and Telegraph (AT&T) Project Managers (PM) and other personnel conducting the type of review described. This procedure is recommended for all CDSs, including major operational changes (paragraph 1.05) to existing CDSs, for either of the following situations:

(a) Organizations that will receive the system have not been included in the central developer's design walk-through.

(b) Other organizations, in addition to those included in the design walk-through, are desired to address the specific review objectives covered by this section (paragraph 1.01).

 1.04 Bell System entities have full option to modify and use these procedures for locally developed systems. Also, organizations may find the questionnaires (Attachments 2 through 4) useful in reviewing a CDS to determine if they should acquire the system or to prepare to install a system.

1.05 Major operational changes will normally be enhancements based on Modification Requests

NOTICE Not for use or disclosure outside the Bell System except under written agreement

Printed in U.S.A.

Page 1

(MRs) which alter the current system requirements. The following list provides examples of major operational changes.

- (a) The introduction of an interface modification or a new input or output interface file from another system, particularly if the interface is with a locally developed system
- (b) Changes to the processing that would require the introduction of new jobs or restructuring of current jobs (computer or people) or alter the processing flow, eg, change the existing files from sequential to nonsequential updates
- (c) Changes that would increase the sizes of operationally sensitive files, such as large volume sorts, on-line files, or large volume print files
- (d) Changes in the vendor supplied software or hardware for the system which will alter the applications design or operation.
- **1.06** The basic steps in effecting this type of review are as follows:
 - (a) The AT&T Segment/Department PM identifies organizations to participate in the review and coordinates their participation and a review schedule.
 - (b) The PM forwards the review documentation (Attachment 1) and review questions (Attachments 2 through 4) to the reviewing organizations. Upon completion of the review, they send their comments and information on identified problem areas to the PM.
 - (c) The information from the reviewing organizations is analyzed by the PM and development team to determine appropriate actions to be taken.

2. INFORMATION FOR THE REVIEW

2.01 Appropriate parts of developmental documentation, as described in Section 007-227-310, should be used for the review documentation. Additionally, the System Requirements Overview and the Development Letter (Section 007-230-210, System Deliverable Documentation) can be used to satisfy parts of the review documentation. Attachment 1 identifies a minimal set of developmental and deliverable documentation for use during reviews at Preliminary Design and Detail Design. When the review is for enhancements to an existing CDS, then a list of the MRs included in the design should be included with the review documentation.

- **2.02** The types of information included in the design review documentation cover the following:
 - (a) System Overview: This information describes the purpose of the system, defines its objectives, decribes the scope or boundaries of the system, and identifies the human and machine processing functions. It will also identify the operation center(s) and operation plan the system supports.

(b) Processing and Scheduling Considerations: This information describes the proposed processing modes and schedules, eg, on-line, on-line queued to batch, or batch. It will identify the interdependencies between the system and other systems, processing runs within the system and the interaction of the users with various processing runs, and the data bases/files. Also, critical deadlines must be identified for outputs such as reports, updated data bases, files sent, data transmitted to other systems. Special requirements, such as unique processing, the need to refer to the actual input source document to correct error lists, unusual file handling procedures to accommodate the first run of the cycle, or end of year condition will be identified.

(c) Personnel Subsystem (PSS) Processing:

This information will provide sufficient details to enable the user to understand the input requirements, output reports, human/machine interfaces, workstation layouts, work module descriptions, training requirements, and personnel requirements for training, conversion, and daily operations.

(d) Computer Subsystem (CSS) Processing:

This information will provide specifics about the jobs, programs, data bases, and files. Individual program descriptions may be provided along with record layouts. The amount of detail that can be provided depends on the phase of design in which the review is being conducted.

(e) **Processing Constraints:** This information will identify limitations that will be imposed as a result of edits, program table constraints, or system architecture, eg, the maximum number of offices or units that can be processed in a run, the limitations on the report structure, and maximum hours of usage data per study period, etc.

(f) System Controls and Security: This information addresses the basic quality attributes of completeness and accuracy, protection, security, privacy, and system examination (audit). Manual and automated controls designed for the system should be described.

(g) Restart, Rerun, and Recovery: This information will identify the restart or rerun facilities and constraints. If facilities are to be included in the system to restart a long running job step, to restart a long print run, or to recover a lost report through selective printing, they would be described in this section. Any unusual system alarms which have been identified should be described. Recovery procedures for various types of failures will be described including any restoration considerations and constraints.

(h) Hardware/Software Requirements:

This information will identify hardware and software requirements and data to use for computer capacity planning. If the system conforms to a standard operating environment, the specific environment would be stated including the specific features of the Standard Operating Environment (SOE) being utilized. If hardware or software requirements do not conform to the standard operating environment, the approved deviations must be identified. Facility and space planning information should be included as well as data communications requirements.

(i) Conversion Requirements: This information will identify user record conversion, file or data base development, and CSS conversion requirements. In addition, it should be stated whether flash cutover or a gradual conversion is required. Any local interface requirements unique to the system conversion should be addressed. For example, if an interface program must be developed or conversion programs processed or written locally, they should be identified.

 (j) Interface Requirements: This information will describe the Operating Telephone Company (OTC) interface requirements with other mechanized systems (inputs and outputs) for ongoing system operation. File layouts should be provided along with descriptions of each of the fields within the file. Data communication needs for this type of interface will be described.

(k) **Assumptions:** This information will identify the assumptions that affected the system design.

2.03 Attachments 2 through 4 provide a set of questions that the reviewing companies will be asked to complete in the course of the review. Because the questions are generalized, they cannot address the idiosyncrasies of all projects. Consequently, the project team should supplement them with any specific questions that they feel should be addressed.

3. PROJECT MANAGER AND DEVELOPMENT TEAM RESPONSIBILITIES

The PM, through consultation with the devel-3.01 opment team, determines whether the type of review addressed by this section should be conducted and, if so, when, ie, at the end of the Preliminary Design Phase and/or at the end of the Detailed Design Phase. In determining if this type of review needs to be conducted, the PM should consider whether the organizations receiving the system will participate in the design walk-throughs (Section 007-233-300*, Testing Recommendations for Information Systems) or if other organizations, besides those involved in the design walk-throughs, should conduct this type of review. Since the purpose of these reviews is to uncover potential design problems related to conversion and operation, the review would be conducted after the basic system architecture has been developed and the input and output specifications have been documented, ie, no sooner than the end of Preliminary Design. The following criteria will be useful in making this decision.

(a) For large systems where the design phases will span more than 1 calendar year, the review will require examining extensive data and details. For these types of systems, it is recommended that design review be handled in two stages: (1) an initial review of the system design at the completion of Preliminary Design, and (2) followed by a final review, with the same companies, at the completion of Detail Design.

^{*} Check Divisional Index 007 for availability.

(b) Review at the Detail Design phase or combined Preliminary Detail design phase would be appropriate for small self-contained systems with a short development time frame, eg, less than 1-year.

3.02 The PM is responsible for identifying organizations to participate in the review. The reviewing organizations should be identified at the earliest possible time in the preliminary design phase or combined preliminary detail design phase. Normally two or more organizations, depending on the size and complexity of the system, v ll be requested to conduct the review. The following factors should be considered in selecting the reviewing organizations.

- (a) The potential or identified trial company should be one of the selected reviewers
- (b) A mixture of types of organizations, eg, large versus small, multistate versus single state
- (c) Organizations involved in identifying the problem(s) being addressed by the system or are familiar with the problem(s) and the information required to effectively address it
- (d) Organizations who have a special interest in the system or have indicated an interest in participating in the review
- (e) Any special areas of concern which could influence the selection of reviewing organizations, eg, data collection or report distribution concerns in a multiarea environment, interface problems for organizations that do not have systems to provide necessary inputs in machine readable format.
- 3.03 Once the potential reviewing organizations have been identified, the PM will communicate the task to, and obtain concurrence of, his/her respective counterpart in the identified organizations. In addition, an estimate or range of the amount of review time required by the review personnel should be provided to the reviewers management contact. Refer the contacts to this section for additional information on the review process. Through coordination with the contacts establish a review schedule which includes dates for:
 - (a) The review documentation and questions to be sent to the reviewing organizations

- (b) The reviewing organizations to complete their efforts and return their comments
- (c) Providing the reviewing organizations with a summary of the disposition of their comments, if needed.
- **3.04** This schedule must allow for comments to be received from the organizations and changes considered before the design is frozen.

3.05 The PM will send at least two sets of review documentation and questions to each review-ing organization by the date established in the review schedule.

- **3.06** The development team is responsible for the following activities:
 - (a) Consult with PM to determine the appropriate design phase (preliminary or detail) to initiate the review.
 - (b) Provide technical information on special areas of concern to the PM for use in selecting the reviewing organizations.
 - (c) Assemble the review documentation, with the minimum as outlined in Attachment 1, and forward to the PM. If the review is for enhancements to an existing CDS, prepare a list of the MRs included in the design.

(d) Develop, as needed, additional review questions that are specific to the application being reviewed. Forward these to the PM to be added to the general questions contained in Attachments 2 through 4.

- (e) Provide inputs to the PM for the review schedule.
- (f) Evaluate the returned questionnaires and review comments.
- (g) Provide a written response to the review organizations, through the PM, as to the disposition of their comments, if needed.

4. **REVIEWERS RESPONSIBILITIES**

4.01 In order to accomplish the objectives of this type of review, the review process must

include those groups in the reviewing organizations involved in the planning, installation, conversion, operation, and use of the system. It is also suggested that the Internal Auditors participate in the review. Consequently, the reviewing organizations should develop a review team approach, wherein the groups involved in the activities are represented on this team.

4.02 Although the review process can be subdivided into a technical review and a user review, there are several aspects of the review that should be addressed on a joint basis. The following paragraphs briefly describe three types of reviews, ie, joint team review, technical review, and user review. The general questions that should be addressed and answered by each of these reviews are listed in Attachments 2 through 4. These lists may be expanded with specific questions added by the development team.

(a) Joint Team Review: The need for joint team review meetings, involving all the groups identified in paragraph 4.01, is largely dependent on the complexity and nature of the system. It is recommended that at least one meeting be held to jointly review installation, conversion, and operational requirements of the system in the operating environment. The Review Team Questionnaire, described in Attachment 2, should be completed during a joint team review meeting.

(b) Technical Review: The technical review is to evaluate the design with respect to CSS installation, conversion, operational requirements, and system architecture. The Technical Review Questionnaire, described in Attachment 3, should be completed during this part of the review.

- (1) Computer Subsystem Conversion: With respect to conversion, primary emphasis should be placed on the availability of input files from other systems necessary for conversion or the ongoing operation of the system. Two prime questions are:
- Are the required interface files available?
- Is the information provided in the design documentation sufficient to develop all required conversion interfaces or conversion programs?
- (2) **Computer Subsystem Operation:** From the computer room point of view, the

primary emphasis of the review should focus on potential problems with respect to:

- Maintaining the processing schedules
- Restart, rerun, fallback, and recovery requirements
- Potential run control problems
- Potential distribution problems
- Potential input data processing problems, particularly with systems that process inputs from other equipment
- Hardware requirements, eg, storage, communications
- Special hardware/software requirements for conversion.
- (3) **Architecture:** The intention of the CSS architecture aspect of the review is to place primary emphasis on potential problems with respect to:
- Logical structure of jobs and their interrelationships and dependencies
- General flow of data
- Processing controls
- Computer subsystem resource requirements, eg, confirmation that file estimates are reasonable.
- (c) User Review: The intention of the user review is to evaluate the design with respect to user conversion requirements, system operation, and the organizational impact of the system. The User Review Questionnaire, described in Attachment 4, should be completed during this part of the design review.
 - (1) User Conversion Requirements: With respect to user conversion requirements, primary emphasis should be placed on design assumptions concerning:
 - Availability of existing manual records to develop the necessary system master file or data base

- Effort necessary to convert existing records to the required mechanized format
- Viability of the proposed method of conversion, ie, flash conversion or gradual
- Magnitude of the training effort required to prepare to use the system based on the mode of training identified, ie, classroom, computer assisted instruction, etc.

 (2) System Operation — User: The review of system operation from a user point of view should place primary emphasis on:

- Adequacy of the proposed outputs with respect to satisfying the user information needs and the system objectives
- Viability of the required interaction between the user PSS and the CSS portion of the system, eg, manual effort required to enter data, correct errors, balance results, verify processing
- Viability of the proposed processing schedule with respect to providing the necessary outputs in a time frame sufficient to accomplish the related system objectives
- Adequacy of any human/machine interfaces to support human performance.
- (3) **Organizational Impact:** The organizational impact of the ongoing operation of the system should be evaluated with respect to:
- Organizational changes necessary to administer the system

- Significant skill level requirements for personnel involved in using the system
- Any force impact by the system on the affected organization.

4.03 Since the review is a scheduled part of the design process, it is essential that the reviewing organizations adhere to the agreed upon schedules for conducting the reviews. The prompt feedback from the design review will be helpful in determining possible problem areas and in taking early corrective action on design deficiencies.

5. RELATED 007 SECTIONS

| 5.01 The relat | ed 007 Sections in this series are: |
|----------------|--|
| 007-200-201 | Glossary of System Development Terms and Acronyms |
| 007-208-310 | Project Management |
| 007-227-310 | Developmental Documentation Specifications – General Infor- mation |
| 007-230-210 | System Deliverable Documenta- tion |
| 007-233-300 | Testing Recommendations for In- formation Systems |

•

REVIEW TEAM QUESTIONNAIRE *

- 1. After reviewing the preliminary Personnel Subsystem (PSS) and Computer Subsystem (CSS) resource requirements to install the system and develop the initial master files or data bases, does the system appear to be economically acceptable to your organization from a conversion point of view?
 - ____Yes

____No, please describe problem areas, such as additional costs not included.

2. Based on the CSS resource requirements for operating the system in your local environment, are the CSS operational cost estimates for your organization within a range that is acceptable based on the tangible and intangible benefits of the system?

> ____Yes ____No

> > No

3. After reviewing CSS and PSS processing requirements, is there anything inherent in the required processing schedule that would preclude the system from achieving its desired objectives?

Yes, please identify problem areas.

*When comments are required in response to a question, record them on a separate page and attach to the questionnaire. 4. Are all inputs that were assumed to be available from an existing source (manual or mechanized) currently available in your organization?

____Yes

____No, please describe effort required to make these inputs available.

5. Are there any parts of the system which are not usable by, or acceptable to, your organization?

> ____Yes, identify how this impacts your organization's acquiring or accepting the system.

____No

6. Are there any problem areas identifiable based on the proposed conversion approach, eg, gradual versus flash cutover?

Yes, identify problem areas and recommend preferred conversion.

____No

NOTICE

Not for use or disclosure outside the Bell System except under written agreement 2. If the existing files are not pure is extensive file purification required?

____Yes, identify nature of purification process.

____No

3. Are translations required to convert file codes, such as CLLI and USO codes, etc?

____Yes, specify required translations.

____No

4. Are the existing files detailed enough to provide the required level of input (for example, service order activity by second level business office managers or cost data at the salesperson level)?

____Yes

____No, specify how the required level of data can be obtained.

5. Will modifications be required to the systems that create the existing files to be used as input to the system; ie, will there be program changes required other than just supplying the input files?

_____Yes, identify nature of changes required.

___No

- 6. Please check one of the following with respect to the approximate person/month effort required to develop the required interface programs.
 - 1/2 11 - 33 - 8
 - 8 12
 - 12 16
 - _____ greater than 16

FILE SIZE AND DEVICE ALLOCATION

1. From the information supplied in the design, is there sufficient information to determine file sizes?

____Yes

____No, specify deficiencies.

2. From the information supplied in the design, is there sufficient information to determine the appropriate device (disk, tape, etc) that each file should be allocated to?

____Yes

- _____No, identify the specific files in question.
- 3. Do you foresee any problem with respect to excessive file requirements (particularly for large volume sort)?

Yes, specify the files that are of concern and your estimate of the size.

_No

4. If data control characteristics/blocking factors are specified, do they conflict with local operating environments or standards?

____Yes, specify conflict.

___No

SOFTWARE REQUIREMENTS

- 1. Are all of the required vendor supplied software packages available in your organization?
 - ___Yes, also identify any problems or limitations you have encountered with any of the software packages.

_____No, specify the packages that are not available.

.

I

TECHNICAL REVIEW QUESTIONNAIRE *

COMPUTER SUBSYSTEM CONVERSION MASTER FILE OR DATA BASE CREATION

If the system involves the initial creation of a master file or data base from existing Operating Telephone Company (OTC) mechanized files, please answer the following questions:

1. Are the descriptions provided in the design sufficient to identify local interface program requirements for conversion?

____Yes

- _____No, identify deficiencies.
- 2. If the existing files are not pure, eg, up-todate, accurate, or missing data, extensive file purification is required?

____Yes, identify nature of purification process.

- ____No
- 3. Are translations required to convert file codes such as Common Language Location Identification (CLLI) and Universal Service Order (USO) codes, etc?

____Yes, specify required translations.

____No

4. Are the existing files detailed enough to provide the required level of input (for example, service order activity by second level business office managers or cost data at the salesperson level)?

____Yes

____No, specify how the required level of data can be obtained.

*When comments are required in response to a question, record them on a separate page and attach to the questionnaire. 5. Will modifications be required to the systems that create the existing files that will be used to develop the data base for the proposed system; ie, will there be program changes required other than just supplying the input files?

____Yes, identify nature of changes required.

____No

6. Do you anticipate any problems in keeping the file pure during the conversion process?

Yes, describe problems associated with file maintenance.

____No

7. Please check one of the following with respect to the approximate person/month effort required to develop the required data base or master file creation program.

INTERFACE FILES FROM OTHER SYSTEMS

If the system involves the use of mechanized input from other systems on an ongoing basis and will require the development of local interface programs, please answer the following questions:

1. Are the descriptions provided in the design sufficient to identify local interface program requirements?

____Yes

_____No, identify deficiencies.

NOTICE

Not for use or disclosure outside the Bell System except under written agreement 2. If the existing files are not pure is extensive file purification required?

____Yes, identify nature of purification process.

____No

3. Are translations required to convert file codes, such as CLLI and USO codes, etc?

_____Yes, specify required translations.

____No

4. Are the existing files detailed enough to provide the required level of input (for example, service order activity by second level business office managers or cost data at the salesperson level)?

____Yes

____No, specify how the required level of data can be obtained.

5. Will modifications be required to the systems that create the existing files to be used as input to the system; ie, will there be program changes required other than just supplying the input files?

_____Yes, identify nature of changes required.

___No

- 6. Please check one of the following with respect to the approximate person/month effort required to develop the required interface programs.
 - 1/2 11 - 33 - 8
 - ____8 12
 - ____12 16
 - _____ greater than 16

FILE SIZE AND DEVICE ALLOCATION

1. From the information supplied in the design, is there sufficient information to determine file sizes?

____Yes

____No, specify deficiencies.

2. From the information supplied in the design, is there sufficient information to determine the appropriate device (disk, tape, etc) that each file should be allocated to?

__Yes

- _____No, identify the specific files in question.
- 3. Do you foresee any problem with respect to excessive file requirements (particularly for large volume sort)?

_____Yes, specify the files that are of concern and your estimate of the size.

___No

4. If data control characteristics/blocking factors are specified, do they conflict with local operating environments or standards?

_____Yes, specify conflict.

____No

SOFTWARE REQUIREMENTS

1. Are all of the required vendor supplied software packages available in your organization?

> Yes, also identify any problems or limitations you have encountered with any of the software packages.

_____No, specify the packages that are not available.

2. If the system is dependent on an interface with another Centrally Developed System(s) (CDSs), is the system(s) operational in your organization?

____Yes

____No, indicate date CDS is scheduled to become operational.

3. Is there any system software (eg, security system, Job Control Language (JCL) validation routines) particular to your installation that would cause problems due to the proposed system's design?

_____Yes, identify problem areas.

____No

CONVERSION RESOURCE REQUIREMENTS

Excluding the requirements to develop master file or data base conversion programs and interface programs, please check one of the following with respect to the approximate person/month effort required for conversion.

COMPUTER SUBSYSTEM OPERATIONS — INPUT CONTROLS

1. Do you foresee any problem in identifying which step(s) or job(s) process the individual input files?

____Yes, specify problem.

____No

2. Are there adequate controls to ensure that all required inputs have been processed?

____Yes

____No, identify deficiencies.

SCHEDULING

1. Do you foresee any problems in determining the processing sequence?

____Yes, identify problem area.

____No

2. Do you foresee any problem inherent in the system that will preclude you from maintaining the processing schedule?

____Yes, identify problem area.

____No

3. Are there any scheduling conflicts with online operations or with interfacing systems?

_____Yes, specify conflict.

____No

PROCESSING

1. Does there appear to be adequate controls in the system that would prevent the jobs from being run out of sequence?

____Yes

_____No, specify deficiencies.

2. Does there appear to be any unnecessary operational requirements for file overrides during the initial processing or at end of cycle, end of month, etc?

<u>Yes, specify deficiencies.</u>

____No

3. Does there appear to be any processing control problem with on-line operations or interfacing systems?

Yes, identify deficiencies

- ____No
- 4. Does there appear to be any file or processing volatility problems that would result in unmanageable changes in processing resource requirements, such as special study requests?

_____Yes, identify problem area.

____No

5. Does there appear to be any file or processing volatility problems, such as special request for large volume prints that would be unmanageable from a scheduling point of view.

____Yes, specify problem area.

____No

6. Does the system require unnecessary checks of operational messages before proceeding to the next step or job, eg, SYSOUT messages, console operator messages?

____Yes, identify problem area.

____No

7. Do all inputs from other systems have standard labels or identifiers?

____Yes

____No, identify specific files.

8. Does the system have adequate internal file balancing procedures?

____Yes

_____No, what are the potential problems. 9. If the CDS is to be run on a mainframe with other application systems, will it create problems?

_____Yes, identify types of problems.

____No

OUTPUT CONTROL

1. Do you foresee any problem in correlating output with the proper recipients for distribution?

____Yes, identify nature of problem.

____No

2. Do you foresee any problem with ensuring all required outputs have been produced; for example, should you always expect an error list or just when there are errors?

_____Yes, identify nature of problem.

____No

3. Do all report specifications include clearly labeled report titles?

____Yes

____No

4. Are you satisfied that the outputs will be properly marked for security purposes, eg, private, or notice markings?

____Yes

____No, identify problem area.

RESTART/RERUN

- 1. Does the system require any out-of-theordinary procedure for restarting jobs?
 - Yes, are the procedures acceptable in your operating environment?

____No

L

2. Are the identified restart procedures adequate?

____Yes

____No, what are deficiencies?

- 3. Does the system require any out-of-theordinary procedures for rerunning jobs?
 - Yes, are the procedures acceptable in your operating environment?

____No

4. Are facilities provided for recovering selective reports from large volume print runs without printing the entire report?

____Yes

_____No, are such facilities required?

5. Are the capabilities for data base backup and recovery adequate?

____Yes

_____No, what are the deficiencies?

6. Are the capabilities for system recovery adequate?

Yes

____No, what are the deficiencies?

COMPUTER SUBSYSTEM ARCHITECTURE

1. Do all controls, master files, and data bases have facilities to add, change, restructure, or delete records?

> Yes, are the facilities flexible enough for numerous changes?

> _____No, do you foresee problems with not having update facilities? If so, enumerate potential problems.

2. Does the system have facilities for receiving or accumulating input data?

____Yes

_____No, do you foresee problems with not having such facilities?

3. Does the system require large volume sorts that you feel could be avoided by changes in file design, file format, or other design changes?

Yes, provide recommendation, if possible.

____No

4. Does the system require any unusual manual intervention to override files, eg, during the first run of the cycle, first run of month, first run of year?

Yes, would such overrides be acceptable in your processing environment?

____No

5. Does the system appear to have adequate file balancing controls for ensuring that complete and correct files are processed?

____Yes

____No, identify problem areas.

6. Does the system appear to have adequate controls for ensuring that the programs and jobs are processed in proper sequence?

____Yes

____No, identify problem areas.

7. Does the system design conform to the Rules for Centrally Developed Systems (Section 007-200-100 and 007-203-100) and applicable Standard Operating Environment (SOE), eg, Section 007-203-101?

____Yes

____No, identify deficiencies.

8. In calculating file sizes, have you identified any files that appear to be prohibitive with respect to resource requirements?

____Yes, identify file.

- ____No
- 9. Are adequate controls employed to prevent unauthorized dissemination of sensitive information?

____Yes

_____No, identify problem areas.

10. Are adequate facilities available to inhibit accidental or intentional data base/file destruction?

____Yes

_____No, identify problem areas.

11. Do proposed abend messages clearly describe the condition causing the abend and possible corrective action?

____Yes

_____No, identify deficiencies.

BELL SYSTEM PRACTICES AT&TCo Standard

USER REVIEW QUESTIONNAIRE *

USER CONVERSION REQUIREMENTS

1. If data from manual records are required to construct the necessary mechanized files/data bases, are the required data clearly identified?

____Yes

____No, specify which areas need clarification.

2. If existing manual records are required to construct the mechanized files, are they available in your organization?

____Yes

_____No, what effort will be required to collect the data.

3. Are these existing manual records compatible with the system requirements with respect to the commonality of record identification requirements, such as a requirement to use CLLI and USO codes, etc?

____Yes

_____No, what effort will be required to reconcile the discrepancies.

4. Are these existing manual records pure, eg, consistent in their use of coding schemes, accurate, up-to-date?

____Yes

____No, what effort will be required to purify the files?

5. Do these existing manual records have the required data at a level of detail that satisfies the system requirements?

____Yes

____No, what effort will be required to provide the required level of detail?

- 6. Please check one of the following with respect to the person/months required to prepare the data and initially create the required mechanized files from these manual records.
 - (a) Management time required:

| 1/2_1 |
|-------|
| 1-2 |
| 2_5 |
| 5-10 |

(b) Clerical time required:

| 1/2_1 |
|-------|
| 1_2 |
| 2—5 |
| 5-10 |
| 10-15 |
| 15-20 |
| 2024 |

7. Are the conversion requirements such that they are manageable in your environment?

Yes

*When comments are required in response to a question, record them on a separate page and attach to the questionnaire.

____No, specify problem areas.

NOTICE

Not for use or disclosure outside the Bell System except under written agreement

SECTION 007-210-320 Attachment 4

- 8. Please check one of the following with respect to the person/months of effort required by the training group to train the personnel in your organization to initially use the system.
 - $\begin{array}{r} ---1 2 \\ ---2 5 \\ --5 10 \\ --10 15 \\ --15 20 \\ --20 24 \end{array}$

USER OPERATIONS

1. Do the outputs (displays and reports) meet your work requirements with respect to their content and format?

____Yes

- ____No, identify deficiencies.
- 2. Are the outputs functionally designed so that they can effectively be used in your current organizational environment?

____Yes

____No, specify problem areas.

3. Are the proposed error messages and reports clear as to the cause of the error?

____Yes

____No, identify problem areas.

4. Are the error correction requirements clearly described?

í

____Yes

____No, specify problem areas.

5. Can the error correction requirements be accomplished in a timely fashion, based on your work objectives, when you consider time delays for processing, distribution, correction, resubmission and review?

___Yes

____No, specify problem areas.

6. Does the design clearly describe the interactions required between the user and the computer subsystem, eg, data entry, error correction, report requests?

____Yes

____No, identify deficiencies.

7. Do you foresee any problems with user required interaction with the computer subsystem?

____Yes, identify problem areas.

___No

8. Are the inputs processed by the user clearly described in the design with respect to their content?

____Yes

_____No, identify deficiencies.

9. Are all of the inputs required readily available?

____Yes

____No, identify problem areas.

ISS 2, SECTION 007-210-320 Attachment 4

ORGANIZATIONAL IMPACT

1. Will the system require organizational changes to existing or proposed responsibilities to effectively operate the system?

____Yes, identify nature of change required.

____No

2. Do you foresee any force increases or decreases as a result of installing the system?

_____Yes, identify impact.

____No

,.

3. Do you foresee any significant changes in the skill level requirements for those individuals responsible for managing or using the system, eg, developing system inputs, utilizing system outputs, operating a video display terminal?

> ____Yes, identify new skill requirements.

____No