

Decision 84 04 017

APR 4 1984

**ORIGINAL**

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Application of General Telephone  
Company of California, a corporation,  
for authority to increase certain  
intrastate rates and charges for  
telephone services.

Application 83-07-02  
(Filed July 1, 1983)

And Related Matters.

OII 83-08-02  
(Filed August 3, 1983)

Case 82-10-08  
(Filed October 28, 1982)

(See Decision 83-12-067 for appearances.)

### SECOND INTERIM OPINION

#### Summary of Decision

The purpose of this opinion is to specifically direct the attention of all respondent telephone utilities, and interested parties, to the proposal of our staff for establishing a cooperative centralized credit bureau. Staff's goal is to reduce the present statewide amount of uncollectibles, now in excess of \$160 million annually (costing about \$13/year per subscriber). The initial concept and mechanics were presented by staff's project manager, H. Strahl, in Exhibit 34. Strahl has refined his proposal since initially testifying about it on December 13, 1983. Today's decision, to be served on all appearances and the respondents in Order Instituting Investigation (OII) 83-08-02, is accompanied by staff's proposal as Attachment.

A hearing to allow cross-examination of Strahl and receive testimony by telephone utilities or interested parties is set for June 12, 1984. We think Strahl's proposal has considerable potential merit, and we want it addressed expeditiously.

Background

We allow a reasonable level of uncollectibles as an offset to revenues when ratemaking. Accordingly, all telephone customers bear, through their rates, the burden caused by those nonpaying customers.

Strahl points out that presently, among all telephone utilities, there is a lack of information exchanged about nonpaying customers. The nonpaying customer of, for example, Pacific Bell could terminate service and move to General Telephone Company of California's (General) territory and have service instituted, very likely without General knowing the customer is a credit risk. Existing tariff rules provide at the most, even if credit worthiness is in doubt, for a deposit equal to two months of the average expected bill. As such, in addition to the centralized credit bureau, Strahl proposes a new deposit rule for tariffs, so that a known credit risk customer (who has not paid the prior serving telephone utility) would have to put up a deposit of 75% of the amount owed the prior utility.

Mechanics of Staff's Proposed  
Centralized Credit Check System

Strahl proposes that information on all new subscribers, and those who have terminated service without fully paying their bills, go into the data base of the centralized credit system check. Thus, there could be an almost instantaneous cross-check on credit worthiness. Also, the telephone utility holding an unpaid bill would be notified of the nonpaying customer's new address so it could pursue collection. General, working with Strahl, found a company in San Jose, Information Management International, Inc. (IMI), which could be contracted with to compile the data base and, essentially, serve as the centralized credit bureau for all telephone utilities. Costs, about \$3.7 million per year, could be shared among utilities. A reduction in uncollectibles of about \$20 million during the first

year is estimated by IMI. At this time Strahl recommends, to quickly institute his proposal, that the utilities contract with the San Jose firm for a maximum of two years. Thereafter, the data-base collection service would be let out to competitive bid.

Other Proposals Related to Uncollectibles

Staff also has proposals to reduce late payments, credit card fraud, and dealing with repeated non-paying customers. These proposals warrant consideration, and should be addressed after the proposed centralized credit check system.

Issues to be Addressed

Reducing uncollectibles is without question a desirable benefit for all customers. It can reduce the cost of service. The pivotal issues we expect parties to address at the hearing are:

1. The cost benefits of staff's proposal.
2. The reasonableness of the ancillary tariff rule charges recommended by staff.
3. Whether there can be adequate safeguards to protect customers' privacy rights and the confidentiality of credit information pertaining to the utilities' customers.
4. Whether the staff proposal, which would use the services of IMI on a two-year trial basis, is preferable to an RFP process which would select, on a competitive basis, a company to carry out (on a trial basis or otherwise) the particular proposal adopted in this proceeding.
5. The various other items recommended in the staff's report dealing with uncollectibles.

If Strahl's proposal, or a variation, is found workable and cost effective for telephone utilities, we may then explore in a separate proceeding the feasibility of ultimately having energy utilities join in the effort.

Staff's proposal reflects the initiative and imagination so critically needed as we endeavor to seek ways of keeping utility service affordable and rates reasonable. Its proposals are in its report which is attached to this decision as an appendix.

SECOND INTERIM ORDER

IT IS ORDERED that:

1. This order shall be served on all appearances in Application 83-07-02 et al., all respondent telephone utilities to OII 83-08-02, and appearances in Pacific Bell's pending Application 83-01-22 et al.

2. The following inter-LATA long distance carriers shall be mailed a copy of this decision: American Telephone and Telegraph Communications Company of California, Inc., MCI Telecommunications Company, Western Union Telegraph Company, and GTE Sprint Communications Corporation. These utilities are not respondents to OII 83-08-02, but their participation in these proceedings may be useful.

3. A public hearing will be held on June 12, 1984, at 10:00 a.m. in the Commission's Courtroom at 350 McAllister Street, San Francisco, to receive the staff's attached proposal in evidence, allow cross-examination, and receive the testimony of any respondent utility or interested party relating to staff's proposal. Those who wish to present testimony shall submit it as prepared testimony, served on all parties and respondents, no later than May 18, 1984.

This order is effective today.

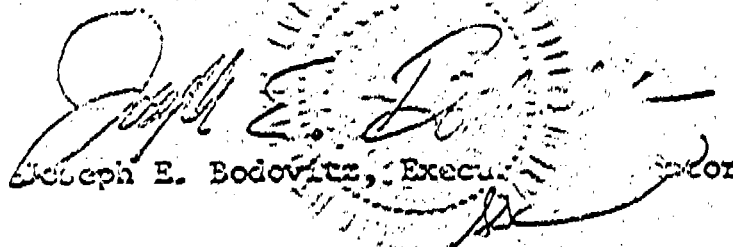
Dated APR 4 1984, at San Francisco, California.

LEONARD M. GRIMES, JR.  
President

VICTOR CALVO  
PRISCILLA C. GREW  
DONALD VIAL  
Commissioners

Commissioner William T. Bagley  
being necessarily absent, did  
not participate.

I CERTIFY THAT THIS DECISION  
WAS APPROVED BY THE ABOVE  
COMMISSIONERS TODAY.

  
Joseph E. Bodovitz, Executive Director

CALIFORNIA PUBLIC UTILITIES COMMISSION

REPORT  
ON THE  
TREATMENT OF UNCOLLECTIBLES  
AND RELATED ISSUES  
FOR TELEPHONE COMPANIES

OII No. 83-08-02

Application No. 83-07-02

J-1518

San Francisco, California  
March 16, 1984

SYNOPSIS

The Revenue Requirements Division staff recommends that:

1. A centralized credit check system should be set up as quickly as possible to accomodate all the telephone utilities in California.
2. The telephone utilities be directed to work with military authorities on military bases that have high uncollectibles so as to reduce that problem.
3. The utilities be directed to implement a late payment charge of 1.5% per month on the unpaid balance of all customers' bills.
4. The utilities be directed to take appropriate steps to reduce credit card fraud.
5. The utilities be directed to modify their rule on discontinuance and restoration of service to include in it provisions for customers who disconnect and reconnect under different names.
6. The Roseville Telephone Company be directed to implement special network restrictions in its system.
7. The utilities be directed to study the possibility of offering various network restrictions.

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This report was prepared by Harry Strahl, Project Manager,  
in the Revenue Requirements Division.



## CHAPTER I

## INTRODUCTION

1. During 1982, the California telephone companies recorded uncollectible charges of over \$160,000,000 or about \$13.50/customer/year. Recent changes involving restriction of third party calling and new deposit rules will aid in reducing this staggering amount to some degree; nevertheless, the 1984 anticipated amount will still be around \$160,000,000 due to the growth in both revenues and customers. Another factor that might well contribute to increased uncollectibles is the ATT divestiture, which will result in a number of interLATA toll carriers serving California and will pose new problem as to the revenue collection practices in light of the various possible serving combinations and jurisdictional problems. For example, a customer served by Pacific Bell for intraLATA and by ATT for interLATA might walk away from hundreds of dollars on both billings, relocate and reestablish service in General Telephone's area for intraLATA and MCI for interLATA. Due to the present lack of cooperation between the utilities, Pacific and ATT would have to write off the amount and, in effect, charge it to their other customers, while General and MCI (and their ratepayers) would unknowingly take on a risky customer.

2. In order to reduce this abuse, the Revenue Requirements Division staff (hereafter referred to as staff) recommends that a centralized credit check entity be set up and funded by all participants on the basis of use. This entity will obtain names and identification data of individuals who disconnect and relocate without paying their telephone bills. The data will be compared to a data file containing the names of customers of all telephone utilities who have recently established service (six months or less). In the event that a verifiable match is found then the entity would notify both the current and the former utility. The current utility would be allowed, under tariff, to charge the customer a special deposit which would be higher than what is normally provided for, and the former utility would be given the current address of the customer in order to facilitate the expeditious collection of the unpaid bill.

3. The staff envisions a fully mechanized system that would use few, if any, paper records. Appropriate measures should be taken to prevent the use of the data by unauthorized entities and, in order to motivate the utilities to use the system efficiently, the names of newly established customers should be purged from the data base after six months.

4. A meeting was held in San Francisco on August 4, 1983 to discuss this particular issue. Representatives of many local exchange telephone utilities, the staff and other entities such as AT&T and GTE Sprint were present. All participants have agreed

that there is a need to further explore this issue as well as other items that relate to it. This report addresses the results of the exploratory activity and also covers related issues.

CHAPTER II

ENVIRONMENT

1. Utility customers are a heterogenous lot but may be roughly classified as belonging to one of five general categories as follows:

1. Regular Paying Customers - Customers who generally pay their bills on or before the due date, and who, on occasion, may miss payments due to forgetfulness, postal delivery problems, vacation and other absences or a bill dispute; in the latter cases, resolution of the matter is relatively expeditious and usually terminates in a satisfactory manner to all parties. The vast majority of customers belong to this category.
2. Threshold Customers - Customers who are frequently late paying their bills because of forgetfulness or because of other pressing financial and nonfinancial matters. These customers generally have no intent to disconnect their service or defraud the system, and if treated in the appropriate manner, may be persuaded to join the first category.
3. Working Cash Customers - Customers (primarily business) who understand the mechanism of working cash and exploit it to the maximum level possible. They constantly compare the benefits derived from deferring payments to the

associated costs, and this economic analysis is their sole motivator. They are habitually late and pay their bills just before the disconnection notice; however, they operate within the letter of the tariffs and generally have no intention of disconnecting or committing fraud.

4. Financially distressed customers - Customers who are unable to pay their bills but have no wish to disconnect service (The exception might be bankrupted individuals or corporations); nevertheless, customers in this category do not intend to commit fraud.

5. Fraudulent customers - Customers who, for diverse reasons, elect to defraud the utility through the use of various devices. These customers span the demographic and social spectrum and only exhibit unity in the way they use the system to further their own aims.

2. It is possible for a customer in one of the first three groups to gravitate to a lower group through unforeseen circumstances; for example, a business customer in the third group might suddenly declare bankruptcy and, as such, would fall into the fourth group, but the key issue is that the intent to commit fraud is inherent only in the last group.

3. By far, the major generator of uncollectibles is the fifth group, although some writeoff may be ascribed to the fourth group. As mentioned before, the uncollectibles for telephone utilities in California exceeded \$160,000,000 in 1982 alone,

or \$13.50 per customer per year. Most customers are and have been totally desensitized to this because the entire uncollectible amount is treated as a legitimate expense for rate making purposes; as such, most utilities find it easier not to pursue this issue. Also, the recent campaign to stimulate usage of the toll network thru ease<sup>OF</sup> access and credit cards has resulted in a virtual invitation for abuse.

4. The customers in the fifth group may belong to one or more of the following subgroups as follows:

- a. Customers who charge calls to billing numbers other than their own (Operator Number Identification (ONI), circle digit Identification and credit card).
- b. Customers who fraudulently contest legitimate charges in the hope that the utility personnel might find it easier to drop the charge than to investigate it.
- c. Customers who skip out on legitimate bills without leaving a bill forwarding address.
- d. Customers who skip out or disconnect service without paying the final bill and reconnect under another name through related or unrelated members in the same household.

5. The motivation of customers in the fifth group is a complex issue that may encompass greed, fun and challenge (ala "Captain Crunch"), radicalization ("a blow against the establishment"), revenge and other factors. The staff is of the opinion that the Commission cannot and should not address those factors and should only concentrate on protecting the first four groups against the last.

6. Appropriate treatments of the fifth group are proposed in Chapters IV, VII and VIII of this report. Treatment of the second and third groups is proposed in Chapter V, and treatment of the fourth group is proposed in Chapter IX.

CHAPTER III

ISSUES

1. The staff, through meetings and correspondence with the exchange telephone utilities in California, identified a number of issues that need to be resolved. Those issues may be addressed individually or collectively and final resolution need not be concurrent for all.
2. The issues are as follows:
  - a. Should customers in the first four groups (as spelled out in Chapter 2) be forced to carry the burden imposed by the fifth group?
  - b. Should the utility (and its stockholders) be held responsible for sharing some or all of the uncollectible burden as an incentive to keep uncollectibles as low as possible?
  - c. Should regular customers bear the financial burden imposed by customers who habitually pay their bills late?
  - d. What should be done about customers who move frequently from one utility's service area to another utility without paying the final bills?
  - e. What needs to be done in order to reduce ONI, circle digit identification and credit card fraud?



- f. Are there any fair and reasonable means to suppress the incidents of customers who disconnect and reconnect under another name through related or unrelated members in the same household?
  - g. Could the network be reconfigured to handle customers with temporary or permanent financial difficulties so that provision of emergency services would not be denied?
  - h. Could the deposit rule be made more flexible so as to enable utilities to handle different types of customers?
  - i. Should the Commission demonstrate more support to utilities that are taking extra measures to reduce and maintain low uncollectibles?
  - j. Should the entire issue be enlarged so as to cover all other regulated fixed utilities in California (Energy & Water)?
3. It is quite possible that additional issues may surface during the course of the hearings in this OII; if such is the case, the staff would recommend that additional time be allocated to address the new issues.

## CHAPTER IV

PROPOSED SOLUTION AND RECOMMENDATION ON THE  
ISSUE OF SKIP OUTS ON FINAL BILLS

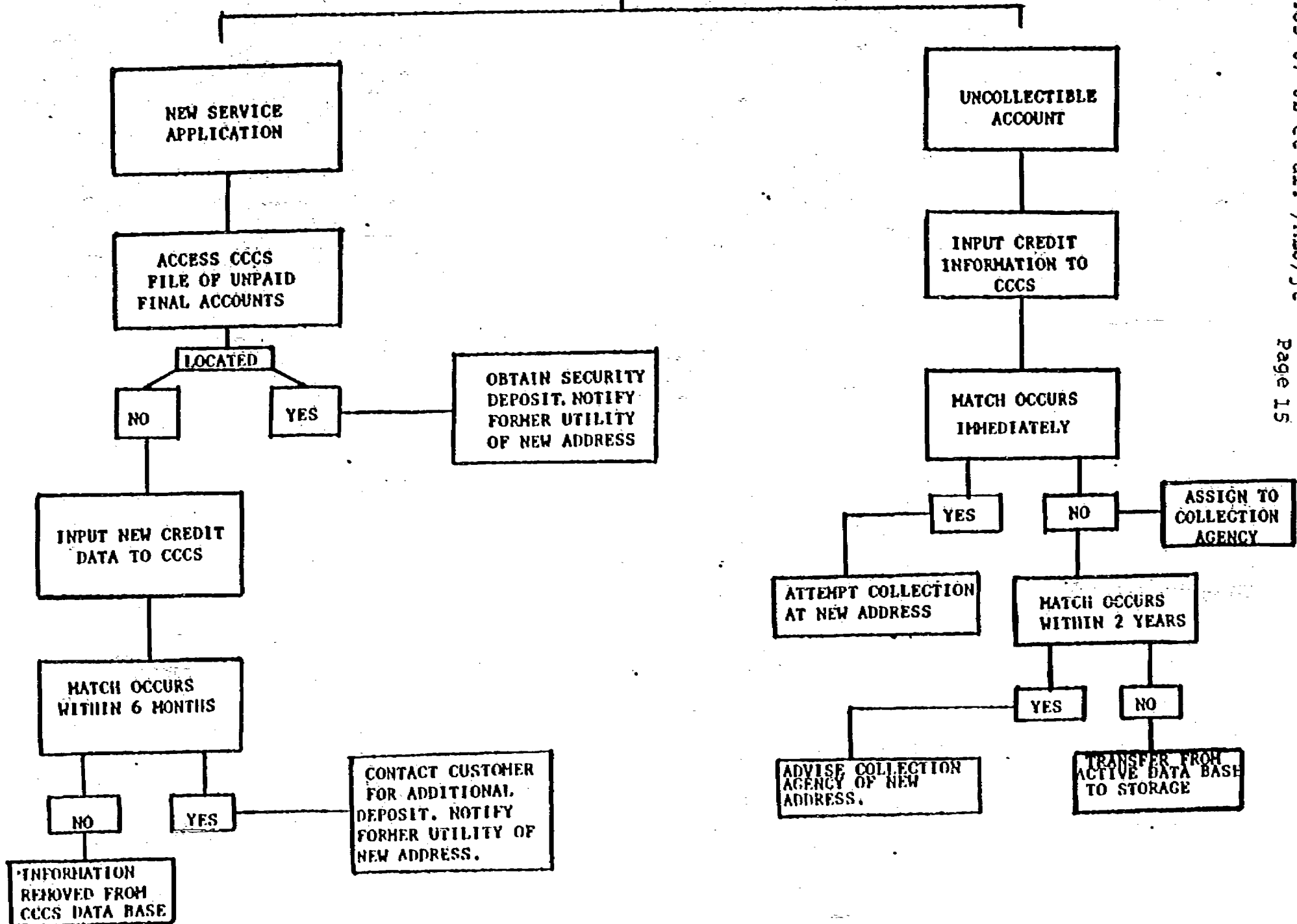
1. Customers who skip out on final bills and reconnect in another company, without making arrangements to pay the final bill, are, in effect, forcing the general body of ratepayers to pay the bills for them. To the extent that means are readily available to suppress such activities, those means should be utilized. The act of ferreting out customers who do not pay their bills and demanding payment represents an attempt to protect the general body of ratepayers. In light of the above, the staff started exploring solutions to this problem in early 1983.

2. On August 31, 1983, the staff sent all participants in OII 83-08-02 a data request regarding uncollectibles in general, and staff's proposed Centralized Credit Check System (CCCS) in particular (Attached as Appendix A). Pacific Bell (formerly Pacific Telephone), in its October 18, 1983 response, made a number of statements to the effect that, due to lack of time, resources and a heavy workload, it was unable to conduct an in-depth study of this matter; further, Pacific suggested that this represents "a potential new business opportunity" and that it would like to consider it in the future.

3. General Telephone responded to the request on October 18, 1983 with a more comprehensive response than Pacific's. Aside from addressing the many issues, General solicited an independent study on CCCS from a non-affiliated entity named Information Management International, Inc. (IMI). IMI's study and CCCS proposal are attached as Appendix B. The study was detailed and its conclusion was that it would cost approximately \$3.7 million to implement and operate CCCS during the first year and that, on the conservative side, it would result in savings of over \$20 million per year; the study also suggested that, in subsequent years, "the savings will increase due to improved collection procedures and education of the general public in the existence and utilization of the proposed CCCS." IMI indicated willingness and ability to commence setting up CCCS as soon as possible and it has confided that CCCS could be fully operational within four months from the go-ahead directive.

4. The basic flow chart of the CCCS function is shown on page No. 12. The concept is that all new service applications will be compared, on a monthly basis, for a period of six months, to the file of unpaid final accounts from all California telephone utilities. If a match is discovered, then the former utility would be notified of the customer's new address, so as to facilitate collection and the current serving utility would charge a reasonable deposit to reflect the fact that it (the utility) is serving a risky customer.

# CENTRALIZED CREDIT CHECK SYSTEM (CCCS)



The staff is of the opinion that: a) the deposit, as discussed above, should equal 75% of the unpaid balance owed to the previous utility but not less than \$100.00; b) in the event that the customer makes a complete and rapid restitution (within one month) to the former utility, after discovery, then the deposit should be reduced to 25% of the former unpaid balance but not less than \$80.00; and c) the deposit should be held for a period of two years.

5. In order to protect the rights of customers and encourage efficiency, new service application data should only be retained for a period of six months from the in-service date and thereafter purged from the files. There should also be safeguards in the system which would prevent its use by unauthorized entities, as:

- a. A restricted access system which would only allow input from authorized users and lock out any attempts to obtain output, manipulate the data file or input information from unauthorized entities,
- b. An in-house security system to insure that personnel of the operating CCCS entity will not manipulate the data file on behalf of unauthorized entities.
- c. A clause in the contract of the CCCS entity which will specify that 1) the customer's information data base is the sole property of the utilities; and 2) failure to achieve a reasonable level of security in protecting the data base shall constitute grounds for termination of the CCCS entity's operating contract.

6. The staff has already recommended, on the record, that this system be implemented as quickly as possible so as to derive benefits from the excellent cost-benefit ratio. The benefits (through reduced revenue requirement) could be reflected in all 1985 telephone rate proceedings. The staff appreciates the difficulties encountered by Pacific in developing a timely study for the system; however, the ratepayers of California need not wait until Pacific is ready. The staff is of the opinion that there is a need to implement CCCS as quickly as possible because a delay costs the California telephone ratepayers at least \$1.3 million per month; therefore, the staff recommends that IMI be given a contract, for a limited period of two years, to implement and operate the system; thereafter, the contracts for operating the system should be let out on the basis of competitive bids for a period of three years.

7. The centralized customers' information system is not substantially different from the in-house systems of major telephone utilities; as such, CCCS is simply an extension of the current systems. CCCS, as proposed above, does provide a fair, reasonable and efficacious way to deal with the issue of customers who skip out on final bills. Further, CCCS will eventually bring about a reduction in the number of customers who skip out due to increased public awareness and exposure to the system.

8. The staff has determined that the skip-out problems are quite severe around military bases because some military personnel assume that the local serving entities will not bother to track them to bases in other states or overseas. The staff recommends that the utilities be directed to work closely with military authorities on the bases to reduce this problem.

### LATE PAYMENT CHARGES

1.        The utility's working cash requirements are greatly affected by the speed of collection of due bills. As more customers lag in their payments, the utility is forced to make up for that through short term borrowing or eventual rate adjustments. Further, such customers bring about a substantial administrative burden which gets reflected in higher commercial expenses. The logic of the habitual late payers is fairly obvious in that they have three alternatives as follows:

- a.    Pay the due bill on time.
- b.    Delay the due bill and, if cash is available, use that cash to earn interest or put it to other uses.
- c.    If cash is not available, delay the bill and thereby avoid the costs of borrowing the cash.

      The most beneficial arrangement for most customers from a cash flow standpoint is alternative C because the customer, in delaying bill payments, negates the need for obtaining a short term loan. The current cost of an unsecured, short-term loan (from a legal money-market source) is anywhere from 17 to 20 percent per year.



2. The reasonable solution is to assess a late payment charge on the unpaid balance of the bill, and General Telephone has already implemented such a charge in 1983. General is of the opinion that this charge will result in a saving of about \$9 million during 1984. The appropriate term for such charges should be Late Payment Charge, and the amount set on the basis of the unpaid balance and expressed as a percentage. The percentage should be equal to the current cost of obtaining a short term, unsecured loan plus a small premium to reflect administrative costs. The staff is of the opinion that implementation of such a charge for all telephone utilities in California would curtail abuse and would eventually result in lower rates for all customers. The charge should be set at 1.5% per month of the unpaid balance.

CHAPTER VI

RESPONSIBILITY FOR UNCOLLECTIBLES

1. The reasonable costs of operating the telephone system should be borne by all customers; nevertheless, there is a trend toward compensatory rates whereby customers will assume more of the burden that they themselves impose upon the system; hence, a customer who moves frequently will have to pay for the moves and charges rather than have the general body of ratepayers pay for this activity. Similar measures are being proposed or have already been implemented for terminal equipment maintenance and operator assisted calls.

2. Uncollectibles are a strange and unique expense category in that they may be controlled, to some degree, by utility and regulatory practices. The ratepayers, as a whole, have been consistently paying for those expenses, and, as such, the environment has been made ripe for a cost-plus operation on the part of the utilities. Also, regulatory restrictions may also affect utility attitudes in that it is generally easier to write off an account rather than pursue it.

3. The suppression of all uncollectibles, an idealistic goal, is generally not feasible due to unreasonable costs. The most reasonable mode of operation is to find an optimum range of suppression-uncollectibles costs and operate within that range while seeking new means to affect ease of collection and suppression.

4. The staff is of the opinion that, while the general body of customers should be responsible for payment of uncollectibles, the utility should be held liable for minimizing the suppression-uncollectibles costs. This means that uncollectibles should receive more than just a cursory review during rate proceedings; the utilities should be ordered to demonstrate, through appropriate studies, that they are indeed protecting the ratepayers.

CHAPTER VII

REDUCTION OF TOLL FRAUD

1. To the extent that modern technology in communications is doing away with Operator Number and Circle Digit Identifications, the problem will simply disappear in time; however, credit card and related toll fraud are increasing due to the following reasons:

- a. In the spirit of showing a "new market" with a potentially "new source of revenues", some utilities might be eagerly issuing credit cards to individuals who shouldn't have them. The stories about cards issued to such worthies as Mr. Al E. Gator might be exaggerated, but the proliferation of such casually treated instruments invites fraud through card theft, eavesdropping for card numbers or unauthorized use.
- b. The cards generally show all the customer's information in bold print on the front of the card; no other verifications are required to make a call. This is in marked contrast to the banking system's automatic teller cards.

- c. The toll network, at present, does not restrict the use of credit cards on the basis of a dollar amount limit on calls. This means that, until abuse and/or theft are reported, the calls charged to a particular card may keep on accruing; it is not unusual to run over a thousand dollars in fraudulent credit card billing.
2. The staff is of the opinion that some solutions should be considered such as:
- a. Increasing the number of public telephones which allow direct credit card dialing.
  - b. Restructuring the contents of the credit cards so as to eliminate some of the identification and network access information in a fashion similar to the banking system's automatic teller cards.
  - c. Exercise restraints in issuing credit cards coupled with a Commission order to the effect that credit cards' uncollectibles shall not be assigned against the ratepayers for ratemaking purposes if an investigation determines that a particular utility is issuing credit cards without safeguards.

- d. Set an upper limit on the monthly amount charged. Most card carriers would probably use less than \$150.00 worth of calls per month; others requiring a higher limit could convey this need to the utility. All this information may be readily stored electronically and compared against the on-going use, with denial applied at the appropriate time. Most regular bank credit cards have an upper limit based on use and need and there's no reason why telephone companies could not adopt a similar system to reduce the potential for fraud.

CHAPTER VIII

TREATMENT OF CUSTOMERS WHO DISCONNECT AND RECONNECT  
UNDER OTHER NAMES

1. A frequent irritant to many utilities is the case where a customer disconnects service without paying the bill and another member of the household reconnects under another name. The cycle may continue on until all of the family or social members have piled up impressive delinquent bills. The CCCS entity, proposed by the staff in Chapter 4, may suppress the practice to a very limited degree if one of the offenders attempts to reestablish telephone service elsewhere in California; however, to the extent that the offenders continue to reside in the same dwelling, other mechanisms might be necessary to suppress this activity.

2. Continental Telephone Company, in a recent correspondence, offered a possible solution to the problem by adding a paragraph to its Rule No. 11 (Discontinuance and Restoration of Service) as follows:

"C 5. The utility may not discontinue or deny service at a premises where services provided to a prior customer were disconnected for non-payment except where it is found that the delinquent customer resides at that same premises."

3. The staff concurs with Continental's language but would recommend added language to specify that "the utility may obtain written statement from a newly connecting customer stating that the former customer at that address was not and is not a member of the household. In the event that the statement is falsified, the new customer will be held liable for the entire delinquent bill owed the utility by the previous customer and shall also be liable for a deposit". The staff recommends that the particular language be introduced to the pertinent rules of all telephone utilities.



## NETWORK RESTRICTIONS

1. There are times when, rather than a total disconnect, it might be more suitable to restrict the customer's access to the network for a specific period of time. For example, a customer with an excellent credit rating might come back from a long vacation to find that the phone has been disconnected for "failure to pay the bill", or a customer with financial problems who intends to pay the bill and remain on the system but needs help in curtailing long distance calls might still be disconnected. This is of prime importance in those particular cases where the phone is a must because of a medical or other emergency related needs.

2. The staff has explored this issue to some degree with the California utilities in 1982 through a data request (Appendix C). The basis of the staff's request was to explore the possibility of providing limited local service, namely access to 911 emergency services and utility business offices through a special intercept system. This system would work with digital and late model electronic analog switches and basically would require a reconfiguration of the software. The intent is to provide unlimited access to 911 for handling emergency situations and any other call attempts or incoming calls would be denied; following a suitable

period after the phone is taken off-hook, an intercept system would connect the customer to the business office for provision of credit information and/or settlement of the account. This special system would continue for a period of 15 to 30 days and would be followed by a total disconnect if no further action is taken by the customer.

3. Some utilities responded to the request and it appears that this may be implemented in a total electronic switching environment. The Roseville Telephone Company (Roseville) in its December 22, 1982 response (Appendix D), suggested that it would cost approximately \$60,000 (one time cost) to arrange its entire switching system for this service. This covers the cost of software modification, time delay type trunk circuits from each office, the recording units and other equipment and facilities. The staff recommends that Roseville be directed to commence on a test of 2-3 years duration in its entire system to determine actual cost of implementation and impact upon the customers and utility. If the test is successful, then implementation should be ordered throughout the state in every exchange which is served by electronic switches capable of being so modified. The staff also recommends that Roseville be allowed to recover its entire cost in any future rate proceeding.

4. The staff also recommends that the utilities be directed to study the possibility of offering selective toll denial and limited toll or measured local service for certain consenting customers who make appropriate arrangements for such services. To the extent that such services may be offered with only some modifications in the software, it might prove to be very beneficial to those customers who need assistance in controlling their calling habits.

OTHER MATTERS

1. A question was raised during the investigative portion of the proceeding about bringing in the energy utilities in California under the umbrella of the proposed CCCS entity so as to reduce their uncollectibles. The staff has explored this with some of the energy utilities and has determined that a) the amount of uncollectibles involved is substantially lower than that of telephone utilities; b) the potential for abuse is lower; c) the energy companies' service areas are more defined and less intermingled thereby reducing the incidents of customers moving back and forth; and d) quite a few of the energy companies are municipal and REA utilities, and the Commission has no ratemaking jurisdiction over them. Nevertheless, the energy utilities which were contacted expressed interest in the subject and, as such, it might be desirable to keep them informed about CCCS and other pertinent matters.

A-83-07-02 et al. /ALJ/jt  
File No.: OII-83-08-02 / A-83-07-02  
Request: 001  
Date: 8/31/83


ATTACHMENT  
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APPENDIX A

PAGE 1 OF 2

To: General Telephone Company of California  
P. O. Box 109  
Santa Monica, California 90406-0109  
  
Attention: Karen S. Smith, Regulatory Matters Director

From: Public Utilities Commission - Revenue Requirements Division

  
H. Strahl, Project Manager  
Accountant/ Engineer/ Accountant

415 552-3631  
Telephone Number

Subject: Uncollectibles

Request: Pursuant to the industry meeting on uncollectibles which took place on August 4, 1983 in San Francisco, it is requested that the following items be provided:

Item 1. It is requested that both Pacific and General analyze a sample of their recent uncollectibles, such as 100 skip payments, to determine:

- a. The suppression effect, if any, of the staff's proposed centralized credit check system (cccs) as it would relate to the sample, and to the total company delinquent accounts.
- b. The estimated annual sum that would be collected through the use of CCCS for the entire company from delinquent accounts.
- c. The impact of imposition of a large deposit on customers who have had delinquent accounts with another utility (suppression, disconnection, etc).

Item 2. It is requested that General investigate the various set-up and operating costs associated with the staff's proposed CCCS entity with the assumptions that:

- a. The entity shall be independent from the telephone companies.
- b. The entity shall be fully mechanized to the extent of operating on a full teleprocessing basis with few, if any, paper records.
- c. The entity shall have normal work hours of 8-5, Monday through Friday, consistent with business hours of the utilities' service offices.

Item 3. It is requested that Pacific investigate the various set-up and operating costs associated with the staff's proposed CCCS entity with the assumption that:

- a. The CCCS entity shall be an integral part of Pacific (not necessarily regulated operations).

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- b. The entity shall be fully mechanized and tied electronically to Pacific's customers accounts teleprocessing system.

Item 4. It is requested that both Pacific and General investigate and determine the annual sum saved through the reduction of credit treatment personnel that would come about from implementation of the proposed CCCS.

Item 5. It is requested that any utility or entity wishing to do so provide suggestions for the Commission's consideration as to how to deal with members of family or social groups who skip out on payments and reconnect under other names.

Item 6. It is requested that any utility or entity wishing to do so provide comments for the Commission's consideration regarding any deficient or inequitable deposit or service connection rules currently on file with the Commission, and suggestions as to how to improve them.

Item 7. It is requested that both Pacific and General analyze the impact of issuing telephone credit cards without the cardholder's name, address or phone number and with only the four number access code showing on the card. The analyses should examine the potential reduction in fraudulent calls and potential reduction in uncollectibles.

Please provide your analyses, results and comments by October 1, 1983, and should there be a need for additional time, please call me at (415) 557-3631.

ES/amp

All participants in OHI-83-08-02  
L. Andrego

Information Management  
International, Inc.

MI

ATTACHMENT  
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PROPOSAL  
TO IMPLEMENT A  
CENTRALIZED CREDIT CHECKING SYSTEM

OCTOBER 6, 1983



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### INTRODUCTION

In order to reduce the delinquency/uncollectibles of the California telephone utilities the California Public Utilities Commission (PUC) requested that the General Telephone Company of California (GTC) analyze the feasibility of structuring an independent organization for implementation of a Centralized Credit Checking System (CCCS). The following proposal addresses this request which was made to GTC on August 31, 1983.

This proposal envisions The formation of an entity to be known as the Centralized Credit Check Company (hereafter referred to as CCCC). This entity will have competent management expertise in the following areas:

- o Credit & Collections
- o Systems Analysis and Design
- o Data Base Management
- o Computer Operations
- o Public Relations
- o Contract Compliance

CCCC will interface with the California telephone utilities and will contract with Information Management International (IMI) for the actual implementation and processing of the state-wide CCCS. IMI has such a system in operation and is providing credit and collection services to numerous California telephone utilities. The following proposal describes IMI's current services and the enhancements which would be made to meet specific requirements of the CCCS.

CCCC shall be a for-profit organization. It is anticipated that members of the California telephone utilities will participate in board positions directly or in an advisory role. It shall be the responsibility of CCCC to market to other telephone/telecommunication users and/or resellers such as MCI, Sprint, AT&T. etc. to increase the data base for mutual use and to help reduce the overall cost to the existing 25 California telephone utilities which were the statistical basis for this proposal.

It is respectfully submitted that the implementation of this proposal shall significantly reduce delinquencies/uncollectibles. The cost justification is significant even within the first years operation.

IMI Qualifications and Current Related Activities

IMI qualifications to provide the necessary services are based upon over 14 years experience in data processing and 5 years of production on-line processing for the credit/collection industry. IMI has the largest on-line network supporting all areas of the industry, including:

- o Major Credit Grantors
- o Collection Agencies
- o Credit Bureaus
- o Lawyers

IMI has shown that this service (Software, Hardware, Network) can be geographically distributed. Current on-line customers are located in Washington, Oregon, California and Arizona. IMI expects total geographical coverage in the Western States by mid 1984.

IMI is a large privately held corporation with the financial backing to meet its growth requirements. IMI is responsible for 6 data centers and a world wide telecommunications network (London, Tokyo, Paris, New York, Los Angeles, San Francisco, San Jose).

The organization of IMI includes staff required for all areas of the proposed support service:

- o Network and Terminals
- o Operations and Logistics
- o Customer Service and Training
- o Systems and Programming

Appendix 1 of this proposal includes brochures describing IMI's products/services and financial capabilities.

The following describes the types of services currently being provided to telephone utilities by IMI.

The current IMI system is operational today with over 400 terminals supporting organizations in Washington, Oregon, California, and Arizona. The Data Base has over 4,000,000 records and can be searched on-line over 100 different ways.

IMI has expended significant effort in working with telephone utilities, major credit grantors and collection agencies to create a system to meet the requirements of all organizations. This effort has taken over 5 years and as a result IMI has over 50 terminals in the following telephone utilities:

- o ATT
- o Continental
- o GTC
- o PTT

Collection Agencies on the IMI system currently provide services for most California telephone utilities including Sprint and MCI. IMI receives on-line transmissions directly from the telephone utilities as well as tapes for updating of the files.

The IMI system has been designed for on-line input, access and display of information through CRT terminals. Many features have been automated so the users can decrease their labor costs and realize significant increases in productivity. Mundane reporting efforts can thereby be eliminated and profitability increased.

Control and auditability are two of the major features with the system. From any terminal within the telephone utility, any debtor on the files can be searched for and displayed. The display shows all of the information available including:

- |                      |                                       |
|----------------------|---------------------------------------|
| o Debtor Information | Names, Address, and other information |
| o Notice History     | Number and Date sent                  |
| o Payment History    | Date and Type of Payment              |
| o Comments           | Up to 2,000 lines per Debtor          |

The following paragraphs describe specific applications being provided for telephone utilities by IMI.

PTT Sacramento - In the Sacramento Credit Management Office (CMO) IMI has installed 32 terminals for collectors and 11 terminals for new additions and payment posting.

The collection effort is in a paperless mode where each collector has a terminal. When a collector starts the system, the computer transmits a screen of information regarding debtor that the collector should contact next. On the work card screen the collector can:

- o Update information (Address, Employer, etc...)
- o Add or change comments (up to 2,000 per debtor)
- o Request a notice (Dynamic insertion of data)
- o Change follow up date and status (next date to work this debtor)

When debtors are to be assigned to outside collection agencies (OCA) the collector inputs the OCA number and today's date. Each week these records are processed and sent to the OCA via teleprocessing.

Payments and status changes are input using a number of different screens. These screens were created to help make file maintenance easier and faster. Mail returns and address corrections are also updated.

Special reports are produced at month end so that management can have more control, better information and a faster method of managing the department.

The search capabilities of the system are used by all staff. This feature significantly improves collections. Searches may be made by use of the following keys:

- o Name, (Person or Company)
- o Name, Spouse
- o Name, Grantor (Company or reference)
- o Address, (old service, new service)
- o Address, (old billing, new billing)
- o SSN, Social Security Number
- o Drivers L., Drivers License
- o Source, Telephone Number (Area-Prefix-Number)

The basic system used at Sacramento includes the following elements:

- o Addition/Changes to debtor master record
- o Payment processing
- o Assignment to outside collection agency
- o Notice series or single notice
- o Status update and corrections
- o Automatic (paperless) mode
- o Report requests
- o Message transmission to other terminals
- o Display comments from debtor record
- o Searching - All combinations

PTT El Cerrito - The 3 terminals located at El Cerrito are used to:

- o Add Debtors to OCA Pre-Commission Letter Service
- o Add Debtors to OCA for Hard Collection Effort
- o Search for Debtor Information
- o Direct inquiry to Debtor Record at OCA
- o Send messages to OCA or other terminals on the network
- o Control and Auditability

PTT Carson - The 4 terminals located at Carson are used similarly to these in El Cerrito. An additional function is searching the files on all new applications for Business Accounts. By this function PTT has found that over 15% of new service applications are on the PTT uncollectible file.

GTC - The 3 terminals located at Mantone are used for the same functions as PTT in El Cerrito.

Continental - The one terminal located at Manteca is used for the same functions as PTT in El Cerrito.

ATT Oakland - The one terminal located at Oakland is used for the same functions as PTT in El Cerrito.

MCI Washington D.C. - Direct tape to tape data input reporting is provided for this location.

Sprint L.A. - On-Line input and reporting for an OCA in Southern California is provided for this location.

The proposal Centralized Credit Check System (CCCS) consists of two subsystems - New Service Applications and Uncollectible Accounts. Figure 1 contains an overview of the system and the interrelationships between the subsystems.

One or more computer terminals will be located at telephone utility locations which process new service applications or uncollectible accounts. All terminals will be connected to an analog teleprocessing network capable of on-line real-time inquiry and update of information. All information would be transmitted electronically with a minimum amount of paper or microfiche for backup records only. The following provides a brief description of the features and capabilities of the proposed CCCS.

#### NEW SERVICE APPLICATION SUBSYSTEM

All applicants for new service will be processed through the CCCS. The following discussion applies to the use of on-line computer terminals, but it is also applicable to batch operation or use of a central phone number where a terminal is located. In this way even the smallest telephone utility can share in the advantage of the CCCS.

To eliminate the cost of redundant CRT terminals and duplicate data entry it has been assumed that all large telephone utilities will provide new service applications, uncollectible accounts and status changes on uncollectible accounts via magnetic tape or teleprocessing on a periodic basis compatible with the matching requirements of the CCCS. On-line terminals at large telephone utilities will be used to verify possible matches, and small volumes of adds, changes and deletes to the data base. Since almost all of the new service applications are made before the prior telephone utility final bill could reach the uncollectible state, on-line verification of a new service application is not mandatory. The match will be found in the next batch processing and an increased deposit can still be required.

The following paragraphs correspond to the numbering on figure 1.

1. The following basic information to search the uncollectible account file for a match would be entered:

- o Name of prior service
- o Address of prior service
- o Phone number of prior service
- o Drivers License number
- o Social Security number
- o Telephone Credit Card number

# CENTRALIZED CREDIT CHECK SYSTEM (CCCS)

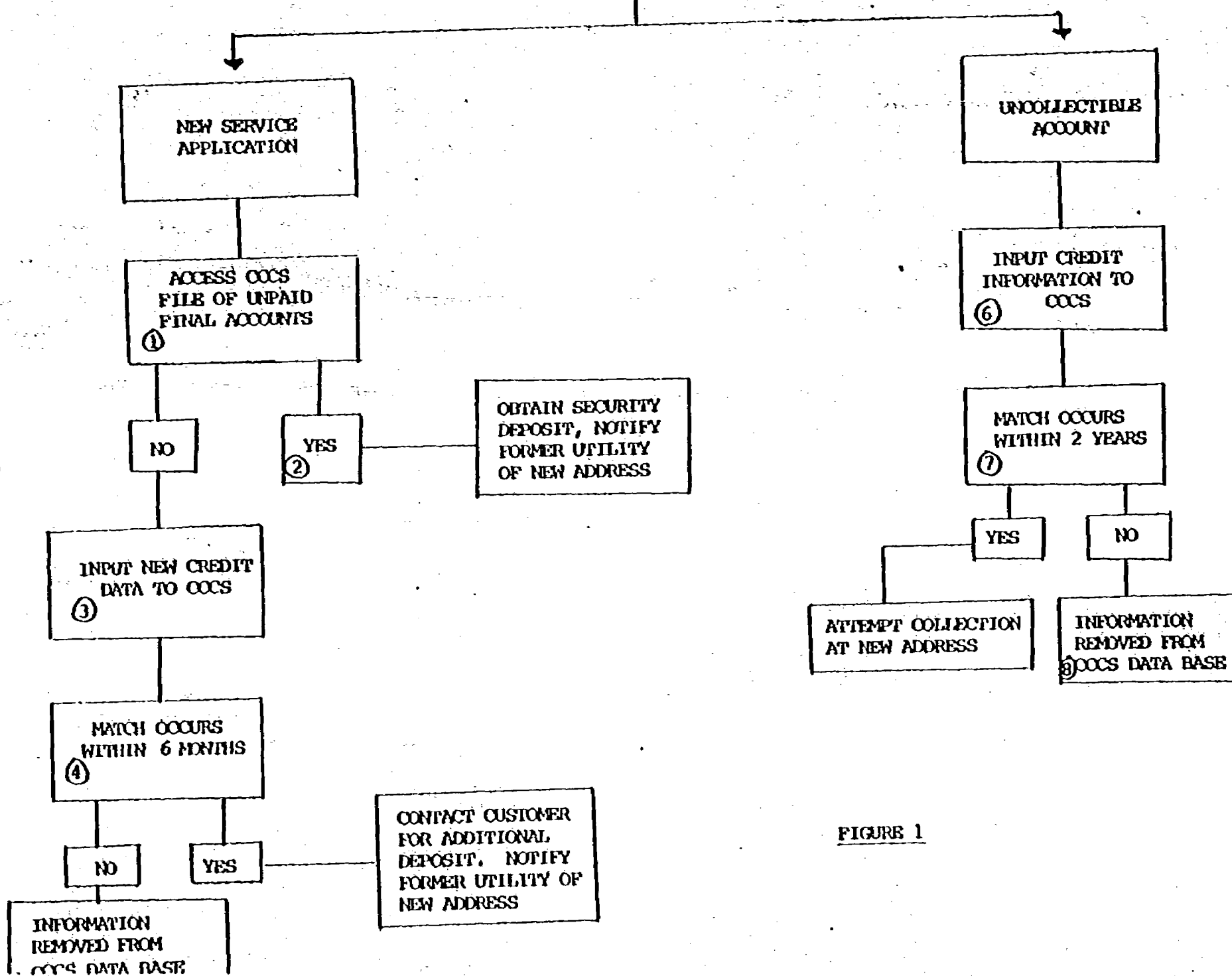


FIGURE 1



In addition to the above search keys the address of new service, CBR (can be reached number) and current employer would be entered.

2. If a match occurs all information from the uncollectible account file will be displayed on the screen. This will provide the information necessary to determine the amount of security deposit required for new service. As a possible option the system could determine the security deposit based upon previously defined parameters. The system will automatically generate a record containing all available new information about the applicant for transmission to the former utility.
3. Additional information, including the amount of security deposit, would be added to the new service record. This could be accomplished via on-line, or computer-computer (teleprocessing, magnetic tape) for large utilities.
4. Periodically (weekly, monthly) the CCCS would match all new service application records with all uncollectible file records. This would uncover new customers who did not pay their final bill, but there was no uncollectible account record when the application for new service was taken. The system would automatically generate a record containing all information about the new service account for transmission to the former utility. The information from the uncollectible account file would be available on a screen for the new utility for review to determine if the customer should be contacted for additional security deposit, and for the former utility to determine what followup action should be taken. A hardcopy in the form of a report or microfiche could also be available.
5. After six months from the new service application date or estimated installation date the new service application records would be moved from the on-line file to magnetic tape. On a periodic basis (monthly, semi-annual, annual) a batch program would attempt to match all new service application and uncollectible account records. Reporting would be the same as matching of the on-line files. This task would take increasing amounts of computer resources as the batch historical files keep increasing in size. The frequency of the attempted matching and the time at which records are actually dropped from the batch historical files would be determined through experience.

UNCOLLECTIBLE ACCOUNT SUBSYSTEM

All uncollectible accounts will be processed through the CCCS. It will normally take about two months from the disconnect date before an account is considered uncollectible. The following discussion is also applicable to on-line or batch processing. The following numbers correspond to the numbering in figure 1.

6. Complete information on uncollectible account will be entered.
7. CCCS will search on-line new service application file for match and display all information if match occurs to provide former utility additional/new information for collection procedures. The new utility will be informed of uncollectible account information to allow determination if increased security deposit should be required. A Match Reported Flag will be set to prevent redundant reporting of the same information during batch matching. If any information is changed in either the uncollectible account record or new service application record the Match Reported Flag will be checked and the CCCS will automatically report to the other utility that a change has taken place; i.e. paid in full, settled in full, bankrupt.
8. After two years from the disconnect date, uncollectible account records would be moved from the on-line files to magnetic tape files. The time at which records are actually dropped from the historical files would be determined through experience.

MATCHING PROCESS

On a weekly basis all new service applications will be matched against the uncollectible file. Any equal condition resulting from at least one of the match fields will cause an entry to be made showing the match. These entries will be sorted by the utility with the new application and the utility with the uncollectible. They will be transmitted to the CRT stations designated by each utility for match processing. Each utility is expected to take the appropriate action based upon these results.

Once a month a match will be prepared of the entire new service application file and the entire uncollectible file, and a matched report will be sent to each utility. This report will identify the debtor and the utilities that are effected. All records that have at least one match will be listed. It is possible for many matches to be in the uncollectible file due to multiple bills. The match report is a list of all records that have one of the following test results.

- o Equal Drivers License Number
- o Equal Social Security Number
- o Equal Telephone Number
- o Equal Name and Address keys

The match report and on-line terminals can be used to effectively search the data base.

#### Data Base Initialization

Data Bases can be initialized from:

- o In-House computer system files on tape or via teleprocessing
- o Existing data bases from IMI service bureau
- o Data Entry from reports or source documents by IMI
- o Data Entry from reports or source documents by telephone utilities

There are two data bases that must be loaded:

- o New service applications (up to 6 months)
- o Uncollectible accounts (up to 2 years)

In all cases the on-line terminals can also be employed to add, change or delete records in the data bases. Additional terminals can be made available for short periods of time under dial-up or leased line environments.

It has been assumed that all data base information from the large utilities will be provided in machine readable form. IMI will assist the small utilities in the development of their data base.

#### SECURITY

The security procedures currently utilized by IMI will be utilized in the CCCS. The IMI system has four levels of security:

- o Station (phone line and terminal)
- o User
- o Screen
- o Extended Authorization

The combination of station and user security provides a working level security since the combination must be valid; i.e. only specific users can utilize specific terminals on a specific phone line. The working level security is then further verified against the screen level security to provide the extended authorization security level; i.e. not all users have access to all screens (capabilities) of the system.

Every station (network mode) must have a valid identification or it will not be allowed into the system.

Extended authorization means that the working level security access is dynamically controlled to a limited set of screens with or without further application level codes (client, user, groupings).

Dial-up access will not be allowed in this system except during installation or on a requested basis. The extended security is also applicable to dial-up.

IMI will utilize its extensive experience in security provisions of data base information (IMI operates a world wide international banking network for a large California bank). All access to the network, computer room, programs, and data base is strictly controlled. Extensive tape control and file backup procedures are followed.

SYSTEM HARDWARE

The system hardware consists of Burroughs Corporation computer equipment and terminals, and General Datacom Corporation modems, diagnostic units and network controller. Appendix 2 contains the computer configuration.

Burroughs Model ET1100 Ergonomic workstations have been selected as the CRT device for this application (see Appendix 3). The ET1100 is a recently announced product which offers several features not found in other units. Typical of these are:

- o Terminals are completely compatible with all earlier Burroughs terminals
- o Terminals have significantly enhanced reliability with a considerably longer mean time to failure than other terminals. This fact is further reflected in an "on site" maintenance annual fee that is 20% lower than previous Burroughs terminals and an even greater reduction when compared to several other "Burroughs look alike" terminals presently available.
- o Burroughs Corporation provides on site maintenance, even in small communities throughout all of California.

The cost of the CCCS consists of one-time startup costs and recurring monthly costs. The following assumptions were used:

- o GTC-provided average monthly statistics for 1982 for the 25 California telephone utilities (see Appendix 4 and 5) were utilized. These volume figures for new service applications were assumed to increase slightly while the number of uncollectible accounts was assumed to decrease over time - primarily due to the CCCS.
- o New service applications were considered stored on-line for six months. Uncollectible accounts were considered stored on-line for 24 months.
- o An initial data base of approximately 1,000,000 uncollectible accounts was assumed provided to IMI in machine readable form.
- o Terminals were assumed to be required in 100 locations. This considers the consolidation of the 175 PT&T offices to approximately 50.
- o The number of terminals at each location were considered small with 150 terminals estimated at the 100 locations. Telecommunication costs were based upon analog phone lines due to the significantly higher cost of digital service. Digital service would be considered for network nodes with significant number of terminals.
- o Input of new service applications, uncollectible accounts and status changes of uncollectible accounts were considered provided by the large teleprocessing or magnetic tape exchange on a frequency compatible with the matching requirements of the CCCS.
- o Output reports were considered limited to most of the information provided via the on-line terminals.

#### STARTUP COSTS

Startup costs consist of both fixed and variable amounts.

The fixed startup costs of \$190,000 (see Appendix 6) include the following:

- o Software modifications necessary to meet utility/PUC requirements
- o Installation of host computer
- o Systems analysis and computer time for data base installation including processing of all information received in machine readable form
- o Legal review and opinions
- o Training consisting of three one-day classes in Sacramento, San Francisco, San Jose, Los Angeles, and San Diego
- o Training manuals and system documentation

The variable startup costs are as follows:

- o Phone line installation at an estimated cost of \$100 per location
- o Modem and CRT installation at a fixed price of \$250 per location
- o Additional training at \$250 per day plus expenses.

Based upon 100 locations the variable costs would be \$10,000 for phone line installation and \$25,000 for modem and CRT installation (see Appendix 7).

#### RECURRING MONTHLY COSTS

Recurring costs also consist of fixed and variable amounts. The fixed monthly base cost of \$230,000 includes the following:

- o Computer resources necessary to implement the CCCS system containing on-line storage for six months of new service application entries and 24 months of uncollectible account entries
- o Processing of up to 250,000 new service requests per month
- o Processing of up to 100,000 uncollectible accounts per month
- o Base reports for reporting of possible matches and statistical reporting
- o Computer supplies - paper, ribbons, tape, disc packs
- o Weekly Report delivery - via first class mail
- o Software maintenance

The variable monthly costs are as follows:

- o Telecommunication costs estimated at approximately \$300 per phone line drop. All telecommunication costs will be based on shared network costs, and will be billed at actual phone company charges.
- o CRT rental of \$190 per month per terminal
- o New service application entries in excess of 250,000 per month at a cost of \$.55 each
- o Uncollectible account entries in excess of 100,000 per month at a cost of \$.80 each

Assuming 100 locations and 150 CRT terminals the variable monthly cost would be \$30,000 for telecommunications and \$28,500 for CRT terminals, or an additional cost of approximately \$58,500.

Thus the total recurring system cost would be \$288,500 per month (see Appendix 8). All costs will be billed to the utilities based upon usage - actual charges for telecommunication and CRT rental charges and prorated charges for base system and excess entries.

COST JUSTIFICATION

The proposed CCCS has one-time startup costs of approximately \$225,000 and recurring monthly costs of approximately \$288,500. The total cost for the first year of \$3,687,000 is less than 2.2 percent of the anticipated \$160,000,000 uncollectibles for the 25-California telephone utilities for 1984. It is extremely difficult to forecast the suppression effect of the proposed CCCS, but collection industry personnel familiar with telephone utility collections estimate 15 to 25 percent. The following table presents possible savings based upon the anticipated 160 million dollar uncollectibles and a first year cost of 3.7 million dollars.

PERCENT REDUCTION	NET COST SAVINGS
5	\$ 4,300,000
10	12,300,000
15	20,300,000
20	28,300,000
25	36,300,000

If the 15 percent estimate is accurate the net savings would exceed 20 million dollars the first year. In subsequent years the percentage will increase due to improved collection procedures and education of the general public in the existence and utilization of the proposed CCCS.



IMI will start installation and training within two months from contract go ahead. The existing IMI ACCT (Automated Collection Control Technology) system will support on-line and batch entry of new service applications and uncollectible accounts with only minor modifications. The current system also has extensive search capabilities utilizing multiple search keys. The two month period will provide adequate time to incorporate the matching and associated reporting using existing search technology.

It is estimated that installation and training will take two additional months. This assumes normal response time from the telephone utilities and conducting three separate one day training classes in Sacramento, San Francisco, San Jose, Los Angeles and San Diego. During this two month period IMI system analysts will assist telephone utility personnel in the extraction and generation of the initial uncollectible account file and possibly new service application file.

IMI currently has a Burroughs B4900 computer scheduled for delivery in December 1983 to replace an existing Burroughs B4800 computer. The B4800 computer has about one half the capabilities of the B4900, but it will be more than adequate for the first few months until the proposed B4900 configuration can be delivered. The network controller is currently operating at the IMI data center, and there does not appear to be any problem in obtaining modems, diagnostic units and CRT terminals within the above time constraints.

In summary, IMI is confident that the CCCS system can be fully operational in four months from the date of contract award.

CONTRACT CONDITIONSTERM

The costs in this proposal are based upon an initial five year contract. IMI shall have the sole right to increase the monthly base cost at each annual anniversary by up to the annual increase in the cost of living index for the San Francisco Ban Area for the immediately proceeding twelve month period.

PAYMENT TERMS

IMI will invoice all telephone utilities in advance at the beginning of each month for their portion of the shared teleprocessing network cost, all CRT rental charges, and 90% of their estimated pro rata share of the monthly base cost. As soon as possible after the close of each month IMI will issue adjusting invoices for the actual charge to each telephone utility for their pro rata share of the monthly base cost.

SYSTEM AVAILABILITY

IMI will furnish on-line computer services from 7:00 a.m. until 6:00 p.m. Monday through Friday except for legal holidays recognized by California telephone utilities. Up to an additional 10 hours per month of scheduled on-line computer services from 9:00 a.m. to 4:00 p.m. on Saturday will be included in the monthly base cost. Saturday services must be scheduled at least three days in advance and must not interfere with IMI weekend processing or maintenance.

OWNERSHIP OF PROGRAMS AND FILES

All programs, documentation, written procedures and other supporting data of the current IMI system are and will remain the sole property of IMI. Additional programs and other supporting data paid for in full by California telephone utilities shall become the sole property of California telephone utilities. All data base masterfiles shall remain the sole property of California telephone utilities.

CONCLUSION

The current state of computer technology allows the feasibility of the massive nature of the CCCS as described herein. The storage requirements for the data base and computer power to accomplish the matching can be met today with a small outlay compared to the cost savings. There is no question that the CCCS will more than pay for itself - immediately. A 2 percent reduction in uncollectibles is the breakeven point. No major capital outlay is required.

The ability of IMI to implement such a system in such a short time frame through the use of existing hardware, software and technology makes the proposal even more attractive. The system and its concepts have already been proven. What remains to be done is to use this knowledge and experience to help the California telephone utilities solve a major problem - the reduction of their uncollectibles.

We look forward to the solution.

Respectively Submitted,

INFORMATION MANAGEMENT INTERNATIONAL

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APPENDIX 1

# INFORMATION MANAGEMENT INTERNATIONAL, INC.

## As A Company:

INFORMATION MANAGEMENT INTERNATIONAL, INC. is an effective mix of contrasts — contrasts that accent, complement and enhance one another. It is a company that provides traditional batch processing to satisfy one set of needs, while developing and implementing state-of-the-art microprocessor technology to meet others. It is a company providing "pre-packaged" software solutions to some problems, and offering software consulting and development skills to create custom solutions to others. It is a company that is global in scope for clients who need worldwide support, and regional in its support of clients who require a more localized structure.

What makes this mix of contrasts effective is an understanding of both data processing systems and industry specific needs. This understanding is so complete, so intuitive, that Information Management International (IMI) is free to concentrate on the best solution to a problem. The customer is the obvious benefactor of this level of expertise.

Founded in 1969, IMI provides consulting, software development, data processing services and computer systems tailored to the information management needs of the financial and health care industries, as well as human resource, educational, labor and commercial organizations. IMI's low corporate profile is in contrast to the depth and extent of its value to, and involvement with, these special industry groups and organizations.

To effectively utilize the power of contrasts requires versatility, and IMI is indeed versatile. Processing services can be handled on a batch, remote-entry batch, on-line, custom in-house facilities management basis. The processing hardware may be as small as a stand-alone micro-computer in an office, or as large as a global communications network.

IMI designs and develops new systems (or re-designs old ones) to keep a client's information processing capabilities current with industry requirements. Additionally, IMI licenses business software/hardware packages for in-house client use. IMI fills the needs of the burgeoning micro-computer industry as a worldwide, value-added distributor of a variety of microcomputer hardware, software and technologies. IMI also utilizes its microprocessor expertise in meeting client needs.

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*Founded in 1969, IMI provides consulting, software development, data processing services and computer systems tailored to the information management needs of the financial and health care industries, as well as human resource, educational, labor and commercial organizations.*

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The center of IMI's resources is its corporate headquarters in San Jose, California. Technical staffs and data centers are located in San Jose, Palo Alto, and Los Angeles, California; and in Metairie, Louisiana. Terminals communicating with the IMI computer facilities are located in Tokyo, London, New York, Chicago, Los Angeles, San Francisco and other major cities throughout the world.

The international aspect of IMI was further enhanced, when in 1979 Societe Generale de Service et de Gestion (SG2), the computer services subsidiary of Societe Generale (the sixth largest bank in the world) acquired an interest in IMI. SG2 chose to invest in IMI, and to enter into an exclusive agreement for the exchange of products, services and expertise, because of IMI's reputation of excellence in serving the needs of the financial community, and its potential for the future.

## For the Financial Industry:

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For more than a decade, IMI has been involved with virtually every aspect of the banking industry. It is this involvement that has developed a staff of specialists in the fields of asset/liability management, foreign exchange, fixed asset accounting, letters of credit, automated lock box processing and multicurrency accounting.

An international banking system (IBS) designed, produced and implemented by IMI demonstrates this synthesis of data processing systems mastery and knowledge of the financial industry's workings and requirements. This system provides the full range of computer services necessary to support the management and accounting needs of a major US/British bank's international division. In addition, IMI manages and operates this system on an ongoing basis. This system is an example of IMI's capabilities on a global scale, with terminals around the world connected by telephone lines and satellite links to a mainframe computer.

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*For more than a decade, IMI has been involved with virtually every aspect of the banking industry.*

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A contrast in scale is IMI's involvement with a microcomputer based system designed expressly for community banks, savings and loans, and thrift institutions. This system gives smaller financial organizations a competitive edge with the larger banks in terms of information handling. It provides asset/liability management, budgeting, profit planning, fixed asset accounting, word processing, data base management and other tools to satisfy the banker's need for information, control and planning.

Between the extremes of global communications networks and stand-alone, microcomputer banking systems, IMI offers a variety of other financial software solutions. Custom asset/liability systems for bank services companies are one example. Another example is a series of retail remittance processing systems that can fully automate the labor intensive "lock box" process and provide scheduling information, management reporting and even "hot listing."

The financial industry includes more than just banks and thrifts, and IMI understands that. As an example, IMI meets the unique needs of land development companies with a system tailored to

their specific requirements for receivable accounting for both simple and add-on loans, commission computation and recording, inventory control, sales and lead processing, and escrow accounting and control. These companies utilize a proprietary Land Development Accounting System (LANDAC) that was developed by IMI, and is installed on a variety of computer equipment including IBM, Burroughs, Hewlett-Packard and DEC.

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*The financial industry includes more than just banks and thrifts, and IMI understands that.*

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In 1983 IMI acquired the assets of the G.A. Smith Company to further broaden IMI's portfolio of financial services with additional applications that effectively complement those offered by IMI. These applications include a comprehensive, on-line collection control system designed for the specific needs of the credit/collection industry.

This system solves the accounting complexities of trusts and calculating interest, and offers search capabilities based on a large variety of keys, reporting on numerous custom forms and the automatic generation of notices. The system was chosen by one of the country's largest utilities for its in-house debt collection activities. It is a system that meets a client's needs primarily because it was designed by experts in both credit/collection and data processing.

International and community banking; global communications networks and stand-alone systems; mainframes and microcomputers might seem like polar extremes in scope and requirements. IMI sees them as points along a continuum of the financial industry's need for information processing. It is this maturity that allows IMI to consistently produce cost-effective solutions to such wide ranging needs.

## For the Health Care Industry:

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The health care and financial industries are similar in that they each have unique information management requirements. Beyond that, the similarities end and the contrasts begin. IMI HEALTH SYSTEMS, a Division of Information Management International, has been serving hospitals and home health care agencies since 1970 with solutions developed from a complete understanding of the capabilities and potential of data processing systems, and a thorough knowledge of the industry.

A hospital's medical record department needs patient data taken from an abstract and organized in a variety of ways. It needs patient statistics; specialized reporting to satisfy the requirements of government agencies, regional hospital councils and health insurers; and reports for its management staff. Its people must also be informed about changes in government regulations and industry trends. IMI understands and meets these needs.

A home health care agency provides home visits to homebound patients by registered nurses, therapists, aides and practitioners of other disciplines, as prescribed by physicians. Its segment of the health community is distinct from that of a hospital's and hence its information needs are equally distinct. A home health agency requires governmental and private billing services; statistical reporting on both patients and individuals providing services; and its staff must keep up-to-date on its own industry's trends. IMI knows and meets these needs as well.

IMI understands the types of information a hospital or home health agency needs, and provides it in concise, readable formats. IMI also realizes that for information to be useful it must be current. To these ends IMI provides information processing systems that produce requirement-driven reports and present data in a clear and useful manner within a turnaround time that is unequalled in the industry.

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***IMI HEALTH SYSTEMS, a Division of Information Management International, has been serving hospitals and home health care agencies since 1970.***

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IMI's health care clients are served by centralized computer processing in the Palo Alto and Metairie Data Centers. Versatility is the key here as well. Documents can arrive by mail and be key entered by IMI HEALTH SYSTEMS personnel, or a client may elect to supply data on magnetic tapes or disks. Data can also be entered directly from on-line, client operated terminals over telephone lines. These remote-batch entry terminals, which can be complete micro or minicomputer systems, also can provide a client with such in-office clerical functions as word processing, general ledger and payroll accounting. The proven power and reliability of IMI HEALTH SYSTEMS' mainframe applications is also available in a stand-alone microcomputer based system for those clients requiring total in-house control of their processing.

IMI HEALTH SYSTEMS publishes one newsletter for hospitals and a second for home health agencies. These newsletters keep clients informed about changes in regulations, new trends in the industry and how IMI HEALTH SYSTEMS is responding.

In 1982 IMI acquired Diversified Computer Applications (DCA) of Palo Alto, California, and Hospital Computer Systems, Inc. (HCSI) of Metairie, Louisiana. As of February 1, 1983, both began operating under the name of IMI HEALTH SYSTEMS. DCA and HCSI brought to IMI a long history of detailed systems knowledge coupled with an in-depth understanding of the information requirements of hospital medical record departments and home health care agencies. This mix of expertise results in a reputation of responsive, reliable and conscientious attention to the changing needs of the industry.

### **For Human Resource, Education, Labor and Commercial Organizations:**

IMI combines its years of processing experience and familiarity with business requirements to provide a wide range of processing services for human resource, educational, labor and commercial organizations. These services include direct mail management for marketing, sales promotion, charitable solicitation and educational mailing lists and rosters. IMI offers publications subscription fulfillment with services specific to circulation, marketing and financial areas. IMI also offers a full range of accounting and insurance services for commercial accounts. The majority of this processing is carried out at the San Jose and Palo Alto Data Centers.

One of IMI's specialties is providing the data processing required to monitor employee eligibility for union health, welfare and pension benefits. To fully administer such programs requires more than systems that keep track of employee contributions and eligibility. It also requires monitoring employer contributions to insure they are fulfilling their obligations to their employees. IMI's on-line systems take this into account to produce the information tools needed to effectively administer such programs.

IMI offers a totally integrated, on-line set of financial systems for commercial accounts. These systems include order entry, accounts receivable, accounts payable, general ledger, fixed assets, perpetual and physical inventories, personnel/labor and work-in-progress. They are designed to eliminate redundant entry and therefore provide significant economies of time and cost for users.

A unique feature of these financial systems is that they are table-driven. This means that only key elements of information need be entered. The remaining information is supplied from the data files. It also means that by entering a few primary codes in the tables, the structures of reports can be changed. IMI understands the need for business accounting systems that are thorough, yet cost-efficient, and responds with integrated, on-line systems tailored to satisfy that need.

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*IMI combines its years of processing experience and familiarity with business requirements to provide a wide range of processing services for human resource, educational, labor and commercial organizations.*

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IMI knows the special needs of the entertainment industry guilds. Its membership is highly mobile and individuals frequently work under more than one professional name. IMI uses its processing systems to manage this geographically diverse and constantly changing base of information. IMI serves the major guilds primarily from its data center in southern California. This center is connected to more than sixty on-line terminals located throughout the United States. The services include accounting and reporting of membership dues, pension contributions, residual payments, health and welfare payments and mailing lists. Clients in the entertainment field include casting and production companies, guilds, pension and health care programs.

In contrast to the needs of the entertainment business, IMI provides data reduction and analysis services for NASA/AMES scientists in Mountain View, California. These IMI employees perform mathematical computations and modeling to prepare data from planetology studies, space probes and atmospheric studies for the research scientists.

## For the Microcomputer Industry and Its Markets:

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IMI is a value-added, worldwide distributor of microcomputer hardware and software. Sales are targeted at OEM's and involve, besides the microcomputers themselves, specialized components and related software. IMI is a major distributor of the Burroughs B20 business computer.

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*IMI is a value-added, worldwide distributor of microcomputer hardware and software.*

---

Being a distributor is only part of IMI's involvement in the microcomputer field. IMI has extensive microcomputer experience with Apple, IBM, Cromemco, Hewlett-Packard, Burroughs, and many other manufacturers. This experience includes hardware, systems design, applications programming and conversions.

## In Summary:

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Information Management International is indeed an effective mix of contrasts. But the contrasts only lie in the nature of unique solutions reached for unique problems. The underlying unity is the mastery of processing systems and thorough understanding of industry requirements. Together these form a tool that is not bound to a single approach or concept, but is free to fill a need with a truly effective remedy. A remedy that will be a timely, cost-effective solution to a client's needs.

## Offices:

---

### Corporate Headquarters:

1101 S. Winchester Blvd.  
San Jose, CA 95128  
(408) 248-8250  
Telex: 171555

### Consulting Staffs and Data Centers:

1101 S. Winchester Blvd. San Jose, CA 95128 (408) 248-8250	8850 Veterans Blvd. Metairie, LA 70003 (504) 469-7391
2525 E. Bayshore Rd. Palo Alto, CA 94303 (415) 493-2100	23450 Calabasas Rd. Woodland Hills, CA 91364 (213) 347-3215

### Sales Offices:

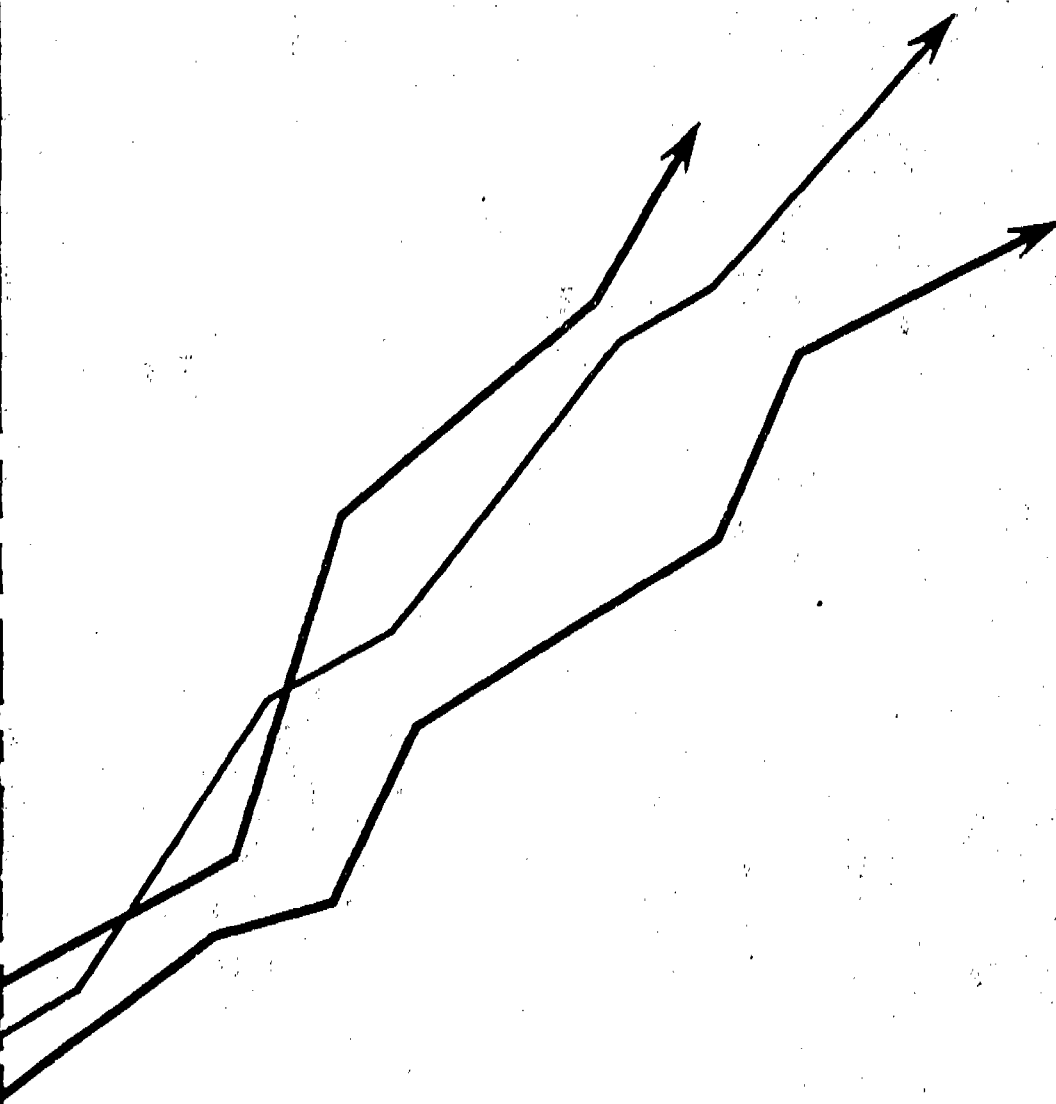
Sales offices are located across the United States.



# INFORMATION MANAGEMENT INTERNATIONAL, INC.

**GROWTH**

**TIME**



# 1969 To The Present - And Beyond

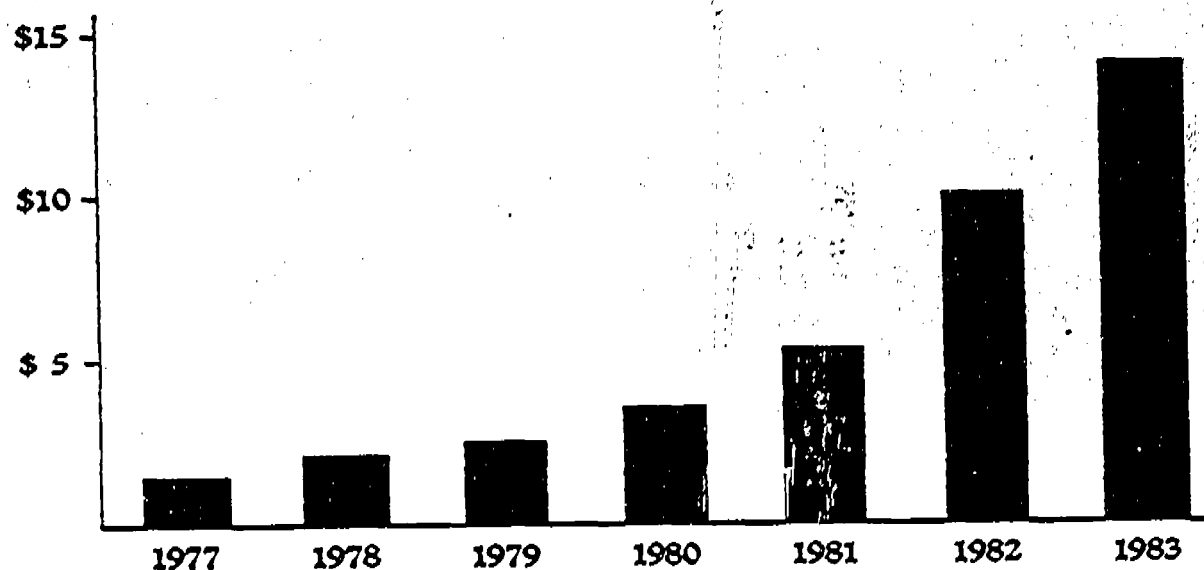
(1982 Financial Summary)

INFORMATION MANAGEMENT INTERNATIONAL's growth since its founding in 1969 has been significant in all financial, product, personnel and market areas. The following charts and graphs illustrate this expansion for the fiscal years 1977 through 1982, and present the projected figures for 1983.

## Revenues:

Increases are due to new business development, greater market penetration and acquisition of complementary organizations.

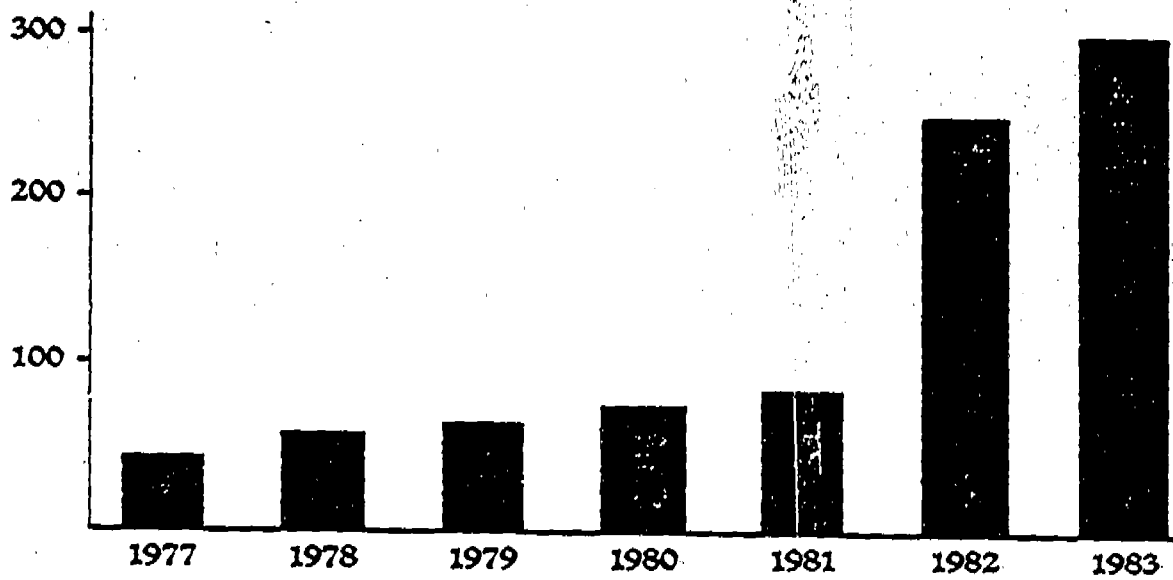
(Millions of Dollars)



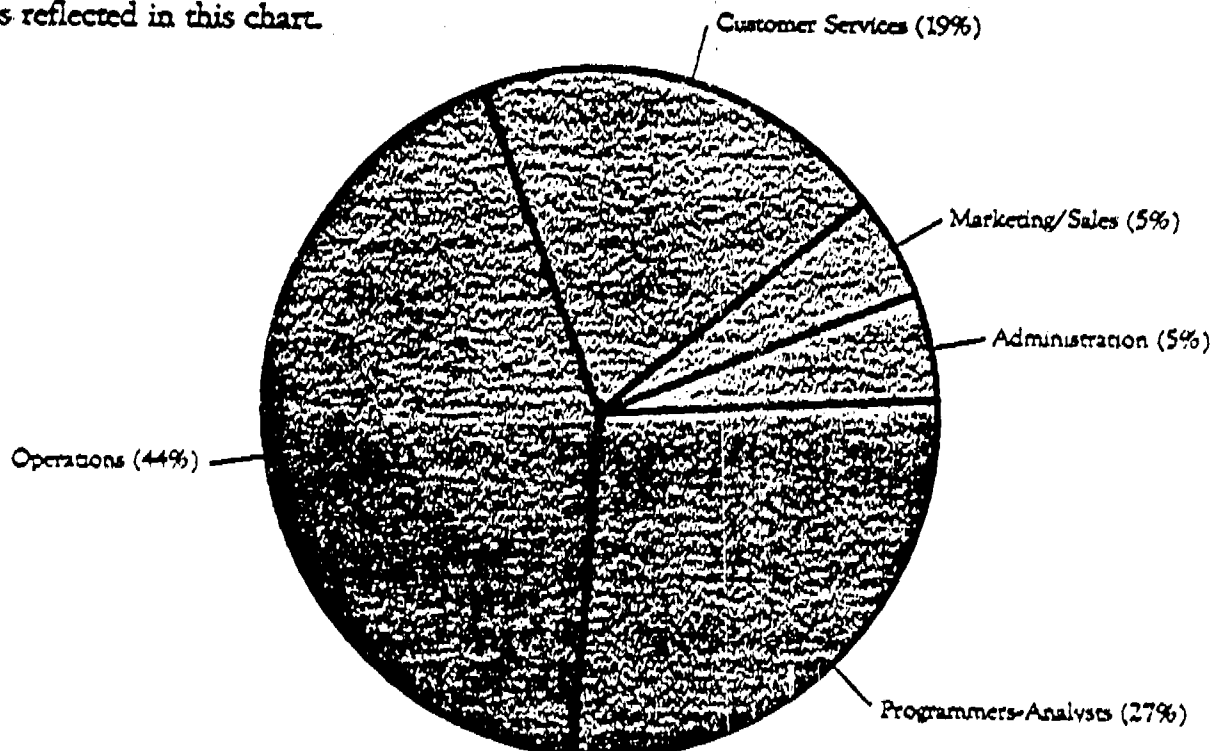
**Personnel:**

IMI's technical, operations and management staff has grown to service and support an increasing customer base. The following bar chart depicts this increase.

(Number of Personnel)



The current composition of the IMI staff is reflected in this chart.



**Equipment and Facilities:**

IMI's facilities, computer hardware and terminal locations have also grown in order to service an increasing customer and product base. In 1969 IMI had one office with one Burroughs mainframe computer. Today IMI has four major processing centers.

	1969	1982
Offices:	Sunnyvale, CA	San Jose, CA Palo Alto, CA Los Angeles, CA Metairie, LA
Mainframe Computers:	1 - Burroughs	6 - Burroughs 1 - NCR 1 - IBM 3 - Hewlett-Packard
Remote Terminals:		Over 300 microcomputers and terminals
Terminal Locations:		London New York Tokyo Chicago San Francisco Los Angeles 20 Other Major Cities

Since 1969, all business indicators demonstrate IMI's growth. The most significant factor contributing to this success story has been the company's ability to retain its outstanding technical and management staff. The members of this team typically have over 10 years with IMI, and consequently provide a continuum of experience not possible in a less stable environment. IMI also continues to attract individuals with a broad range of expertise and technical disciplines to guarantee continued growth.

**IMI**

INFORMATION MANAGEMENT INTERNATIONAL

1101 S. Winchester Blvd., San Jose, CA 95128  
(408) 248-8520 / Telex 171555

# CHECKLIST

(Check all that apply)

- ☐ Frustrated?
- ☐ Paper-Bound?
- ☐ Pre-Collect Problems?
- ☐ Limited Debtor Searches?
- ☐ Trust Accounting Headaches?
- ☐ Accrued Interest Lost?
- ☐ Tired of Excuses?

If two or more of the above apply,

Information Management International has the answer for you.

We offer answers - Not excuses!

COLLECTION CONTROL

# Answers - Not Excuses!

"I don't have the money.  
I haven't worked in  
months."

"My insurance was  
supposed to pay that."

"You should have gotten  
the check weeks ago."

"You can't get blood out  
of a turnip."

You get enough excuses from debtors - you don't need any from us. Information Management International (IMI) offers an unequaled, on-line collection control system to provide the collection agency and major credit granter with the information tools necessary to do their job in a professional, cost-effective manner.

---

*The bottom line is  
greater profitability  
for your agency.*

---

With this system you can search based on a wide variety of factors. They include, but are not limited to, driver's license number, spouse's name, responsible party name, address, social security number and suit number. You can perform any of these searches with complete or partial information, and the system will respond with exact matches and possible matches. There are 98 ways to search your files.

But searching and skiptracing are only part of the job. The administration of pre-collect letters is a major problem for agencies. With the IMI system, the pre-collect letters are generated automatically - at the intervals

you select and with the text you choose. Because it's automatic, you can forget it - but nothing gets forgotten.

If a pre-collect letter series does not cause payment to be made, the account can automatically be converted to "hard core" collection. Again the notices are produced at the intervals, and with the message, you specify. Even the name of the collector can be incorporated into the notice to give your notices that additional clout.

When you receive a new account and the information is entered, there is no delay in starting to work that account. The work card is automatically generated; the pre-collect letter or notice series is started; and the full debtor history is on-line and ready for your collectors. There is no waiting.

The headaches of trust accounting are removed from your shoulders. The collection control system keeps track of all the percentages, all the payments and even calculates the accrued interest you are entitled to collect. This information is always on-line and ready for your immediate recall and use.

The IMI Collection Control System doesn't just follow industry trends, it sets them. With this system agencies who agree among themselves to share limited, read-only access to each others debtor files can do so. The integrity and security of each agency's files is,

course, maintained, and this is done among mutually agreeing agencies, but it gives those agencies skiptracing powers never before possible. It's new! It's revolutionary! It can make your agency more effective! It's only from IMI!

A partial listing of the IMI Collection Control System features includes:

- Automatic, customized Pre-collect letter series
- Notice series that are customized and generated automatically
- On-line histories of notices sent to each debtor and address changes
- Overnight turnaround of new accounts
- On-line trust activity, with a complete history for each debtor
- Reporting to TRW, Trans-Union and CBI credit reporting agencies
- Seemingly limitless search and skiptracing capabilities
- Multiple debts can be listed on one notice
- A variety of work card, check and other form formats
- Terminals can be installed in the offices of your major clients
- Security tailored to needs of the agency

Instantly available information is what this whole system is about. It gives your collectors the tools they need to do their job better. When a debtor calls after receiving a notice, your collector can search through millions of pieces of information in seconds to pull up the correct account. He can even do it with incomplete information, or from a reference name. A receptionist can route an incoming call to the right desk, because the desk number is part of the data file. A debtor need never be lost again, because you couldn't find "his" account.

As the owner of the agency the system gives you the information tools you need to run your business effectively. All the trust accounting and check generation is done automatically. All the accrued interest is calculated and included in the accounting. All the management reporting you require is immediately available and waiting for you.

The result of this instantly available information is that your collectors can get the job done faster and with a greater collection ratio. You have more control over your business, because you have the accounting and management information tools you need to do your job. The bottom line is greater profitability for your agency.

# IMI

INFORMATION MANAGEMENT INTERNATIONAL

"I can't pay anything right now - maybe in a week or two."

"How am I supposed to pay? I can't find work."

"There must be a mistake. I don't owe him anything."

"The check's in the mail."

**INFORMATION MANAGEMENT INTERNATIONAL, INC. (IMI)** has provided data processing and software consulting services to many aspects of the financial community since 1969. IMI serves the banking and health care industries, as well as human resource, educational, labor and commercial organizations. It supports these target markets with a combination of a thorough understanding of each segment's unique business requirements and a complete mastery of data processing techniques. IMI has data centers, consulting staffs and sales offices across the United States, and its mainframe computers communicate with terminals throughout the world via satellite and telephone links.

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**IMI**

**INFORMATION MANAGEMENT INTERNATIONAL**

1101 S. Winchester Blvd.

San Jose, CA 95128

(408) 248-8250



CENTRAL COMPUTER CONFIGURATIONEquipment Description.Purchase Price

Burroughs B4900 Central System consisting of:

- A stored logic processor which is a series of asynchronously operating microprogrammed processors \$ 816,107
- 5 million bytes of integrated circuit error correcting main memory
- Three DLP processors for:
  - Operator display/diagnostic console (1)
  - Disk Pack (8)
  - Magnetic Tape (2)
  - Front-end Processors (2)
  - Card Reader (1)
  - Printer (1)

Mass Storage Sub-systems consisting of:

- A 4 x 16 Spindle Exchange 278,000
  - with 3.252 billion bytes of disk pack
- A 2 x 16 Controller with 804 million bytes of disk pack 80,000
- A 2 x 16 Controller for access to program library system 30,000

Data Communications System consisting of:

133,417

- A Communications Processor (HP1000)
- 512 K Bytes of disk storage
- 20 million bytes of disk storage
- System console
- 9 dual port microprocessor based sync/async line adapters

Magnetic Tape System consisting of:

234,000

- 2 path access to a 2 x 8 tape exchange
- 6 GCR (Group Coded Recording) tape drives with program selectable recording densities of 6,250 BPI or 1600 BPI

TOTAL

\$ 1,571,524

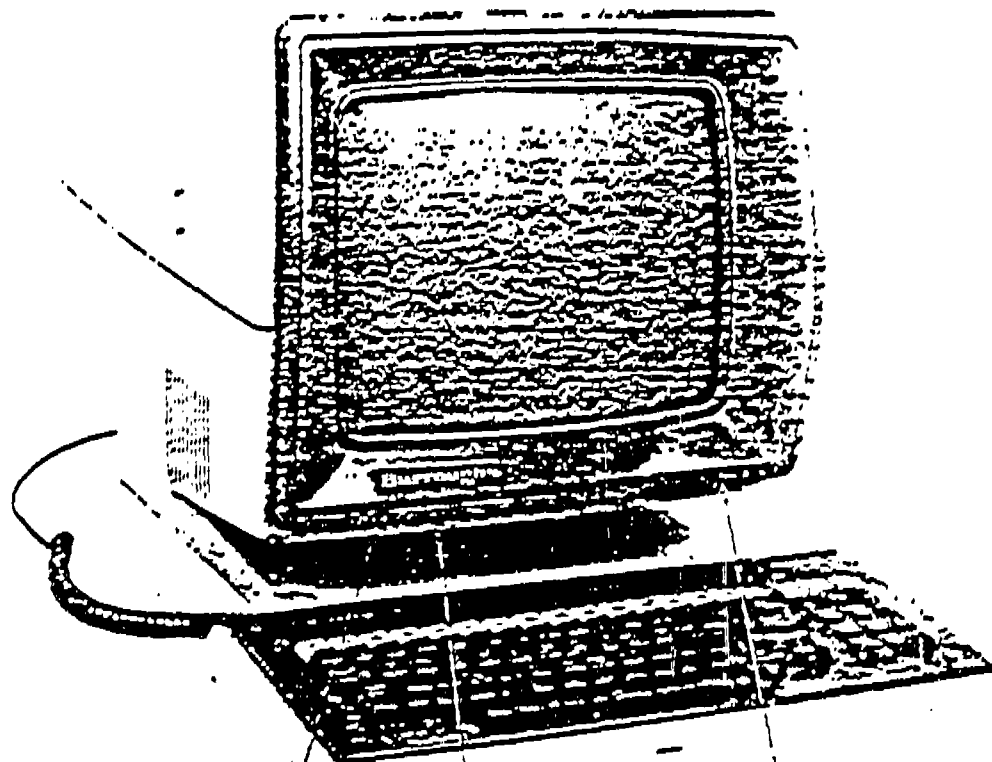
In addition to the above the following existing IMI equipment will be utilized on an as-needed basis:

- 4.8 billion bytes of disk pack
- 10 GCR tape drives
- 5 line printers
- 2 card readers
- General Datacom NETCOM 5 network controller

ET 1100 Ergonomic Workstation  
Operator's Manual

## CONTROLS AND INDICATORS

### THE DISPLAY UNIT



#### ON/OFF SWITCH

THIS SWITCH ALLOWS POWER FROM THE WALL SOCKET TO BE APPLIED TO THE UNIT. THE 'O' IS THE OFF POSITION OF THE SWITCH, AND THE 'I' IS THE ON POSITION.

#### CONTRAST CONTROL

THIS CONTROL VARIES THE DEGREE OF DIFFERENCE BETWEEN THE CHARACTERS AND THE BACKGROUND. WHEN THE CONTRAST CONTROL IS TURNED CLOCKWISE, THE CHARACTERS BECOME DIMMER AND THE SCREEN BECOMES BRIGHTER.

#### BRIGHTNESS CONTROL

THIS CONTROL VARIES THE DEGREE OF SCREEN AND CHARACTER HIGHLIGHT. WHEN THE BRIGHTNESS CONTROL IS TURNED CLOCKWISE, BOTH THE SCREEN AND CHARACTERS BECOME BRIGHTER.

## APPENDIX 4

CALIFORNIA TELEPHONE UTILITIES STATISTICS  
(Monthly Averages for 1982)

	PT&T	GTC	CONTINENTAL	ALL OTHERS	TOTAL
TOTAL ACCOUNTS	8,250,000	2,165,000	160,000	100,000	10,675,000
NEW CONNECTS	160,600	43,170	3,120	3,000	209,890
UNCOLLECTIBLE ACCOUNTS	69,300	18,175	1,344	840	89,659
% TOTAL ACCOUNTS UNCOLLECTIBLE	.8%	.8%	.8%	.8%	.8%
# OF SERVICE APPLICATION OFFICES	175	46	14	22	257
TOTAL UNPAID ACCOUNTS IN CURRENT FILE	800,000	200,000	16,000	10,000	1,026,000

DOES NOT INCLUDE MCI AND SPRINT

## ATTACHMENT

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## APPENDIX 5

MONTHLY VOLUMESCALIFORNIA TELEPHONE UTILITIES

<u>COMPANY</u>	<u>STATIONS</u>	<u>PERCENT</u>	<u>NEW APPS.</u>	<u>UNCOLLECTIBLE</u>
PT & T	16,150,411	77.53	162,787	69,762
GTC	4,161,369	20.00	42,000	18,000
Continental Tel.	288,679	1.39	2,919	1,251
Roseville Tel.	68,500	.33	693	297
Citizens Utilities	63,275	.303	636	273
CP National	20,847	.1009	212	91
West Coast Tel.	13,413	.06	126	54
Volcano Tel.	8,194	.039	82	35
Sierra Tel.	7,619	.036	75	32
Kerman Tel.	7,000	.034	71	31
Ponderosa Tel.	5,845	.028	59	25
Evans Tel.	5,006	.024	50	22
Livingston Tel.	4,954	.024	50	22
Siskiyou Tel.	4,895	.024	50	22
Mariposa Co. Tel.	4,625	.022	46	20
Tuolumne Tel.	4,278	.021	44	19
Happy Valley Tel.	2,615	.013	27	12
California Oregon Tel.	1,964	.009	19	8
Foresthill Tel.	1,735	.008	17	7
Dorris Tel.	1,317	.006	13	5
Calaveras Tel.	857	.004	8	4
Ducor Tel.	613	.003	6	3
Hornitos Tel.	467	.002	4	2
Capay Valley Tel.	459	.002	4	2
Pinnacles Tel.	200	.00096	2	1
<b>TOTAL</b>	<b>20,829,137</b>		<b>210,000</b>	<b>90,000</b>

## APPENDIX 6

START UP COSTSCALIFORNIA TELEPHONE UTILITIES

<u>COMPANY</u>	<u>STATIONS</u>	<u>PERCENT</u>	<u>START UP COST</u>
PT & T	16,150,411	77.53	147,278
GTC	4,161,369	20.00	38,000
Continental Tel.	288,679	1.39	2,641
Roseville Tel.	68,500	.33	627
Citizens Utilities	63,275	.303	576
CP National	20,847	.1009	192
West Coast Tel.	13,413	.06	114
Volcano Tel.	8,194	.039	74
Sierra Tel.	7,619	.036	68
Kerman Tel.	7,000	.034	65
Ponderosa Tel.	5,845	.028	53
Evans Tel.	5,006	.024	46
Livingston Tel.	4,954	.024	46
Siskiyou Tel.	4,895	.024	46
Mariposa Co. Tel.	4,625	.022	42
Tuolumne Tel.	4,278	.021	40
Happy Valley Tel.	2,615	.013	25
California Oregon Tel.	1,964	.009	17
Foresthill Tel.	1,735	.008	15
Dorris Tel.	1,317	.006	11
Calaveras Tel.	857	.004	8
Ducor Tel.	613	.003	6
Hornitos Tel.	467	.002	4
Capay Valley Tel.	459	.002	4
Pinnacles Tel.	200	.00096	2
<b>TOTAL</b>	<b>20,829,137</b>		<b>190,000</b>

ATTACHMENT  
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APPENDIX 7

NETWORK AND TERMINALS START UP COSTCALIFORNIA TELEPHONE UTILITIES

<u>COMPANY</u>	<u>NETWORK</u>	<u>TERMINALS</u>	<u>EXTRA TERMINALS</u>	<u>COST</u>
PT & T	50	50	40	17,500
GTC	20	20	8	7,000
Continental Tel.	8	8	2	2,800
Roseville Tel.	1	1	0	350
Citizens Utilities	1	1	0	350
CP National	1	1	0	350
West Coast Tel.	1	1	0	350
Volcano Tel.	1	1	0	350
Sierra Tel.	1	1	0	350
Kerman Tel.	1	1	0	350
Ponderosa Tel.	1	1	0	350
Yavans Tel.	1	1	0	350
Livingston Tel.	1	1	0	350
Siskiyou Tel.	1	1	0	350
Mariposa Co. Tel.	1	1	0	350
Tuolumne Tel.	1	1	0	350
Happy Valley Tel.	1	1	0	350
California Oregon Tel.	1	1	0	350
Foresthill Tel.	1	1	0	350
Dorris Tel.	1	1	0	350
Calaveras Tel.	1	1	0	350
Ducor Tel.	1	1	0	350
Hornitos Tel.	1	1	0	350
Capay Valley Tel.	1	1	0	350
Pinnacles Tel.	1	1	0	350
<b>TOTAL</b>	<b>100</b>	<b>100</b>	<b>50</b>	<b>35,000</b>

## ATTACHMENT

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## APPENDIX 8

ON GOING COSTSCALIFORNIA TELEPHONE UTILITIES

<u>COMPANY</u>	<u>BASE COST</u>	<u>NETWORK LOCATIONS</u>	<u>TERM</u>	<u>TOTAL</u>
PT & T	178,000	15,000	17,100	210,100
GTC	46,000	6,600	5,700	58,300
Continental Tel.	3,200	3,000	2,280	8,480
Roseville Tel.	760	300	190	1,250
Citizens Utilities	700	300	190	1,190
CP National	230	300	190	720
West Coast Tel.	140	300	190	630
Volcano Tel.	90	300	190	580
Sierra Tel.	80	300	190	570
Kerman Tel.	80	300	190	570
Ponderosa Tel.	70	300	190	560
Evans Tel.	60	300	190	550
Livingston Tel.	60	300	190	550
Siskiyou Tel.	60	300	190	550
Mariposa Co. Tel.	60	300	190	550
Tuolumne Tel.	50	300	190	540
Happy Valley Tel.	30	300	190	520
California Oregon Tel.	20	300	190	510
Foresthill Tel.	20	300	190	510
Dorris Tel.	15	300	190	505
Calaveras Tel.	10	300	190	500
Ducor Tel.	10	300	190	500
Hornitos Tel.	5	300	190	495
Capay Valley Tel.	5	300	190	495
Pinnacles Tel.	2	300	190	492
<b>TOTAL</b>	<b>230,000</b>	<b>30,000</b>	<b>28,500</b>	<b>288,500</b>



ADDRESS ALL COMMUNICATIONS  
TO THE COMMISSION  
CALIFORNIA STATE BUILDING  
SAN FRANCISCO, CALIFORNIA 94133  
TELEPHONE (415) 777-1000

**APPENDIX C****PAGE 1 OF 2****Public Utilities Commission**  
STATE OF CALIFORNIA

September 24, 1982

FILE NO

**ALL OPERATING TELEPHONE COMPANIES IN CALIFORNIA:**

It is requested that you study this proposed alternate interim disconnect practice for non-payment of telephone bills and submit your comments to the Commission staff on or before January 1, 1983. The alternate disconnect practice, which would be applicable to all central offices service by digital switches or late model electronic analog switches with adequate processing capacity, is as follows:

1. After the appropriate disconnect notices, a non-paying subscriber shall be placed on limited service as follows:
  - a. Unlimited out-going calls to 911 emergency services (if provided by the local county).
  - b. Intercept system for all other out-going call attempts which will give the subscriber two recordings. During normal business office hours, the recording should state: "This telephone was disconnected because of a billing problem. If you wish to remedy this, please stay on the line and a business office representative will be with you shortly". If the subscriber is still off-hook after the recording, the intercept system would channel the subscriber to the business office.

During non-business hours, the second recording should state: "This telephone was disconnected because of a billing problem. If you wish to remedy this, please call again during business office hours, Monday through Friday".
  - c. Incoming calls would not be received.
2. The intercept practice shall be an interim measure only, lasting 15 to 30 days, and followed by a total disconnect.
3. If the subscriber elects to make payment and reconnect the telephone service during the interim measure, then the reconnection charge would be based on the actual costs of setting up and removing the intercept system and any associated service order activities.



ALL OPERATING TELEPHONE COMPANIES  
IN CALIFORNIA  
September 24, 1982  
Page 2

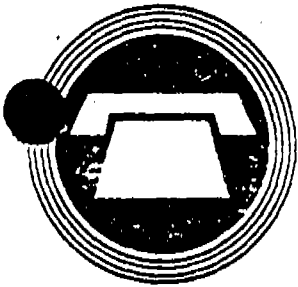
Please mail your response to Harry Strahl, Communications Division, and  
should you have any questions, please write or call Harry at (415) 557-3265.

Very truly yours,

*Dean J. Evans*

Dean J. Evans, Chief  
Surveillance Branch  
Communications Division

cc: Al Pelavin  
Robert Ringman, CITA  
Roger Barker  
Harry Strahl



ROSEVILLE TELEPHONE COMPANY

P.O. BOX 989 • ROSEVILLE, CALIFORNIA 95661  
TELEPHONE 786-6141 • AREA CODE 916

ROBERT L. DOYLE  
PRESIDENT, MANAGER  
THOMAS E. DOYLE  
SECRETARY

December 22, 1982

Mr. Harry Strahl  
Communications Division  
Public Utilities Commission  
California State Building  
San Francisco, California 94102

Dear Mr. Strahl:

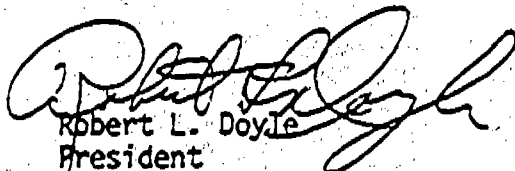
This is in response to your letter dated September 24, 1982 requesting our comments on a proposed alternate interim disconnect practice for non-payment of telephone bills. The proposed approach has merit and would provide the customer with access to emergency services during the period of resolving the payment of the bill.

We have looked at each of our common control type equipped central offices to determine if they were technically capable of providing this service. It is estimated it will cost approximately \$60,000 to arrange our present equipment for this service. This covers the cost of a reconfiguration of the software of the No. 2 EAX equipment, the time delay type trunk circuits from each office, the recording units and other equipment and facilities.

Presently about 70% of our access lines are connected to common control type central office equipment. The remaining 30% are served from step by step type control offices.

Please let me know if additional information is desired.

Very truly yours,

  
Robert L. Doyle  
President

RLD:va