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Overview '77
Public
Message
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Service



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1. OVERVIEW '77 8

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DEPARTMENT OF COMMUNICATIONS

OVERVIEW '77 PUBLIC MESSAGE TELEGRAPH

SERVICE

I - INTRODUCTION

1. Background

In response to a number of inquiries, questions and complaints from the general public and the business community expressing dissatisfaction with the way public message telegraph service (PMTS) was being provided, the Minister of Communications launched an inquiry concerning this service in January 1970. This inquiry reviewed all aspects of PMTS, including the standards followed in providing the service, how it related to other public telecommunications, what the public interest was in an efficient telegraph service at that time and thereafter, and what changes in government policies and regulations might have been appropriate.

The results of the inquiry were tabled in the House of Commons the following June 23 in a document entitled "A Review of the Public Message Telegraph Service in Canada".

The review provided statistical data from 1960 which showed that usage of PMTS had been steadily declining as users turned to alternative telecommunications services and that as a result the service was no longer economically self sufficient. The selective closing of telegraph offices, initiated by CNCP Telecommunications in 1967, was discussed in terms of its effect on company personnel and the impact on the service being provided to the public. Also, the review identified certain features provided by the PMTS which might not have been satisfied by alternative means of telecommunications.

The major conclusion of the review was that "for the foreseeable future, continued provision of the public message telegraph service, in its present nation-wide form, is necessary and socially desirable. Because of the fluid situation, there should be on-going Government surveillance with a view to facilitating changes that appear desirable in the interests of both the public and the companies."

2. Purposes of the present review

Over the last few months, the Department received an increasing number of representations, inquiries and expressions of concern about the quality and availability of the public message telegraph service. It was, therefore, judged appropriate to intensify the regular monitoring of the service and augment this with a user survey.

Varying degrees of success have been achieved in implementing the recommendations made in the 1970 study. The suggestion for a new form of mail service satisfying some of the needs of telegram users has culminated in the introduction of Telepost, a joint service of the Post Office and CNCP Telecommunications. The operating companies have taken greater care to consult affected parties and publicize any major changes in the service. New telecommunications legislation, recently tabled in the House of Commons, will provide for more effective regulation of telecommunications carriers engaged in this service. Nevertheless, the changes in the environment in which the service is now being provided warrant a fresh look at the relevancy of the conclusions derived in the previous study. In particular, it is important to consider the public requirements for this type of service and assess whether or not these are being, and will continue to be, met.

II - SUMMARY AND CONCLUSIONS

1. Summary of findings

The use of the public message telegraph service (PMTS) continues to show a marked decline. From 1965 to 1975, the total number of domestic telegrams and of telegrams between Canada and the United States decreased by more than 60 per cent. The average rate of annual decline has accelerated since the Department published its review of this service in 1970. During the period 1971 to 1975, the average decline was more than nine per cent a year. This is consistent with trends in most other nations where the telecommunications user has access to a variety of modern telecommunications services.

The number of overseas telegrams or "cablegrams", however has remained practically constant over the 1971 to 1975 period. As a result, overseas traffic represents an increasing proportion of the messages processed through the domestic telegraph facilities operated by CNCP Telecommunications. The number of overseas messages represented 15 per cent of the total telegraph traffic in 1965, 24 per cent in 1972 and 38.7 per cent in 1975.

Although money transfer telegrams represent an identifiable and, to some, an important dimension of PMTS, this type of message represents less than five per cent of the over-all volume of message traffic. The number of this type of message has remained relatively stable over the 1965-1975 period as have the absolute dollar values transferred, when adjusted for inflation. In 1975, there were some 300,000 such telegrams representing a total value of approximately \$82 million transferred. In contrast to the predominant use of the over-all PMTS by business, the results of a user survey carried out for the purpose of this review indicate that almost 80 per cent of money transfers are filed by non-business customers. It also appears that this service is proportionally more prevalent in smaller communities than in large urban areas.

In absolute terms, the total number of messages sent and received by Canadians was about eight million in 1975. Business users of the service accounted for 62 per cent of this total. Non-business telegrams are sent for purposes ranging from congratulations to real estate transactions.

Increasing expenses and declining usage have led CNCP Telecommunications to continue to modify their operating procedures. This has affected to a certain extent, the level of service furnished to the general public. Business hours have been shortened in certain telegraph offices; other offices have been phased out of service. In the 1970-75 period, the total number of offices and agents handling telegrams decreased from 1199 to 426.

For locations where a telegraph office has been phased out of service, CNCP Telecommunications provides the communities affected with a toll-free telephone service to the nearest telegraph office in service. This arrangement curtails services which might have required over-the-counter filing and also eliminates local messenger delivery service.

The results of the user survey carried out in November 1976 indicate that 75 per cent of all telegrams emanate from Montreal, Toronto, Ottawa, Winnipeg, Edmonton, Calgary and Vancouver. Small one-person offices, which represented more than 60 per cent of all offices in service during the survey period, generate less than five per cent of all telegrams. Furthermore, 68 per cent of telegrams are filed by telephone, some 24 per cent through the use of Telex terminals and less than eight per cent are filed over the counter. The largest proportion of those messages filed over the counter are money transfer telegrams, in conformity with company procedures for accepting such messages from customers who have no established credit with the company.

From a financial perspective, the PMTS continues to operate at a loss and is being cross-subsidized by other services of CNCP Telecommunications. Operating expenses exceeded revenues generated from the service by some \$3 million in 1975 and this loss could reach \$5 million in 1976. As this service is more labor intensive than most other telecommunications services, the dominant component of the operating expenses is for labor and labor related items.

2. Conclusions

1. There is no evidence to show that the steady decline in the use of domestic telegrams as well as of telegrams between Canada and the United States will be arrested under prevailing conditions. Some of the measures instituted by the companies, in the interest of more economical operation, may have accelerated the decline in usage of the service. The decline in demand, however, is fundamentally due to the inability of the service to compete with the more efficient alternative telecommunications services available in Canada.

In contrast to the domestic situation, the volume of overseas cablegrams has remained practically constant. Nevertheless, forecasts indicate that this service will also experience a decrease in demand as other countries upgrade their public telecommunications services. This decrease could be more gradual than has been the case in the domestic service.

2. The public message telegraph service will continue to be, for the foreseeable future, a valuable option in the over-all range of telecommunications services available to Canadians. For example, the findings suggest that overseas cablegrams represent an important and continued requirement in the context of available alternative means for Canada to communicate with overseas countries. While Canadians benefit from a variety of the most modern telecommunications services, less developed nations do not. The overseas telegraph service is thus an important means of communicating with these countries.

Apart from obligations under international agreements and regulations, other factors must be taken into consideration to maintain an adequate overseas service. Such factors as the relative cost of overseas telephone calls compared to charges for cablegrams, as well as language and time differences between the corresponding parties necessitate the continuance of this service.

3. In an effort to minimize the financial losses incurred while providing the public message telegraph service, CNCP Telecommunications has focussed on the most significant items of expense, such as labor costs. This has led to a major reduction in telegraph offices and there is every reason to believe this will continue. In an effort to improve the revenue picture, the operating companies have attempted to introduce new and innovative services, such as Telepost. This effort has not, as yet, led to any significant improvement in the revenues derived from the PMTS. Most of the increases in the revenues generated by the service are derived from rate increases and revised financial settlements with Canada's overseas telecommunications carriers.
4. The need to maintain telegraph offices on a nation-wide basis represents a focal issue that should be addressed when considering the future of the service. In this regard, it is important that operating companies develop long term plans pertaining to the way the public message telegraph service will be provided in the future and that they make such plans publicly available.
5. The descriptive statistics and survey results contained in this report are not intended to permit definitive conclusions to be drawn as to what further evolution of the public message telegraph service would best satisfy the public interest. They do however, suggest a number of directions to be considered by interested parties in any assessment of future changes in the service.

III - BACKGROUND INFORMATION

1. CNCP Telecommunications

CNCP Telecommunications, a joint undertaking of Canadian National and Canadian Pacific Telecommunications, is the operator of the domestic telegraph service in Canada. Furthermore, CNCP Telecommunications receives and transmits telegraph messages between Canada and the United States under arrangements made directly with the domestic PMTS carrier in the U.S.

As for the overseas telegraph service, CNCP Telecommunications interfaces with the overseas telecommunications carriers operating in Canada and provides both the national delivery of telegrams originated overseas and the reception from the public of telegrams for overseas destinations. In Montreal, however, Teleglobe has a separate service dealing directly with the public which allows Teleglobe to accept and deliver overseas cablegrams.

2. Descriptions of the domestic PMTS

In 1967 as part of their modernization program, CNT and CPT proposed, and the CTC approved, a plan for elimination of the duplication of service in any single area. In accordance with this agreement, each company undertook to withdraw its services, ultimately leaving one company in each location. The action proposed under this "reciprocal withdrawal agreement" has been completed. Faced with declining utilization of the service and increasing operating expenses, the companies continued to phase more telegraph offices out of service. In certain other locations where hours of business have been shortened messages are handled by telephone at one of the larger offices outside of regular business hours.

Over the years, both CNT and CPT have modernized and automated their separate telegraph systems, operating message-switching computers in Toronto and Montreal respectively. Messages are received over the telephone, from Telex stations and directly over the counter in those locations where offices are maintained. The operator in the larger locations uses a Cathode Ray Tube (CRT) visual display unit together with a keyboard to type, format and edit the message and in the case of CP to record accounting information. When the message is in correct form and properly addressed, the operator releases it to an automatic controller which in turn feeds the message to the main switching computers for delivery to its destination via domestic and international circuits. Messages originated in CN territory for delivery by a CP office, and vice versa, are routed to the switching computer of the other carrier by direct computer-to-computer circuits. Messages are delivered by Telex, telephone, mail and, in some cases and locations, by messenger from the CNCP Telecommunications office closest to the recipient. For the recipient of messages who does not lease a Telex terminal, the content of the message is relayed by telephone and an actual copy of the message follows by mail if requested. Within certain established city limits, the telegraph message can be delivered by messenger for an additional fee.

For locations where a telegraph office has been phased out of service, CNCP Telecommunications provides the communities affected with a toll-free telephone service to the nearest telegraph office in service. This arrangement does not provide for services which require over-the-counter filing and it eliminates local messenger delivery service.

In addition to the automated transmission of messages, CP has mechanized their billing system which, as a by-product, provides them with current management and traffic information. CN, on the other hand, has continued billing on a manual basis but has introduced labor-saving procedures and devices where possible.

3. Description of the international PMTS

Overseas telegraph service is provided mainly by Teleglobe Canada with small portions being provided by the Commercial Cable Company (approximately 18 per cent of the traffic). Although Teleglobe provides a pick-up and delivery service in Montreal, CNCP Telecommunications provides the reception and delivery of overseas messages in other parts of Canada. For this purpose, CNCP inter-connects with Teleglobe facilities which in turn provides connections with overseas administrations. Agreements between CNCP Telecommunications and the international cable companies govern the proportion of traffic handled by each company. The telegraph facilities of Teleglobe are automated using computer-controlled storage and retrieval, with automatic links to the switching computers of CNT and CPT. It should be noted that the close interrelationship between CNCP and the international carriers for the acceptance and delivery of international messages permits certain operational economies which would not be available if the domestic and international services were to be provided separately.

Telegraph messages between Canada and the United States are handled through direct arrangements between CNCP and the PMTS carrier in the United States. Teleglobe has no direct involvement in PMTS service between the two countries.

4. Statistical data

The Public Message Telegraph Service could be classified under the following broad headings:

- domestic telegrams and telegrams between Canada and the United States*.
- domestic money transfer telegrams and those between Canada and the United States
- overseas telegrams called cablegrams.

* Telepost, a recent joint offering of CNCP Telecommunications and Canada Post, is included under this heading. Telepost messages are filed much like a regular telegram and delivered to their destinations by the Post Office. It is too early to determine the potential growth of this service. A comparable service called Mailgram however, was introduced a few years earlier in the United States and has shown a significant growth in demand.

This section provides statistical data acquired since the 1970 Review of PMTS in Canada was published. In addition to the general traffic data, updates are provided on the financial viability of the service, the number of offices in service and work force levels.

a) Domestic and U.S. telegrams

Number of domestic and U.S. telegrams

<u>Year</u>	<u>CN</u>	<u>CP</u>	<u>Total</u>	<u>% Annual Decrease</u>
1969	5,501,767	2,958,191	8,459,958	12.1
70	4,306,521	2,344,372	7,650,893	9.6
71	4,424,688	1,941,224	6,365,912	16.8
72	3,614,908	1,964,737	5,578,645	12.4
73	2,268,455	1,547,974	3,816,429	31.6
74	2,386,251	1,685,835	4,072,086	(6.7)
75	2,570,627	1,850,720	4,421,347	(8.6)

The number of telegrams decreased by 65.2 per cent over the period 1965 to 1975. The average rates of decrease between different periods of time are tabulated below.

<u>Period</u>	<u>Average annual decline in no. of telegrams</u>
1960-75	7.5%
1960-65	3.69%
1966-70	9.65%
1971-75	9.10%

As shown above, the steady decline in the use of the service has continued, except for 1974 and 1975, when some increases over the previous year's totals were recorded. These increases, however, should be measured against the very substantial decrease in volume of Traffic in 1973, a result, in part, of the strike by CNCP Telecommunications employees that year. The 1973 decrease was more than twice the decrease for the previous year. Therefore, the 1974

figure shows a continuation of the general decline experienced prior to the strike. The 1975 increase is almost directly attributable to the increased use of the service by business users during a postal strike that year.

The average rate of annual decline in the number of telegrams processed has accelerated in recent years, since the Department published its Review of the service in 1970. At that time, the average rate of decrease over the 1960 to 1968 period was 5.5 per cent per year. This rate is now in excess of 9 per cent annually.

b) Cablegrams

In contrast to the domestic situation, the volume of overseas Cablegrams processed by CNCP Telecommunications has remained almost constant. Recent trends, however, indicate that this service could also be experiencing a decline in demand. This decline is not expected to be as significant as has been the case in the domestic service.

Number of cablegrams

<u>Year</u>	<u>CN</u>	<u>CP</u>	<u>Total</u>	<u>% Increase</u>
1969	1,464,851	1,064,128	2,528,979	(5.6)
1970	1,647,464	840,021	2,487,485	(1.6)
1971	1,592,274	1,043,582	2,635,856	6.0
1972	1,715,524	1,063,809	2,779,333	5.1
1973	1,728,223	1,014,439	2,742,662	(1.3)
1974	1,821,607	982,012	2,803,619	2.2
1975	1,816,281	981,891	2,798,172	(0.2)

c) Money transfers

The number of money transfer messages has remained relatively stable over the 1965-75 period, while the total amount of funds transferred has increased by 110 per cent over the same period. When this increase is adjusted to take inflation into account, no significant increase appears in the absolute dollar amounts transferred by the PMTS.

As a result of procedures instituted by the operating companies, money transfer telegrams are filed only over the counter except for customers with an established credit with CNCP Telecommunications. Accordingly, this service is generally available only to residents of communities where a local telegraph office is in service.

Number of money transfer messages and amounts transferred

<u>Year</u>	<u>CN Messages</u>	<u>CP Messages</u>	<u>Total Messages</u>	<u>Total Dollars</u>
1969	184,181	99,372	383,553	41,627,026
1970	230,710	89,092	319,802	57,878,368
1971	161,102	75,428	237,530	40,828,974
1972	156,598	73,602	230,200	49,589,770
1973	133,805	67,551	201,356	41,943,473
1974	153,175	77,652	230,827	55,298,120
1975	204,933	92,331	297,264	81,771,867

d) Number of public offices

Originally, the large decrease in the number of public offices was directly related to the elimination of railway stations and of passenger agents who also acted as telegraph agents. Furthermore, under the 1967 reciprocal withdrawal agreement, a number of offices were closed in order to avoid duplication in locations where both operating companies had offices serving the same geographical area. Further decline in the number of offices in service was due to CNCP management decisions

to reduce the operating deficit caused by increasing operating expenses and decreasing telegraph traffic. The table below shows the number of offices in operation on a yearly basis over the period of 1970-75. The figures for CN include a large number of agents who accept messages from the public, but are not involved in the delivery of telegrams. These agents usually have other company-related duties.

Number of public offices and agents

<u>YEAR</u>	<u>CN</u>	<u>CP</u>	<u>TOTAL</u>
1970	780	419	1199
71	764	311	1075
72	747	68	815
73	741	58	799
74	490	58	548
75	399	27	426

e) Work force statistics

As PMTS is a labor intensive service, manpower costs and other related expenditures represent a large proportion of operating expenses. From 1961 to 1968, the total number of employees engaged exclusively in the telegraph service dropped from 9,997 to 8,687. In 1976, there were approximately 1,080 employees engaged in this service (CN 660; CP 420).

While labor-management relations within CNCP Telecommunications are outside the scope of responsibilities of the Minister of Communications, the declining employment opportunities in this service industry are of concern. In this regard, it should be noted that labor and management have been able to negotiate freely a number of job security agreements. The purpose of these agreements is to minimize the adverse effects on employees caused by technological, operational and organizational changes instituted within the operating companies.

f) Financial data

The table shown below identifies revenues collected and expenses incurred by CNCP Telecommunications in recent years as a result of providing PMTS. Although the revenues generated by this service are easily identifiable, some of the expenses are not. The approximations used in compiling the financial data, however, are considered adequate until further progress is achieved in the cost inquiry initiated by the CTC and now being continued by the CRTC.

5. Major international agreements concerning the provision of international public telegraph service

The provision of the international public telegraph service is governed by Telegraph Regulations of the International Telecommunications Union (ITU), an agency of the United Nations responsible for international telecommunications. These Regulations, to which Canada is a signatory, specify six classes of telegrams as obligatory while others are optional. The obligation to provide the public telegraph service is also applicable to the radio transmissions of ships at sea as covered by the ITU Radio Regulations to which Canada is also a signatory.

While the Telegraph Regulations make provisions for the suspension of service by any member nation subject to immediate notification to the Secretary General of the ITU, the interpretation of these provisions is ordinarily directed towards suspension of service due to technical interruptions and not towards unilateral cancellation of an entire service. Any attempt to substitute or alter the service in a radical manner is likely to be opposed by the majority of the ITU member nations and, in particular, those nations with less developed alternative means of telecommunications. Presumably, therefore, any proposed major change in the international service would require appropriate amendments to the pertinent Regulations approved by the ITU members. Where such a proposed change gives rise to unresolved disputes concerning the interpretation or application of the Regulations, compulsory arbitration may apply, as prescribed by the Optional Additional Protocol of the 1973 ITU Convention.

COMPARATIVE PUBLIC MESSAGE INCOME STATEMENT

(\$000)

	<u>1974</u>			<u>1975</u>		
	<u>CP</u>	<u>CN</u>	<u>TOTAL</u>	<u>CP</u>	<u>CN</u>	<u>TOTAL</u>
<u>Revenues</u>						
Public Message	\$ 3,130	\$ 5,167	\$ 8,297	\$ 3,883	\$ 5,978	\$ 9,861
Teltex	202	482	684	267	723	990
Press Message	133	150	267	228	295	523
Cablegram	1,911	2,836	4,747	2,331	3,382	4,713
Money Order Message	176	368	544	260	547	807
Other	488	520	1,008	863	696	1,559
<u>Total Revenues</u>	<u>\$ 6,040</u>	<u>\$ 9,523</u>	<u>\$15,563</u>	<u>\$ 7,832</u>	<u>\$11,621</u>	<u>\$19,453</u>
<u>Expenses</u>						
Administration	\$ 245	\$ 581	\$ 826	\$ 322	\$ 654	\$ 976
Operating Labour	5,219	6,773	11,992	5,068	7,705	12,773
Operating Other	1,284	1,664	2,948	1,467	1,969	3,436
Fringe Benefits	794	1,198	1,992	884	1,364	2,248
Imputed Rents						
Equipment	112	963	1,075	112	963	1,075
Circuitry	125	518	643	125	518	643
Computer	228	1,206	1,435	228	1,206	1,435
<u>Total Expenses</u>	<u>\$ 8,007</u>	<u>\$12,903</u>	<u>\$20,910</u>	<u>\$ 8,206</u>	<u>\$14,379</u>	<u>\$22,585</u>
<u>NET OPERATING INCOME</u>	<u>\$(1,967)</u>	<u>\$(3,380)</u>	<u>\$(5,347)</u>	<u>\$(374)</u>	<u>\$(2,758)</u>	<u>\$(3,132)</u>

6. Telegraph and other telecommunications services

Although the demand for domestic telegrams has declined and overseas cablegrams has remained relatively constant, the demand for other telecommunications services has substantially increased. This implies that these telecommunications services have successfully been able to compete with PMTS and have eroded markets traditionally satisfied by the telegraph service. The trends experienced in Canada have also occurred in other developed countries where a variety of modern telecommunications services are easily acquired by the public at competitive rates.

The main public telecommunications services that have gradually replaced the telegraph service are:

a) Telex-Telenet

CNCP Telecommunications Telex service has expanded greatly, with the number of machines in service increasing from some 10,000 in 1965 to approximately 36,000 today. Overseas Telex established in the early sixties has experienced increased traffic volumes growing from 276,000 messages in 1965 to 3,835,000 in 1974.

For those organizations with large volumes of internal traffic as well as a need for external communications, CNCP Telecommunications offers the Telenet service providing message switching at higher speeds while retaining the capability of exchanging messages with regular Telex subscribers.

In competition with Telex and Telenet, the telephone companies provide somewhat similar services known as TWX and MSDS respectively.

b) Telephone services

Over the years, the growth in telephone facilities and decreases in the cost of long distance telephone messages have made telephone service an attractive substitute for telegrams.

From 1964 to 1974, the number of telephones in service increased 67 per cent to 12.5 million. Long distance telephone calls increased 153 per cent to more than 462 million calls a year. As for overseas calls to the United Kingdom and other European countries, the number of completed calls increased between 1965 and 1975 from 322,000 to 2,223,000, an increase of some 700 per cent.

Factors that have influenced the increase in long distance telephone calls include the introduction by telephone companies of the one-minute telephone call and reduced rates for calls outside business hours and on holidays. These structural changes in rates have undoubtedly made the telephone service more competitive with the telegram and should provide impetus to the development of higher speed facsimile services which utilize the regular toll telephone network.

IV - SURVEY OF USERS

1. Background

During the on-going review of the PMTS, it became apparent that it would be valuable to find whether or not a significant number of users relied on this service because alternative means of communicating or transferring funds were not able to satisfy their particular requirements. Accordingly, a survey of PMTS users in Canada was conducted in co-operation with CNCP Telecommunications.

2. Purpose of the survey

The fundamental objective of the survey was to shed some light on whether the PMTS was a necessity or only a convenience to business and non-business users. Consequently, the survey was designed to yield information about the class of telegram sent, the kind of message conveyed, the reasons for using a telegram, any alternative means of communications which might be used and a broad profile of the users.

3. Planning of the survey

To achieve these objectives, it was necessary to interview a representative sample of PMTS users across the country. The most suitable method, which was agreed upon by Statistics Canada and CNCP Telecommunications, was to select a sample of telegrams filed in each telegraph office during a representative week and to ask the originator of each telegram selected a number of questions.

As in any large scale survey of a segment of the population, a balance had to be struck between the level of detail incorporated in the questions posed to the users and the level of their tolerance to answer

such questions. Furthermore, the size of the questionnaire had to be constrained by the practical limitations, operational or administrative in nature.

4. Fieldwork

(i) Sampling methodology: To obtain a self-weighting sample, every twentieth telegram filed after a random start during the survey period was to be selected in each telegraph office in Canada.

As the survey frame was to consist of telegrams filed by paying customers at the point of origin, two classes were excluded from the selection process for the purposes of this survey: non-revenue messages and relay messages. Non-revenue messages are those sent from one telegraph office to another for internal communications of the operating companies. Statistics compiled by CNT in February 1976 show that non-revenue messages comprise from 20 to 30 per cent of all messages originated in that company's offices. Relay messages do not originate in a particular telegraph office, but are merely forwarded through it to reach their destination.

To select the sample, all messages, except those mentioned above, were to be counted as they were filed, whether it be in person, over the telephone, by telex or by pickup. Detailed instructions were prepared for each telegraph office explaining how to select the sample.

(ii) Interview technique: The survey was designed to be carried out in person or by telephone interview. In some offices, the interviews were to be carried out when the telegram was filed; in other offices, where in the view of the operating companies this would lead to unacceptable delays in service, customers were interviewed later. The procedure to be followed in each office was left to the discretion of the operating companies.

The format of the interview, that is, the wording of the questions and the order in which they were asked, was completely formalized to attain uniformity in the questioning and recording of answers.

Because the survey was to be carried out in approximately 90 centres across Canada, and for economy, written instructions to the interviewers were relied on as a training vehicle. The basic instructions were printed on the questionnaire. Additional elaboration and special cases were treated in separate instructions issued to each participating telegraph office.

(iii) The questionnaire: This consisted of two sections: those questions asked of the customer by the interviewer and those answered by the interviewer without the customer's help. Questions in the latter section included the name of the originating telegraph office, the day and time the telegram was sent, the method of filing, the method of payment, the class of telegram, the number of words and the charges paid.

Questions asked of the customer included the type of message (business or non-business), its purpose, alternative methods of conveying the information and why a telegram was used rather than an alternative method. Business customers were asked to provide information on the industry category of their establishment and the number of employees. In addition, when messages were filed over the counter, the customer was asked whether he could have filed it by telephone and, if not, why not. To the extent possible, questions were pre-coded as opposed to open-ended.

The questionnaire (see appendix), was printed on one sheet of paper with English and French versions back to back.

(iv) Pre-testing: A pre-test was conducted in five centres to test the questionnaire and instructions for clarity and ease of understanding. Analysis of the results led to modifications of both the questionnaire and the instructions.

(v) Schedule: The actual survey was conducted from 8:00 a.m. 15 November 1976 to 8:00 a.m. 22 November 1976 -- a period of one week. This period was not selected randomly, therefore, the applicability of the results to time periods other than the week cannot be measured statistically. The question of repeating the survey at another time to test for seasonal variation of results is under consideration.

5. Highlights of the results of the survey

Highlights of the results of the survey are shown here:

(General)

- Business messages represented 62 per cent of all telegrams and non-business messages, 38 per cent. Business messages predominated in all regions of the country.

- For overseas messages, the telegram was selected by the customer rather than other means of communications because of the urgency of the message. For domestic applications, the customer's primary reasons for selecting the telegram as a medium for communications were the need for a written record and the legal status of the telegram in certain applications. Presumably for domestic applications, urgent information is more readily relayed by telephone or Telex.

(Geographical Profile)

- Three-quarters of all messages emanated from seven offices only-- Montreal, Toronto, Ottawa, Winnipeg, Edmonton, Calgary and Vancouver.

- Small offices (one-person) mostly serving small communities, represented some 60 per cent of the public offices in service. These offices processed less than five per cent of the messages filed by customers.

- Use of money transfer services appeared to be relatively more prevalent in smaller communities than in large urban areas.

(Method of Filing)

- 68 per cent of telegraph messages were filed by telephone, 24 per cent by Telex, seven per cent over the counter, and one per cent by other means.
- 86 per cent of non-business messages were filed by telephone and 13 per cent over the counter. The majority of messages filed over the counter were money transfers. This is due to the filing procedures instituted by the companies whereby money transfers are accepted over the counter in most cases.

(Type of Message)

- The type of messages filed represented
 - Domestic and Canada-U.S.A. ordinary telegrams 58.7%
 - Money transfers 4 %
 - Telepost 0.3%
 - Overseas messages 37 %

(Alternative Substitutes)

- 92 per cent of the customers indicated that if PMTS was not available, they were likely to try other methods of communications which might not totally satisfy their needs. Eight per cent indicated that they had no alternative to PMTS for their specific requirements. One of the largest of such requirements is money transfers.
- Of those customers who were likely to try other communications alternatives if PMTS was not available, 46 per cent of them used PMTS because of speed and urgency, 13 per cent because of convenience, 12 per cent because of the need for a written record and 11 per cent for the economy achieved in using PMTS.

- Of those customers who indicated that no other communications means could replace their requirement for PMTS, 51 per cent stated this was because of the urgency of the message, 21 per cent because of the need for a written document and 12 per cent because of the status of the telegram.

(Business Messages)

- The largest business users of the service were wholesale or retail trade establishments (29 per cent of the business traffic), manufacturing firms (25 per cent) and businesses engaged in finance, insurance and real estate (16 per cent).
- Large establishments accounted for a much greater proportion of the business telegraph traffic than small ones. Firms with one to three employees generated eight per cent of the business traffic while firms with 100 or more employees generated 41 per cent of such traffic.
- The principal purposes for business telegrams were requests for documents or product shipments and information on the status of orders.

(Non-Business Messages)

- Each class of message, with the exception of money transfer messages, was used more for business than non-business purposes. Eighty per cent of the money transfer messages were filed by non-business customers.
- The primary purposes of sending non-business telegrams, within North America, were congratulations or to extend sympathy. For overseas messages, the primary purposes were to provide general family news and notification about family emergencies.

The complete results of the survey are shown in the appendix.

V - FUTURE OUTLOOK FOR THE PUBLIC MESSAGE TELEGRAPH SERVICE

1. An assessment of the continuing need for the telegraph service

In considering possible directions for the future evolution of the service, it is important to consider the so-called "hard-core" demand which only the telegraph service appears fully able to satisfy. This demand stems from:

- a) small businesses and individuals which have an occasional but important need for fast "record communications" or "hard copy" messages.

This occasional use of the service makes it difficult to justify financially the use of other comparable services which are more suitable for a regular user of "record telecommunications" services. This requirement is not limited to small businesses and individuals only, as large businesses requiring fast "record communications" with the public or small businesses also make use of this service.

- b) certain business communication applications, such as tender bids, where written submissions are expected to meet deadlines.

Users believe that legal status is conferred to the telegram in this type of application. This is presumably because, in cases of legal disputes, verification of the details of such telegrams is readily possible by examining the records of the operating companies.

- c) the need for expedient transfer of funds.

Although it is possible to transfer funds by other means, such as bank transfers, certain telegraph offices provide money transfer services outside normal working hours.

Night service provided by the banks, the introduction of automatic teller machines and the increased use of credit cards have not so far diminished the use of money transfer telegrams. However, increasing public awareness of these alternate methods and other new services should eventually have a significant impact on money transfers effected by telegrams.

- d) the continuing demand for an overseas telegraph service.

There are a number of important reasons to maintain this service. The Regulations of the International Telecommunications Union (ITU) specify obligatory classes of international telegrams which must be provided as a means of public telecommunications. In particular, the international telegraph service provides an important means of public telecommunications between Canada and developing countries where telephone service is less extensive. Also, to a greater extent than most other means of communication, the telegraph service allows the user to overcome language and time differences as there is no requirement for direct and simultaneous communication between the originating and receiving party.

- e) a requirement for written communications independent of mail services during periods of strikes or other emergency situations.
- f) a tendency of the public to maintain traditional social uses of this service.

Congratulatory or sympathy messages sent by telegram are examples of this type of use. Although some might argue that this service cannot be maintained for the sake of this type of application, it represents a large proportion of the non-business use.

2. The future

It is suggested by some that the present users of the public message telegraph service constitute the "hard core" which is not likely to abandon the service in favor of other telecommunications services. The trends, however, indicate that the use of telegrams will continue to decline, albeit possibly in a more gradual fashion, further deteriorating the economics of providing this service. Understandably, the operating companies would be expected to continue organizational, operational and administrative changes commensurate with the utilization of the service. In the case of CNCP Telecommunications, this implies further reduction in the number of telegraph offices in service and curtailment of business hours in other offices. Accordingly, the decline in the domestic facilities might reach a level at which the service provided by CNCP Telecommunications would not be considered adequate to satisfy users of the overseas telegraph service.

Significant resources are being devoted by government and the private sector in considering the development of services which would take advantage of technological advances in the computer and telecommunications fields. These long-term developments will have a major impact not only on the telegraph service as it is known today, but on the entire telecommunications scene. Major information and fund transfer systems are now considered in a number of countries. In the meantime, the question arises as to what changes might be required to make the telegraph service more responsive to the needs of its users, in particular those users for whom there will not be adequate alternative means of communications.

It is difficult to foresee viable long term measures which would bring about a return to the type of telegraph service that was being provided many years ago. However, there appear to be some opportunities for change which could lead to an orderly evolution of the service and which also could further the interests of users and operating companies. Although some of these possible changes are suggested below for discussion, they require an in-depth assessment within the regulatory framework as an integral part of comprehensive long-term plan for the service. Such changes include:

- further integration of the resources of the telegraph companies operating in Canada to achieve improved cost-effectiveness.

- integration of the telegraph service, to the extent possible, with the public switched telephone service. This could lead to some improved accessibility to the service and if charges were included with monthly telephone statements, could result in savings in the operation of the service and convenience to its users.

- alternative arrangements which would allow over-the-counter services to be maintained in communities where the local telegraph office is phased out of service. A number of such alternatives have been implemented in other countries by enlisting the resources of the Post Office or established retail outlets in the filing and delivery of telegrams.

APPENDIX

RESULTS OF THE SURVEY

APPENDIX

PMS - FREQUENCIES ANALYSIS

	ADJUSTED FREQ. (PCT)	
TELEGRAMS		
Business	61.8	
Non-Business	38.2	
Total		100.0
NON-BUSINESS MESSAGES - PURPOSE		
Loss of credit card	0.4	
Extend Sympathy	12.7	
Congratulations	35.4	
Family Emergency	6.1	
General Family News	15.2	
Real Estate Transactions	2.5	
Make or Confirm Reservations for Accommodations	2.6	
Birth Announcements	1.3	
Petitions to Government	1.2	
Transfer Money	8.4	
Other	14.2	
Total		100.0

APPENDIX

PMS - FREQUENCIES ANALYSIS

	ADJUSTED FREQ. (PCT)	
TELEGRAMS		
Business	61.8	
Non-Business	38.2	
Total		100.0
BUSINESS MESSAGES - PURPOSE		
Make Quotations on Sale of Products	5.9	
Complete Financial Transactions	6.5	
Confirm Agreements	10.2	
Make or Confirm Reservations for Accommodations	1.3	
Request Documents or Products be Forwarded	12.8	
Advise Status of Orders	12.6	
Reminders for Various Reasons	9.6	
Advise Shipping Particulars	9.6	
Real Estate Transactions	1.0	
Tracing Delinquent Accounts	4.1	
Transfer Money	2.5	
Petitions to Government	0.7	
Other	23.2	
Total		100.0

APPENDIX

PMS - FREQUENCIES ANALYSIS

	ADJUSTED FREQ. (PCT)	
TELEGRAMS		
Business	61.8	
Non-Business	38.2	
Total		100.0
BUSINESS MESSAGES - TYPE OF BUSINESS		
Agriculture, Fishing, Forestry	1.0	
Mining	1.4	
Manufacturing	25.4	
Construction	3.6	
Wholesale or Retail Trade	29.1	
Finance, Insurance & Real Estate	15.6	
Community Business or Personal Service	11.9	
Public Administration & Defence	4.5	
Trans., Communications & Utilities	5.4	
Other	1.9	
Total		100.0
BUSINESS MESSAGES - SIZE OF BUSINESS		
1 to 3 employees	8.0	
4 to 10 "	16.3	
11 to 49 "	20.4	
50 to 99 "	10.9	
100 or more employees	41.3	
Don't know	3.0	
Total		100.0

APPENDIX

PMS - FREQUENCIES ANALYSIS

	ADJUSTED FREQ. (PCT)	
REASONS FOR CHOOSING TELEGRAPH SERVICE		
Economy, Alternative too Expensive	10.8	
Speed, Alternative too Slow	38.6	
Telegram Convenient	13.3	
Message Urgent	6.7	
Save Office Manpower	0.4	
Hard to Get Through by Telephone	4.3	
Telegram has Prestige	2.7	
Telegram Traditional, Nice to Send	7.1	
Assured Arrival	0.9	
Written Document	12.3	
Other	2.8	
Total		100.0

APPENDIX

PMS - FREQUENCIES ANALYSIS

<u>PREFERRED ALTERNATIVE</u>	<u>ADJUSTED FREQ. (PCT)</u>
METHOD OF SENDING MESSAGE - IF NO TELEGRAPH	
Mail	37.0
Phone	40.7
Telepost by Telex	0.7
Telex/TWX	7.2
Facsimile	0.0
Courier	1.3
Personal Visit	0.8
Friend or Relative	0.0
Postal Money Order	1.1
Bank Services	1.3
Don't Know	1.7
No Alternative Possible*	7.9
Other Means	0.3
Total	100.0
* NO ALTERNATIVE POSSIBLE - REASONS	
Message Urgent	35.0
Need Written Document	21.2
Legal Status of Telegram	12.1
Rush Money Transfer	16.2
Other	15.4
Total	100.0

APPENDIX

PMS - FREQUENCIES ANALYSIS

	ADJUSTED FREQ. (PCT)	
TELEGRAMS FILED - PROVINCIAL DISTR.		
Newfoundland	2.2	
Nova Scotia	2.6	
Prince Edward Island	0.2	
New Brunswick	1.8	
Quebec	30.2	
Ontario	39.0	
Manitoba	2.9	
Saskatchewan	1.3	
Alberta	6.5	
British Columbia, Yukon & N.W.T.	13.2	
Total		100.0
TELEGRAMS FILED - OFFICE SIZE		
1 Man	4.9	
2 - 10	8.3	
11 - 30	11.4	
30	75.4	
Total		100.0

APPENDIX

PMS - FREQUENCIES ANALYSIS

	ADJUSTED FREQ. (PCT)	
METHOD OF FILING		
Telephone	68.0	
Telex	23.5	
Over Counter *	7.4	
Other	1.1	
Total		100.0
* OVER COUNTER FILING		
Telephone Filing Possible	26.9	
Telephone Filing Not Possible **	73.1	
Total		100.0
** REASONS WHY MESSAGE COULD NOT BE FILED BY PHONE		
Money Transfer	68.3	
Reply Paid Cablegram	0.6	
No Telephone Available	3.7	
Transient	3.0	
Message Too Long	10.4	
Language Difficulties	3.0	
Cheaper	1.8	
Use Written Copy	3.7	
Other	5.4	
Total		100.0
TIME OF FILING		
a) Monday - Friday	92.4	
Saturday - Sunday	7.5	100.0
b) 8:01 a.m. - 6 p.m.	82.8	
6:01 p.m. - 8 a.m.	17.2	100.0
METHOD OF PAYMENT		
CNCP Account	51.5	
Due Bill	38.5	
Cash	6.1	
Other (Credit Card)	2.0	
Addressee	1.8	
Total		100.0

APPENDIX

PMS - FREQUENCIES ANALYSIS

	ADJUSTED FREQ. (PCT)
TYPE OF MESSAGE	
a) Canada - U.S.A.	
- full rate	41.8
- night letter	16.8
- money transfer	3.9
- telepost	0.3
- press	0.1
b) Overseas	
- full rate	15.2
- night letter	21.8
- press	0.1
Total	100.0

CN / CP QUESTIONNAIRE

(USE RED PEN OR PENCIL TO COMPLETE THIS QUESTIONNAIRE)

READ: CN and CP in co-operation with the Department of Communication are conducting a one week survey of telegram users across the country. We would appreciate it if you would answer a few questions about the telegram you just sent (about the telegram you sent to [name of addressee] which reads as follows [read text]). The information that you give will be strictly confidential.

NOTE: PLEASE PUT THE NUMBER OF YOUR ANSWER TO EACH QUESTION IN BLOCK AT RIGHT (FOR KEY PUNCHING PURPOSES)

1. READ: (if necessary) Is this a business message? 1 YES 2 NO 1

2. READ: (if necessary) Can you tell me what the purpose of this message is?
If question 1 is yes (business)

01 Make quotations on the sale of products 02 Complete financial transactions 03 Confirm agreements 2 3

04 Make or confirm reservations for accommodation 05 Request documents or products be forwarded 06 Advise status of orders

07 Reminders for various reasons 08 Advise shipping particulars 09 Real estate transactions 10 Tracing delinquent Accounts

11 Transfer money 12 Petitions to government 13 Other (specify)

If question 1 is no (non business)

01 Loss of credit card 02 Extend sympathy 03 Congratulations 04 Family emergency 05 General family news 4 5

06 Real estate transactions 07 Make or confirm reservations for accommodation 08 Birth announcements 09 Petitions to government

10 Transfer money 11 Other (specify)

3. READ: Ask Question 3 only for message filed over the counter. If message was not filed over the counter, skip to Question 4.

a) Could you have filed this message by telephone? 1 YES 2 NO 6

If question 3 (a) is no, ask question 3 (b).

b) Why couldn't you file this message by telephone? 7 8

4. READ: If you couldn't use a telegram to send this message by what means would you send it?

01 Mail 02 Telephone 03 Telepost by Telex 04 Telex / TWX 05 Facsimile 06 Courier 07 Personal visit 08 Friend or relative 9 10

09 Postal money order 10 Bank services 11 Don't know 12 No alternative possible

13 Other means (specify)

Ask customer either question 5(a) or 5(b)

5. If customer gave answer other than "no alternative possible"

READ: a) Why did you use a telegram to send this message rather than some other method?

01 Economy, alternative too expensive 02 Speed, alternative too slow 03 Telegram convenient 04 Message urgent 11 12

05 Save office manpower 06 Hard to get through by telephone 07 Telegram has prestige 08 Telegram traditional, nice to send

09 Assured arrival 10 Written document 11 Other specify

b) if customer said "no alternative possible"

READ: Can you explain why this message could not be transmitted by any other means?

01 Message urgent 02 Need written document 03 Legal status of telegram 04 Rush money transfer 13 14

05 Other specify

FOR NON-BUSINESS MESSAGES STOP HERE. INTERVIEW IS COMPLETE. FOR BUSINESS MESSAGES CONTINUE WITH QUESTIONS 6 TO 9.

6. READ: (if necessary) What is the name of your company or organization?

7. READ: (if necessary) In what city, town or village is it located?

8. READ: What is the main type of work in which your company or organization is engaged?

01 Agriculture, fishing, forestry 02 Mining 03 Manufacturing 04 Construction 05 Wholesale or retail trade 15 16

06 Finance insurance and real estate 07 Community business or personal service (e.g. education, health, hotels) 08 Public administration and defence (government)

09 Transportation communications and utilities 10 Other specify

9. READ: Approximately how many persons are employed by your company or organization at this particular location?

1 1-3 2 4-10 3 11-49 4 50-99 5 100 or more 6 don't know 17

END OF INTERVIEW

To be completed by Telegraph Office Staff

Originating Office _____ 18 22

Day of Week 1 Mon - Fri 2 Sat - Sun _____ 23

Time of Day 1 8:01 am - 6 pm 2 6:01 pm - 8:00 am _____ 24

Method of Filing: 1 Telephone 2 Telex 3 Over counter 4 Other _____ 25

Method of Payment: 1 CN / CP Account 2 Due Bill 3 Cash 4 Other (credit card) 5 Addressee _____ 26

Type of Message:

Canada or U.S. 1 Full Rate 2 Night Letter 3 Money Transfer 4 Telex 5 Press

Oversas 6 Full Rate 7 Night Letter 8 Press 27

Number of Words _____ 28 30

Charges (excluding surcharges) _____ 31 35

Name of Sender (from signature) _____ Address _____ Telephone No. _____

