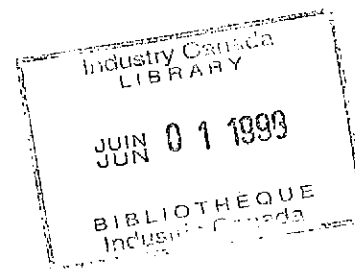CANADA. DEPT. OF COMMUNICATIONS.
CENTRAL REGION

(Two papers on) Telecommunications in the
Prairie Provinces by the Economic/
Regulatory Advisor, Communications Canada,
Central Region, Winnipeg, 1973.

TELECOMMUNICATIONS

IN THE PRAIRIE PROVINCES
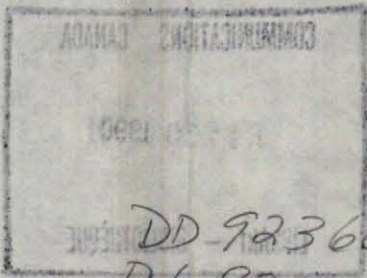
STRUCTURE AND ISSUES

TELECOMMUNICATIONS IN THE PRAIRIE PROVINCES

The three prairie provinces own and operate their own telephone systems. Alberta has the largest and most modern. All have rates lower than those existing in the other provinces, which are all served by private companies, but the latter do not enjoy the same tax exemptions or government-backed capital financing.

All telephone companies collaborate through the cooperative mechanism of the Trans-Canada Telephone System for the purpose of achieving the standardization necessary for playing their part in the national telephone operation.

The three provinces are served also by the Canadian National and Canadian Pacific Railways telecommunications divisions. Railway operations pre-date the commencement of the telephone companies' service and have been modernized periodically to remain fully competitive. Except for the ordinary telephone service, both the railways and the telephone companies provide a wide range of similar telecommunications services.

The difficulty in achieving further expansion throughout the west relates mainly to the high cost of transporting signals over great distances.

Cable television is in a middle stage of development. In Alberta, only recently Calgary and Edmonton have been developed; outside of these cities only the southern towns are equipped. In Saskatchewan there is practically no development. Guidelines for cable development have been issued by the Saskatchewan Government. In Manitoba the coverage is confined to the Winnipeg area.

Manitoba and Saskatchewan are developing northern programs to improve communications in the North.

Manitoba is preparing a Telecommunication Position Paper.

I REGIONAL ISSUES

1. Competition

CN/CP Telecommunications

For many years the prairie telephone companies, spear-headed
by the Alberta company, have opposed telecommunication expansion
on the part of the railways. Recently the growing interest
of the governments themselves has caused this opposition to be
more forcefully expressed.

Generally, the objection to the railway operation flows from
the fact that the provincial governments concerned, while
having control over their telephone company, does not exercise
any control over the railways. They fear that the latter will
"cream-skim" the lucrative routes and thus cripple the telephone
companies' ability to serve the thinly-populated parts of its
territory.

The business community tends to regard the railway operation
favourably, representing as it does an option which often
produces either a more acceptable form of service or lower rates.

Canadian Overseas Telecommunications Corporation

There is some apprehension on the part of the prairie provinces
that COTC may expand its facilities to serve major population
centers directly rather than through the domestic telephone
companies. This concern has come about because COTC decided
to introduce a new eastern supplementary gateway at Toronto
rather than continuing to rely on the single existing gateway
at Montreal. This new development in part has become logical
as a result of the availability to COTC of a service in the
new Telesat satellite.

Such developments improve the flexibility and the reliability
of COTC's services but some provinces see them as another
undesirable increase in the federal presence which in turn
makes it more difficult for their telephone companies to provide
an effective integrated service, and which may tend to divert
revenue from provincial carriers to federal carriers (CN/CP or
Telesat).

Satellite Communications

The telephone companies, in varying degrees, have been cautious
in their support of Telesat Canada. Alberta has suggested that
this satellite corporation was forced upon the province without
adequate consultation. This attitude seems mainly to be an
attempt to resurrect the dissatisfaction expressed at the time
of the passage of the Telesat legislation. Many compromises
were made by all concerned at that time and by and large there
is now good cooperation between the parties in this venture,
even though some continue to be apprehensive about the new
federal presence that Telesat represents.

As a result of meetings with the prairie provinces on the UHF
Satellite Study, the provinces have requested that they be
kept informed of all future satellite planning.

2. Regulation

The prairie provinces along with the other provinces have
been consulting among themselves with a view to identifying
areas of mutual interest and for the purpose of becoming equipped
for discussions with the federal government. Publication of
the Federal Government's Green Papers have acted as a starting
point for such discussions.

The manner in which exercising jurisdiction will be shared bet-
ween the two levels of government is likely to be the most
difficult issue. Its resolution will be made easier if there
can be wide prior agreement on the principal objectives of
communications policies applicable nationally and provincially.
The prairie provinces no doubt would welcome the establishment
of federal-provincial consultative arrangements applicable
to day-to-day telecommunications development.

3. Broadcasting Networks

The issue in the broadcasting area is one of provincial objectives
in broadcasting and cable distribution systems.

As with most other provinces, the prairie governments wish to
have a greater voice in cable television development. Spurred
on by their telephone companies, they tend to favour a policy
under which the hardware (intra-city cables and inter-city
microwave) would be provided by the telephone companies while
the programming would be produced and managed by others.
Saskatchewan has announced this policy formally, carrying it to
the point of requiring those responsible for programming to be
non-profit community groups. With telephone company provision-

ing of hardware the governments believe that service can be spread more uniformly and expeditiously across their territories.

There is bound to be opposition to these policies from those who would wish cable television to develop on a more individualistic basis, with the separate operators owning their hardware, so as to give more substance to their operations. These entrepreneurs will argue that this approach enables the newer types of service to be provided on a more competitive basis. Also they see advantages in maintaining the competitive position of the railways in the inter-city microwave field so that, on occasion they can utilize this option.

4. Regional Development

The basic policy in the prairie provinces is well expressed by the Ontario statement, "Where the telecommunications system and services act, directly or indirectly, to influence growth and change in the social, cultural, economic and political milieu of the province, it is the business of the provincial government, as opposed to industry, to direct the form, nature, incidence and speed of such growth and change". There will be an ever-increasing reliance on the Federal Government to provide funds and expertise to assist in this regional development. The role of the Federal Department of Regional and Economic Expansion as a co-ordinator of programs through their provincial agreements will be extremely important to the provinces.

At the Western Economic Opportunities Conference in Calgary, The Honourable James Richardson stated that the Federal Government would discuss with the provinces the establishment or decentralization of various research facilities. DOC has a submission to Treasury Board for a Communications Systems Engineering Facility for the prairie provinces. This facility would be an independent consulting organization to provide regional telecommunications systems designs and associated services primarily to the prairie telephone companies. The provinces have been officially advised of this development but strong interest has not been expressed.

5. Northern Communications

The prairie provinces have only recently approached the role of communications in northern development. Saskatchewan and Manitoba are currently aggressively developing a northern policy and programs relating to communications. Areas of interest are community broadcasting, the costs associated with expansion and CBC service in the North.

II ALBERTA

a. Alberta Provincial Government

Minister of Telephones and Utilities

The Honourable Roy Farran
MLA for Calgary North Hill

Background

- Born in United Kingdom.
- Major in British army at retirement in 1948.
- Unsuccessful candidate in United Kingdom general election.
- Emigrated to Canada in 1950.
- Publisher and general manager North Hill News in Calgary until 1971.
- Calgary alderman from 1961 (fall) until 1971 election to Legislature for Calgary North Hill.
- 18 months as Conservative backbencher - has a reputation as a renegade, and does not shy away from confrontation in the house.
- Was MLA in charge of the government task force on provincial-municipal financing, and drafted the Alberta Property Tax Reduction Plan.
- Knowledgeable in provincial-municipal affairs.
- March 6, 1973 - appointed to Telephones and Utilities portfolio following the death of Len Werry.
- Initial responsibilities as cabinet minister:
    - (i) Develop natural gas rebate plan.
    - (ii) Expansion of gas services to rural areas.
    - (iii) Extended area telephone service.
    - (iv) Review of Public Utilities Board operations.
    - (v) Responsible for relationships between Edmonton Telephones and Alberta Government Telephones.

b. Alberta Government Telephones

Alberta Government Telephones was formed in 1906 as part of the Department of Public Works of the Provincial Government. In 1958 A.G.T. became an independent Crown Corporation.

A.G.T. serves the province of Alberta with the exception of exchange service to both a large part of the City of Edmonton and to some rural areas.

A.G.T. has, since 1915 been subject to the regulatory authority of the Alberta Public Utilities Board.

c. Provincial Issues - Alberta

Competition

1. Concerned with the integrated communications/transport-ation/data processing activities of the railways and feel that CN and CP should be required to establish separate arms-length communication companies.

2. Role of COTC and its apparent lack of regulation. Whether or not it is an international or national carrier. Possible cream-skimming by COTC through changes in location of COTC overseas terminals.

3. Increased emphasis on only carrier in Alberta being A.G.T.

4. Cream-skimming by CP Telecommunications in microwave extension from Calgary to Lethbridge. No opportunity for A.G.T. to counter CP Tel's bid.

5. Telesat offers competition to existing terrestrial network. Telesat should be limited to be a carrier's carrier.

6. Wish to be advised on DOC satellite planning activities.

7. The provincial government has been recently granting authority for the establishment of communications facilities in the province.

Regulation

1. The consultative process proposed in the Green Paper would be acceptable to Alberta only if the federal government is prepared to give up some of its powers in return for powers which the Province of Alberta might give up.

2. They would like to see the licensing procedure made public - accessible to all for objection or comment.

3. They see no addition to the two-way regulation over what exists informally at the present time through TCTS and they ask, "Is either the federal government or the Province of Alberta likely to give up any of its powers and if any, two-way regulation could never happen".

4. They don't disagree with one federal regulatory body and they do agree with consultation as an on-going mechanism.

5. CN/CP Telecommunications does not file rates with their Public Utilities Board.

6. Full control over the activities of the public utility has been emphasized.

7. They view the intrusion by the federal government into either regulation of long distance rates or to the distribution of revenue as a direct invasion of provincial jurisdiction.

8. They feel it necessary that the province control all sources of AGT's income including both long distance and local rates and revenue.

9. Believe there must be provincial input into the regulation of cable.

Broadcasting Networks

1. They would like to have access to licensed approval procedures in broadcasting and use of the spectrum and cable TV, either by issuing the licence or having an input to an objective body that does issue licences. This would enable them to integrate their planning for microwave extensions and broadcasting networks.

2. Alberta Educational Communications Corporation formed recently.

3. In 1969 AGT submitted a proposal, known as the Ten City Plan, to CRTC on an inter-city TV distribution network to serve CATV undertakings throughout the province. This network, employing a rate averaging principle, distributes Canadian and U.S. TV signals to cities in Alberta.

4. A CATV Task Force, consisting of cable operator and provincial government representatives was recently established to determine the future of cable in the province.

5. AGT has recently informed cable companies that their pole attachment and duct agreements would not be renewed.

Computer/Communications

1. Request full consultation between federal and provincial officials before major policy decisions are made.

2. AGT has recently formed a computer division which will lease terminals. There is considerable reaction from industry expressing complaints of unfair competition from the Crown Corporation. The Computer Division is not at arms length to AGT, as was recommended in the Federal Computer/Communications Green Paper.

III SASKATCHEWAN

a. Saskatchewan Provincial Government

Minister of Government Services and Telephones

The Honourable John E. Brockelbank

Background

- Born 1931, at Tisdale, Saskatchewan, son of John H. Brockelbank, CCF politician (Sask.).
- Educated at Steen and Regina, Saskatchewan.
- Married 1954 - two sons.
- Elected to provincial legislature in 1964.
- Re-elected in elections of 1967 and 1971.
- Attended school on parliamentary procedure in Westminster, England in 1971.
- Deputy Speaker from July 28, 1971 to February 24, 1972.
- Appointed Minister of Government Services January 7, 1972.
- By occupation - an instrument technician.
- Chairman of the Board of Directors, Saskatchewan Telecommunications.

b. Saskatchewan Telecommunications

Saskatchewan Telecommunications, a Crown Corporation of the Province of Saskatchewan, had its origin as the Department of Railways, Telephones and Telegraphs established by legislation of the Province of Saskatchewan in 1908. The system remained as a function of the Department from 1908 until 1947 when it was established as a Crown Corporation under the name of "Saskatchewan Government Telephones". In 1969, the name was changed to "Saskatchewan Telecommunications", "Sask Tel" being the abbreviated name sanctioned by legislation.

Sask Tel is authorized to operate in the whole of the province. There are no legislative provisions or government directives which restrict or define the territorial operations of Sask Tel. There are approximately 800 rural telephone companies (private and co-operative) whose services are switched by Sask Tel.

There is no external regulatory authority established to control Sask Tel. Rather, Sask Tel is self-regulated through its cabinet-appointed directors, the Minister of Telephones and a select standing committee of the legislature to which it must answer for the operations and financial affairs of Sask Tel.

c. Provincial Issues - Saskatchewan

Competition

1. Role of satellites and their effects on existing carrier microwave systems.

2. Would like a provincial monopoly in telecommunications.

Regulation

1. Concerned of the direction DOC regulation is progressing (merger of CRTC and CTC).

2. Concerned with interference of federal government in areas of provincial jurisdiction (telecommunications carriers).

3. They consider the Green Paper does not set out sufficient alternatives and does not critically evaluate the alternatives.

4. At the present time TCTS gives a kind of inter-provincial regulation and rate setting in which the Province of Saskatchewan does have a veto and they would be concerned about a national policy unless they retained the veto.

5. They favour participation in decision-making which they feel they have in TCTS.

6. They feel there is no problem at present in inter-provincial services.

7. They are suspicious of the term, "national policy on communications" as not in the interests of Saskatchewan.

8. In regard to the basis on which regulation is determined, they feel that basic rate of return on investment is best. They feel that a more analytical approach to identify costs and revenues wouldn't work because political factors prevail.

9. They feel that policy should not be put into law or statutes and they note our use of the words, "statutory national policy" in the Green Paper.

10. "Any expanded role for the Federal Government in the regulation of the telecommunications industry can only be justified on the basis of substantial evidence that provincial institutions have not been successful in meeting national objectives, not on the basis of a sterile constitutional argument."

11. "Even if a more substantial role for the Federal Government
    in the regulation of the telephone companies were justified,
    which we doubt, this could not be effectively accomplished by
    a two-tier system of authority. A more appropriate arrangement
    would be exclusive provincial jurisdiction over telecommunica-
    tions systems within their borders with Federal participation
    in an interprovincial co-ordinating body in relation to those
    aspects in which they have a legitimate concern and where
    provinces cannot effectively meet national and international
    needs."

12. The Saskatchewan policy of developing a broadband network utility
    within Saskatchewan Telecommunications and the connection of
    non-profit, community-controlled organizations, may come into
    conflict with the interpretation of jurisdictional responsibil-
    ities.

Broadcasting Networks

1. Saskatchewan plans for a local broadcasting network includes
   government financing because communities would not be able to
   finance their own.

2. Public utility cable systems required to satisfy population
   dispersion, Sask Tel as major cable carrier, satisfaction
   of provincial and local needs and for greater control of broad-
   band networks in the province.

3. They have expressed concern in broadcasting policy which appears
   to exclude provision of funding for provinces in any way for
   broadcasting. They read the Green Paper as taking a hard
   line position on broadcasting as far as provincial government
   involvement is concerned.

4. Concerned that the federal government would not be prepared
   to recognize local needs.

5. A report by the Department of Education recommended the est-
   ablishment of an Educational Communications Corporation (Sask
   Media Report - Towards the Development of an Integrated Educational
   Communications and Community College System).

6. Provincial concern for the development of local input in broad-
   casting services.

Computer/Communications

1. The Saskatchewan Computer Utility Corporation was established as a Crown Corporation in February, 1973 to consolidate and develop computer facilities operated independently by a number of government and government-funded organizations (Government Systems Centre, Saskatchewan Power Corporation, Sask Tel, Saskatchewan Government Insurance and the campuses of the University of Saskatchewan). Hope to provide services to private companies at a later date.

Regional Development

1. They support regional resources development and manufacturing. If Sask Tel were involved in manufacturing it might make inter-connection more palatable.

Northern Communications

1. The Department of Northern Saskatchewan is presently developing a northern program and they feel communications should be integrated. The Minister of Northern Saskatchewan is totally responsible for all northern programs.

2. The province has undertaken a substantial investment program to extend telecommunications services into the North.

IV MANITOBA

a. Manitoba Provincial Government

Minister of Consumer, Corporate and Internal Services

The Honourable Ian D. Turnbull
NDP-MLA for Winnipeg-Osborne

Minister responsible for the Manitoba Telephone System

Background

- 38 years old - native of Winnipeg.
- Teacher, research associate (University of Manitoba) (BA and MA in Political Science, U. of M.) (provincial water resources).
- Quiet, thoughtful, willing to hear all sides before a decision.
- Decisions followed by prompt action.
- Elected (NDP)-MLA for Osborne in 1969 election.
- Has served as:

    (i)   Legislative Assistant to Minister of
          Industry and Commerce.
    (ii)   Member of the Manitoba Telephone System
          Board of Directors.
   (iii)   Chairman of the Legislature standing
          committee on Public Utilities (at time of
          Churchill River diversion hearings).
    (iv)   Chairman of the Economic Development
          Committee.

- Sworn in as minister on July 4, 1973, to take over portfolio
  from A.H. Mackling, (Attorney General and Minister of
  Consumer, Corporate and Internal Services), who was defeated
  in June 28 election.
- Responsible for developments in the field of communications:

    (i)   Extension of TV to rural communities.
    (ii)   Data communication.
   (iii)   Computer development and rationalization.

- Responsible also for:

    (i)   Consumer protection and landlord-tenant
          legislation.
    (ii)   Public Utilities Board.
   (iii)   Manitoba Securities Commission.
    (iv)   Companies and Business Names Registration
          Board.
    (v)   Purchasing Bureau.
    (vi)   Queen's Printer.

b. **Manitoba Telephone System**

In 1908 the Province of Manitoba purchased the properties of the
Bell Telephone Company of Canada and formed "Manitoba Government
Telephones". As a department of the government Manitoba Govern-
ment Telephones was re-organized in 1912 with a Commissioner
responsible for the management of the system and a Public Utilities
Commissioner was appointed with certain jurisdiction over rates,
service, depreciation reserves and a general supervision over the
utility.

In 1933, the Manitoba Telephone Act established the "Manitoba
Telephone Commission" as a corporate body, consisting of one
to three Commissioners. In 1962 the name was changed to the
Manitoba Telephone System and in 1966 the Manitoba Telephone
Act was revised to provide that the operation of the System
would be under the control and management of by not less than
three and not more than five Commissioners.

The Manitoba Telephone System's operating territory is the whole of the province of Manitoba and it is the only company supplying public telephone service to the Province.

The present regulatory authority for the Manitoba Telephone System is the Public Utilities Board, consisting of a Chairman and five members, which has jurisdiction to review and revise all rates and tolls charged by MTS. Some technical regulation as to methods, standards and safety is allowed, but the Board has no direct jurisdiction to review capital issues or construction expenditures save to the extent that rate regulation affects such matters.

c. Provincial Issues - Manitoba

Competition

1. Increasing emphasis on only carrier in Manitoba being MTS. (Recently provincial Crown property given to MTS for railway requirements.)

2. Cross-subsidization by CN/CP for introduction of INFODAT as a competitive but not technically equivalent service to TCTS Dataroute.

3. Concerned of federal decisions to use CN/CP Telecommunications and Telesat, in conjunction with COTC, in direct competition, over lucrative urban routes, with TCTS.

4. Any liberalization of interconnection policy at this time might impair the ability of the provincial carrier to extend basic services to all at reasonable rates. Manitoba also has the statutory authority to regulate the interconnection of terminal devices.

Regulation

1. Does a "National Telecommunications Policy" mean a policy to which all authorities are expected to adhere, to the extent of their jurisdictions, or does it mean a policy which will guide only the federal authority?

2. Policies designed for Central Canada cannot be imposed on the Western or Atlantic regions.

3. Concerned of desire of federal authority to enlarge its role in regulation of inter-provincial toll rates.

Broadcasting Networks

1. General philosophy of equal access to Canadian networks to all Manitobans at no cost regardless of the size or location of the community.

2. Interested in improving broadcasting services over the province as quickly as possible - emphasis changed away from cable-TV toward extension of the three Canadian networks via conventional means of microwave and off-air rebroadcasting.

3. Policies on ETV are not yet formulated. Although there is interest in ETV it is not likely that development of systems will be commenced for some time.

4. Owning and licensing of CATV Head End by the Manitoba Telephone System.

5. Provincial input required in all future broadcasting extensions.

6. Province-wide coverage of cultural activities associated with the government's "stay-option". They view communications as an integral part of their guidelines.

7. Cable television in its present form should not hamper the viability of their broadcast system, or prevent the broadcast system from extending to rural and remote areas those services which are available free in the cities.

8. Cable television in its future form should not hamper the viability of their telecommunications carrier by duplicating services which could be provided by the carrier.

Computer/Communications

1. The Manitoba Government has a Computer Rationalization Task Force in progress at the present time.

2. The Manitoba Government has expressed concern that the Air Canada computer processing may move to Montreal. Air Canada has informed the Manitoba Government that it has no intention of moving these facilities.

Regional Development

1. View modern telecommunications services as a catalyst for decentralization.

2. Favour the decentralization of the federal government's electronic data processing activities for regional development.

3. Favour the enhancement of regional development through the rational extension of broadcasting as a medium for entertainment and education.

Northern Communications

1. The provincial Department of Northern Affairs are in the process of developing a northern program with communications as an integral part.

2. The Manitoba Telephone System has developed a plan for improved telephone and television service for Northern Manitoba. In 1966 the Telephone Assistance Program was introduced to encourage people living in isolated communities to set up and operate local telephone service with equipment and technical assistance from MTS.

P R A I R I E   T E L E C O M M U N I C A T I O N S

ECONOMIC/REGULATORY ADVISOR

COMMUNICATIONS CANADA
CENTRAL REGION

November 5, 1973

PREFACE

This study was commenced to summarize the activities in the telecommunications carriers of the prairie provinces in the areas of history, operations, territory, regulation and future developments. Some operating statistics are provided with a comparison to Bell Canada.

Detailed studies of telecommunications in the Central Region are to be initiated with expansion of the subject areas.

1

C O N T E N T S

I ALBERTA GOVERNMENT TELEPHONES

A. History

Alberta Government Telephones (AGT) was formed in 1906 as part
of the Provincial Government in the Department of Public Works.
In that year, the department had started on construction of a
toll line between Calgary and Banff. Privately owned telephone
companies were operating at this time. One of the largest was
The Bell Telephone Company of Canada. Having entered Alberta
in 1887, it had small exchanges at Calgary, Lethbridge and Medicine
Hat and toll lines from Edmonton to Calgary, Lacombe to Bentley,
Lethbridge to Cardston and Spring Coulee. In 1905, The Edmonton
District Telephone Company was purchased by the City of Edmonton.
The company employed exchanges in Edmonton and Leduc as well as
a toll line between them.

At the end of 1907 the Provincial Government had constructed many
toll lines, twelve new exchanges and purchased small telephone
companies in the rural areas. In April, 1908, the Provincial
Government acquired Bell Telephone assets which operated in the
province, for $675,000. Bell Telephone assets had consisted of
1200 miles of toll line, 60 toll offices, 35 exchanges, and approx-
imately 3000 subscriber stations.

By 1918, AGT service had grown to over 33,000 telephones and in
1968 it was 431,000. In 1968 there were also 28,000 telephones
operated by Rural Mutual Companies and 190,000 telephones owned by
Edmonton Telephones.

In 1958 the Alberta Government Telephone Act replacing the Telephone
and Telegraph Act had declared AGT as an independent Crown Corp-
oration. AGT undertook to sell long term debt securities to the
public which had previously consisted of advances from The Provincial
Treasurer. In 1960, AGT plant was approximately $150,000,000
and by 1968 $400,000,000.

B. Operating Territory

AGT provides service to the whole of the province except for exchange
service for Edmonton and some rural areas.

The City of Edmonton supplies exchange service within a mutually
agreed boundary. Edmonton also takes in (since 1962) the former
Town of Jasper Place.

During the depression in the 1930's, many rural companies were established. The farmers were able to keep up operations by doing the work on the pole lines themselves. But AGT were the owners of the exchanges to which the rural lines were connected. In 1966 there were over 39,000 rural mutual telephones in Alberta decreasing to 28,000 by 1968. This was the direct result of AGT installing a four party buried cable to replace the multi-party open wire.

C. Regulation

Since 1915, AGT has been responsible to the authority of the Alberta Public Utilities Board. This Board (formerly called the Board of Public Commissioners) has been in existence since 1915.

This Provincial regulatory board consists of three members appointed for a 10 year duration by the Lieutenant-Governor-in-Council and can be reappointed until the age of 65. On jurisdictional subjects The Board has "all such powers, rights, privileges and immunities as are vested in the Supreme Court of Alberta". The three members of the board are usually made up of two members qualified in the legal field, and the third, an experienced chartered accountant. The Board employs a permanent staff of a secretary, two chartered accountants and clerical help. It also hires professional engineers and other experts on a consultant basis. The Board's responsibility is to investigate and to approve changes in exchange and toll rates.

D. Policy

AGT is devoted to supply a high grade of service at rates which everyone can afford and to modernize the service as the demand calls. To accomplish its objective, AGT is equipped to provide telemetering and supervisory control facilities, closed circuit television service, equipment to send pictures and printed material over the telephone, teletypewriter service, high speed data transmission service to computer centres and an extensive radiotelephone service.

E. Future Development

Indications are that AGT will have to increase expansion for 1973. In 1972, AGT proceeded with the electronics switching equipment program where new electronic exchanges will be installed. In 1973, it is planned to have new electronic exchanges in use at Sherwood Park by March 4, Lethbridge on May 25 and St. Albert by August 19. As well, AGT has plans to install new electronic exchanges at Slave Lake and Fox Creek.

Small cities such as Medicine Hat, Hanna and Drumheller will be provided with DDD facilities in 1973 and all Calgary exchanges will be able to accommodate touch tone service.

A new multi-million dollar toll center has gone into construction
in Calgary. This is to provide ultra-modern long distance switching
facilities.

The program to change the open-wire line to the buried cable
(rural) with Pulse Code Modulation (PCM) is to be continued.
PCM allows a signal to be repeated over and over with negligible
distortion which results in a better grade of transmission
as well as being able to handle data.

II SASKATCHEWAN TELECOMMUNICATIONS

A. History

On June 12, 1908, the Province of Saskatchewan, by legislation,
established The Department of Railways, Telegraph and Telephones.
The department was permitted to construct, operate and acquire
telephone and telegraph systems. In 1947, the department became
a Crown Corporation named "Saskatchewan Government Telephones".
On April 1, 1969 the name was changed to "Saskatchewan Telecommunica-
tions.

There were 15,000 local subscribers and an additional 9,000
subscribers to smaller companies in 1911. By 1968, Sask Tel
had grown to 297,000 telephone subscribers and 52,000 subscribers
of rural companies. From 1909-1912 the department had obtained
seven major systems from independent companies one of which was
Bell Telephone Co. of Canada.

B. Operating Territory

Sask Tel is authorized to operate in the whole province without
any legislative provisions or government directives to limit or
define its terrestrial operation. The corporation has the power
which includes the right to build its facilities on roads, streets,
and lanes without any restrictions. Therefore, the province-
wide system can operate in urban or regional areas.

In Saskatchewan Telecommunications Act, it gives Sask Tel the
power to confiscate property, with permission of the Lieutenant-
Governor-in-Council, which is deemed necessary for the objects
of the corporation. Also, The Minister of Telephones has the power
to entrust the administration of The Telephones Department Act
which governs the rural telephone companies, to Sask Tel.

C. Regulation

There is no governmental regulatory authority established to
control Sask Tel. Instead, Sask Tel is self-controlled through
its cabinet-appointed directors, Ministers of Telephones, and a
select standing committee of The Legislature to which Sask Tel
is responsible for its operation and finance. The internal
regulations of Sask Tel made through the channels of legislature,
cabinet and ministerial control are as follows:

(i) tariff changes are referred to the directors and
   responsible ministers and often to cabinet for approval

(ii) Saskatchewan Telecommunications Act limits the total
     borrowing ($175,000,000) by Sask Tel. Any increase
     must be approved by legislation

(iii) construction expenditures are restricted by borrowings.
      Furthermore, Sask Tel must provide a proposed capital
      program to a committee of cabinet each year for approval
      (each capital project greater than $25,000 must be
      referred to the directors for approval).

From the above, the role of the Legislature is to have a general
control over the capital expenditures of Sask Tel and to estimate
the communications need against other capital programs of the
Province. The cabinet has the more specific control. It can
set general priorities to which problems Sask Tel should stress,
i.e., modernization against service to areas needing subsidization.

There is no governmental authority to control the technical
standards by which Sask Tel operates. Sask Tel use standard
equipment and technique so as to be compatible with other tele-
communications companies in Canada.

D. **Policy**

Sask Tel's self-regulation displays its realization of the
customers' demand and of the development of their policy to supply
high standards of service to all customers in their area. They
also strive for co-ordination with other Canadian telecommunica-
tions companies to provide reasonable service on a national
scale. Sask Tel hopes to make reasonable earnings by innovating
and improving the telecommunications level through the use of
capital and labour.

E. **Future Development**

In 1972, Sask Tel spent well over $23 million towards extending
and improving local and long distance calls. In that year,
provision of DDD network facilities has increased remarkably
from 5% to 97%.

In 1971, Sask Tel provided two agencies with Northern Radio-
telephone Service. By 1972, Sask Tel had extended that service
to fifteen agencies and has eight more installations for 1973.

In conjunction with the radiotelephone expansion, Sask Tel is
building two new microwave routes to give standard telephone
service for many northern areas. The two routes are to begin
at North Battleford and Prince Albert. One route is to connect
North Battleford to La Loche, Buffalo Narrows and other points
in between. The other is to join Prince Albert and Wollaston
Lake in 1973 and expand to Uranium City in 1974. Part of the
Prince Albert route's capacity to La Ronge is to handle a one-
way video channel for CBC television network.

Sask Tel is also planning to install new electronic switching exchanges. It is planned to be in-service at Saskatoon by 1974 and in Regina in 1975.

III MANITOBA TELEPHONE SYSTEM

A. History

In January, 1908 the Government of the Province of Manitoba acquired the property and system of The Bell Telephone Company of Canada with the objective of providing telephone service throughout the whole province. The Provincially-owned telephone system was named "Manitoba Government Telephones" by an order-in-council. The telephone system was a department of the Provincial Government, under the control of a three member commission which had the power to operate and construct additions to the system.

In the first four years of government operation telephone service increased greatly but was losing money. The Commissioners proposed a "measure service", i.e. pay depending on how much you use. This proposal brought on a great deal of protest. In 1912, an appointment of a Royal Commission suggested a re-organization of Manitoba Government Telephones. One Commissioner was entrusted with the management of the system. By the Public Utilities Act of 1912, a Public Utilities Commissioner was appointed who was responsible to the rates, services, depreciation reserves and general supervision over the utility.

From 1912 to 1920 The Manitoba Government Telephones was still a department of the Government. The Commissioner's actions were still open to review by an advisory board of the Provincial Government. This included the Premier, Cabinet, Public Utilities Commissioners and the Telephone Commissioner himself.

In 1921, John E. Lowry, Commissioner of Manitoba Government Telephones changed the name to "Manitoba Telephone System". It was still a governmental department until 1933 when the Manitoba Telephone Act repealed the Telephone and Telegraph Department and Manitoba Telephone and Telegraph Act. A Manitoba Telephone Commission was established as a corporate body with one, two or three Commissioners decided by the Lieutenant-Governor-in-Council.

While the Manitoba Telephone Act allowed up to three Commissioners, the system remained operating with one Commissioner and an Executive Committee. This committee comprised of a Commissioner, Assistant General Manager and the Comptroller. The committee only held an advisory capacity on operational and financial affairs but the ultimate decision was up to the Commissioner.

In 1962, the Manitoba Telephone Act was revised, the operation of the system would be under the control and management of not less than three and not more than five. In 1966, the maximum was raised to seven.

B. Operating Territory

The Manitoba Telephone System is permitted to operate within the whole province. However, MTS has not been given exclusive rights to supply all telephone service, i.e., under the Municipality Act, municipalities are authorized to operate their own system, but from past experience it has been found financially unfeasible.

C. Regulation

The first regulatory authority was the Public Utility Commission with one Commissioner. The present regulatory body for MTS is the Public Utilities Board, operating under the Public Utilities Act of the Province of Manitoba. The Board includes a Chairman and five members. The Chairman was a permanent member while the others would have different terms lasting from one to three years. The Board was appointed by order-in-council by the Provincial Government.

Before the complete revision of the Manitoba Telephone Act in 1955, MTS was subject to certain amount of economic control by the Public Utilities Board, such as fixing of depreciation rates, expenditures and issuing of securities. In 1955, the Manitoba Telephone Act revision stated the above controls were no longer applicable to MTS and that the Public Utilities did not have any powers to control the economy of MTS with respect to issuing of capital, construction, expenditures, etc.

The Board was only left with the power to keep the rates fixed at just and reasonable level. They, also to some extent, have some control to the rights of technical regulation and as to the methods, standards and safety of operation.

Presently, the Public Utilities Board of Manitoba regards the Commissioners of the System as having been delegated with the general management, operation and the supplying of service to its customers and has restrained its own regulatory powers to rates affecting the public in general.

D. Policy

MTS must provide adequate service to satisfy the Government policy set out for its Government-owned utilities. That is, services provided by its utilities must be available to all people living in the province who can be serviced with consistent efficiency and at lowest possible costs. As long as a customer can be reached, telephone service to the rural or distant areas must be supplied even at a loss. It is reasoned that other services by MTS will provide satisfactory earnings to overcome any deficit resulting from supplying service to rural or distant areas.

E. Future Development

MTS estimates capital expenditures of $36 million for the coming
year (1973). Almost half of which will go towards construction
of new facilities. Approximately $10 million will go towards
growth and improvement of urban and rural service. It is estimated
that 6,500 new telephones will be installed, multi-party line
service will be upgraded and dial service made available to
2,800 existing phones.

DDD facilities will be provided to approximately 10,000 customers
in The Pas and Dauphin.

It is planned to have a microwave system linking Thompson and Lynn
Lake in 1973. This system will accommodate Lynn Lake and Leaf
Rapids with long distance service and will allow CBC to carry
television to Lynn Lake.

IV CN/CP TELECOMMUNICATIONS

A. History

CP's telecommunications service had originated in the 1880's.
As the railroad was moving west across Canada, the telegraph line
was following closely behind. Since 1911 CP and CN Telecommunications
have been the forerunners of the "news wire service" with the
stock exchange ticker operation, coast to coast commercial tele-
vision and radio broadcast, air traffic controller voice network,
weather map facsimile distribution networks, etc   That is, they
can provide any type of telecommunications services except the
public telephone service which was stated in the Canadian Pacific's
charter and Canadian National Railway Act.

Before 1947, CN and CP operated as competing carrier companies.
Since then both telecommunications departments have joined forces
because with fierce competition between each other rates would
be too high for people to use their service resulting in both
companies going out of business. Because of the ever changing
technological developments, large decreases in telegraph personnel
were experienced. Telegraph service peaked in 1954 but since
then it has been decreasing as a result of the growth in tech-
nological innovations which provide quicker, more efficient means
at lower costs. Together in 1956, CN/CP introduced a world-wide
Telex network to Canada (since then its growth rate has been
20% per year). In 1967 they presented the Broadband service
to accommodate high speed data for business.

B. Operating Territory

CN/CP Telecommunications provide many various types of communica-
tions services throughout Canada. They have not been granted
the right to provide public telephone service with the exception
of areas in Newfoundland, N.W.T. and the Yukon.

C. Regulation

Even though CN and CP have joined together they are still respons-
ible to their respective companies. They still operate separately
with respect to administration, operation and finance. Canadian
Pacific operates with their headquarters in Montreal, with regional
offices in Vancouver, Winnipeg, Toronto and Montreal. Canadian
National headquarters are in Toronto with district offices in
Toronto and Edmonton. Regional offices are also split up into
four districts in the east and west. Departments must report to
their own railway's General Manager at an executive level.
Headquarters are responsible for providing functions such as
marketing, engineering, planning, personnel, system accounting
and supervision of operations. Operations is the responsibility
of the Regional Manager and his staff.

D. Policy

Good quality of technical competence is considered very highly
by CN/CP. As a result, they have set out in their plans provisions
for necessary and comprehensive training programs. CN/CP conduct
schools for their technical personnel and have a full time staff
devoted to teaching courses and information on modern technology
and equipment.

CN/CP also have high regard for management supervisory personnel.
Because of business increases, quick decisions must be employed
to seize any significant business opportunities. Therefore, they
realize the need for management development courses and better use
of university training programs and industrial seminars.

The main objective of a joint CN/CP Telecommunications operation
is to minimize the amount of duplication, therefore, maximizing
system efficiency. Joint offices have been set up where it is
more advantageous to have common staff. Administration of jointly-
owned switching systems and united sales staff are controlled
by one authority.

V OPERATING STATISTICS

Tables of the operating statistics of the three prairie provincial
government telephone systems follow. A comparison has been made
with Bell Canada operating statistics for informational purposes.

	MTS	Sask Tel	AGT	Bell
Number of phones company owned	461,543	344,661	613,203	6,742,184
Private system or Rural Mutual Co. owned	2,536	50,616	249,539	-
Percent Dial	97.3%	98.9%	99.9%	-
Total number of phones	464,079	395,277	862,742	-
Telephone Movement				
(i) connected	127,130	110,233	238,649	1,855,000
(ii) Disconnected	105,981	93,698	181,137	1,408,000
(iii) net increase	21,149	16,535	57,512	447,000
Number of Exchanges	233	337	366	-
Number of Toll Offices	41	26	32	-
Long Distance Messages	19,900,000	23,170,000	56,112,313	345,240,000
Finance				
Government Advances	$ 48,700,000	$137,711,793	$ -	$ -
Telephone Plant	323,710,217	257,748,819	675,745,150	4,488,281,000
Total Revenues	67,322,287	59,771,132	141,369,487	1,125,416,000
Total Expenses	63,766,468	39,635,747	135,130,231	712,534,000
Net Income	3,555,819	14,435,399	6,239,256	164,788,000
Employees				
Men	2,225	1,279	3,779	-
Women	1,980	1,277	3,460	-
Total	4,205	2,556	7,239	40,953
Total Payroll	$ 31,839,860	$ 20,395,198	$ 65,855,364	$ 376,129,000

In thousands of dollars	MTS		Sask Tel		AGT		Bell Tel	
	1971	1972	1971	1972	1971	1972	1971	1972
Item of Revenue								
1. Local service	24,450	25,881	18,767	19,810	38,675	43,250	568,153	629,701
2. Toll service	33,467	36,729	33,484	38,104	78,674	92,803	406,689	464,905
3. Miscellaneous revenues	2,470	2,662	1,862	2,073	5,470	6,103	48,567	34,776
4. Less: uncollectable operating revenue	290	339	227	209	739	786	4,622	3,966
5. Total operating revenue	60,097	64,932	53,885	59,777	122,080	141,156	1,018,787	1,125,416
6. Other	1,521	2,390	215	284	--	--	29,786	32,203
Total Income	61,618	67,322	54,100	60,061	122,080	141,156	1,048,573	1,157,619

In thousands of dollars	MTS		Sask Tel		AGT		Bell Tel	
	1971	1972	1971	1972	1971	1972	1971	1972
Items of Expense								
1. Maintenance	14,311	15,222	8,568	9,359	23,543	26,419	174,471	193,435
2. Depreciation (Note 1)	14,608	15,816	12,749	13,665	32,626	36,525	198,438	228,033
3. Traffic (Note 2)	5,938	6,312	5,218	5,465	9,933	11,346	61,212	66,482
4. Commercial & Marketing	4,188	4,603	3,243	3,595	8,423	9,335	72,247	69,506
5. General & Administration (Note 3)	6,260	6,931	2,954	3,457	15,803	17,443	133,369	155,078
6. Operating Taxes (Note 4)	1,247	1,356	3,019	4,116	5,652	6,919	174,352	180,688
Total Expenses before debt charges	46,552	50,239	35,753	39,636	95,980	107,984	814,089	893,222
7. Debt charges (i) interest on long term debts	12,155	13,000	5,501	5,871	22,515	26,364	86,406	97,813
(ii) amortization of discounts	529	520	122	109	445	474	788	888
Total Expenses	59,236	63,756	41,376	45,626	118,940	134,822	901,283	991,923
Net Income	2,319	3,556	12,724	14,435	3,140	6,545	147,290	165,696

In thousands of dollars	MTS		Sask Tel		AGT		Bell Tel	
	1971	1972	1971	1972	1971	1972	1971	1972
Items of Assets								
1. Telephone property (plant and equipment)	301,536	323,710	239,346	252,344	636,531	571,027	7,209,257	7,888,742
2. Less: accumulated depreciation	89,981	99,418	80,768	88,786	131,116	147,356	1,152,567	1,276,996
3. Sub total	211,555	224,292	158,578	163,558	439,911	489,175	6,056,690	6,611,746
4. Investments	333	999	832	999	2,333	2,799	309,391	318,199
5. Current Assets (i) cash (Note 6)	2,606	4,235	257	122	23,308	3,162	80,867	57,711
(ii) accounts receivable	6,913	8,160	6,671	8,196	15,157	18,414	125,770	155,659
(iii) others (Note 7)	3,863	4,347	4,309	3,992	7,514	7,438	58,166	59,219
6. Total current Assets	13,383	16,742	11,238	12,310	48,302	31,813	264,803	267,589
7. Deferred charges	2,947	2,903	982	874	59,171	67,953	20,987	28,167
Total Assets	227,608	243,937	177,650	176,742	594,687	588,941	7,651,871	7,225,701

Note 1

Depreciation
- amortization of the cost of telephone plant over its useful lifetime on a straight line basis.

Note 2

Traffic
- expenses, principally operators' wages, incurred in handling telephone calls.

Note 3

General and Administration
- general office salaries and expenses, rental of circuits and facilities, pensions, insurance and other general expenses.

Note 4

Operating Taxes
- grants to municipalities in lieu of property taxes.

Note 5

Investments
- Telesat common shares, no par value, issued at $10 a share
- for Bell tel. Also included its investments in subsidiary companies.

Note 6

Cash Assets
- cash in banks, temporary investments.

Note 7

Others
- materials and supplies, prepayments.

TELECOMMUNICATIONS IN THE
PRAIRIE PROVINCES : STRUCTURE
AND ISSUES

DATE DUE

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