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THE INTRODUCTION OF A CLOSED CAPTIONING CAPABILITY TO SERVICE CANADIAN NEEDS

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Submitted by: Pierre Levasseur
August 31st 1981.

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TABLE OF CONTENT

	Page
INTRODUCTION	1
THE CENTRAL ISSUE	2
THE OBJECTIVES	3
THE OVERALL CONTEXT OF THE MANDATE	4
- A Canadian captioning capability	4
- Self-sustaining	4
- By January 1, 1982	5
- With interim arrangements to start captioning by Fall of 1981	5
- To serve the hearing-impaired community	5
MODELS AND IMPORTANT CONSIDERATIONS	6
THE BASIC OPTIONS	7
ACHIEVING A VIABLE CANADIAN CAPTIONING CAPABILITY WITH A LIMITED FINANCIAL INVOLVEMENT ON THE PART OF THE GOVERNMENT	10
LICENCING FEES	11
THE TRANSFER OF AMERICAN TECHNOLOGY	12
AN ACCEPTABLE CANADIAN COST	13
FUTURE GROWTH IN THE NUMBER OF CAPTIONED PROGRAMS	15
THE KEY PLAYER	17
- Other players	17
THE CRTC	18
GOVERNMENT STRATEGY	19
FACTS ABOUT CAPTIONING	20
THE CAPTIONING PROCESS	21
- Leadership is in the U.S.	21
- Costly to set up	21
- Principal location	21
- Low mistake rate	22
- Step by step easy to follow	22
- Training is needed	22
- High emotional involvement	23
- Labor intensive	23
- Electronic knowledge necessary	23
- Low effect of volume	24

	Page
MARKET AND DEMAND	25
- Size of market	25
- Market penetration	25
- Selling to advertisers	26
- Development of other uses	27
- Profit potential	27
- Base demand	27
CAPTIONING AND THE ENTREPRENEUR	29
THE PREFERRED OPTION: A GOVERNMENT FUNDED NON-PROFIT CORPORATION AND A PRIVATE SECTOR CAPTION CENTRE	31
THE NON-PROFIT CORPORATION	32
THE CAPTIONING CENTRE/OPTIONS	34
CHOOSING AN ENTREPRENEUR	36
RECOMMENDATIONS AND IMPLEMENTATION STRATEGY	38
RECOMMENDATIONS	39
THE PROPOSED IMPLEMENTATION STRATEGY	41
APPENDIX: THE CORPORATION'S MARKETING AND DEVELOPMENT PROGRAM	43
MARKET POTENTIALS	45
- Development	46
OFFICE OF THE DIRECTOR OF GOVERNMENT INDUSTRY RELATION	47
LIASON TO BE ESTABLISHED WITH OR MAINTAINED	48
YEAR ONE OBJECTIVES: DIRECTOR GOVERNMENT/ INDUSTRY RELATIONS	49
- Post-Interim Period - 6 months to End Year 1	50

INTRODUCTION

On May 12, 1981, Communications Minister Francis Fox announced:

> "Pierre Levasseur will be responsible for seeking to obtain an agreement from all interested parties to create a Canadian closed-captioning capability in both official languages for television programs for the hearing-impaired.
>
> Mr. Levasseur will also be seeking firm commitments from potential participants to ensure the implementation of a Canadian captioning service at the earliest possible date.
>
> Mr. Levasseur's appointment is in direct response to the recent report of the House of Commons Special Committee on the Disabled and the Handicapped, which recommended that the Federal Government move quickly to establish the capability to produce captioned Canadian television programs in both official languages for the deaf and the hearing-impaired".

Final report:

As stated in the memo prepared by Mr. Rainboth on April 29, 1981, file number 8145-5, the final report:

> "would not be a lengthly report but would be intended to include all the relevant information collected throughout the contract process and to document the model agreed upon and the commitments obtained".

THE CENTRAL ISSUE

How best to build a Canadian captioning capability to serve the needs of the hearing-impaired community, using American know-how and technology, at a socially acceptable Canadian cost with a minimum of government implication in the financing and operations of the captioning unit.

THE OBJECTIVES

THE OVERALL CONTEXT OF THE MANDATE

As stated by Minister Fox, the mandate was not to carry out another study bur rather to make things happen.

The Minister also expressed the wish that the private sector be involved if at all possible so that the government could support captioning through avenues other than brick, mortar and equipment.

Thus, the mandate referred to the introduction to Canada of a captioning capability rather than a captioning facility, although both are inter-related. But the nuance was clearly indicative that the mandate proceed with a certain number of objectives in mind.

A Canadian captioning capability:

The implication was that it was not essential for:

- the government or one of its agencies to be directly involved in the operation of a captioning centre;
- technology to be re-invented in Canada for captioning purposes.

Self-sustaining:

The intention of the government was that it should not be involved in the direct funding of the activities of a caption centre.

It was believed at the outset that captioning was a viable economic business activity and that private sector interests could take charge of the captioning centre given firm contracts with those broadcasters who would agree to have their captioning done in Canada.

By January 1, 1982:

It was felt that if the mandate was completed by the 31st of August, all the arrangements could be concluded in such a way as to allow the captioning centre to be operational by January 1st 1982. Two basic assumptions underlied these target dates: technology would be transfered to Canada by the Americans by that date and broadcasters would agree to contracts for captioned programs to be delivered at that date.

With interim arrangements to start captioning by Fall of 1981:

It was felt that the Americans would agree to transfer the technology and train the captioners if they obtained contracts for the captioning of Canadian programs on an interim basis up until the moment where captioning could be fully operational in Canada.

To serve the hearing-impaired community:

Naturally the whole exercise was aimed at turning into reality one of the principal recommandations of the special committee on the handicapped.

MODELS AND IMPORTANT CONSIDERATIONS

THE BASIC OPTIONS

The first phase of the mandate consisted of an identification process of those basic options that appeared realistic.

- The captioning of Canadian programs could be carried out by the Americans under contract.

  This is probably the cheapest, most secure and easiest way to proceed but given the objectives of introducing a Canadian capability, this option is the option of last resort.

- Broadcasters could decide that one of them should develop the captioning capability and supply the service to other broadcasters.

- The Deaf T.V. Resource Center in Toronto, part of the Rogers Group, could be asked to develop a centre.

  In both of these cases, there is a shared feeling that it would be better if a third party offered the services.

- Captioning could be carried out by the National Film Board which has already proposed such an initiative.

  This proposal does not meet one of the objectives.

- Captioning could be carried out by private sector interests.

  The Department has already received two proposals to that effect.

Given these basic options, the mandate was to search for a solution which could be satisfactory to all the participants given that there are also a number of other considerations that should be remembered:

- The participation of the hearing-impaired community in some form of consultation or decision making with respect to the programs that should be captioned has to be guaranteed.

- The necessity for each broadcaster to feel comfortable in his business relationship with the producer of captioned programs and his need to obtain the guarantees that quality, delivery and price will be respected.

- The need, felt by all, for a continuous government presence even though it may not be financially involved in the operations of a caption centre.

All of these considerations lead to the consideration of the National Captioning Institute model, since N.C.I. fulfills essentially all of the roles that can be expected of an independent captioning centre offering services to broadcasters.

The WGBH model was also considered since it represented the model of a broadcaster offering services to other broadcasters.

The N.C.I. model would be totally applicable to Canada if the Federal Government were willing to commit itself to a major funding operation both at the outset and on an ongoing basis.

Since the N.C.I. model did not totally correspond to one of the objectives, it was decided that the Canadian solution would have to be a modified version of the N.C.I. approach.

The N.C.I. roles can be split according to service/production roles and support roles. The service/production roles relate to the captioning of programs while the support roles relate to marketing, government relations and relation with the hearing-impaired.

Given the objectives and the Canadian context, a model was developed where the production roles would be carried out by the private sector and the support roles carried out by Government.

ACHIEVING A VIABLE CANADIAN CAPTIONING CAPABILITY WITH A LIMITED FINANCIAL INVOLVEMENT ON THE PART OF THE GOVERNMENT.

The model which was retained and discussed with most of the interested parties is one where:

- a non-profit corporation is created within the private sector, but which would be funded by the government to oversee the introduction of the captioning in Canada and to act as a catalyst in market development and the development of other uses of the captioning technology;

- a captioning centre or centres are set up by the private sector to carry out the actual operations under some form of licencing which allows the government to reduce its financial commitment on a yearly basis.

This solution has met with the approval of all those with whom it was discussed and in particular, with the CBC, key representatives of hearing-impaired community, the two entrepreneurs who have submitted proposals and the Americans.

It is felt that the other Canadian broadcasters who already have expressed their opinions will go along with this solution if it is accepted by the Minister.

LICENCING FEES

The proposed solution whereby the private sector would look after the service/production roles and the non-profit corporation assumes the support roles, lends itself to a formula akin to licencing.

In effect, the non-profit corporation's mandate is to oversee the introduction of a Canadian capability.

It could produce the captioned programs itself by setting up its own shop and offer its services to the broadcasters. It could also decide to offer captioning services to broadcasters and then contract out the captioning to private sector production centres.

It can also, in concert with the broadcasters, establish the parameters under which the broadcasters would agree to contract for services from a third party, with the understanding that the potential market limits the number of possible sources of supply on the one hand and on the other, there is a need for co-ordination to effect a transfer of technology from the Americans.

The corporation can then decide, jointly with the broadcasters, on who is best qualified to do the job and impose as a condition a schedule of licence fees to be paid to the corporation; these fees would replace the government's contribution starting in year 2, according to the proposed schedule.

THE TRANSFER OF AMERICAN TECHNOLOGY

Visits were made to N.C.I. and WGBH in order to ascertain the possibilities of having them participate in the establishment of a Canadian capability and center.

Both groups were given the same presentation and were asked to submit proposals to cover training, consultation, interim captioning and equipment.

N.C.I. flatly refused to submit such a proposal; they would do so only and when an interim captioning agreement is signed.

WBHB submitted a most comprehensive proposal which covers all the elements asked for.

The only element which has not been ascertained in a satisfactory manner is whether or not WGBH can deliver the equipment given the assertion by N.C.I. that they control the licensing rights. WGBH will supply by September 8th evidence that they can deliver.

The delivery lead-time for equipment is at least three months. In order to obtain the equipment to be operationnal by March 1st, the equipment has to be delivered by January 1st and consequently ordered by late September.

The implication is that either the private sector interests are identified by that date or the Government assumes interim responsibility for the order.

In any case, both N.C.I. and WGBH would feel much happier with a government guaranteed order and would prefer to deal with the Federal Government or its appointee than with a third party.

AN ACCEPTABLE CANADIAN COST

The most important consideration and one that has a major impact on how to introduce a Canadian captioning capability relates to the notion of an acceptable Canadian cost.

Two basic assumptions are possible:

1. It is more important to have a Canadian capability than to be able to produce captioned programs at a cost comparable to the U.S. cost.
   or
2. It is essential to produce captioned programs in Canada at a cost comparable to the U.S. cost and, therefore, the Canadian capability must be developed within parameters of financial viability while remaining within an acceptable level of cost to the broadcasters.

The original NFB proposal was essentially a proposal which corresponded to the premise that a Canadian capability was more important that what it would cost.

The broadcasters, especially those in the private sector, argue and rightly so that since there is little economic benefit to be derived from captioning programs, the cost must be maintained at the lowest possible; and given a higher Canadian cost, why should they and could they be forced to buy Canadian. It would be perfectly acceptable to them to continue to have their programs captioned in the U.S.

So, although the objective of having a Canadian capability is a highly desirable one politically, the pursuit of this objective is constrained by economic factors that weigh heavily in the decisions of those who will have a direct impact on the overall viability of a Canadian operation. Thus, it is imperative that their decision-making criteria be taken into consideration.

Therefore, it is essential that a Canadian captioning centre be able to produce captioned programs at a cost equal to or slightly higher than what is presently charged by the American centres.

FUTURE GROWTH IN THE NUMBER OF CAPTIONED PROGRAMS

Another major consideration is the planning for the introduction of a Canadian capability is the foreseeable growth in the number of captioned programs.

The growth will reflect the following factors:

1. the demand for additional captioned programs,
2. the cost per unit.

The demand for additional captioned programs will come from the hearing-impaired community or from the regulatory agencies.

The broadcasters, public and private, cannot be expected to go beyond the commitments they feel obligated to make at this juncture unless it can be proven to them that they derive a socio-economic benefit from their endeavour that matches their cost.

Unless the hearing-impaired community proves, through the purchase of decoders, that its members are using the service, any lobby on their part once the basic service has been met would be difficult to sustain.

And it would be difficult for the CRTC, for example, to impose further demands on the broadcasters given such a situation.

On the other hand, if the unit cost is not held stable (increasing at a level commensurate with the inflation rate), the broadcasters could argue that it is impossible to do more. If the unit cost is held stable, the argument for not doing more or the premise for doing more would essentially be a case of cost/benefit analysis.

Thus, the preoccupation of the government at the time of introduction of a Canadian capability has to be to structure the operation in such a way as to ensure that the cost structure is maintained at a low level by obtaining the most efficient centre possible while at the same time looking for other uses that could help to maintain a cost/efficiency basis that would lead to stable unit costs.

THE KEY PLAYER

The key player is the C.B.C.

Without the CBC, captioning cannot exist or survive in Canada.

The CBC has obtained Cabinet approval of its proposal to caption 5 hours in French and 5 hours in English, on a yearly basis.

The CBC is committed to reach the 10 hours as rapidly as possible; this is not to say that this total will necessarily be reached in year I.

The CBC at this point, will not commit itself to a greater number of hours.

Other players:

CTV, TVA, TV Ontario and Radio Quebec have all indicated their willingness to caption programs.

CTV has entered into negociations with NCI to that effect.

It is expected that, in total, another 5 hours would be captioned within one year by Canadian broadcasters.

THE CRTC

In recent decisions, the CRTC has encouraged the broadcasters to caption programs and intends to ask the right questions when licence renewals come up for review.

The CRTC would prefer to use moral suasion rather than to proceed through the imposition of conditions of licence.

Since most broadcasters are committed to have some programs captioned, it would seem that the CRTC will not be faced with reluctant partners, at least at the outset.

GOVERNMENT STRATEGY

The government strategy must be based on the recognition of the following constraints:

1. It must ensure that captioning in Canada succeeds. This means that if it picks an entrepreneur to become the caption producer in Canada, it must pick the right one (or ones).

   This has to be done in concert with the broadcasters who will have to live with the producer.

   It is apparent at this juncture that the CBC who will be the prime user has its reservations about using one or the other or both of the entrepreneurs who have submitted proposals.

2. The government must also be preoccupied with the development of other captioning uses, directly or indirectly.

3. The government must also ensure that the hearing-impaired community is involved in the ultimate solution since this involvement will give credibility to captioning in Canada. This is the foremost reason why the government is involved in captioning at all.

4. The government must also ensure that once this report has been submitted, the implementation stage is carried out to its proper conclusion.

FACTS ABOUT

CAPTIONING

THE CAPTIONING PROCESS

It is important to understand the characteristics of the captioning process and how they impact on the viability of a captioning centre.

Leadership is in the U.S.:

The captioning technology was developed by the PBS engineering group.

New technological advancements are in the works. It would be costly and difficult to initiate and compete in this area, taking into consideration the fact that the U.S. Federal Government committed more than 10 million dollars to the development of captioning in the U.S. to bring it to today's standards.

Unless the technology is to be duplicated in Canada, it is desirable to transfer the technology from the U.S. to Canada.

Costly to set up:

For anyone who wishes to be involved in captioning, there is a high front end investment, for equipment as well as training of captioners.

Principal location:

With modern telecommunication devices, it is no longer critical that the captioner be physically close to the broadcaster although this is desirable for many reasons, the principal one being that, most of the time, the turn-around time allocated to the captioner is rather tight.

Low mistake rate:

Although the number of viewers is limited, they become very critical of the end-product. The adaptation of the spoken word to the written word has to retain a full enough meaning for the viewer to follow the story and the placement of the captions is critical to the viewer.

The hearing-impaired (especially those who are totally deaf), read slower than normal persons, and therefore the number of words per minute has to be reduced for a better understanding. At the outset, the rate of 140 to 160 words was acceptable. But gradually, the rate is climbing. Both units in the U.S. are now aiming at 180 words per minute.

Step by step easy to follow:

The captioning process is broken down into steps that are easy to follow. There are simple procedures to be followed at each step to arrive at a final product which is acceptable. It requires time, concentration and a special ability with languages.

Training is needed:

In order to operate the process, a 3 to 4 months training period is necessary to bring captioners up to the degree of competence necessary to make a captioning team work efficiently, to make it an easy to follow process. This training has to be carried on the job, captioning real programs.

High emotional involvement:

Most people who enter the captioning field, enter for reasons such as the possibility of moving onto other jobs in the broadcasting area. However, during their captioning work experience, most of these people become highly motivated by the very nature of their work and by the community they are serving.

The burn out rate is approximately between 24 and 30 months, although there are exceptions to this rule. But because it is a rather repetitive and dull process, people tend to move on when other opportunities are created.

Labor intensive:

Although the equipment is sophisticated and expensive, this is a labor intensive operation.

The whole process involves people working in teams. Dealing with the sophisticated equipment at each stage of the process requires special training.

Electronic knowledge necessary:

It is important to have an understanding of the technology being used and the centre must have someone on its staff, who has an intimate knowledge of electronics since the equipment is subject to maintenance.

Low effect of volume:

Since each work station is composed of a given number of pieces of equipment and a corresponding number of people doing the editing, and given that each station has a maximum output, the only impact of volume is to allow a greater amortization of the basic fixed overhead costs.

This is not the type of operation where volume has a dramatic impact on the unit cost.

MARKET AND DEMAND

Size of market:

The end-users or consumers of the captioned programs will be members of the hearing-impaired community.

With the captioning of Canadian programs, the hearing-impaired community in Canada will in effect be better served in terms of availability of programs than the same group in the U.S.

The exact size of the hearing-impaired community in Canada is not known. However, using the American figures and extrapolating, it is estimated that there are 200,000 completely deaf people in Canada and approximately 1,400,000 people suffering from hearing-impairements of a varying degree.

Market penetration:

The hearing-impaired community has its own network of communications and traditional marketing methods, and as evidenced by Sears' experience in the U.S., there is no guarantee of awareness and an assured market penetration.

To penetrate the market, there is a need to ensure that the hearing-impaired community is aware of the availability of captioned programs.

Once the basic awareness has been created, theoretically at least, the decoder sales follow. As evidenced by the slow sales of decoders in the U.S., there is evidently a problem in increasing the use of decoders.

It seems that there is more success in selling television sets that incorporate the decoder.

There are presently 65,000 decoders sitting on the shelves in the U.S. and about 3,000 in Canada.

The decoder retails at $350. which might also be an impediment to increased sales.

In Canada there is also a social stigma attached to the fact that a deaf person must present himself with a document signed by a doctor in order to be able to take advantage of the sales tax credit available to the handicapped.

It should be noted that N.C.I. has decided that it must get involved in consumer marketing to increase the sales of decoders.

Selling to advertisers:

In the U.S., it was expected that advertisers would have their ads captioned since there could be a definite advantage in reaching that particular community. However, the number of advertisers who have committed themselves to this practice to date is still minimal.

Selling to advertisers in Canada will be even more difficult given the size of the market. Captioned advertising will be more a matter of corporate image than a cold calculation of the return on dollars invested.

Development of other uses:

It would seem highly desirable that, given the small size of the hearing-impaired market, other captioning uses be developed, if for no other reasons than to ensure the long term viability of the Canadian captioning centre.

There has been some research conducted in the use of captioning for language training and for training of the hearing-impaired themselves.

Profit potential:

The profit potential of a captioning centre is not all that great, given that the selling price to the broadcaster is pretty well fixed in advance. Since the market served will not expand dramatically unless other uses are developed, the centre will not greatly influence the growth curve of its services.

Therefore, the operation will be viable only if the centre is well financed at the outset and tightly managed in the following years.

According to the WGBH proposal, profit is obtainable in year 3 and constant thereafter, although not growing given the cost structure of the operation.

Base demand:

The base demand is constituted by the broadcaster commitments; at the present time 15 hours a week are forecast as the maximum the broadcasters are willing to commit to. It should take two years to reach the fifteen hours.

The base demand can only be increased through other uses or through sales to advertisers.

CAPTIONING AND THE ENTREPRENEUR

It is important to situate the entrepreneur vis-à-vis the opportunity that is offered to him.

1. revenues are nearly totally pre-determined,
2. low growth in the demand beyond the base demand is to be expected,
3. low profit margins are to be expected although constant,
4. initial under-capitalisation can lead to failure,
5. the large capital required at the outset means a small return to an investor, given the the limited growth potential,
6. training is costly and therefore selection of personnel is critical.

The entrepreneur's risk is related to an under-estimation of costs, mismanagement of the captioning process and over-estimation of revenues from other sources.

However, it is a sure business in the sense that the entrepreneur will be the only one in the business.

The low risk/low return attracts a certain type of entrepreneuf. The Government is delivering a business opportunity to someone and must therefore exact the proper proof of future performance and a financial contribution to the development of captioning in Canada.

An entrepreneur/producer holding a firm purchasing contract from a broadcaster should be able to find the financing necessary to start up a captioning centre. However, it must be remembered that the broadcaster/producer relationship will be based on delivery, quality and cost performance. No broadcaster will be willing to sign a purchase order without first having sufficient assurances that the entrepreneur is serious and can remain in business even if problems arise.

In the Canadian case, since there will probably be only one captioning centre and at the most two, the broadcaster will be hard pressed to break-off his relationship in favour of another source of supply.

The broadcaster has to be assured that the entrepreneur is a viable entrepreneur, that he can meet delivery and other performance criteria he sets, and that he will remain in business without having to support a greater purchasing price as a means of keeping him in business.

Therefore, there is a need to ensure that the right entrepreneur is selected at the outset, and that he proves his capability of raising the necessary equity and term financing.

THE PREFERRED OPTION

A GOVERNMENT FUNDED
NON-PROFIT CORPORATION
AND A
PRIVATE SECTOR CAPTION CENTRE

THE NON-PROFIT CORPORATION

Based on the analysis of all the factors previously mentioned, it appears essential that the Federal Government remain involved in the introductory phase of the Canadian captioning capability.

The first three years will be critical to all concerned and therefore, it is proposed that a non-profit corporation be set up:

1. To ensure the successful start-up of a Canadian closed captioning capability, by providing a link between the federal government and the entrepreneur(s);

2. To create and foster an awareness among all federal departments and agencies, as well as within the advertising community, of the social importance as well as the advantages to them in having some of their material closed-captioned;

3. To ensure the long-term viability of a Canadian closed captioning capability, by seeking alternate potential uses of the closed captioning technique (e.g., second-language training, special education of deaf children, "score-board" information during live sporting events), as well as by seeking more sophisticated, cheaper technologies.

This corporation could be called the Canadian Captioning Development Bureau or any more suitable name.

The Federal Government would fund the corporation through operational grants which would be on a decreasing scale.

The following scale is proposed:

Year I - $200,000.
Year 2 - $100,000.
Year 3 - $ 50,000.

This is the minimum needed to carry out its mandate.

The private sector operated centre would be required to fund on the following scale:

Year 2 - $100,000.
Year 3 - $150,000.

The corporation's existence would be reviewed after year 3 with the intent of discontinuing its existence if it is no longer needed.

The Board of Directors would be made up of representatives of the broadcasters, the hearing-impaired community, the NFB and other government agencies plus a few socially committed businessmen.

THE CAPTIONING CENTRE/OPTIONS

Assuming a decision to proceed with the creation of a Canadian captioning centre and given that the private sector would take on the responsibility of setting up the caption centre, there are a number of options to be considered.

As stated earlier, there are reasons that favor the establishment of the centre close to the broadcaster/user. In the Canadian context, this would mean that Toronto and Montreal could claim the need to each have their own centre close-by.

According to the WGBH proposal, this is feasible and both units could economically survive although increasing the risk of encountering financial difficulties. On the other hand, two centres offer the advantage of a back-up system.

Nevertheless, the following options are available:

- One captioning centre, located either in Toronto or Montreal.

  The argument for one centre is that it makes for a more viable and profitable operation.

  The argument in favor of Toronto is that the greatest number of hours to be captioned will be produced in Toronto and proximity to the producers is seen as preferable although not essential.

  The argument in favor of Montreal is that it is easier to find captioners in both languages, and the introduction of captioned programs in French at the same time as in

- Two centres, one in Toronto and the other in Montreal, owned and operated by the same corporate entity.

  The corporate entity decides how best to serve both markets and how to allocate equipment and personnel. This is essentially how N.C.I. and WGBH work.

- Two centres, independently owned and operated.

  The central issue in this case is how to split the market in a fair manner and not only along linguistic lines.

CHOOSING AN ENTREPRENEUR

Two distinct organisations have submitted proposals to the Department, offering to set-up captioning facilities; Video Captions of Toronto and Cine Doc of Montreal.

The principals of these two organisations were met on a number of occasions to assess the viability of their plans and their fundamental interest in captioning.

Both organisations are involved in film production; their interest is real because they see it as a financially interesting venture. They could probably carry out the mandate but both need firm contracts from the broadcasters to raise the capital needed to start up the operations.

An unsuccessful attempt was made at having them join to create a national organisation.

The government has the responsibility to see that captioning services do not fail once they are launched.

If the strategy of using the private sector is going to work, the conditions of entry have to be made tough enough to ensure survival and respect of the broadcasters' conditions related to delivery, price and quality.

These conditions must relate to the amount of equity financing available, access to additionnal term lending, managerial track record and acceptability to the broadcasters.

The government might consider the alternate options:

- approaching an existing group with compatible interests
  or
- calling for bids.

Given the time constraint, it would be preferable to give the non-profit corporation the mandate to enter into negotiations with both known candidates plus others that it may want to solicit directly.

RECOMMENDATIONS AND IMPLEMENTATION STRATEGY

RECOMMENDATIONS

The Government should:

1. Foster the incorporation of a non-profit corporation to oversee the introduction of a closed-captioning capability.

2. Fund it according to the suggested scale of:

   - Year I - $200,000.
   - Year 2 - $100,000.
   - Year 3 - $ 50,000.

3. Name a Board of Directors made up of representatives of the broadcasters, hearing-impaired community, certain government agencies and other prominent Canadians.

4. Give it a three year mandate at which time it should review its existence.

5. Give it an immediate mandate:

   - to conclude arrangements for the transfer of U.S. technology, training of Canadians in the U.S. and interim captioning on a basis that will guarantee that Canadian captioning operations will be operational by early Spring '82.

   - to make whatever arrangements are necesary to have the private sector take on the operations of a captioning centre(s) with the understanding that the centre(s) will contribute funds to the corporation, on the following scale:

     - Year 2 - $100,000.
     - Year 3 - $150,000.

6. The Minister of Communications should ensure that the Canadian Broadcasting Corporation cooperates with the corporation in concluding the necessary arrangements with the American agencies and Canadian private sector interests.

7. The Department of Communications should second Mr. Bob Lucyk to the Corporation for a two year term.

8. The Department of Communications should ensure that Mr. Sanderson Layng, Director of the Deaf Television Resource Centre is retained on contract from September 1st, 1981 and transferred to the Corporation as soon as it is created.

9. The Minister should appoint an interim Chairman to begin immediate negotiations with the Americans.

10. The Minister should make any proposed announcements in concert with those that will be made soon by the C.B.C.

THE PROPOSED IMPLEMENTATION STRATEGY

Assuming the decision is to establish the centre(s) through private sector interests, the suggested implemented strategy would be the following:

1. The Corporation would enter into a contract with either N.C.I., WGBH or both, to supply equipment, training and set-up consultation services on the basis that the payment would be effected by the captioning centre.

2. The CBC and CTV enter into contracts with either N.C.I., WGBH or both to supply interim captioning and make these agreements part of the overall agreement to transfer technology.

3. A caption centre would be established in Montreal to be operational by March 1st to supply the needs of the CBC, both in French and in English.

   Canadian captioners would be recruited and sent to the U.S. for training by December 1st.

4. A second caption centre could then be established in Toronto within 12 months if the Montreal centre is successful and if the Toronto market requires it. The Toronto staff would be trained in Montreal.

The advantages of this proposed strategy are obvious:

1. The risk is reduced.

2. It allows for the de-bugging of the system.

3. It gives time to test the one centre concept.

4. It reduces the cost of the initial training program.

5. There would be a longer on-going relationship with the Americans since interim captioning would be required for a longer period of time. This might facilitate the transfer of technology.

APPENDIX

THE CORPORATION'S MARKETING AND DEVELOPMENT PROGRAM

Current assessments show that profit margins for a Canadian captioning operation which served network broadcasters only would be very small. In order for a caption centre to be securely established, a very assertive approach to marketing must be taken with the intent of developing captioning as an industry and not simply a side-service to broadcasters. Accordingly, all potential markets for captioning services should be explored and research/development initiatives should be given a high profile. While services to broadcasters will remain the prime focus, the successful marketing and development of non-broadcast services will determine the overall viability of a Canadian captioning operation.

MARKET POTENTIALS

The following is an identification of markets to be explored:

a) Broadcast
- all Canadian broadcast networks, national and regional
- all Canadian broadcast stations
- all Canadian producers for broadcast television (film and video)

b) Advertising
- all advertisers on Canadian television stations/networks
- all associated agencies, organizations to Canadian advertisers

c) Cable/Pay TV
- all cable companies with special programming services
- all producers for special programming for cable distribution

Non-Broadcast

d) Educational
- all provincial education ministries
- all schools for the deaf
- all associated educational agencies

e) Government (Federal and Provincial)
- all departments relating to or providing services to deaf organizations and individuals
- all departments producing or concerned with video resources for internal or external use.

f) Industry
- all industries who a) hire the handicapped
  b) use video training resources
- all producers of industrial video resources

A, B and C are the primary markets and will receive prime attention. D, E and F can also be contacted with respect to non-hearing related issues such as remedial education, learning of second language, etc. All of the above can be contacted in other countries. These are secondary markets and the latter are more developmental in nature.

Development:

The following is an identification of tasks to begin the research and development process:

1) Establish information sharing liaison with all agencies currently providing captioning services.
2) Establish a library of all research pertaining to captioning or related technologies.
3) Assess available research.
4) Establish reserach/development affiliation with Telidon through Industry Investment Stimulation Program and other programs or activities.
5) Develop a five year development approach to the introduction of new technologies for captioning.

All of the above activities need to be carried out concurrently where appropriate.

OFFICE OF THE DIRECTOR OF GOVERNMENT INDUSTRY RELATIONS

By virtue of the Federal Government's contribution of public funds to create and operate the Canadian Captioning Development Bureau, a focal point is required whereby the interests of the Federal Government in facilitating the greatest possible access to television programming by hearing-impaired Canadians can be formally, continuously and visibly represented to the various players indicated on the attached list of contacts, balancing the social needs and aspirations of the hearing-impaired with the legitimate business objectives and constraints of the private entrepreneur(s). This focal point is to be represented in the office of the Director of Government/Industry Relations.

In addition to the foregoing, this office will seek to explore and promote the development of other potential uses of captioning, such as the learning of second languages and remedial education.

LIASON TO BE ESTABLISHED WITH OR MAINTAINED

In the United States

- the National Captioning Institute
- WGBH-TV Caption Center
- Individual TV Networks:
  - PBS
  - ABC
  - NBC
  - CBS

In Canada

Major Players

- CBC
- entrepreneurs
- the hearing-impaired national organizations
- all major Federal departments and agencies

Secondary Players

- CRTC
- Cable operators
- National Film Board
- Telidon program (DOC)
- CTV
- TVA

New Players

- Pay TV licencees
- major independent broadcasters (eg. CHCH-TV)

VI. ONE OBJECTIVES -

DIRECTOR GOVERNMENT/INDUSTRY RELATIONS

Interim Period (Canadian Programs Captioned by Americans) - Bureau Inception ot 6 Months

a) to liase continuously with the American captioning entities (NCI and WGBH-TV) to monitor:

- equipment delivery schedule adherence
- progress in training of Canadian captioners
- new developments in R&D (eg. "real time" captioning)
- progress toward earliest and smoothest transition to a total Canadian capability;

b) to contact in writing all major players to inform them of the Federal Goverment's interests in the captioning endeavour:

i.e. liason with the American, the non-interfering support to the Canadian private sector; encouragement of greater number and variety of programs for the hearing-impaired; exploration and development of other potential users;

c) to visit most or all the major players at least once to strengthen existing relations and establish new ones;

d) to deal with public inquiries with respect to the nature and mandate of the Bureau;

e) at 3 months, to provide the Board of Directors with a preliminary report on activities and results to date;

f) at 6 months, to provide the Board of Directors with a full, written report on activities, results and progress toward "Canadianization".

Post-Interim Period - 6 Months to End Year 1

a) to maintain on-going, but less frequent and less formal, contact with the American captioning entities, in order to:

- remain abreast of the "state-of-the-art" in R&D;
- explore and promote the possible exchange of programs in both countries by broadcasters (eg. specials);

b) to visit the remaining players not visited (though contacted in writing) during the first 6 month period;

c) to deal with public inquiries with respect to the nature and mandate of the Bureau;

d) at the end of Year 1, submit second full report, as for the first six months, with the addition of recommendations for action in the second year of operation.

Note

In addition to the above objectives, the Director of Government/ Industry Relations will attend Board meetings as required, provide special reports as requested and carry out specific directions provided by the Board.