10:03 a.m.

Wednesday, October 24, 1990

[Chairman: Mr. Ady]

MR. CHAIRMAN: I'd like to call the meeting to order this morning. We appreciate having the Hon. Fred Stewart, Minister of Technology, Research and Telecommunications, with us this morning along with his department officials.

Just prior to asking the minister to introduce his department officials, I'd like to give an opportunity to those on the committee who may have recommendations they would like to read into the record. The Member for Ponoka-Rimbey.

MR. JONSON: Yes, Mr. Chairman. Good morning. I'd like to read this recommendation into the record:

Be it resolved that priority be placed on directing all available funds in the Heritage Savings Trust Fund towards investments that yield the best possible monetary return until such time as the budget is balanced and the accumulated debt is erased.

MR. CHAIRMAN: Thank you.

Are there others? The Member for Calgary-Fish Creek.

MR. PAYNE: I'd like to propose, Mr. Chairman, the following recommendation:

The Alberta Heritage Savings Trust Fund committee recommends that the Minister of Health direct the Alberta children's hospital board to reconsider its decision to terminate the mobile team project's outpatient therapy services.

MR. CHAIRMAN: Thank you.

Are there others? The Member for Clover Bar.

MR. GESELL: Mr. Chairman, I'd like to repeat a recommendation that was made during the last session of the Heritage Savings Trust Fund Act committee:

that a new division be created under the Alberta Heritage Savings Trust Fund, the environmental investment division, and that investments from this division be made for projects that will provide short- and long-term benefits to the people of Alberta through enhancement of our environment and through reduction of pollution.

MR. CHAIRMAN: Okay. Thank you.

MR. GESELL: Mr. Chairman, I also have a motion that I would like to ... Should I leave that until later today?

MR. CHAIRMAN: In view of the fact that we've taken time for the recommendations this morning, perhaps it would be well to hold motions to a later meeting.

With the concurrence of the member, I'd now like to go back to the minister and ask him if he would introduce his department officials, and then perhaps he has some opening remarks that he would like to give to the committee. Then we'll move to questions from committee members. Mr. Minister.

MR. STEWART: Thank you very much, Mr. Chairman, and good morning to you and to members of the committee. It's a real pleasure for me to be here today and to bring you up to date on some of the things that I think are pretty exciting investments of the Heritage Savings Trust Fund as they impact on my portfolio.

I'd like to introduce Mr. Ken Broadfoot, the Deputy Minister of Technology, Research and Telecommunications, to my left; Mr. Don Keech, who is the executive director of financial projects and administration in the department; and Ms Pat Tillenius, who is the manager of the individual line service program and has been such, I guess, pretty well throughout the whole program.

Mr. Chairman, I do have some introductory remarks to make and then will welcome questions from the members of the committee. As I indicated, I am very pleased to have the opportunity to make this report to the committee, because I know that really the moneys of the Alberta Heritage Savings Trust Fund that have been invested in the various areas under my jurisdiction have in fact been profitable investments, and I say that in the sense that they've been profitable in promoting the economic diversification and growth of our province and in building a foundation for more such activity in the future. The department is both aware and appreciative of the support that the advanced technology industry in Alberta has received from the heritage fund. I guess it's no exaggeration to say that the benefits of improved methods for fighting disease and disability, greater access to business and educational opportunities for remote parts of the province, and expanded markets for locally produced goods represent returns on the investments that really go far beyond dollars.

Several of the programs under the auspices of the ministry have received no funding beyond the initial costs of establishing them. They are now growing and expanding on their own, and that I think is a credit to the fund in granting that initial support.

Scientific research in Alberta has made several breakthroughs in the past year in several fields, most notably, I would suggest, in human health care: treatment to battle insulin-dependent diabetes, helping patients with spinal cord injuries to walk again. These are research projects that obviously directly affect the quality of human life, and it pleases me immensely that this calibre of research is taking place right here in Alberta. I think it's a legacy of the heritage fund investment in the Alberta Heritage Foundation for Medical Research.

The electronics industry is well served by two organizations which have received funding from the heritage fund. The Electronics Test Centre has expanded its services, its client base, and indeed its contract revenues in this past year, so it remains an integral part of the applied research infrastructures of the province and really is seen as an essential service to industry.

The Alberta Microelectronic Centre has attracted national and international development contracts in microelectronics while continuing to serve Alberta industry as well. The AMC has enhanced, I believe, the reputations of both the universities of Alberta and Calgary in the electronics field by training university students in microelectronics research and applications, and that sort of linkage is extremely important.

We at the department are very proud of these organizations, and they've obviously, as I say, received considerable help from the heritage fund over the years.

I want to take a bit of time to give you a greater understanding of what has been done with that assistance. Let me start with a topic that I'm sure you are by now most familiar with, and that is Alberta Government Telephones. I am pleased to be able to say that the very significant investment that the heritage fund has made over the years in AGT is now starting to reap a financial return to the fund, in addition to the services it has provided to the Alberta public.

As a result of the Alberta Government Telephones Reorganization Act, on October 4, 1990, AGT was restructured and Telus Corporation created. As you are well aware, Telus is a holding company which wholly owns a number of subsidiaries, including of course AGT Limited, as it is now known, which is the telephone network company that all Albertans deal with and are familiar with and will continue to deal with and be familiar with. AGT, as such, will continue as the telephone network company.

Before the restructuring of AGT it was financing its activities by borrowing in the Canadian public market, but in the late '70s and early '80s the Alberta Heritage Savings Trust Fund purchased the debentures that were issued by AGT and in that way provided financing to AGT. As a result of the AGT restructuring, these debentures were converted to shares in Telus Corporation, a significant portion of which, of course, were offered for sale during the public offering recently concluded, and the proceeds of that public share offering will revert to the Heritage Savings Trust Fund. As a result of that reorganization the heritage fund obviously will not be funding AGT in the future, and therefore the investment projected for '90-91 is zero.

Still on the subject of telecommunication, the individual line service is on schedule and meeting the objective of ensuring that every telephone subscriber in Alberta has private-line telephone service by '91-92. The individual line service will obviously allow the use of fax machines and other modern telecommunications equipment, promising Albertans in more remote areas of our province greater access to business and educational opportunities. The investment in 1989-90 of \$46 million brings the total investment as at March 31, 1990, to \$151 million. This money has gone for direct assistance to AGT and ET in fulfilling their obligations under the program and for rebates to the individual customers to keep subscriber costs at the level promised when the program was first announced.

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In today's world when electronics is affecting every area of human endeavour, the Alberta Microelectronic Centre is a vital link between Alberta business and the future. The Alberta Microelectronic Centre helps companies understand and use microelectronic technology in their businesses. Services include feasibility studies, consulting, electronic products development, and microchip design and fabrication. Those services are all an integral part of AMC's operation.

The Edmonton fabrication facility of Alberta Microelectronic Centre specializes in the manufacture of application-specific integrated circuits, or ASICs as they're called. This facility is complemented by a Calgary facility that deals mainly with design and engineering capabilities. With these facilities and expertise, AMC has really enabled both the University of Calgary and the University of Alberta to become leading centres of microelectronics activity in Canada, and Alberta industry is taking advantage of this reality. I might also add that we are finding more and more that this sort of infrastructural support and the reputation that has accrued to that support is playing a very vital role in attracting industry to Alberta. I think of Hughes Canada as just one example in that regard.

Last year the Alberta Microelectronic Centre handled over 900 industrial consultations. More than 60 projects were processed by the wafer fabrication facility in Edmonton, projects which have applications in a wide variety of areas including the petroleum, entertainment, communications, and aviation fields. The AMC completed 10 ASIC designs including the facility's first analog bipolar circuit and its first analog digital circuit.

The centre's expertise is also attracting national and international attention. For example, the AMC is now working for the communications research centre of the federal government's Department of Communications to develop semicustom ASIC chips for improved satellite communications, and Toshiba corporation recently hired AMC to develop what they call a token ring local area network circuit board for the laptop computers that are produced by Toshiba. I think that gives an indication of the type of international reputation that these centres have developed and the capability of the researchers and other technicians that are involved.

The AMC is also – and I think this is a very important part of its activities – a training and basic research centre, and it has therefore provided training to 78 university students through the integrated circuit design classes, and currently 20 researchers regularly use the AMC's equipment and its personnel.

Moving to the Electronics Test Centre, it is the other program in electronics which has received funding from the Heritage Savings Trust Fund. The ETC is successfully helping the Alberta electronics industry develop new products and new markets by providing product evaluation and technical support for present and potential manufacturers and by offering consulting services in the areas of product integrity and quality assurance, quality assurance obviously being a very important aspect in a competitive global marketplace.

The Electronics Test Centre tests and evaluates products used in telecommunications, medical electronics, data processing, office automation, process instrumentation, and, recently, avionics.

To help Alberta products meet the needs of expanding markets, the ETC provides testing and engineering services accredited by national and international agencies, including agencies in Japan, Europe, and the United States. It is the only facility in western Canada that offers this service for electronic products. Recently the Department of Communications accredited the Electronics Test Centre to test telephones for hearing aid compatibility and to test private-line modems, so you see the versatility of the ETC in that regard.

Alberta's electronic industry is using these services, and for the year ended March 31, 1989, the Electronics Test Centre worked on 307 projects for 155 companies. This means that the ETC has assisted 474 companies since it opened just five years ago, in 1985. Also, last year contract revenues increased by 19 percent over the 1988 figure.

During 1989 the Electronics Test Centre and two Alberta companies submitted a successful joint bid to provide an automatic test station that's used to maintain the Canadian Forces F-18 fighter aircraft, and work on this major project is well under way.

The Electronics Test Centre is a very effective instrument in our infrastructural support as it zeros in on the electronics industry, and as you probably know, it's administered really as a department of the Alberta Research Council.

Last but certainly not least, I want to talk about the Alberta Heritage Foundation for Medical Research. With its original \$300 million endowment from the heritage fund, the Alberta Heritage Foundation for Medical Research has really turned Alberta into a renowned centre for medical research.

I think it's appropriate, Mr. Chairman, to point out that during this past year, after the resignation of Dr. Lionel McLeod, who was the original president of the foundation and who retired, we've been very, very pleased to see that the foundation has been able to secure a very prominent person, Dr. Matthew Spence, as its new president. I've had the opportunity of meeting on occasions with Dr. Spence, and he brings to that position a great deal of credibility in the scientific and medical areas and I know will make a tremendous contribution to the work at the foundation in the years to come. Also, the foundation has a new chairman of its board, Mr. Al Libin of Calgary, and because of his experience in the medical area he will indeed bring a great deal of experience and knowledge to that particular position as well.

Since 1980 the foundation has attracted 143 senior scientists from around the globe with really exciting results. In addition, Alberta scientists are achieving international recognition at home, and students and fellows are gaining experience here and abroad for Alberta-based research. I know that when Dr. Spence and Mr. Libin have the opportunity to meet with your committee -I believe it's on November 1 that they are scheduled – they will give you much more detail of their activities and their successes and some of the things they feel are issues that are around the corner, so I won't dwell on that.

I would like merely to point out that among the successes of the medical research foundation funded research in the past year is a functional electrical stimulator, FES, developed by a visiting researcher from Yugoslavia, a Dr. Popovic. This replaces the natural electrical nerve signals to muscles with electrical stimulation and, therefore, allows some people that have been paralyzed by spinal cord injury to walk again. So it's pretty significant work in terms of our human endeavours.

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The search for a cure for diabetes is certainly continuing here as well. It has the potential, obviously, of doing away with the injections which diabetics are so familiar with. Transplanting the pancreatic islets into insulin-dependent diabetics during kidney transplants is showing encouraging results after yet another patient received the procedure.

In addition, a University of Alberta team has a lead on one cause of high blood pressure. Also, a new method for early diagnosis of skin cancer has been developed, and a new formula has been developed that prevents a liver disease common to premature infants fed intravenously. So as you can see, there are a lot of exciting things that are happening through the Alberta medical research foundation.

The medical research foundation's support of developments like these is already attracting money from outside the province, and I think that's a very significant development: money from the federal government, money from volunteer organizations, and money from industry. Right now investments from outside Alberta are contributing over a dollar for each dollar that the Alberta medical research foundation spends.

So, in summary, Mr. Chairman, improved health care, leadingedge electronics, and economic diversification: these are the results, really, of Alberta Heritage Savings Trust Fund support. I am very confident that thanks to this support, Alberta's advanced technology industries in electronics and telecommunications and health care will continue to grow and to develop, and they will become increasingly important areas of activity, contributing economic and life-style benefits to Albertans in the future.

Mr. Chairman, that concludes my introductory remarks. I'd be pleased to entertain any questions from committee members.

MR. CHAIRMAN: Thank you.

I will recognize the Member for Edmonton-Centre.

REV. ROBERTS: Thank you, Mr. Chairman, and welcome to the minister and his officials. Quite a comprehensive overview of what's happened this year, although I think it still doesn't talk in detail about what we in the New Democrat caucus are very concerned about, which is the sale of AGT from being owned by all Albertans to selling it off to less than 10 percent of Albertans. We continue to see no reason that this kind of sell-off of a useful and valuable public utility in this way makes any sense.

What I'd like to see answered today are questions about the impact of this in terms of the individual line service for rural Albertans particularly. We know, for instance, that the cost of hookup for individual line service is about \$40, regardless of location in the province, under the program here, whereas rural Canadians in other provinces have had to spend up to \$5,000 for

their ILS hookup where they might be in very remote parts of other provinces. Rural Albertans have had a great advantage here, and there is every reason to be worried about this advantage now being lost entirely. The minister said that there would be in fact no increases to basic rates for AGT, and that's been proven wrong already, with a 20 to 30 percent rate increase just over the summer.

MR. CHAIRMAN: Hon. member, please move to your question.

REV. ROBERTS: I'm just trying to get at the sense of credibility or lack of credibility on this issue. A number of rural Albertans who have called our offices want to know what assurances there will be that after 1991 drastic increases to commercial rates to pay for individual lines in very remote parts of this province isn't going to be exactly their fate. So I'd like to ask the minister to give assurances today that that in fact won't be the case, as it is in other provinces, once Telus and AGT are fully sold off to the private sector.

MR. STEWART: Well, Mr. Chairman, the hon. member has raised a number of points with respect to the whole matter of the reorganization of AGT which I'd like to respond to. But let me specifically zero in firstly on the ILS. There's no doubt about the fact that the ILS program has been an extremely valuable program for rural Alberta. It's in its last stages; it's over 80 percent now complete, and moneys will be appropriated in the estimates to finalize that particular program.

Obviously, support and service to the rural areas was a very important consideration in the whole matter of the reorganization of AGT, and it was for that reason that we wanted to ensure that there were, in fact, guarantees that the ILS program would continue, would be completed in accordance with the original terms. For that reason, we met on several occasions with the federal minister and also with the commissioner and a deputy commissioner of the CRTC to make sure that at such time as AGT came under the jurisdiction of CRTC, indeed these programs and services would in fact be accepted and become part of the regulatory regime under CRTC. That assurance has been received and it will be carried out. I must say that when we met with those people, particularly the CRTC, their reaction was, "Why on earth would we do anything that would disturb a program such as ILS?" because they regard it, in effect, as a model. The individual line service will complete a program that will see a hundred percent fully electronic digital system, the only one of its kind in all of North America. That's something we're very proud of, and as I say, the CRTC and the federal government as well think that's a model for other jurisdictions to try to aspire to.

Insofar as rates, we have indicated that since the privatization, rates have gone up 20 to 30 percent. That announcement was back in April, and we gave the full reasons for it: because of the disparity that did exist between the long-distance rates that were prevalent here in this province compared to other jurisdictions. That's a phenomenon that's got nothing to do with privatization; it's something that is occurring worldwide. Certainly within North America the long-distance rates have been coming down, and we had to keep competitive with that. That rate increase of \$2, the first rate increase since 1986 or '85 in residential rates, was announced in April and became effective on July 1. We still have one of the lowest service rates of any province or any jurisdiction, and I think we're proud of that. It's a regulated industry. All of the rates and services are regulated in the public interest with opportunities for intervention - public hearings on the whole process - and that, of course, will continue.

As to the matter of only a selected few being entitled to be shareholders of this company, in the whole reorganization of AGT we did one thing that I think was very important: we made an opportunity available to all Albertans to participate in this company through personal ownership. Now, I recognize that the NDP has a certain idea of what ownership really means, and we could enter into quite a debate, Mr. Chairman, as to the difference between state ownership and personal ownership. Nevertheless, all Albertans had that opportunity to invest. They could invest and participate for as little as \$150. We also provided access to that participation by making applications available through financial institutions right across the province. Indeed, 40 percent of all of the people who did invest - and there were a lot of them - were applications for 200 shares or less. So we really did hit the little guy who wanted to participate in personal ownership of AGT. The installment plan made it very attractive for Albertans where we were able to give a special benefit and priority to Albertans.

10:33

The situation that did exist, where you say that all Albertans owned it before the state owned it: no benefit flowed through to the taxpayers whatsoever. The entire earnings of AGT year after year had to be kept in AGT in order to apply against future capital requirements of the company. Indeed, if one wants to talk about ownership, then you have to take all the downside of ownership too. There are certain risks that are involved in ownership, and if the taxpayers were to remain as the NDP indicate, "owners" of AGT, then they have to assume all of those risks and all of those obligations in a changing telecommunications industry which is very capital intensive. If the taxpayers were to remain as owners, then there's no doubt that they would be required to come up with at least \$2 billion in the next three to five years alone just to keep up with that. We felt that sort of capital investment should not come from taxpayers but should come from investors who are prepared to take risks.

So there is a tremendous benefit, I believe, Mr. Chairman, to the company in being able to move into the private sector with a great deal more flexibility to capitalize on a growing market in telecommunications, a \$300 billion market by the year 2000. It was a great opportunity for the company and its employees, 84 percent of whom participated fully as owners of this company, and it's a great benefit, I believe, to the taxpayer of Alberta. Over \$300 million will be applied against the accumulated debt of this province, and as I say, we have removed the taxpayer from the obligations in providing future capital.

MR. CHAIRMAN: Thank you, hon. minister.

If I could just make a comment prior to your supplementary questions. The Chair has to insist that members of the committee be more concise and more focused in their questions to the minister. In that leading question there was a great deal of preamble. In actuality there were three questions in there which took an inordinate amount of time for the minister to answer. It's not fair to the balance of the committee members who are waiting to get in with their questions that they've prepared.

The other thing I'd like to make clear is that questions would be appropriate from the committee on individual line service, the Electronics Test Centre, microchip design and fabrication facilities, and Alberta Government Telephones. I would ask that committee members keep their questions focused on those particular projects that have been funded by the Heritage Savings Trust Fund.

Now, hon. member, the Chair is going to allow you your two subsequent supplementaries when in reality he's stretching a point. REV. ROBERTS: Mr. Chairman, I think this is outrageous. We have been sitting here since quarter after 10. The minister has had about 20 minutes for his comments. My question took just over a minute. It might have had some other implicit questions in it in a very broad area, but the question was about individual line service to rural Albertans. I took less than a minute to ask that question. He's had 20 minutes to put his questions and responses to it.

I want to get back to the minister and ask: after 1991 when rural Albertans want to have a new individual line service in their new homestead, their new farm – if we're going to turn around the rural depopulation of this province and people go back out to rural Alberta – how much is it going to cost to hook up their telephone service? That's all I want to know from this minister. I don't like being berated by the chairman for having ...

MR. CHAIRMAN: Thank you. We've heard the question. We'll turn it to the minister to respond.

REV. ROBERTS: That's my question. In 1991-92 how much is it going to cost to . . .

MR. CHAIRMAN: Hon. member, you've asked your question. It's put to the minister, and we'll look to the minister for a response.

REV. ROBERTS: Yeah, and it'll take him two minutes to respond . . .

MR. CHAIRMAN: Hon. member.

MR. STEWART: Well, we'll try, hon. member, to be very concise and direct.

The same sort of rate structure and services that relate to the completion of the individual line service will prevail under CRTC. The program itself insofar as individual line hookup will be completed by March 1991. We haven't got that much farther to go. We're over 80 percent complete, and we have that assurance from CRTC as part of their orders.

REV. ROBERTS: Thank you.

MR. CHAIRMAN: Your final supplementary, hon. member.

REV. ROBERTS: My final supplementary has to do with the \$151 million that's been put into the program already, \$151 million that we as taxpayers in Alberta, as owners of the trust fund, have wanted to give to rural Albertans to continue this very valuable service. How can the minister, then, in any conscience, just give up on that \$151 million, not expand it beyond 1991, and give it instead to Telus, a private-sector operation? And God knows what's going to happen after that in terms of public funding for that very valuable service. Why just put \$151 million and give it away to others when it really is our money, our investment, and should be kept for all Albertans, particularly rural Albertans?

MR. STEWART: Well, by 1991 all Albertans will have individual line service hookup. That money has gone to that very important objective. As you say, without that the costs of that sort of hookup would have been significant. They would have amounted, in some cases, to maybe as high as \$4,000 for an individual hookup. The program was a very successful program and will be completed on time and in accordance with the existing rate regulatory regime. The Member for Wainwright, followed by the Member for Edmonton-Meadowlark.

MR. FISCHER: Yes. I'd like to ask about the Electronics Test Centre. You mentioned that it has a possibility of expanding. I believe it was that. Or was it the microchip? I think you mentioned the Electronics Test Centre with the expansion. Anyway, could you give me a bit of a review of how you charge for the service, and what kind of dollars? Is it self-supporting? If there is room for expansion, can you elaborate a little bit on the financial side of it as well?

MR. STEWART: I guess it's expanding more in terms of its capabilities as opposed to expanding in bricks and mortar and so on, although it has to expand in terms of its own equipment in order to provide the appropriate evaluation and testing that is expected of it in more diverse areas. It is operating at the present time with a budget of approximately \$1.4 million. It receives the bulk of its funding through the Alberta Research Council, but it obtained about \$525,000, as a matter of fact, last year on contract revenue. Its contract revenue is really the important thrust of it, and they're trying to increase the amount of contracts undertaken and, therefore, the revenue received. But that's where its efforts are, and that's where its expansion is. It's expanding in the types of things that it undertakes and its overall capability. That's the nature of the expansion.

MR. CHAIRMAN: A supplementary.

MR. FISCHER: You also mentioned that in connection with the university they did a fair bit of training with the students. Is there any money changing hands for that, or are there dollars that go into the electronics centre to pay for some of that? Is it an instruction organization as well? Do they have classes and so on?

MR. STEWART: The hon. member, Mr. Chairman, may be referring to the Alberta Microelectronic Centre, which has a tiein with the university in the training and opportunities for researchers to actually utilize their facilities.

The Electronics Test Centre operates more as an arm of the Alberta Research Council. In fact, it's physically present right at the Mill Woods facility of the Alberta Research Council. So it's the Alberta Microelectronic Centre that has the capability and the opportunities for university students and researchers to be involved, and they do have a number of training sessions along with their ordinary operations that they carry out.

MR. FISCHER: So the micro centre, then, is completely funded by the Research Council?

MR. STEWART: The Electronics Test Centre is funded through the estimates of the Alberta Research Council and, in addition to that, has contract revenue from private industry.

10:43

MR. FISCHER: Thank you.

MR. CHAIRMAN: That's all your set of questions? Thank you.

The Member for Edmonton-Meadowlark, followed by the Member for Calgary-Fish Creek.

MR. MITCHELL: Thank you, Mr. Chairman. My first question concerns the sale of AGT as well. Given that about 60

percent was sold for \$900 million, that would place the value of this firm at a total of about \$1.5 billion. Given also that that company has a \$1 billion debenture with the Heritage Savings Trust Fund, is it the case that two-thirds of the revenues from the sale ultimately will go to pay off the entire debenture?

MR. STEWART: Mr. Chairman, the debentures that the Heritage Savings Trust Fund held in AGT were converted into shares on a market value basis. A portion of those shares was then part of the public offering. As you know, the public offering was for approximately 56 percent of all the common shares. After that offering the Heritage Savings Trust Fund would now hold approximately 60 million shares. At the same time, it has received net proceeds from that first public offering of nearly \$540 million. So that's the current asset status of the Heritage Savings Trust Fund as it relates to Telus Corporation.

MR. MITCHELL: Does that mean, therefore, that if its share – that is, the heritage trust fund's portion of ownership of AGT – is worth about \$500 million . . .

MR. STEWART: Seven hundred and twenty million.

MR. MITCHELL: It's worth \$720 million? Okay.

MR. STEWART: On the basis of \$12: at the original price.

MR. MITCHELL: Okay. I guess I just want to confirm that it's getting more, ultimately, than the value of its debenture therefore.

MR. STEWART: Yes. As a matter of fact the Heritage Savings Trust Fund realized a gain by virtue of the conversion over and the fact that there was a bump-up on the issue price. So they, in effect, received in total dollar value a greater amount than was represented by the debentures.

MR. MITCHELL: Good. Given the significance of its holding, are there restrictions on how quickly it could sell those shares? Maybe some of these things you can't really talk about, but what is the long-term plan for Alberta heritage trust fund's investment in AGT, then, as an equity investment? Have they got a schedule for getting out? Do they want to get out? Do they want to hold?

MR. STEWART: Well, Mr. Chairman, we have given an indication right from the very beginning that it would be our intention to divest ourselves of all the shares of Telus Corporation, save and except of course for the special share, the golden share, that is retained. The program for that divestiture has to be developed in accordance with whatever market conditions will prevail, but it will be, hopefully, more short term than long term. I think that basically the investors want to make sure this company operates as a fully flexible private-sector corporation unencumbered by some of the constraints that sometimes come through involvement of government.

MR. CHAIRMAN: Thank you.

The Member for Calgary-Fish Creek, followed by the Member for Calgary-Mountain View.

MR. PAYNE: Mr. Chairman, I'm wondering if we could return to the fascinating area of the Alberta Microelectronic Centre. My interest was caught by a reference on page 23 in the 1989-90 fund annual report, specifically the reference to the new ASIC microchips. There's an indication that these new microchips will be making a significant technological or scientific contribution to a variety of areas, and there's one reference to the drilling industry that I'd like to address. I wonder if the minister could advise the committee how significant that particular development is, the ASIC microchips, for downhole well instrumentation. Just how significant is that for the industry?

If I could just tuck in a second part of that: how rapidly is the industry taking advantage of this microchip development?

MR. STEWART: Well, Mr. Chairman, this almost sounds rehearsed, which obviously it isn't. Mr. Broadfoot came into my office this morning and said, "I wonder if the committee would be interested in a little show-and-tell." He brought with him some of the actual chips and the instrumentation that I think relate to the downhole apparatus.

MR. PAYNE: My opposition colleagues will never believe that this wasn't planned.

MR. BROADFOOT: Mr. Chairman, may I just go across so they can see this?

MR. CHAIRMAN: I suppose that's acceptable, if we have no opposition from any of the members.

HON. MEMBERS: Agreed.

MR. BROADFOOT: This is an example we use to show what the Alberta Microelectronic Centre can do. This actually came from downhole circuitry. This was the old piece of equipment that the company had before they went in to see AMC. What came out after the design and work with the company was a product like this. The significance of this is that this product here replaces five original circuit boards; it reduces the chip count from 68 to four and the area size by a factor of eight. So obviously what happens here is that the quality, all the aspects of manufacturing, and the cost go down plus the performance goes up. This is typical of what they do, and it's just one visual way of understanding what's happening over there. That's all.

MR. PAYNE: My question was industry take-up of the development though.

MR. BROADFOOT: Do you mean: is industry participating significantly with AMC?

MR. PAYNE: Yes.

MR. BROADFOOT: Yes, they are. There is a portion of AMC's income, of course, that comes from contract work. It's about \$900,000 a year out of a total budget of just over \$3 million. But they aren't going to break even.

MR. PAYNE: Mr. Chairman, I wonder if I could direct my first supplementary also to Mr. Broadfoot inasmuch as he has the floor. Page 170 of last year's *Hansard* is my reference. In response to my question last year regarding research and technology exchange, Mr. Broadfoot reported that the AMC president was planning a trip to Silicon Valley in California partly to see what could be brought back to the AMC for the benefit of Alberta companies. I'm wondering: could the minister or the deputy update the committee regarding that potentially useful networking? MR. STEWART: Well, we have had a number of opportunities to talk about the Alberta Microelectronic Centre in areas outside the borders of Alberta, and I mentioned in my opening comments the type of thing that we are now realizing is the capability of this centre to meet international requirements of corporations. I mentioned the Toshiba situation, and that directly resulted from that sort of contact. Some of the small pieces of the Toshiba laptop computer, that token ring assembly, are now developed right here in Alberta. So I think that's an indication of the type of applications.

I think what we want to see is that the AMC will operate significantly on an industry-driven and market-driven basis and ensure that the types of things they devote their time and resources to are ones that will indeed bring economic development and growth to our province. At the same time, we recognize the research and educational opportunities that can exist through the facility, and so there's a balance there.

MR. PAYNE: Mr. Chairman, I realize that the Alberta Microelectronic Centre was funded by establishing grants from the heritage fund and now operates without heritage fund assistance. However, I wonder if the minister could advise us whether new capital investment from the heritage fund will be required to maintain AMC's enviable position as a leading-edge technology centre.

REV. ROBERTS: On a point of order there, Mr. Chairman.

MR. CHAIRMAN: A point of order?

10:53

REV. ROBERTS: Yes. If you're going to allow that question, which I think is a legitimate question, then I think you must allow other questions which are of a similar nature which have been posed to other ministers and have been disallowed at other times.

MR. CHAIRMAN: The Chair has to apologize in that it was distracted momentarily.

MR. PAYNE: I'd be happy to repeat the question.

MR. CHAIRMAN: Would you repeat the question for the benefit of the Chair? Then I'll rule on it.

MR. PAYNE: Well, I acknowledged that the AMC was established by grants from the heritage fund initially and now operates without heritage fund assistance.

REV. ROBERTS: End of question. Right?

MR. PAYNE: But my question was then: will new capital investment be solicited from or be required from the heritage fund in order to maintain AMC's position as a leading-edge technology centre?

MR. CHAIRMAN: Frankly, the Chair doesn't have a problem with the question.

MR. MITCHELL: Mr. Chairman.

MR. CHAIRMAN: Yes. On that point of order?

MR. MITCHELL: Yeah. I'd just like to pursue that point. I agree that that question should be allowed. I just ask that the chairman consider that on many occasions in the past I and my

colleagues in the opposition have asked questions about possible potential expenditures of Heritage Savings Trust Fund money which have been ruled out of order because they haven't been related specifically to a program or a project that is currently being invested in utilizing Heritage Savings Trust Fund money. So I would hope that in the future the chairman's clear openness on this particular question would be translated to members of the opposition as well.

MR. CHAIRMAN: Let's be clear though. What the Chair has endeavoured to do is allow questions relating to projects that have been or are funded by the Alberta Heritage Savings Trust Fund. What the hon. member has asked is a question of possible additional expenditures from the fund for a project that has been funded in the past by the Alberta Heritage Savings Trust Fund. With those parameters I believe the Chair is legitimate in allowing the question. But the Chair has trouble allowing a question about whatever may be funded by the Heritage Savings Trust Fund in the future; there I think we're getting out of bounds. But the Chair will allow a question on a project that has been funded by the Alberta Heritage Savings Trust Fund. Just so we understand the parameters.

Hon. minister.

MR. STEWART: Mr. Chairman, the answer to the hon. member's question I think is clear: in time there will be further amounts required. I say that because of the current situation AMC finds itself in relative to its facilities and the fabrication centre in particular. They're located in a building at the University of Alberta. I've forgotten the name of it, but that building is destined for either drastic repair or indeed some change. It means that the fabrication facility itself may have to be relocated. In any event, because of the increasing capacity that is required for the fabrication facility, the board of the AMC has indicated that they will want us to give a full assessment for the potential of a new fabrication facility. That assessment is ongoing at the present time along with our assessment to complete the infrastructural support systems of applied research in the province. So that is something that may be around the corner where we would be asking for some further capital, but that hasn't been determined as yet.

MR. PAYNE: Thank you, Mr. Chairman.

MR. CHAIRMAN: The Member for Calgary-Mountain View, followed by the Member for Lacombe.

MR. HAWKESWORTH: Thank you, Mr. Chairman. I believe the minister has set the context for my questions this morning. As I take it from his answers, the Heritage Savings Trust Fund is now the major shareholder of Telus by virtue of a \$60 million stake as a result of the sell-off of shares of Telus to the investing public.

MR. STEWART: Excuse me. May I interrupt the hon. member? It's not \$60 million. It's 60 million shares.

MR. HAWKESWORTH: I appreciate that. I'm sorry.

MR. STEWART: It's \$720 million.

MR. HAWKESWORTH: Fair enough. Thank you for the correction. I meant to say 60 million shares.

We know, Mr. Chairman, that the government seriously botched this sell-off by first issuing a prospectus which contained false earning projections for NovAtel, and as a result, it had to be amended before the share offering was closed. In order to prop up market confidence and to maintain the share value, the government committed Alberta taxpayers to indemnify the shareholders by at least \$21 million this year to make up for those seriously understated financial projections for NovAtel. As well, if the Bosch company, which had offered to buy 50 percent of NovAtel, pull out of their offer, then the taxpayers are committed, as I understand it, to buy NovAtel in its entirety from Telus, which might cost us another \$150 million or so.

So in view of this indemnification of the shareholders which has been given by the government . . .

MR. CHAIRMAN: Hon. member, do you have a question?

MR. HAWKESWORTH: You bet.

MR. CHAIRMAN: Could you come to it, please?

MR. HAWKESWORTH: You bet. I would like to ask the minister this question. Because in the prospectus the certificate of the undertakers – the underwriters; a Freudian slip – certified that the prospectus was a full, true, and plain disclosure of all material facts and did not contain any misrepresentation likely to affect the value or market price of the securities, I'd like to know, given their seal of approval, what is the liability of the underwriters to indemnify the shareholders? Why is it that it's entirely on the backs of the taxpayers to indemnify the shareholders, given this statement? Don't these underwriters have some obligations as well?

MR. STEWART: Well, Mr. Chairman, there are two aspects to the hon. member's question: one that relates to the indemnification and one that relates to what is referred to as the put, whereby Telus, under certain circumstances, can require the government to purchase back the assets of NovAtel.

Let me deal with the latter one first, because the hon. member is absolutely wrong in saying that the taxpayers of Alberta might be required to come up with the dollars to pay that. The fact of the matter is that what we would be doing if that eventuality ever did occur is returning to investors part of the money they have already paid. They paid for a complete package of Telus, including all of its assets and including, obviously, a small portion of those assets which relate to NovAtel. They paid the full price for it. If we were required to take some of that package back, then we'd give them back part of the moneys they paid to us. So to say that that is a cost to the taxpayer is absolutely wrong.

The indemnification was a very ... Well, let me just say a word, Mr. Chairman, about how it arose, because the hon. member has reviewed that. The figures that were put forward by NovAtel in the first instance looked at the next six months. They were forecasting ahead for the balance of 1990 and the earnings anticipated over that period of time, using the best information that was available to them and, in particular, the type of sale contracts that were in place, particularly in the United States. He's quite right; the figures that the company came up with were indeed subject to audit. In fact, two sets of auditors went over those figures. The directors of both NovAtel and Telus were then required to do due diligence, and they signed off. Then 11 underwriting firms had to do their due diligence and sign off with respect to it as well.

Circumstances that related to the fact that the expected sales from the United States retail customers were going to be much less than first anticipated: that information came about in the August statements from NovAtel and came very unexpectedly, primarily due, as indicated in the amended prospectus, to the fact that there was a tremendous and sudden softening and cancellation of those contracts. Over 50 percent of their sales were from the United States. Whether that is due to the Persian Gulf situation or fears of recession or whatever, nevertheless it happened, and it happened suddenly. So we – "we" being the offerer, I suppose, of the shares – had made representations, in effect, by endorsing the figures as they had come through that process. We felt compelled to make sure that Albertans would be dealt with in a fair way, and we indicated that there would be an indemnification to the extent that in 1990, and it doesn't go beyond 1990, those income projections turned out not to be fulfilled.

11:03

You should keep in mind however, hon. member, that 44 percent of this company is owned by the Heritage Savings Trust Fund, so while you may talk in terms of \$21 million, actually about \$11.7 million is the figure that really relates to investors other than the government itself. But it was an important thing to do to preserve the integrity of that offer. Without that, the offer might not have gone forward. If we had cut out NovAtel totally and said that we'll reduce the price, reducing the price by just 25 cents would have meant \$20 million.

So it was a decision – I believe the right decision – to preserve the integrity, to make sure of the ultimate benefits that flow through to the taxpayer; namely, to have 300 million applied towards the accumulated debt of this province plus to remove the government and the taxpayer from having to put up the capital in the future. These were important reasons why that had to go through.

I'm sorry to take so long, Mr. Chairman. But just to get to the specifics of his question with respect to the liability of the underwriters, that's a legal question, and I'm not capable of giving an opinion with respect to that, but all aspects that relate to the forecast deficiency are being looked at very closely. We got on that right away after the circumstances came to light, and in due course we will determine to what extent those were within the control of NovAtel and to what extent they were beyond the extent of NovAtel.

MR. HAWKESWORTH: Mr. Chairman, the minister made reference to due diligence, which means, as he knows as a lawyer – I guess we could oversimplify it by saying that the government here would have a defence to any civil action or liability as a result of the issuing of the securities if they had carried out due diligence in the examination of the company for which the securities were being issued. Had the government known before September 10, when the final prospectus was issued, they could have made some minor adjustments to the pricing of the shares and made the correction fairly easily. But because of this surprise after the final prospectus and the seriousness of having to make an amendment after a final prospectus had been issued, the government was forced to overreact. Clearly, if people had been doing their due diligence, this information ...

MR. CHAIRMAN: Hon. member, we're really looking for that supplementary.

MR. HAWKESWORTH: ... [inaudible] before the final prospectus was offered. So I'd like to ask, because this indicates some serious internal problem in my view, by failing to do their due diligence prior to the issuance of the final prospectus, what assurances ...

MR. CHAIRMAN: Hon. member, if you don't move to your question, the Chair really has no alternative but to assume you don't have one and move on to the next speaker. So I would ask that you please put your question to the minister.

MR. HAWKESWORTH: Thank you. If they didn't do their due diligence in this regard, what assurances do we have that they did it in regard to the rest of the prospectus and that the government and the taxpayer are not then subsequently liable for any losses that might be incurred by the investors? Are the taxpayers going to be liable for any further losses as a result of the errors made by these persons in NovAtel and Telus?

MR. STEWART: The indemnification, Mr. Chairman, relates to 1990, and 1990 only, and the projections that were made in relation to the income anticipated for the last six months of the year.

The situation is that the prospectus contains many things, most of which are fact, things that are in there by virtue of looking back and being able to identify exactly what the situation is and representing that situation to individuals. An estimate of future earnings is, of course, part of a prospectus as well, but a smaller part of it. I would suggest that if one were to have to look ahead the six months and try to forecast and to give due diligence to what might be anticipated by way of oil prices, you would mayhap have a little difficulty as well from the standpoint of giving an accurate and precise assessment of it. The due process that was followed was in keeping with all of the underwriting procedures that are normally followed in an [inaudible] of this nature. That was followed, but we did not sit back and we acted on the situation as we found it. The hon. member suggests: well, you could have adjusted the purchase price. As I have indicated earlier, yes, we could have adjusted the purchase price, but if we had adjusted it even by a reduction of 25 cents, that would have definitely cost \$20 million.

MR. CHAIRMAN: Your final supplementary, hon. member.

MR. HAWKESWORTH: Well, I still don't understand, Mr. Chairman, how a change that radical could take place inside a period of less than about eight days, from September 10 to the time that this was first reported to the minister or the people in charge. Now, according to the prospectus, the share purchase agreement between Bosch and NovAtel was dated July 24, 1990, near the end of July, and the preliminary prospectus was published very shortly after that, in early August, and it was those projections that were carried over into the final prospectus, which then had to be corrected in the amended version.

My question to the minister is this. Presumably in reaching agreements between NovAtel and Bosch, certain revenue projections were provided to Bosch and that was the basis for the agreement entered into between them and NovAtel. Would the minister confirm that NovAtel found themselves in a corner in that they realized that the projections were out of whack but they had already provided them to Bosch as a basis for this share purchase agreement, and they had to go on with them because had they not used those projections, Bosch might have withdrawn in the middle of the share offering, which would have equally had a negative impact on investor confidence in Telus and its share offering?

MR. STEWART: Mr. Chairman, part and parcel of the negotiations leading up to the agreement that was reached between Telus and Bosch involved an opportunity for Bosch to have full access to all the financial information in NovAtel to make their own judgments. They needn't rely on something that

was forecast or not forecast by NovAtel management itself. They had every opportunity to assess NovAtel on its merits and to therefore enter into an interim agreement. Bosch found that NovAtel fit their long-term objectives. The agreement was therefore put together, and it would be anticipated that while the agreement is subject to conditions, as any agreement of that nature would be, we have seen nothing that would indicate that there's any material change in the nature of the agreement or the things that may flow from it.

MR. CHAIRMAN: Thank you.

The Member for Lacombe, followed by the Member for Three Hills.

MR. MOORE: Thanks, Mr. Chairman. I would just like to look for a moment at the financial end of the Electronics Test Centre and the microchip design and fabrication facilities. I understood from the minister – I think it was 900 consultations and 60 projects processed and so on, so they're very active over there. The Member for Wainwright asked the question about revenue generated, and he basically said it was contract revenue and this was a source of income for those facilities. What I would like to know, Mr. Chairman, is: what percentage of the operating costs do we recover from contract revenue?

11:13

MR. STEWART: On the Alberta Microelectronic Centre the portion is approximately one-third. The operating budget as disclosed in the annual report is about \$3.1 million, of which approximately \$1 million is from contract revenue. The other portion of the operating funds have come through the department and through our estimates.

MR. MOORE: What consideration has been given to increasing the user fee, if we want to use that word, to the industry? They get the financial spin-off from all the results. Shouldn't they be paying a larger portion of that rather than going to general revenue?

MR. STEWART: Mr. Chairman, I should have completed my answer, I suppose, and the other part of that was the Electronics Test Centre. About 40 percent is the figure there from contract revenue as a proportion of the total operating budget of the Electronics Test Centre.

On the supplementary question, Mr. Chairman, the answer to that, basically, is that the work that is done on a contract basis is done at four appropriate rates that are prevalent. The question is whether or not we can increase the number of projects that come into the test centre to increase that contract revenue. That has, in fact, been one of the objectives of the Electronics Test Centre, to increase that, and as I indicated, there's a 19 percent increase in the past year. So that objective is being achieved, albeit perhaps not as quickly as we would like. They undertake through their capability a greater number of projects and in that way increase the contract revenue. It should also be pointed out, though, that a lot of the Electronics Test Centre's operating budget goes into providing clinics and seminars and so on. So it's an outreach type of thing as well that may bring, in the final analysis, more contract revenue back to ETC but, in the meantime, is sort of a cost of providing that sort of service that is not realized through contract revenue entirely.

MR. MOORE: My final supplementary, Mr. Chairman. If utilization is a solution to reducing the drain on the general revenue, when do we arrive at a point in time when utilization is up to where we could probably privatize this and say to the high-tech industry that you can form a consortium or whatever and take over this operation and return to the heritage trust fund that capital that we've invested there? We're doing it because it's in the infant stage; we're helping it along. But there must be a point in time when it would have to be privatized; it doesn't become part of government.

MR. STEWART: Mr. Chairman, it's a very good question. I would think that before we could anticipate any opportunities for privatization of the Electronics Test Centre, we would have to have those contract revenues up higher, at least to the point where they would be attractive, obviously, for a private-sector investor. But they are increasing - as I say, 19 percent last year - so it's moving towards that potential. In the meantime, it's critical that the Electronics Test Centre be retained because of the valuable role it plays in the infrastructural support to industry here. I mean, this is, as I indicated in my opening remarks, the only one of its kind in this part of the country. It's receiving increasing certification and endorsement opportunities for a variety of industries and companies and moving across the borders of Alberta. So it's something that we feel is worthy of support as it goes along, but indeed there may come a time when the contract revenues have reached the point where other options might be considered.

MR. CHAIRMAN: Thank you.

The Member for Three Hills, followed by the Member for Clover Bar.

MRS. OSTERMAN: Thank you, Mr. Chairman, and good morning to the officials and staff and of course the minister, who holds a very exciting portfolio in my view, particularly the part that deals with telecommunications and research.

I wanted to just make an observation as a rural member, Mr. Chairman, if I might. It's not a question, but just to say that obviously the individual line service is something that is just fantastic for my constituents. I hope that agriculture, at least the grain sectors, will improve to the point that some investments will be able to be made by individual farmers to access the kind of information that I believe will be available to us eventually through having our individual line service. It's been very, very important and something, as I understand from my travels, that is unheard of anywhere else in the world. In some of the countries that are well known for their high technology – for instance, Germany – their telephone system and so on leaves a lot to be desired. So we certainly are ahead of the game there.

My question, Mr. Chairman, deals with the research area. I'm wanting the minister to help me understand the various components of the research that is being done, whether we're talking about the microchip facility or whether we're talking about a purer kind of research that is going on funded through the heritage fund. Are there vehicles existing which in the end would see some patents or whatever accruing to government or to an entity sponsored by us that will pay dividends in the future?

MR. STEWART: Mr. Chairman, I thank the hon. member for her comments with respect to the individual line service, because I certainly concur with the things that you've mentioned relative to the opportunities that exist in the future.

On the Alberta Microelectronic Centre, a very important component of its activities and operations lies in the research area. I may have indicated – I'm not sure – in my opening remarks that there are 16 fellowships, 20 researchers that are doing pure research, and that is an important component of the University of Alberta. Those linkages are absolutely important.

Specifically with respect to some of the things that may evolve from that, there may be certain opportunities that exist in certain sensors and things of that nature where microelectronics has such an application for licensing agreements to be entered into where they can have a proprietary right to the technology that is being developed. Wherever that is possible, those sorts of things are pursued. We're not just there to provide something without a fair and reasonable type of arrangement that would see the benefits come back to the taxpayer who, in effect, has supported throughout these many years that sort of infrastructural facility. The Electronics Test Centre is not quite so appropriate in that regard because it is more of a testing and evaluation type of process.

MRS. OSTERMAN: Thank you to the minister for his response. Then just following up on that, as I understand it, when we look at the number of people that are here, with probably most of them at the forefront of their field doing research in various areas, obviously this is what a lot of postsecondary institutions would call the creation of the critical mass that then attracts other people. Has the minister information in terms of individuals or particular research areas that are being looked at now by others outside our own jurisdiction because of the critical mass that has been created here? In other words, are there at this moment various communications going on that would lead us to conclude that we're going to be moving into related areas, building on what we have right now?

MR. STEWART: There's no doubt, Mr. Chairman, that the infrastructural support system of our province in the applied science area has been very instrumental in attracting companies, individuals . . .

REV. ROBERTS: Like Myrias.

MR. STEWART: That was not attracted from anyplace. That was a corporation that was built from start here.

The infrastructural support, though, is important. We have had and continue to have a number of discussions with some very significant corporations that are thinking about Alberta as a place to call home in the future because of that infrastructural support and the building critical mass in the advanced technologies. I mean, the advanced technologies are growing significantly in this province, at the rate of 15 percent per year. We have companies like Hughes Canada, whose president said to me, "Look, we wouldn't be here if it weren't for things such as the Alberta Telecommunications Research Centre and some of the things that are happening in telecommunications." Alberta is the leader by far in telecommunications in Canada. Now, that's aside from the Alberta Microelectronic Centre, but the centre itself is an integral part of the telecommunications industry through the provision of ASICs, which very much dovetail with the telecommunications industry.

11:23

So all of these pieces do fit together and do, in fact, result in us having an expanding reputation and capability in this province that I think is going to see, by the year 2000, 25 percent of all the manufacturing shipments from this province being from the advanced technologies.

MRS. OSTERMAN: Thanks, Mr. Chairman, and to the minister, that's very exciting.

The last component of my question relates to the pieces that the minister talked about. Some of us have had the opportunity to visit the University of Alberta as one entity where there's some very exciting research going on. I wonder if the minister could describe the relationship between the various components that are funded out of the heritage fund, the research that is going on there, and the universities in the province. I ask that question, Mr. Chairman, because we often hear concerns about funding of our postsecondary institutions. Do we put any additional stress on those institutions with respect to the kind of exciting relationships that are possible? If they don't enter into them, they lose that, but if they do, is it putting a stress on their funding base or other programs?

MR. STEWART: Mr. Chairman, I think it expands the opportunities that exist for the universities. The linkages with the universities and the research capabilities of the universities is a very, very important part and what we're trying to build upon. For example, when we go into something like a Westaim project, we insist that that agreement involve those sorts of linkages that will make sure that there are opportunities for research and the linkages with the strengths within our universities in those areas. So I don't think you would in any way detract from or inhibit the effectiveness of research within those institutions. I think it expands it, because they have opportunities now. As I say, there are 16 fellowships in AMC, 20 people who are researchers that are utilizing the facilities of the Alberta Microelectronic Centre. Without such a facility, we wouldn't have the opportunity of that research existing nor, obviously, would the university, because the amounts of capital that are required for this sort of infrastructural support are very significant.

MRS. OSTERMAN: So just to clarify, Mr. Chairman, the minister's saying that the university isn't put in a position of trying to take funds from one area to fund another area. The research question is a separate one not related to the ongoing funding of the university on a per capita basis or whatever.

MR. STEWART: Yes, I think that reflects it. I think I should add there, as well, that with this infrastructural support system more and more money comes in from the private sector on given projects, and we're seeing that. So the opportunities that exist for infusions of capital from the private sector are increasing all the time and must increase, because all the statistics show in Canada, for example, that we are lagging in research and development totally by quite a measure. From the standpoint of industry itself, there's not a sufficient commitment to R and D from the private sector yet. So any ways in which we can increase that - it's certainly very, very important to our longterm strategies.

MR. CHAIRMAN: Thank you, Mr. Minister.

The Member for Clover Bar, followed by the Member for Lloydminster.

MR. GESELL: Thank you, Mr. Chairman. My questions relate to the item of recovery of investment. I see the Alberta Heritage Savings Trust Fund as a catalyst to initiate some of these new fields of technology, and I think the Alberta Microelectronic Centre and the Electronics Test Centre are two of these new fields that we should be moving into. Now, the minister has indicated in response to earlier questions that there may be in the future some further investment required. He also indicated that there has been considerable growth as far as project work is concerned; I think he indicated 19 percent. I'm not sure which one that applies to, maybe both of them, but the numbers are very impressive, when we have under the Microelectronic Centre some 900 industrial consultations and under the Electronics Test Centre some 307 projects dealing with 155 companies. I can see the point in time where this contact with the private sector and this assistance gets to the point where we actually might recover that investment. I see that as a strategy. Is there a definite intention, is there a guideline in order to achieve that?

MR. STEWART: It certainly is a strategy, Mr. Chairman, from the standpoint of expanding the solid base of infrastructural support, because we believe we get a multiplier effect from every dollar that is invested. Some people have put forward the figure of 10 to 1 as being an appropriate figure that represents that sort of multiplier effect. But what we want to do is have an infrastructural capability which the private sector can tap into in their research and development, we want an infrastructural capability that will attract industry to Alberta, and we want an infrastructural capability that will be a base for the development of an advanced technology industry in this province, which is expanding, as I mentioned, at the rate of 15 percent per year. We now have 50,000 people, Albertans, that are directly employed in the advanced technologies totally and probably another 50,000 that are indirectly employed as a result of that. Someone told me a short time ago that the number of employees in the oil and gas sector in Alberta at the present time is about 80,000. So when we see 50,000 in the advanced technologies, you can get some appreciation of the growth in the advanced technologies as an arm of our diversification policies, and it's working.

MR. GESELL: If I may, in my supplementary I'd like to maybe deal with an item that I feel is important in rounding out the technological research that is being done. The minister indicated that research results may result more from the Microelectronic Centre because the testing and evaluation is slightly different. However, even in the testing and evaluation portion that the Electronics Test Centre produces, I would expect there would be some innovative new apparatus that's devised in order to test certain other applications. What do we do with respect to commercialization of some of this research, the results that we achieve or even the intellectual property that's generated by either one of these centres? Is that an avenue that might derive some benefit to this total area that we're moving into?

MR. STEWART: I think, as I indicated earlier to the hon. Member for Three Hills, there are more opportunities in the Alberta Microelectronic Centre for that sort of thing to happen than in the Electronics Test Centre. The Electronics Test Centre is indeed expanding the number of areas within which they have a capability for certification and endorsement of materials and equipment, but the Alberta Microelectronic Centre is developing, through research, the types of new opportunities that may give rise, hopefully, to commercial application. To the extent that patents can be developed or licences entered into, then there are opportunities for an increasing amount of revenue to flow from that. But we really believe the commercialization of this research is a primary objective. That's why to move from basic research to applied research, which is the area of infrastructural support we're talking about here, is so critical as a stage leading towards commercialization. You're quite right; the importance of that sort of opportunity for commercialization and taking advantage of that research is a very important objective of our department totally.

11:33

MR. GESELL: Mr. Chairman, on my final supplementary I'd like to deal with interaction with the research we're doing in other areas. Now, I know that the Member for Three Hills talked about universities, and there have been some questions from the Member for Calgary-Fish Creek about contact with California. But other countries – I'm talking on an international scale here – may be doing similar types of work. Japan, for instance. Are we interacting with those research centres in some fashion? I see that interaction as a positive, because when one person is doing particular research and another might be doing that in a related field, the contact between those individuals might generate what we call a creative leap and get off into some new area of research. Are we actively pursuing that type of interaction in order to stay on the very leading edge of this particular technology?

MR. STEWART: I think the hon. member is right on insofar as what will happen in the future. What will happen in the future is more technology transfer, where everybody is not inventing the same wheel. We'll be able to build upon the type of research that has already been done in international circles. Just recently our department concluded memorandums of understanding in both Hungary and Belgium, where there are significant opportunities for technology transfer. Indeed, another region of Belgium – namely, Flanders – will be here shortly, in November, to sign a further memorandum of understanding.

What we're endeavouring to do is build upon the strengths of Alberta. We're not just out there to find technology transfer, the technology of which might not be appropriate for Alberta. We have to build upon the strengths of Alberta. So the types of technology that we're interested in are in strategic areas: biotechnology and advanced industrial materials, electronics and microelectronics, and telecommunications, that sort of thing. Our technology transfer endeavours are directed in those areas.

But you're absolutely right; there are those opportunities. We look forward to that increasing with contacts within Europe, and indeed with the Pacific Rim as well, but particularly now with Europe and some of the opportunities that exist there.

MR. CHAIRMAN: Thank you.

The Member for Lloydminster, followed by the Member for Edmonton-Centre.

MR. CHERRY: Thanks, Mr. Chairman, and to the minister and your support staff. I, like the Member for Three Hills, want to compliment the government for the ILS program. I think to go to the ILS program was one of the best announcements we ever heard, and that was in 1986.

Understanding that there was a cost of \$500 and some and then you got \$100 back and we're back on target again, I just want to go on to the natural gas. There was a difference whereby when the program was going through, if you took it, then you got a certain rate. If you went back on an infill, then it cost you more. I guess my question is: on an infill on the ILS, would that party pay the same as we originally paid, \$500 and some, or would the fee be higher than that?

MR. STEWART: No. Mr. Chairman, when the program was first announced, it was anticipated that about 75 percent of the cost would be borne through the government and 25 percent by the individuals. A rate was submitted to the Public Utilities Board at that time, and as you know, it was anticipated and recommended that the cost to be borne by the individual subscriber would be \$450. When the Public Utilities Board said, "No, \$560 is the appropriate figure," then the government by virtue of the fact that they had made that representation and were bound to uphold that representation said they would provide a rebate of \$110 back to the individual subscribers. That is the rate that has been prevalent right up to this point in time. That is the rate the CRTC has accepted as being appropriate and part of our regulatory regime to the completion of the project. We anticipate all the individual line service hookups to be done by March 1991.

MR. CHERRY: All right. My other question deals with the flat rate calling, Mr. Minister. The question I would want to put before you is: in the foreseeable future will there be further flat rate calling or . . .

MR. CHAIRMAN: Hon. member, I'm not sure your question is appropriate. It's not part of the ... I guess it does fall under Alberta Government Telephones, which is funded. Is the minister comfortable with the question?

MR. STEWART: I think the simple answer to the ...

MR. CHAIRMAN: Perhaps I should let him finish the question then. All right. Proceed. It's marginal but ...

MR. CHERRY: Going on, my question, I guess, is: what is the policy down the road, or is there one or is it finished? Can you elaborate on that for me?

MR. STEWART: The extended flat rate calling program as it exists and all the criteria that relate to that program are fully adopted by the CRTC at the time AGT becomes a part of the regulatory regime of CRTC. So all the programs and services, extended flat rate calling included, have become part and parcel of the regulatory regime under CRTC and are subject therefore to continuance in accordance with that criteria until such time as they may be changed, but only by virtue of a public process.

MR. CHAIRMAN: Any further questions from the member?

MR. CHERRY: I have just one further question ...

MR. CHAIRMAN: Thank you. One more supplementary.

MR. CHERRY: ... to the minister on Telus. There was discussion earlier regarding it. In future as we continue with the privatization of it, will there be some roadblocks put in there to ensure this doesn't occur? Maybe you could just indicate whether it was something to do with the market that is over and above the average perspective out there.

MR. STEWART: Well, I suppose, Mr. Chairman, that forecasting ahead will never be a perfect science. At the same time, we have ensured that all the financial management systems and reporting mechanisms of NovAtel, in this instance, will be completely examined and are being examined at this very moment to ensure everything possible is done to ensure that forecasts emanating from the company will be as accurate as possible. One always has to recognize, though, in looking ahead and in uncertain times that you're not always going to be right on. No person would; not you or I or any government or any corporation. But we want to make sure the very best opportunities are available for them to make sure those estimates are as close and those forecasts are as accurate as possible. MR. CHAIRMAN: Thank you.

The Member for Edmonton-Centre, followed by the Member for Meadowlark.

11:43

REV. ROBERTS: Well, thank you, Mr. Chairman, because I'd like to pursue that same line of questioning. My sense is that often when prospectuses are issued forecasts aren't normally included and that in this case they were included, that NovAtel had some losses over the past quarters. Why when there was this difficulty – or, as the minister said, it's not a real science here – was it even included in the prospectus in the first place, which I find to be so unusual and so problematic? Who was putting the pressure on?

MR. STEWART: I don't think it's unusual at all, Mr. Chairman, for pro forma estimates to be included in prospectuses.

REV. ROBERTS: Well, pro forma's just that. It's not a firm figure, and it's not really something that should be taken seriously. We really smell a rat here. Something went on, that either you were all duped or Del Lippert, before he left for Boston, had some information which he really wasn't telling people. I mean, it can't be put down to the Persian Gulf crisis, which is what we understand the minister to say was the reason for it. I want to know why it was that only four days after the prospectus was issued this information came to the attention of certain officials and it took then another eight to 10 days before the minister finally made this public and told people who were buying shares what the problems with it were.

MR. STEWART: Well, Mr. Chairman, the matter came to notice when the August results from NovAtel were revealed. They were revealed by NovAtel to the AGT Commission. The AGT Commission immediately notified us, and we started the wheels in motion to take action in respect to that. Now, it's true that a few days after that was when we made the announcement as to what sort of action we would be taking for the benefit of preserving the integrity of the initial public offering, but it did take some very considerable discussion and analysis before we made that decision.

In the meantime, I immediately instructed the chairman of AGT to look into this matter and tell me exactly what actions AGT was prepared to take in order to address the circumstances that related to this, recognizing that certain things probably were beyond control in forecasting ahead because all kinds of circumstances exist out there in an uncertain marketplace, but also recognizing that there may be certain things that related to the financial management systems of the company that may not have operated as fully and effectively as they should have. So we called upon the AGT Commission to tell us exactly what course of action they were going to undertake in that regard. We then met with the commission, with full commission members, and indicated to them that we insisted on that sort of investigation taking place. A special committee was struck. That special committee consists of government representation along with an independent person, a qualified consultant, to look into the financial management systems of the company. That process is under way, and we anticipate we will be getting a full report with respect to that within the next few weeks.

REV. ROBERTS: Well, I mean that's very nice, but I get a sense that this information was known even before the prospectus was issued, that in fact officials at NovAtel may well have known that what they were putting forward was not an accurate picture of what their forecast should have been, that in fact pressure was put on so that you could have a good sale of this issue and, in a sense, there's some real . . .

MR. CHAIRMAN: Hon. member, you're really making some innuendos there that . . .

REV. ROBERTS: I know. That's right. I really feel strongly that in fact there was pressure on, the timing ...

MR. CHAIRMAN: Well, unless you have a basis for them, I don't think you should be making them on record.

REV. ROBERTS: We're sort of shooting in the dark here, it's true. I want to know what sort of disciplinary action, what sort of further public, open hearing this minister is prepared to undertake in order to get at really what was going on even in August there so that in fact he was not misled, AGT officials were not misled, and the people of Alberta have not been misled by some very shady practices which I think we really need a much more thorough public investigation of.

MR. STEWART: Mr. Chairman, NovAtel accounts for about 3.6 percent of the total asset value of Telus. To suggest that the government would in some way want to jack the numbers around to make what would have been a very wild success in any event and to commit some sort of fraud on the people of Alberta is ludicrous, and I resent even the implication. The fact of the matter, as I've indicated earlier, is that looking ahead is never a perfect science. To the extent that there were systems that broke down in the financial management, they will be uncovered and they will be dealt with. But I'm not going to be precipitous in making some sort of judgment as to that situation until I've got all the facts. We will be looking into that. At the present time it is being looked at, and we'll deal with it when we see the results of that investigation.

MR. CHAIRMAN: Thank you. The Member for Edmonton-Meadowlark, followed by the Member for Calgary Fish-Creek.

MR. MITCHELL: Thanks, Mr. Chairman. My first question concerns Telus. The implication or significance of projecting a current profit of course goes beyond the current frame of reference because it gives investors an idea of what they might anticipate as profits in the future, and it's some assessment of what they would consider those future profits to be which would direct or dictate their assessment of the value - that is, what they're prepared to pay. So while this \$21 million subsidy may have on the one hand allowed the prospectus to be true and may have in fact bolstered the "earnings" now, unless the government were to subsidize that for the next umpteen years, of course the implications of that \$21 million earnings for the future have gone. So it will say something about the future value of that firm, and it will therefore say something - will it not? - about what you can expect to sell the rest of the firm for. Has the minister therefore got an opinion about whether or not he will be able to sell the remaining 40 percent of AGT for a value which would be based upon the first 60 percent's value?

MR. STEWART: Well, Mr. Chairman, the future market value as determined in the normal tugs and pulls of the marketplace will obviously determine the situation in the future. There was no indication of support through indemnification being given beyond December 31, 1990, the six-month earnings ending at that point in time, nor did any investors rely beyond that. I mean, the facts were all laid out in the prospectus and the amendment to the prospectus in relation to the government's indemnification. Individual investors made their choice with respect to that. I think it's significant to note that while there were large cries of everybody cashing in on their applications and not going to go ahead, fewer than 5 percent, about 4 and a half percent, of Albertans pulled back on their orders, which was not a large percentage in terms of what would normally occur in any sales period that extends for that period of time, four to five weeks. So I think the stock will obviously go in accordance with market conditions in the future and with the telecommunications industry. It is a regulated utility. It operates on a regulated rate of return. Investors will take all those circumstances into account and make their decisions accordingly and the marketplace will decide.

MR. MITCHELL: It's difficult to comprehend how a company such as NovAtel wouldn't have some inkling early on of declining sales. Surely they probably have day-to-day sales figures; they could see trends of decline in those sales figures. It wouldn't be that all of a sudden at the end of the quarter they'd say, "Gee, we were wrong." Is the minister convinced or could he please convince us that somehow somebody in that company didn't have an inkling and should have told him prior to his going to the market that there was a strong indication that the figure, the projection, probably wasn't going to be right?

11:53

MR. STEWART: Mr. Chairman, I can't comment fully with respect to the question because obviously that investigation is still under way, but I can say that NovAtel was capturing a large measure of the U.S. market in cellular basically through some large department stores. They order in a big way. They had stock on their shelves, yet they were preparing for the next few months and in particular for Christmas and thereafter. Orders that were submitted were reviewed obviously by both NovAtel and those that were also looking at those forecasts. Those orders were in place, but suddenly those orders were canceled and over 50 percent of the U.S. sales dropped off, were cut. That came through companies such as J.C. Penny and Sears and so on that were the primary buyers on a wholesale basis from NovAtel.

The full details as to the financial management considerations that went into those forecasts will be looked at very closely, and we will determine what has to be done thereafter with respect to those financial management systems.

MR. MITCHELL: That's good because we would all know that 50 percent of orders wouldn't be canceled within three or four days after issuing that prospectus.

MR. CHAIRMAN: Final supplementary.

MR. MITCHELL: My other question concerns the research and development discussion that the minister offered earlier. The faculty of pharmacy at the University of Alberta I think has had some true success in developing spin-off companies. Synphar and Biomira are two companies which are perhaps test cases of how well we can do in Alberta. They've brought millions of dollars into Alberta from the Montreal and Toronto stock exchanges, from Japan; they've created good, solid, diversified, clean high-tech jobs. And those spin-off companies have been generated from a faculty of pharmacy which in large part has just appalling facilities. In fact, I would argue that those labs are very dangerous for the people who have to work there, not to mention uncomfortable and inadequate scientifically and technically. How can the government, the heritage trust fund, support what I believe to be tremendous R and D potential in the faculty of pharmacy by providing better facilities, as has been done through the Alberta Heritage Foundation for Medical Research for strictly medical research?

MR. STEWART: Well, I think the hon. member is on a very good point, Mr. Chairman, because of the opportunities that do exist in the whole biomedical area of biotechnology. That's why we've identified it as an area of real thrust. It may very well be that we would be giving consideration to some further form of infrastructural support to make sure that happens. In the meantime there are a number of avenues through which the commercialization of that technology can take place, to bring it out in the open and look for opportunities where private-sector dollars can be put together with the technology, preserving the integrity of the proprietary rights for those that have put it forward, and end up with something that would provide a great return and a great advancement in the whole area of technologies and the 'commercialability' of those technologies in Alberta.

So BioTech and the pharmacy people that are involved in the U of A and the U of C as well are \ldots I agree with you; it's an important component of the advanced technologies and one that indeed may require some further assessment as to the applied research end of it once it has moved from the basic research stage. That's something I'm looking at very closely.

MR. CHAIRMAN: Thank you. Our time for this meeting has passed. In closing, the Chair would like to thank the minister and his department officials on behalf of the committee for appearing before them today and for the information they have given to the committee and the manner in which the questions have been answered. We appreciate the time you have taken to be here.

We have one order of business that the Chair would like to get concurrence on from the members – I mentioned it yesterday – having to do with the deadline for submission of recommendations. If the committee members could have their recommendations prepared by November 1 at 4 p.m., it would eliminate the necessity of calling an additional meeting on November 7 to do nothing more than read in recommendations. Does the Chair have concurrence with the members to move that deadline up?

The Member for Calgary-Mountain View.

MR. HAWKESWORTH: Just a question, Mr. Chairman. Is there any mechanism that recommendations could be submitted in writing and they could be distributed to all members outside the process of actually reading them into the record here in a meeting? Is there any mechanism other than simply sitting here and reading them that allows us to put recommendations on the floor for the committee's consideration?

MR. CHAIRMAN: The Chair doesn't have any problem with your suggestion except for the fact that historically the committee has always had them read into *Hansard*, and that's the problem we are involved with.

The Member for Calgary-Fish Creek on that issue.

MR. PAYNE: Well, Mr. Chairman, you quite properly point out that there is a precedent for so doing, and it's a very proper precedent. There are a number of citizens of this province who do read the *Hansard* record of the deliberations of this committee. A very important part of this committee's deliberations are the recommendations that are arrived at after extensive meetings with cabinet ministers. I think it's entirely appropriate that those recommendations be a part of the record and, therefore, would share the unease of the Chair.

MR. CHAIRMAN: I suspect that the Member for Calgary-Mountain View would see the value of that and the importance of it. I understand your concern with trying to give a little more time to members and the Chair would like to do that, and we can do it, but it means the committee traveling back to Edmonton if they're not here and the expense of reconvening the committee to do that necessary point of reading them into Hansard. So does the committee ...

The hon. Member for Calgary-Mountain View again on this issue.

MR. HAWKESWORTH: Just one point, Mr. Chairman. I'm not advocating we come back for the 7th just to read things into the record. That's why I'm looking at perhaps some other mechanism. We still have the meeting with the Premier from 10 to 12 noon, and then our last meeting before the deadline would be medical research from 2 until 4. I'm just thinking if there was anything that arose as a result of our meeting with the Premier or anything in regards to medical research, our hearings end and the deadline automatically is imposed under that scenario too. So I'm just trying to think: if anything arises as a result of these hearings on the deadline, is there some contingency or some way we might be able to submit some recommendations?

MR. CHAIRMAN: I understand what the member is getting at, and the Chair doesn't have any particular problem. In the event that there is an additional meeting required, the Chair would be willing to extend the submission of recommendations up to and not beyond November 7 so that we would have time to prepare them and then proceed with the meetings that are scheduled to discuss the recommendations. But the Chair really would be more comfortable if everyone had their recommendations in by November 1 so that we, in fact, can move on.

The Member for Lacombe on this issue.

MR. MOORE: We're just having a general discussion here, Mr. Chairman. We all understand your point that you brought forward and so on. I make that as a motion that it will be November so we can vote on it and make a decision immediately. Otherwise, we could discuss it until tomorrow morning.

MR. CHAIRMAN: So your motion is that all members submit their recommendations by November 1, 4 p.m., which would be the conclusion of that afternoon meeting. Is the committee ready for the vote? Call for the question. All those in favour of the motion? Opposed? The motion passes.

The next meeting will be this afternoon at 2 p.m. The Minister of Energy will appear before the committee.

[The committee adjourned at 12:03 p.m.]