

munications problems which, in some cases, are unique to Canada, and which in other cases are present in a much greater degree or which are more significant than they would be in other countries. Insofar as the problems are concerned that are unique to Canada, there is not much use in hoping that somebody else will do the work and solve the problems for us. In this field, therefore, we have to address ourselves to the problem independently, and not rely on anyone else. Where things which are terribly significant to us are a problem, but not to others, we will probably have to do our own work, too; but there are certain areas in the communications fields which are problems that are common to ourselves and to others. We cannot do everything simultaneously, and we will have to rely on others to do the work and hope that by making contributions in parallel or similar fields we will be able to benefit from their increasing knowledge and the solutions they find.

**Senator Lang:** Undoubtedly the mails are our worst problem in communications.

**Hon. Mr. Drury:** This is one problem the solution to which does lend itself to technology. Part of the problem, however, is in the introduction of this new technology.

**Senator Godfrey:** I want to clear up one small confusion. You are talking earlier about our doing one-third of the research in the industrial sector, and our competitors doing two-thirds.

**Hon. Mr. Drury:** Not quite. We only did one-third as much as they did.

**Senator Godfrey:** Yes. It is one-third as much.

**Hon. Mr. Drury:** Yes. The two-thirds is probably the ceiling at which we should aim, given our particular case. It would be stupid, you know, for us to go for one hundred percent.

**Senator Grosart:** That was not the statement that the minister made. He said that roughly one-third of all research and development performed in Canada is done in industry, as compared to about two-thirds. It is not a question of a third of what somebody else is doing.

**Senator Godfrey:** Compared to two-thirds. My mathematics would make that one-half. Fifty per cent, not one-third. I wrote down, "One third of the capacity our competitors have." If our competitors have two-thirds and we have one-third, my mathematics gives me 50 per cent of theirs.

**The Chairman:** What the minister said is that in Canada Canadian industry was accounting for one-third of our total expenditure for research and development, whereas in most other countries industry accounts for two-thirds of the total effort.

**Senator Godfrey:** That is right. Then he went on to say that therefore we have one-third of the capacity of our competitors. When I went to school that meant one-half of the capacity. I am trying to get that straight. Really, in comparison to our competitors, we have one-half, and not one-third.

**Senator Grosart:** That is not so.

**Senator Godfrey:** My mathematics are lousy, I know.

**Senator Grosart:** Yes, they are.

**Senator Godfrey:** I am still confused.

**Senator Grosart:** The question is, of the total funding of science and technology, what percentage is performed in industry as against what percentage is performed elsewhere, most of it in-house.

**Senator Godfrey:** But we are one-third, and our competitors in other countries are two-thirds.

**The Chairman:** Yes.

**Senator Grosart:** No. This is a question of performance.

**Senator Godfrey:** Yes, performance.

**The Chairman:** Well, do you want to ask further questions, Senator Grosart? I suppose we should plan to adjourn around a quarter to one.

**Senator Grosart:** I have just one question. When Mr. Gillespie was Minister of Industry, Trade and Commerce, he made this statement:

The traditional policy of having government facilities perform by far the largest share of R&D work for government has served its purpose but cannot meet Canada's future needs.

Is this still the policy of the government, if in fact the traditional policy of having government facilities perform by far the largest share of R&D work for government cannot meet Canada's future needs? That was said in 1972. Do we still believe that?

**Hon. Mr. Drury:** Yes.

**Senator Grosart:** Good. I am glad to hear it. We have not done anything about it, but perhaps we will in the years ahead.

**Senator Carter:** I was only half way through my list when my time ran out, Mr. Chairman.

**The Chairman:** I have not even begun mine.

**Senator Carter:** Then I will pass in deference to you.

**The Chairman:** I do not intend to ask questions today, so go ahead.

**Senator Carter:** What I want to get at is, do we know what is going on all over the country? Have we compiled an inventory of scientific projects that are in progress? Do we know what is going on in government? Do we know what is being done in the various universities? Do we know what is being done in the private sector? Do we have any means of finding out whether there is any overlapping, or whether there is any way of co-ordinating the effort that is being made?

**Hon. Mr. Drury:** To make the statement, "We know", would be challengeable, I think, on the ground of the question, "In what detail?" We have tried to compile an inventory of the research work being done within the federal government, and I take it you are talking about research work. This is a continuously changing list, and the more detailed it becomes, the more frequent and rampant the changes are. To keep such an inventory would require a very substantial staff.

**Senator Carter:** Are we devising a means of finding out whether all of these are useful, whether some should be discontinued or whether some are overlapping what is