

type of financial aid is available to all companies or groups of companies.

The other form of financial support of industrial research amounts to about 500 million Belgian francs per year, or 10 million dollars, which is used to sponsor so-called competitive research through an agency known as the *Administration des prototypes* (Standards Control). This group finances projects which are proposed by a single company, and which are of a competitive nature. The results of their research are therefore not available to rival companies. In this case the financial aid is not in the form of a subsidy, but a loan which may cover up to 80% of the cost of research. The loan never covers 100% of the cost, because we have found that if we sustain 100% of the cost of so-called competitive industrial research, we run the risk of paying out money to people who are referred to in the language of the initiated, as "shacks". If the company is not in a position to assume 20% of the risk, we do not see why the government should assume 100%. This loan must be paid back if the project is successful, and may be subject to royalties; but the royalties may not amount to more than twice the value of the loans advanced by the government.

Here the order of priority is more stringent. Top priority is given to projects involving advanced technology, proposed by companies which will be able to see the project through to the marketing stage.

Second priority is reserved for projects involving less advanced technology, but proposed by progressive companies.

Third priority is granted to projects involving advanced technology, proposed by companies which have the potential to contribute significantly to our economy.

We draw the line here, because we feel that our aim is to promote the kind of research that can directly contribute to the growth of the national economy, and we do not want to confuse government support of research with welfare. In other words, we try to support projects that are a good risk.

Have I answered your question?

Senator Desruisseaux: Yes. I have some other questions, this time relevant to our own concerns. Does the amount of \$10 million, which you said is set aside for research, meet the demand? Is that amount spent each year? Is it adjusted according to need and demand? On what basis do you arrive at these budget estimates?

Dr. Spaey: The 500 million francs I mentioned earlier are used for joint research. Competitive research also receives 500 million, and priorities are established on the basis of the projects proposed by the companies.

Senator Desruisseaux: But are you able to fill all requests?

Dr. Spaey: Yes, we have managed to so far, because this undertaking is still new and the companies have not yet acquired the habit of requesting extravagant amounts. They will in time, but we shall proceed with caution, for experience has shown that if we increase our grants too rapidly, we inevitably end up by over-spending. Civil servants think they are being inefficient if they do not use up the entire amount of their grant—at least this is the case in Belgium.

The Chairman: In Canada as well.

Senator Desruisseaux: In some respects all countries are alike.

Regarding the 80% which the government contributes to a project, and the 20% contributed by the company which proposed it, is that 20% a tax-deductible expense, in view of the income it will create, or is it considered as a capital investment?

Dr. Spaey: No. We cover only the costs of research, including equipment. This means that the government will never pay over 80% of the cost of research.

Senator Desruisseaux: But is the company's 20% considered an expense?

Dr. Spaey: Yes, it is an expense. It is a risk which the company assumes.

Senator Desruisseaux: What percentage of the gross national product does the sum of \$20 million represent? Is it a large proportion of the gross national product?

The Chairman: Perhaps "total budget" would be more accurate?

Dr. Spaey: Here I should point out that in Belgium, in 1969, we will spend 2 billion francs on industrial and farm research, of which 1 billion 500 million will go to industrial research. Besides this, which is the amount the government contributes, about 8 billion francs are spent on research by private industry as well. This brings the total to about 10 billion francs. Since the national product is presently about one thousand bil-