



ADVISORY COUNCIL FOR APPLIED RESEARCH AND DEVELOPMENT

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The Prime Minister  
10 Downing Street  
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9 September 1985

Dear Prime Minister

Exploitable Areas of Science

Over the past 18 months or so, ACARD has been studying ways in which we can identify more readily areas of science which are economically exploitable, and I am writing to seek your agreement to:

- (i) publication of part of a report of an ACARD Study Group on this subject
- (ii) endorsement of the proposal to continue the work of ACARD in this area by transferring the process of assessment to other appropriate organisations

Late in 1983, ACARD set up a study under the chairmanship of Dr Charles Reece, ICI's Director of Research and Technology, to survey current scientific developments in order to advise the Council on work which showed commercial potential in the medium to long-term.

The study, which was seen as complementary to the Council's activities in advising Government on the Annual Review of Research and Development, represented a new departure for the Council which has previously regarded its remit as to consider and encourage new technologies, such as robotics and computer-aided techniques, which are ripe for immediate exploitation by industry.

The study was partly prompted by the realisation that the UK does not have a recognised institution whose primary function is to make assessments of the future potential of science and technology. Other countries, notably the USA, Japan and France, have such organisations in the private or public sectors. Private industry itself, and particularly the major companies, have ways of evaluating R & D activities in their own areas of expertise in order to guide their investment decision-taking, although medium-sized and smaller companies do not have access to such a capability. In the public sector the peer review system is used by the Research Councils in selecting priorities for support but the basis of this is primarily academic in nature.

ACARD's interest was therefore in the possibility of obtaining insights into a broad spectrum of science and of presenting some value judgements on the potential of that science for contributing to the economic well-being of the country in the future.

As a preliminary to the exercise, the Council asked the Science Policy Research Unit (SPRU) of Sussex University to advise on how other countries went about the business of considering the potential of science and technology. The findings were published last year by SPRU as a book entitled "Foresight in Science". The major proposal of SPRU was that the UK should attempt to bring its level of longer term foresight activities up to that found in Japan.

The ACARD study, completed earlier this year, was considered recently by the Council. Perhaps the length of time taken for its completion and the size of the report give some indication of the complexity of the task. The report is divided into two parts: Part I is concerned with the need for a process in the UK for determining exploitable science priorities; Part II reports the results of a preliminary attempt at such a process. Although with the time and expertise available the study was limited in scope, ACARD was sufficiently encouraged to seek to carry it forward, and it endorsed the main recommendation of Part I which is to establish "a process for identifying exploitable areas of science, which has some certainty of continuity for the long-term economic health of the country". The ABRC also recognise a need for such a process in the UK.

Dr Reece considers it vital that the Group's effort is vigorously followed up and this seems to be the general view of industrialists. ACARD also wished to receive further advice on how the recommendation to "spin-off" this activity might be implemented; I have discussed this with Sir Robin Nicholson, and I understand that he will be advising you separately about this. The arrangements which we have considered are I believe the best possible and should provide a structure which other countries like Japan and the USA already have. The essential requirement is that the process should be credible and authoritative, should win the commitment of those involved so that it is influential, and should be of a long term nature if the results of its activities are to have effect.

The purpose of this letter is therefore to ask for your approval for the publication of Part I of Dr Reece's Group's work as an ACARD report. I hope we may also have your endorsement of the plans to "spin-off" the process begun by ACARD to appropriate organisations outside Government.

*Yours sincerely*  
*Henry Chilver*

Sir Henry Chilver  
Chairman