

INTRODUCTION

Background

At its meeting on 26 November 1980, the Cabinet accepted a recommendation for a joint review, to be made by the Ministry of State for Science and Technology and the Department of External Affairs, of measures "to increase international collaboration in science and technology." This paper presents the findings of the joint review.

Like many intellectual pursuits, science is inherently international in character, and cooperation between scientists is as old as science itself. It has its foundation in the stimulation of critical examination by peers and the need to exchange ideas. The results of fundamental and much applied research are published freely and finds other applications and uses in distant lands by different groups addressing similar problems. This natural exchange has taken on new dimensions since the Second World War as the pace of scientific discovery and application has accelerated and as new convenient means of communication and transportation have made joint activities easier and foreign facilities more accessible.

Technology, on the other hand, by its very nature presents a more restricted environment because of its importance to industrial development. Even here however, the purchase of patents, company-to-company exchanges of know-how and the sheer complexity of modern processes ensures a diffusion of knowledge across frontiers. Few discoveries are now made by the single researcher working alone; advances are more the result of many steps and many contributions from a diverse mix of sources.

Collaboration in S&T takes many forms: the exchange of correspondence, sharing of data and results, the exchange of views and experiences at conferences and the publication of results are common and valuable sources of information. Physical cooperation spans a broad spectrum from co-authorship of papers to joint work undertaken on a major multinational collaborative project.

Many studies have been made on various aspects of international collaboration. These have, however, concentrated on specific aspects such as fields or categories: no attempt has been made to quantify the overall level because it is too vast and all pervasive. It is, and probably always will be, a natural integral part of national S&T activity.