

The average number of passengers per car on the Channel services is only 2.7, so that Hoverloyd will be faced with a lot of empty seats if it is unable to do better than this. The fare structure is therefore designed so that passengers—as many as seven per car—travel free. This means that families or parties can travel very much more cheaply by Hoverloyd than by any other route. Four people in a medium size family car would pay £14 by boat, and exactly the same by Hoverloyd if they travelled on the peak-period "A" tariff. If they travelled off peak, the hovercraft fare would be only £11. One person in the same car, on the other hand, would still pay £11 on the hovercraft, but only £6.85 on the boat. Each foot passenger will be charged £2 10s on the hovercraft cheap rate, against £2 12s for the boat.

#### MANAGEMENT

### Strategy for Technology

A SPECULATIVE lecture on scientific and technical strategy at the national and major enterprise levels—the seventh talk in a series devoted to management and technological problems—was given at the United States Embassy in London last week by Professor James Quinn of the Amos Tuck School of Business Studies at Dartmouth College, New Hampshire. Enlivened by a series of anecdotes, the lecture revolved around the problem of defining and following a scientific and technological strategy in a large organization, whether public or private.

The immense difficulties in trying to reduce this question to definable terms were reflected in the style of the lecture. Indeed, it would be tempting to surmise from the number of unanswered questions posed by Professor Quinn that the days of intuitive decision-making are not yet over. But, in the long run, the only justification for adopting a strategy at all, according to Professor Quinn, is that either guessing or hoping do generally produce worse results.

Much of the talk was devoted to outlining the concepts needed to relate technology to an industrial or government strategy. The distinction between measured economic growth and the idea of "maximum growth in human well-being" was expressed in terms of quality improvements, which are intimately connected with technology. An example might be the construction of quieter aircraft rather than more economic ones.

Professor Quinn went on to discuss the role of a technological strategy in attaining this goal, and was quick to concede that a large company—by virtue of its well-defined hierarchy and its more limited objectives—could evolve a strategy much more easily than a government. He showed a flow-chart of forecasting and strategy in a typical large company, and referred to Hannibal's planning of his campaign against the Romans to bring out the prime ingredients of a strategy. These consist of evaluating opportunities and threats and committing resources in a unique and selective pattern. Occasional snippets of political affiliation crept into the lecture, such as the acceptance of competition both nationally and internationally as a fundamental of life.

In assessing the benefits to less developed countries of foreign investment and the installation of multinational companies, Professor Quinn stressed that the

managers in the parent country were by no means as free to dictate policy as might appear on the surface, and had to be influenced by the feelings of local labour and social conditions. The importation of technology was also of value to the host country, but the style of Professor Quinn's treatment will have given many in the audience the impression that part of the argument was based on a need to justify the huge overseas investments of the United States.

#### TECHNOLOGY

### European Cooperation

THE deadlock between France and the Netherlands on the question of technological collaboration between the Common Market and other countries was resolved at a meeting of the Council of Ministers of the European Community when a compromise procedure for associating with other countries was hammered out. The deadlock arose after the last French veto on British entry into the Common Market. The Dutch boycotted the Community's Marechal Committee on technological cooperation, saying that it should be allowed to consider collaboration with countries that had applied for community membership. The French position was that only the member countries should be involved.

The way the compromise works is that the Marechal Committee will resume its interrupted study of the possible fields for international cooperation and will report to the council by March of next year. The ministers will consider the report and may at that stage make proposals to other "interested" European countries. The word interested in this context is an attempt to gloss over the question of who exactly should be included. The Dutch would like to see only the four applicants for membership involved, but the French, unwilling to concede this a step on the way to entry into the community, want to make the invitation more general. At the discretion of the council, the next stage would be for experts from the six and outside countries to meet to prepare the ground for discussions between ministers of technology in the countries concerned. A spokesman for the community thought that this meeting might materialize in about a year's time.

The Marechal Committee will initially consider collaboration in seven fields—automatic data processing, telecommunications, development of new forms of transport, oceanography, metallurgy, meteorology and nuisances (including air and water pollution). Whether the fact that none of these areas is politically controversial will make agreement easy and pave the way for more significant cooperation remains to be seen.

#### OPEN UNIVERSITY

### Who will be Paying?

THE proposals for the Open University have now become an issue in the constant battle between the British Government and local government authorities over the levels of local government expenditure. Whitehall can fairly be accused of telling local government authorities to cut their levels of expenditure, while at the same time blithely putting forward projects which saddle local councils with extra expenditure. Last week, the Association of Municipal Corporations