

## COMPUTER POLICY

**Choice of Hardware Too Wide**

THE government should not contribute to the development of new computing machinery unless what emerges is a completely different type of computer which would fit in more closely with everyday work, the subcommittee of the Select Committee on Science and Technology, which is discussing how the British computer industry can best be encouraged, was told last week by Computeraid Ltd, a British computer service bureau. Last week the subcommittee heard evidence from Computeraid Ltd and from International Computing Services Ltd, a subsidiary of ICL.

In a memorandum the Computeraid representatives talked of the embarrassingly wide choice of computer hardware, and said that the proliferation of new hardware should be discouraged. Many small and medium-sized companies do not need the facilities of the third generation of computers, and the cost of the change-over from one generation of computers to another is extremely high. It may be that the government should set up disincentives to the introduction of new computers which do not show marked improvements over previous machines, the memorandum said.

Both organizations complained about the impact on the service bureaux of selective employment tax—the payroll tax which is designed to encourage the movement of labour to manufacturing industries by operating against the service industries. The Computeraid representatives thought that software houses and computer service organizations which might be expected to improve industrial efficiency ought not to be penalized by the selective employment tax. This view was supported by the memorandum from International Computing Services, which also agreed with Computeraid that the provision of computer programs through bureaux should also qualify for investment grants.

Following the attitude of the software houses at last week's meetings of the subcommittee, Computeraid thought that the government should look beyond its internal resources for computer services, as the United States government does, and that the government should consider asking outside organizations to run government computing facilities.

The service bureaux have also been pressing the Post Office to improve the data transmission facilities which are provided through the telephone system. The Computeraid memorandum said that unless the facilities provided by the Post Office are improved the use of on-line computing is unlikely to develop to its potential. The telephone system is, of course, optimized for speech, and in the opinion of Computeraid not enough effort is being devoted to networks suitable for data transmission. The bureaux are also concerned that the Post Office monopoly may interfere with the development of data communications.

## POLLUTION

**Fire without Smoke**

FINANCIAL coercion and governmental control are the keynote of fifty proposals for attacking pollution in Britain, put forward this week in a report from the research department of the Labour Party. The measures suggested in this report cover the setting up of three new national agencies to deal with water

supplies and sewage disposal, the dumping of wastes in the sea and the reclaiming of derelict land, and a plethora of taxes, levies and fines to put pressure on recalcitrant offenders, as well as a comprehensive family planning service under the National Health Service to grapple with what is the most basic problem of all. Those who argue that the cost to industry of implementing these schemes would be economically damaging ignore both the hidden costs of pollution and the fact that other countries face the same situation, according to the report (*Pollution and Our Environment*, 3s, from Transport House, London SW1).

The report, prepared for the National Conference of Labour Women to be held next month in Hastings, concentrates on declaring priorities rather than planning in detail. Its credo is that, if looking after the Earth is to be regarded as a social service, then the manufacturer and the consumer must accept the need to pay up just as they do for the other social services, whether the cost be direct (effluent treatment and the like) or indirect (the increased prices that will follow). "Pollution levies", too, could persuade people to buy or sell less damaging products, as in the case of household bituminous coal, which is claimed to account for 85 per cent of the smoke pollution in Britain; a price advantage for smokeless fuels would combine fruitfully with the stronger enforcement of the Clean Air Acts which the report also urges. But industry would have to take the brunt of the cost, helped on its way by an increase in the penalties for negligence, beyond the derisory fines which are often imposed now. Prosecutions for oil spillage off British shores in 1968, for example, resulted in fines that averaged £145.

A forceful argument for clean air is embodied in a retrospective survey from the Royal College of Physicians (*Air Pollution and Health*, Pitman, London, 30s). In 1952 some 4,000 people may have died because of a five-day London smog; the Clean Air Act of 1956 was a direct consequence, but while the air in London is now much healthier there are plenty of northern mining towns where smoke control has not even made a start. The incidence of bronchitis is strikingly correlated with the degree of atmospheric pollution, and bad air aggravates the harm caused by smoking cigarettes (see table).

What is less clear is the relative importance of different pollutants. Smoke particles and sulphur dioxide are the worst offenders in terms of atmospheric concentrations, but until the full effect of smokeless zones has been realized, nobody can establish how much illness the two pollutants may cause separately. Carbon monoxide and lead from motor exhausts, the survey finds, do not reach obviously poisonous concentrations even in the most crowded traffic, but there is some evidence that small concentrations of

INCIDENCE OF BRONCHITIS IN RELATION TO SMOKING AND AIR POLLUTION (DATA OF P. M. LAMBERT AND D. D. REID)

|             | Standardized morbidity ratio*<br>(per cent) |                  |                       |                   |
|-------------|---|------------------|-----------------------|-------------------|
|             | Very low<br>pollution                       | Low<br>pollution | Moderate<br>pollution | High<br>pollution |
| Non-smokers | 41  | 52               | 67                    | 71                |
| Smokers     | 121   | 131              | 159                   | 209               |

\* Based on 100 per cent for incidence of chronic bronchitic symptoms in Britain as a whole.