

ments have asserted a right to regulate the uses made of his invention and its successors, and for two kinds of reasons. First, as in the pre-*glasnost* Soviet Union, telephones provide people with potentially subversive opportunities for communication, which governments seek to prevent either by not providing a workable service or by listening to the conversations that telephones generate. But even elsewhere, telecommunications services are not free. Because telephone networks are natural physical monopolies, public regulation of even private enterprises is unavoidable. It is not merely that unregulated communications networks might exploit their obligatory customers financially, but that they might discriminate among them on political or other such grounds. During last year's elections in Eastern Europe, for example, opposition parties complained loudly that the state providers of communications gave them too little access to the inadequate facilities that there were.

Given all that, the British government deserves a little credit for having decided, last week, that there should now be a further liberalization of the regulatory framework of British telecommunications. (During the same week, it also decided that all airlines can in future apply for the right to land at London's principal airport, which is a further sign of liberal inclinations — see *Nature* 349, 638; 21 February 1991). Yet what the government now proposes is the least of what it should have done a decade ago, when 51 per cent of the publicly owned telecommunications monopoly (called British Telecom) was sold to the public. And the snail's pace of regulatory change promises to lag further behind the pace of technical change — which, ironically, the government seeks further to accelerate.

In the new regime, as in the old, operators of telecommunications services will have to be licensed, which is proper, while the scope of the services they provide and the prices at which they sell them will continue to be overseen by a regulatory agency, called Oftel. Ten years ago, the government licensed British Telecom to provide a comprehensive telecommunications service (nationally as well as overseas) and encouraged a second (called Mercury) to build a competing network. But the government was also then grappling with (even cheerleading) the prospect that the opportunities in cable television would quickly thread the country with an independent broad-band telecommunications network. (The prospect might have become reality had the government not fortuitously moved the financial goalposts.) Meanwhile, all concerned have evidently been astonished by the pace of development of mobile networks based on UHF radio.

What is now proposed is a modestly sensible loosening of this framework. Newcomers to the communications business will in principle be licensed (but not immediately). Meanwhile, operators of mobile communications systems and of cable networks will be allowed to use their facilities to provide fixed-point, local and even trunk communications. Private organizations wishing to set up communications systems by means of Earth satellites will be allowed to do so, provided that their channels are not connected to a fixed network at either end. Both British Telecom and Mercury will have to allow others access to their networks on terms to be

negotiated, and will also be allowed to continue subsidizing their domestic services and capital investments by making uneconomically high international charges (which are nevertheless to be reduced by 10 per cent). At least for seven years, perhaps for ten, British Telecom will not be allowed to use its network for distributing television signals.

The last of these restrictions points directly to the technical anomaly now being created. With broad-band communications just around the corner, it would make technical sense that there should be a single broad-band network based on optical-fibre cables — and one set of holes in urban streets. But would not that be a recipe for domination of the market by its most likely provider, British Telecom? Not if the regulatory framework required that provider to function as a common carrier, charging transparent prices for access to the network and having itself no commercial interest in the uses made of the network — voice communications, data transmission or even entertainment. The British government's difficulty is that, even if it is not influenced by the 49 per cent of the company it has retained, it has a kind of moral commitment to those who own the rest of the stock to ensure that the company is not emasculated commercially. But the perpetually managed profitability of British Telecom is hardly a more laudable objective than those that embarrassed successive governments when British Telecom was a nationalized industry. □

Women without men

A row about the insemination of unmarried women scorns human nature and undervalues human ingenuity.

WITH the Gulf War over for the time being, the British tabloid press and even some members of the House of Commons (MPs) are making a fuss about the revelation that some women (there are at least two) have persuaded a fertility clinic to enable them to become pregnant with sperm from a donor-bank. "Virgin birth" features in most headlines, but there is also a drum-beat of thundering about the sanctity of the nuclear family, and yet another outburst of anxiety about the new human embryology (misplaced because artificial insemination by donor, or AID, is old hat).

What seems to have been overlooked is that many unmarried women have traditionally sought to bear children, and to bring them up on their own, without the assistance of fertility banks. Nobody could possibly tell what proportion of the large number of unmarried mothers in Britain are in this category, but it would not be negligible. Two parents are better than one, and not simply for the obvious prudential reasons (one might die). But these days it takes a brave newspaper or MP to say that a woman without a mate must not become pregnant. And who is to say that mating with a passing acquaintance is preferable to a fertility bank? Is it possible that the indignation so suddenly aroused stems from the British government's plan to insist that absent fathers make maintenance payments on behalf of their children? Will the fertility banks be responsible? □