Top capyonticen Pol, ICC, Ptz W.0830 PRIME MINISTER INMOS and BT/ICL Decisions on the sale of INMOS and the placing of the major BT contract for computer systems both relate to the UK's technological capability and the threat of American technological protectionism. 2. In the case of INMOS, it is a key semi-conductor component which can determine the competitiveness of a wide range of products made by the UK's IT industry. 3. In the case of BT's computers, what is at stake is the heart of the country's modern business and communications network and hence the supply of equipment to the many future users of this network. 4. The attachments to this minute give an indication of the strength of the technological argument in each case which needs to be balanced against the financial and general policy considerations. RISN ROBIN B NICHOLSON Chief Scientific Adviser Cabinet Office 9 December 1983

ICL/BT 1. The modern business and communications network for the next half century in the UK is about to be constructed. It is vital that this is done using technical standards available to many manufacturers so as to ensure competitive supply to the network. 2. The only standard which meets this criterion is the Open Systems Interconnection (OSI) Model defined by the International Standards Organisation for compatible communications, at all levels, between different computers. 3. IBM supply to their own standard, Systems Network Architecture (SNA), which is incompatible with the OSI model. In the past IBM have freely published the protocols and formats of SNA to allow rival manufacturers to make and sell so-called "IBM compatible" hardware and software. But this situation is now threatened by the increasingly predatory commercial activities of an IBM freed from its long-standing anti-trust action and by the spectre of US technological protectionism. 4. Thus a communications network based on SNA may increasingly shut out all suppliers of hardware and software except for IBM. 5. The BT contract will form the heart of the UK's communications network. If this contract is let to the SNA standard, users will be driven to the monopoly supplier to this standard, ie IBM. There are already signs of this happening with the major clearing banks favouring IBM in anticipation of the BT contract going to IBM. 6. On the other hand, if the BT contract is let to the OSI standard, which is freely published and not tied to a specific manufacturer, then users will be able to choose their equipment from many suppliers on a competitive basis. 7. ICL, as a major systems and software producer for large-scale projects, should be a strong contender to satisfy BT's requirements - 1 -

using the OSI standard. In addition ICL's continued existence would guarantee an indigenous technological capability in a part of the country's infrastructure which will be as important in the future as the transport and telephone network have been in the past. 8. The alternative is to require IBM to supply BT to the OSI standard but I would not have great confidence in this initial requirement guaranteeing competitive supply of hardware and software well into the future. 9. Thus if ICL were to win the BT contract, it would provide longterm benefits for many UK manufacturers whose products would otherwise be threatened by an IBM monopoly. However ICL must show that they can meet BT's requirements at a competitive price. - 2 -

PRIME MINISTER

Two very interesting notes from Dr. Nicholson. I asked him whether INMOS technology was of such strategic importance that it was worth keeping in the UK. He thinks it is. This is not an objection to selling INMOS but points to trying to secure a UK deal.

On ICL, I minuted DTI after your meeting with Norman Tebbit to say that you thought it was important to maintain a computer capability in the UK provided ICL can stay competitive. Dr. Nicholson reaches the same conclusion in paragraph 9.

my AT

9 December 1983