(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.

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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.

RBN.

ROBIN B NICHOLSON
Chief Scientific Adviser

Cabinet Office
9 December 1983

INMOS

1. The true value of INMOS lies in the advanced and innovative designs for components which it has produced. From its early memory chips through to the recently-announced Transputer, these have combined design brilliance with state-of-the-art technology so as to be fully competitive with anything from the US or Japan. In the future, as effective design of such components becomes more and more related to the detailed fabrication processes involved, INMOS offers the opportunity to maintain a semiconductor design and manufacturing operation in the UK showing innovative skills unmatched by other UK component suppliers.

2. Availability of the latest, most sophisticated components, as Sir Clive Sinclair pointed out at your Seminar, is one of the keys to competitive products in the information industry. Just as the Uncommitted Logic Array, an advanced component of a previous generation, allowed his micro computers to be so successful, so INMOS innovations such as the Transputer itself may be the basis of future UK manufactured market-leaders. In addition, this versatile component could be of enormous importance to the development of parallel processing computers which are orders of magnitude more powerful than today's computers.

3. If, for commercial reasons, foreign semi-conductor producers only allow UK manufacturers the use of older, slower components for their products, because they retain the more advanced components for indigenous producers then UK products will become uncompetitive.

4. With its proven design capability, INMOS is thus important commercially to the UK. and if it passed to US control, the competitiveness of UK manufacturers of many IT products would be threatened.

5. However, the recent US restrictions on export of high technology raise the question of the potential strategic importance of INMOS.

Should US technological protectionism worsen, advanced components from a US-controlled INMOS could be amongst the first affected, with serious consequences for UK producers.

6. Thus there are both commercial and strategic reasons for preferring a UK-controlled INMOS but I recognise that there must be some limit to the price we are prepared to pay for this. However, I would take little comfort from any "guarantee" from a US purchaser - it would always be difficult to prove that the design capability and thus the competitive edge of the UK product was being deliberately eroded in favour of the US parent company.