W. 0493

PRIME MINISTER

Prime minister

Agree har by Nichthan
Showld carry and the
examination and report
described in the draft remit at Play A?

GOVERNMENT R & D CAPABILITY

In my minute of 6 July to you about the British Technology Group, I drew attention to the continuing massive role of the State in carrying out research and development. I would like to develop the point further.

2. Experience world-wide shows that to get the best value from

(a) flexible and encouraging of creativity and the taking of risks;

R & D expenditure, it must be carried out in organisations which are:

- (b) capable of at least initiating the exploitation process;
- (c) as close as possible to the international market place which they serve.
- 3. Yet one-quarter of this nation's R & D is carried out in the Government's own laboratories which scarcely meet the criteria given above. They employ over 20,000 scientists, engineers and technicians, again about one-quarter (excluding the universities) of the nation's trained manpower engaged in R & D.
- 4. Although there are undoubtedly legitimate reasons for Government to do some R & D in-house, there would appear to be major disadvantages in doing so large a fraction of the nation's R & D this way. For example, most of the results have to be handed on to others before exploitation can take place. Lack of staff mobility out of the Civil Service and reductions in manpower give little room for new blood in an ageing research population; new research areas of promise are held back.

CONFIDENTIAL 5. Admittedly privatisation has resulted in some significant pieces of R & D capability being moved to the private sector. But this approach has probably gone as far as it can, because the short term problems of further privatisation of Government research laboratories appear to overwhelm any long term advantages which have only been vaguely identified. 6. I believe the way forward lies in looking at the long term first. We should develop a clear view of what magnitude of research capability in, say, 10 years' time, Government needs to have in its own establishments, as opposed to the capability that is better bought from the private sector. Once a long-term view is developed, it will be up to Departments to make decisions on how to reach the agreed future point from the present position. 7. I would expect the overall result would be a reduction in Government in-house R & D capability comparable with the reduction in the role of the public sector in manufacturing and service industries which the Government is presently undertaking. 8. If you agree, I would like to take the initiative in developing this long-term view and presenting it to you because I believe the matter can best be initiated from the centre of Government. The subject is complex and contentious but I would plan to provide a draft report that Departments could comment on, after you yourself had first seen it, by the end of the year. I attach a draft remit that you may wish me to finalise after seeking comments from appropriate Ministers. 9. I should add that I recognise the need for a parallel move from the private sector to become more far-sighted and generous in its support of R & D. I expect this to emerge as one of the principal discussion points in your seminar in September, after which an ACARD study might be appropriate. 10. A copy of this minute goes to Sir Robert Armstrong. ROBIN B NICHOLSON Chief Scientific Adviser 2 August 1983 - 2 -CONFIDENTIAL

CONFIDENTIAL DRAFT REMIT GOVERNMENT R & D CAPABILITY As part of his role in providing advice on scientific and technological issues, and particularly relating to improving the commercial exploitation of the nation's research and development, the Chief Scientific Adviser, Cabinet Office, is asked to examine and report on: the criteria by which Central Government should allocate R & D tasks to its own establishments in preference to other, mainly private sector, bodies; the likely requirements of Central Government for its own in-house research capability in the 1990s the options for future better use of any R & D capability which is surplus to Government's needs for in-house research and to provide a preliminary report by December 1983.

CONFIDENTIAL

April put

Es Os les + 2 All and 10 123

da

10 DOWNING STREET

From the Private Secretary

DR. NICHOLSON

Government R & D Capability

The Prime Minister has seen your minute of 2 August (W.0493). She agrees that you should carry out the examination and report described in the draft remit attached to your minute.

I am copying this to Richard Hatfield.

T. FLESHER

11 August 1983

CONFIDENTIAL

85