

RESTRICTED



10 DOWNING STREET

From the Private Secretary

SIR ROBERT ARMSTRONG

VERSAILLES WORKING GROUP ON TECHNOLOGY,
GROWTH AND EMPLOYMENT

The Prime Minister has seen your minute of 20 December.

Mrs. Thatcher considers that we should continue to argue that the Group's Report should not be published before the Economic Summit. If we fail to carry the day with this argument, she would be content to follow the timetable set out in paragraph 6 of your minute.

Finally, with regard to the proposal for an expert conference in 1983, the Prime Minister would wish to know a good deal more about the arrangements before deciding whether it would be appropriate for her to open such a conference.

A. J. COLES

21 December 1982

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Prime Minister

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Agree that

(i) we should argue for no publication of the report before the Summit

(ii) if the French permit, we should accept the timetable in para. 6

(iii) you should not commit yourself to opening an expert conference (para. 9) until we know much more about it.

Ref. A082/0579

PRIME MINISTER

Versailles Working Group on Technology, Growth and Employment


A.J.C. 20/12

Dr Nicholson briefed you on the work of this Group in his minutes of 8th and 12th October. As the Group nears the reporting stage, we need to seek your instructions on some specific aspects of the report.

2. The Versailles Declaration required the Group to report to Heads of State and Government by 31st December 1982. The next meeting of the Group will be on 21st and 22nd December, and it is clear that one more meeting in January will be necessary before the report can be completed. It will then be transmitted to Heads of State and Government by President Mitterrand.

3. The question of publication of the report and/or publication of a covering letter summarising the findings of the report has been argued within the Group and will be discussed again next week. The Personal Representatives also discussed it at their meeting on 11th and 12th December. The main argument in favour of early publication is that expert and media comment on the report will be an additional and valuable input to the deliberations of Heads of State and Government at Williamsburg. The counter-argument is that such an action will pre-empt the assessment of the report by Heads of State or Government at the Summit and devalue its conclusions. All the countries concerned except for the French and Italians have tended towards the latter argument, while reserving their positions.

4. Another consideration is maximising the impact of the report on the public and hence improving public attitudes towards science and technology and their application to economic growth and employment - a consideration which was much in your mind at Versailles. Would this be best served by publication shortly before the Summit,



so that the report would not be overwhelmed by other Summit activities and could be followed by a "second bunch" in the form of a clear supportive statement on the report by Heads of State and Government in the Williamsburg communique? Or would it be best served by release at or after the Summit, with the endorsement of Heads of State or Government in the Williamsburg communique?

5. On the whole I would favour delaying publication until the Summit, so as to give you and your fellow Heads of State or Government an opportunity of discussing it before it comes out. But as the French are keen on early publication, they will probably leak it if it is decided not to publish it until the Summit. Nothing much would be lost, and leaks might be avoided, by a decision to publish in, say, early May.

6. Thus the time-table might look as follows:

end January	completion of report by Working Group
<u>early February</u>	(i) transmission of <u>report plus covering letter</u> by Mitterrand to Heads of State and Government [(ii) <u>publication of covering letter</u>]
<u>early May</u>	publication of report (if it is to be published before the Summit)
late May	Williamsburg (i) consideration of report by Summit (ii) reference in Declaration to report and the views of Summit Heads on it, and publication of the report (if it has not been published before).

The square-bracketed part of this schedule is not essential but may be needed to persuade the French to accept the later publication of the report as a whole.

7. A summary of an early draft of the report and a list of "findings" and "projects" from a later version of the draft are attached. A full copy of this draft has been circulated to Departments for their comments prior to the December 21st/22nd meeting.

The "findings" are liable to substantial alteration at this meeting, and the UK delegation will reserve the Government's position at the meeting so that we may put before you a later draft of the report and its findings and seek your instructions for the January meeting of the Group.

8. All the projects in which the UK is involved are still in the list. They are: Materials (joint leader with the USA), Biotechnology (joint leader with France), Renewable Energy Sources, Food Technology and Public Acceptance of New Technologies. In addition the Group has supported your original comments at Versailles to the extent that the problem of public acceptance features strongly in the report itself (eg Section 2.3).

9. The UK delegation believes that there is advantage in maintaining the momentum on public acceptance, since the research which has been done for the project indicates great gulfs in our knowledge and understanding of the factors which influence public acceptance and the way these vary from country to country. It seems likely that it will be worth while to follow up the work which has been done for the Working Group with an expert Conference on the subject, perhaps later in 1983. The delegation have asked me to inquire whether you would, in principle, be prepared to open such a Conference.

RA

ROBERT ARMSTRONG

20th December 1982

Incl Pol:



Versailles Economic Summit
Working Group on Technology.

June 1982.

COORDINATOR

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VERSAILLES WORKING GROUP ON TECHNOLOGY, GROWTH AND EMPLOYMENT
OUTLINE OF GENERAL REPORT (Based on 2nd draft)

0.1 General Introduction

This short section quotes the declaration of Summit leaders in June 1982 establishing the Working Group, and tasking it to report by 31 December 1982.

1 Importance of Science and Technology (S&T) as a basis for Economic Revitalisation and Growth

1.1 Historical Analysis

This sets the scene, by quoting some examples from history, in which technology has changed the traditional way of life.

1.2 Future Potential

The current problems of industrialised countries are touched upon, including energy, raw materials, and environmental aspects. Technology may be able to help to overcome some of the current difficulties, but only if it is intelligently applied.

2 The Role of S&T on Employment, Labour Conditions and Cultural and Educational Standards

2.1 The Level of Employment

Technology may in the short term reduce the level of employment. In the longer term, productivity growth is likely to enhance job prospects.

2.2 Social Effects

Technology can improve social conditions, but it may also introduce problems of its own. Mention is made of particular technologies, and their possible effects on society.

2.3 Public Acceptability of New Technologies

This section introduces the theme of the UK paper on the subject. Public attitudes vary, depending on a number of interrelated factors. Frank and open debate can lead to enhanced acceptance, through improved understanding of the issues involved.

2.4 Impact of New Technologies on Mature Industries

This is also the theme of a later paper. The structure of industry is dynamic, with growth and decline occurring simultaneously. New technology has a part to play in reviving dying industries, as well as generating new ones.

3.0 Implications of S&T for the World Economy

3.1 International Flow of Technology - Encouraging Economic Growth

A slightly contentious section which advocates a healthy world economy, an open trading system and the elimination of trade and other barriers as a means of promoting the international flow of technology, and its subsequent impact on industry.

3.2 Conditions for the Effective Utilisation of S&T by the Developing Countries

The needs of the developing world frequently differ from those of Summit countries. Training is a big element in the up-take of technology. However, problems can arise which need to be tackled with understanding and sympathy.

4.0 Role of Governments in shaping the Social and Economic Conditions for Optimum Impact of Innovation on Growth and Employment

4.1 Primary Responsibilities of the Public and Private Sectors

Another contentious section which considers the responsibility of the public sector in shaping social and economic conditions for growth.

4.2 Overall Economic Policies

This covers regulatory, patent, tax and trade policies. It is suggested that innovation thrives during a period of stability. Factors such as inflation, high interest and fluctuating exchange rates are obstacles to successful innovation.

4.3 National Policies for Promotion of S & T and International Consultation on these

It is argued here that the complexity and cost of major S&T programmes, and their interaction with the economy suggests the need for an integrated approach in drawing up national science policies.

5.0 International Co-operation in S&T

5.1 Present situation

Examples are given of successful international collaboration, and the social and economic benefits arising therefrom.

5.2 The need to Improve Such Co-operation

The advantages of co-operation are discussed, being especially beneficial during times of economic recession.

5.3 International Implications of National S&T Policies

A number of aims of an international nature are proposed, for incorporation by Governments into their overall science policies. This is seen as a means of enhancing international co-operation for overall benefit.

6.0 Criteria for Proposed Action

The foregoing sections have been used as a basis for establishing six criteria for selecting specific topics for international collaboration. The criteria are listed in this section.

7.0 Potential Topics for Co-operation

Some twenty topics have been selected by the Working Group, leading to proposals for international collaboration. The topics cover a wide spectrum of technical areas, and they are listed in this section. Considerably more detail on individual proposals will be included in an Annex.

8.0 Conclusions and Recommendations

Several conclusions have emerged from the paper, and these are listed here. A number of recommendations follow, which are addressed to Summit Heads of State. (The Conclusions and Recommendations in particular are still the subject of considerable discussion within the Working Group, and changes are likely to the current draft.)

7. POTENTIAL TOPICS FOR COOPERATION

In order to give form to the working group's ideas, a number of topics for cooperation in science and technology were examined by groups of experts, whose conclusions are included in an annex to this report. The topics for scientific and technological cooperation were selected with the following objectives in mind:

- to stimulate the conditions for growth.
- to encourage training and education at all levels
- to improve living and employment conditions

7.1 Conditions for growth

7.1.1 Energy

Safety of Light Water Reactors
Radioactive Waste Management
Breeder Reactor Design
Solar Energy
Other Renewable Sources of Energy
Fusion

7.1.2 Food

Food Technology

Cold Water Aquaculture

7.1.3 Basic Science and Technology

Deep Ocean Drilling

High Energy Physics

Solar System Exploration

Photosynthesis

7.2 Living and Employment Conditions

7.2.1 Better Living Conditions

Urban Planning

Remote Sensing

High Speed Trains

7.2.2 Better Industry and Employment Conditions

Advanced Robotics

Advanced Materials and Standards

Impact of New Technologies on Mature Industries

Biotechnology

Orphan Drugs

7.3 Training and Education

- Application of new technologies to culture, training and education.
- Public acceptability of new technologies.

8. Findings

- Science and technology are a source of national and international strength and should, therefore, be given due consideration in all policy decisions for national development and international cooperation.

- Science is expanding. Our quest for knowledge, its utilization, and its diffusion should continue. An effective exchange of ideas and researchers must be guaranteed.

- Our research, educational, and training systems need long-term support, but should, at the same time, be enabled to meet the challenges of quickly changing requirements.

- The contribution of science and technology to economic growth and employment depends upon the integration of our relevant policies with our economic, political, and social goals. Economic policy planning and science and technology policy decisions are to be more consistent with each other.

- The fate of our scientific and technological innovations is largely a function of the willingness of the public to accept them. More attention to the problem of public acceptance of new technologies is needed.

- (The introduction of new commercial technologies is primarily the task of the private sector. A competitive atmosphere is essential for this type of innovation since it alone creates a continual evolution of technological progress and, thereby, long-term economic growth.)

- Governments are to guarantee the framework conditions for workable competition and - at the same time - incentives for innovation primarily through the protection of inventions and innovative investments.

- National policies in areas such as regulatory standards, tax, patent, and trade influence our ability to innovate and to reap the full benefits of innovation. (We recognize and endorse the efforts of the OECD and GATT to resolve problems we face in this area.)

- Science and technology can be applied to many of the problems faced by the developing world. As developing countries create infrastructures in science and technology, we should recognize the constructive role which we are able to play, mindful that it is the responsibility of these sovereign nations to establish their own national policies and priorities.

- As we face economic difficulties, and as national budgets become subject to greater constraints, it makes even more

sense to coordinate internationally our efforts, in particular, in long-term, high-risk research and development projects. Therefore, the already existing international cooperation in science and technology should be continued and, if possible, enlarged. In addition, new topics for further cooperation should be considered. For this, the fine work which has begun under the auspices of this working group and the activities discussed in Section 7 form a solid base.