REPORT

drawn up on behalf of the Committee on Energy, Research and Technology on Europe's response to the modern technological challenge

Part A: MOTION FOR A RESOLUTION

Rapporteur: Mr M. PONIATOWSKI
B/ letter of 29 March 1985, the Committee on Energy, Research and Technology requested authorization to draw up a report on Europe's response to technological challenge.

B/ decision of 25 April 1985, the committee was authorized to report on this subject.

The motion for resolution tabled by Mrs CHOURAGUI, Mr JUPPE, Mr FITZSIMONS, Mr MACSHARRY, Mr MANCEL, Mr CARIGNON and Mr FLANAGAN on the new technologies (Doc. 2-1705/84), and the motion for a resolution tabled by Mr EPHREMIDIS, Mr ADAMOU and Mr ALAVANOS on statements by the President of the Commission concerning Community participation in space armament programmes (Doc. B 2-130/85), which had been referred to the Committee on Energy, Research and Technology, were also taken into consideration.

On 23 April 1985, the Committee on Energy, Research and Technology appointed Mr PONIATOWSKI rapporteur.

At its meetings of 20 June 1985, 16/17 September 1985 and 26 September 1985, the Committee on Energy, Research and Technology considered the draft report. It adopted the motion for a resolution as a whole on 27 September 1985 by 20 votes to 0 with 4 abstentions.

The following took part in the vote: Mr ADAM, second vice-chairman and acting chairman; Mr SALZER, first vice-chairman; Mr SELIGMAN, third vice-chairman; Mrs ALOIS VON BLOTTNITZ, Mr BONACCINI (deputizing for Mr IPPOLITO), Mr CIANAGLINI, Mr CROUX (deputizing for Mr ESTGEN), Mr FORD (deputizing for Mrs LIENEMANN), Mr K.-H. HOFFMANN (deputizing for Mr MUNCH), Mr KOLOKOTRONIS, Mr LINKOHR, Mrs LIZIN, Mr MALLET, Mrs MARTIN (deputizing for Mr LONGUET), Mr METTEN (deputizing for Mr SCHINZEL), Mr SMITH, Mr SPATH, Mr STAES, Mr STAUFFENBERG (deputizing for Mr RINSCHER), Mr TOKSVIG, Mr TURNER, Sir Peter VANNECK (deputizing for Mr KILBY), Mrs VIEHOFF and Mr WEST.

The report was tabled on 27 September 1985.

The deadline for tabling amendments to this report will be indicated in the draft agenda for the part-session at which it will be debated.
CONTENTS

A. MOTION FOR A RESOLUTION .................................................. 5

B. EXPLANATORY STATEMENT ......................................................

INTRODUCTION ...........................................................................

Part I The context ...........................................................................

Part II The rivals ............................................................................

Part III Europe: the state of the union ..............................................

Annex I: Motion for a resolution tabled by Mrs CHOURAQUI, Mr JUPPE, Mr FITZSIMONS, Mr MacSHARRY, Mr MANCEL, Mr CARIGNON and Mr FLANAGAN on the new technologies (Doc. 2-1705/84) .............................................

Annex II: Motion for a resolution tabled by Mr EPHREMINIDIS, Mr ADAMOU and Mr ALAVANOS on statements by the President of the Commission concerning community participation in space armament programmes (Doc. B 2-130/85) ..................................................
The Committee on Energy Research and Technology hereby submits to the European Parliament the following motion for a resolution together with explanatory statement:

A

MOTION FOR A RESOLUTION

on Europe's response to the modern technological challenge

The European Parliament,
- having regard to the various proposals to reinforce the Community's technological base and in particular the EUREKA initiative of the French Government,
- having regard to the Commission's memorandum 'Towards a European Technology Community',
- having regard to the IRIS (Initiative for Research in Informatics relating to Society) proposal by the Italian Government,
- having regard to the intergovernmental meeting on EUREKA in Paris on 10 July 1985,
- having regard to the Strategic Defence Initiative announced by the President of the United States in 1983,
- having regard to the very significant increase in research and development funding in the United States in the past two years, in both the private and public sectors,
- having regard to Europe's declining industrial competitiveness in trade in high technology products,
- having regard to its own resolutions on the European response to SDI
- having regard to the report of the Committee on Energy, Research and Technology (Doc. A 2-109/85),

A. aware of Europe's great scientific achievements throughout the 20th century and in previous centuries,

B. aware that Europe is at its strongest when the European countries cooperate as has been seen recently with the achievements of the European Space Agency, of Airbus, in the field of thermonuclear fusion, the ESPRIT programme and elsewhere,

1 COM(85) 350 final
2 Resolution on European initiatives in the research and development sphere, PV 13.6.85 (PE 98.744), Part II, p. 13
Resolution on a European technological research project (Doc. B 2-516/85)
C. aware that Europe's weaknesses lie chiefly in the fragmentation of its research activities and the lack of a genuine internal market but also in the exploitation of research findings for innovation,

D. aware that the scale of funding available for research and development in the US and Japan has strengthened their industrial competitiveness vis-à-vis the European Community,

E. aware that Japan and the newly industrialized countries pose a similar, and in the long run, possibly greater threat,

F. aware, however, that the aims, objectives and resources of US and Japanese technology and industrial policy do not correspond to the political, economic, and social needs and circumstances of Europe and for that reason cannot simply be copied,

G. aware that Japan's success rests on government organized and subsidized strategic research and development where universities, industry and governments cooperate closely together,

H. aware that innovation results from industrially relevant applied research and development and not from pure research,

I. having regard to the vast and growing opportunities for a technologically developing society which can thereby exert a favourable influence on the quality of life and help to create greater well-being in Europe and the world,

J. aware that high technology industries will be the principal elements in the creation of new wealth which justifies giving consideration to their distribution notwithstanding the fact that sections of these industries are subject to fluctuations,

K. acutely aware that Europe absolutely must assert itself in the field of technology if it wishes to ensure its political and economic independence and its social and cultural identity,

L. whereas research and technology policy must be an integral part of any European industrial policy, with industry remaining one of the main direct creators of wealth,

M. whereas research and technology must reflect a democratic formation of opinion and be based on a broad dialogue carried out in society, political/parliamentary circles and on the shop floor,

N. whereas it is the aim of research and technology policy to use technological progress for the benefit of society and the environment and to translate this into social progress,

O. whereas technological change can only be mastered without profound social upheavals if it proves possible to exploit it to create employment, improve living and working conditions and enhance the quality of work,

F. whereas supply alone can no longer be permitted to ensure technological development which must also match the requirements of demand,
Q. whereas technology policy must be implemented within the framework of a large internal market and efficient Community institutions,

R. aware of the possibility of rejuvinating traditional industries through the use of new technologies,

S. aware that if such a technological Europe is to be created then a massive increase in training and retraining will be necessary for the workers of Europe and urging more governments to take steps to ensure funds are available,

T. aware that productive capital is more important than finance capital for these developments,

In the immediate future

1. Insists that technology policy should be integrated into a coherent and efficient Community framework by creating a technological Community, completing the large internal market and reforming the decision-making procedures and institutional structure;

2. Calls for all these measures to be taken in the course of work in progress in various intergovernmental conferences to prepare the decisions for the next European Council in Luxembourg in December 1985;

3. Demands that the political declarations from Europe's leadership now be translated into action and that at the next meeting the Conference of Research Ministers take immediately operational decisions;

4. Insists that clear priorities be established for European research, with adequate funding from public and private sources, within the Community budget, from national budgets and through the European Investment Bank and the New Community Instrument;

5. Welcomes the EUREKA initiative of the French Government both as a non-military European response to the SDI programme and as the means for an aggressive European technological and industrial policy;

6. Urges strongly that the organization of research and the dissemination and utilization of findings should be improved so that Europe is able to exploit commercially and with success its own inventions;

7. Wishes the EUREKA project to be incorporated into the European Community and wishes the Commission to have a vital role in the development of the EUREKA project, for it to be associated with each project, for it to assume the essential role of coordination between individual projects and with existing programmes and finally that it should guarantee that the results are available to all members of the European Community;

8. Welcomes the inclusion of non-members of the Community in this cooperation; wishes serious consideration to be given to whether countries from Eastern Europe seeking cooperation can be included in individual projects;
9. Repeats its demand for the European Parliament to participate in the definition and implementation of EUREKA;

10. Points out that further procrastination by governments would be an inexcusable dereliction of their duty and a great disservice to the peoples of Europe as well as being counter-productive to their true national interests;

11. For the Community budget, sets a target of at least 6% of commitment appropriations by 1988 to be devoted to research and development: this figure to be matched by national efforts;

12. Calls on Member States to agree the same budget nomenclature for research and development expenditure in all government departments;

13. Approves, in principle, the list of priority sectors proposed by the Commission in its memorandum 'Towards a European Technology Community' and the impact that one may have on another;

14. Believes when choosing projects that the main criteria must be social and economic benefits; requests the European Commission to put forward appropriate projects which meet these criteria as far as possible;

15. (i) Believes that the European Community should support a number of major projects to supplement existing projects;

(ii) These projects should be in keeping with the objectives of Community policy and be of a non-military nature;

(iii) Suggests that in its report on the framework programme of Community research and development activities, the Commission should examine the feasibility of major projects and present them to the European Parliament which will define the priorities for the future;

(iv) Would add to the requests for priority in research, environmental programmes, in particular to combat air pollution, and advanced transport systems;

16. Asks the Commission to investigate the feasibility of these and similar proposals with a view to submitting them to Parliament and the Research Council so that decisions may be taken within 12 months;

17. Calls for European research capacity to be mobilized and focussed on non-military aims and rejects European participation in the SDI project on political, economic, scientific and ethical grounds;

18. Wishes to ensure that any technology breakthroughs are not lost to the Community through restrictions on technological transfer because of involvement in joint ventures with companies based in countries that have such unfair regulations; wishes priority to be given to joint ventures with companies based in countries without such restrictions, e.g. Japan;

19. Appeals in this context to all European scientists and research workers to commit themselves to developing a European technological community for non-military purposes;
20. Points out the need for European coordination as regards cooperation with the United States and Japan in technological research areas in addition to thermonuclear fusion and space, free exchange of scientists, research workers and scientific findings;

In the medium term

21. Calls for an independent European contribution to the development and introduction of new technologies with the aim of modernizing European industry in a manner which is socially and environmentally acceptable;

22. Believes, given the high level of skills of its labour force, that Europe's opportunity lies in the judicious use of new technologies to develop new products with a high degree of specialization;

23. Urges that the assessment and evaluation of the economic and social effects of new technologies should form an integral part of the programme to promote research and technology and welcomes in this context the IRIS initiative by the Italian Government;

24. Urges that a 'technological Europe' should take its place alongside 'A European social continuum';

25. Calls for workers to be involved in decision-making processes relating to employment, production aims and production methods and urges in particular:
   (a) the formulation of a framework directive making the information, consultation and participation in decisions by workers compulsory at plant level and above plant level when new technologies are introduced;
   (b) a legal framework to protect workers in the course of changes to the organization of work, and swifter progress in collective bargaining towards the redistribution of work and reduction in working time;
   (c) effective participation by representatives of European trade unions in the formulation and implementation of Community research programmes;
   (d) involvement of works councils in research projects financed with resources from the European Community;

26. Insists on the need to overcome traditional scepticism and over-caution and to adopt measures designed to improve the economic climate for innovation;

27. Considers it essential that a fertile economic base be laid to encourage the emergence of new undertakings in growth industries and the development of existing undertakings by directing innovation towards products as well so as to increase our competitiveness on world markets;

28. Considers it essential therefore that:
   (a) a unified internal market be established, in accordance with the decisions of the Milan European Council and Parliament's guidelines;
(b) appropriate financial instruments be implemented to encourage the emergence and development of new undertakings and new industrial skills;

29. Considers that the establishment of a unified internal market should not only provide a stimulus for further competitiveness between European undertakings but rather, given the threat of further unemployment, an opportunity for the emergence of new undertakings in Europe and cooperation projects, particularly in the service and telecommunications sectors and in those sectors where the Community is lagging far behind or is in debt to other industrial powers;

30. Considers that innovation should provide particular encouragement for local entrepreneurial initiatives capable of applying the new technologies and directing them towards services and new products thereby responding to local needs;

31. Stresses the importance of improved scientific communication between research centres in the various regions of the European Community;

32. Wishes the Joint Research Centre (JRC) to be assigned a central coordinating role - particularly in the EUREKA framework - in environmental research and research into biological and chemical hazards;

33. Asks the Commission to bring forward more imaginative proposals to improve the professional status and working conditions for Europe's scientists as the best means to halt the brain drain;

34. Believes that positive discrimination in favour of starting up and growth of small technological companies is a proper objective for the Community;

35. Believes that a flexible large venture capital market not limited to internal ventures is vital for the encouragement of innovation and to crown with success the exploitation of research results;

36. Asks the Commission to study this question further with a view to making more imaginative proposals;

37. Asks the Committee on Energy, Research and Technology to examine, in conjunction with the research bodies, high technology industries and public authorities, new means of stimulating innovation and cooperative research ventures;

38. Believes that more needs to be done at Community level to bring academic research closer to European industry at all levels and to encourage it to be more closely geared to practical industrial uses. This need requires recognition. Close technological and industrial cooperation must be encouraged in order to make Europe truly competitive while avoiding any breach of Articles 85 and 86 of the Treaty of Rome;

39. Believes that other Community policies should take account of the importance of strengthening the Community's technological base;

40. Sees the danger of the gap widening between rich and poor regions in the Community if regional policy is not backed by technology policy measures; calls for aid to be given to labour-intensive technologies geared to the
skills and experience of the labour force and natural conditions in less
developed regions; draws attention to the central role of small- and
medium-sized undertakings in these regions;

41. Acknowledges its responsibility towards countries in the Third World and
calls for a systematic transfer of labour-intensive technologies adapted
to local conditions;

42. Stresses the need for a major reform of the Community's training and
retraining policies in order to increase the research corps of Europe;

In the longer term

43. Calls for a more precise definition of a Community technology strategy;

44. Believes that this strategy should contain the following basic elements:
   - the Community should maintain its comparative advantage in space,
     energy-related research and telecommunications;
   - the Community should concentrate on improving its relative position
     as regards biotechnology, marine technology, new materials and
     micro-electronics;

45. Believes that the institutions of the EC should commit themselves to
making up, in the next 10 years, by 1995, the loss in industrial
competitiveness in high technology goods, incurred in the past 20 years;

46. Instructs its Committee on Energy, Research and Technology to report to it
annually on the state of Europe technologically, and progress made towards
the achievement of the objectives outlined above.