## **European Communities**

## **EUROPEAN PARLIAMENT**

# Working Documents

1983-1984

1 June 1983

**DOCUMENT 1-379/83** 

REPORT

drawn up on behalf of the Committee on Energy, Research and Technology

on the proposal from the Commission of the European Communities to the Council (Doc. 1-1182/82 - COM(82) 855 final) for a decision adopting a research programme of the European Economic Community on forecasting and assessment in science and technology (FAST), 1983-1987

Rapporteur: Mr T. NORMANTON

PE 83.579/fin.

By letter of 21 January 1983 the President of the Council of the European Communities requested the European Parliament to deliver an opinion on the Commission's communication to the Council on the research programme (1983-1987) 'Forecasting and Assessment in Science and Technology (FAST)'.

On 7 February 1983 the President of the European Parliament referred this proposal to the Committee on Energy, Research and Technology.

On 19 January 1983 the Committee on Energy, Research and Technology appointed Mr NORMANTON rapporteur.

The committee considered the Commission's proposal at its meeting of 15 February 1983 and the draft report at its meetings of 23 March and 25 May 1983. At the last meeting the committee unanimously adopted the report as a whole.

The Commission took the committee's amendments into consideration.

The following took part in the vote: Mrs Walz, chairman; Mr Gallagher and Mr Seligman, vice-chairmen; Mr Normanton, rapporteur; Mr Adam, Mr Calvez (deputizing for Mr Pintat), Mr K. Fuchs, Mr Linkohr, Mr Pedini, Mr Purvis, Mr Sassano, Mr Veronesi and Mrs Viehoff (deputizing for Mr Schmid).

The opinion of the Committee on Budgets is attached.

This report was tabled on 27 May 1983.

### CONTENTS

<u>e</u>	<u>age</u>
Amendments to the Commission's proposal	5
A. MOTION FOR A RESOLUTION	6
B. EXPLANATORY STATEMENT	9
I. Political statement	9
II. Background	10
III. Results of FAST	11
IV. Recommendations for FAST II	13
Opinion of the Committee on Budgets	15

The Committee on Energy, Research and Technology hereby submits to the European Parliament the following amendments to the Commission's proposal and motion for a resolution together with explanatory statement:

I. Proposal from the Commission for a Council decision adopting a research programme of the European Economic Community on forecasting and assessment in science and technology (FAST), 1983-1987.

Amendments tabled by the Committee on Energy and Research

#### Amendment No. 1

The Commission shall arrange for the results of the programme to be evaluated by an independent group, and shall make a report to the Council and to the European Parliament at the end of the programme,

#### Amendment No. 2.

The main aim of the FAST research programme is the analysis of scientific and technological changes in order to highlight their long-term implications and consequences for the Community's R & D and other policies over the next 5.7 and 10 years and to propose timely policy options.

Text proposed by the Commission of the European Communities

#### Article 4, second paragraph

The Commission shall evaluate the result of the programme and shall make a report to the Council and to the European Parliament at the end of the programme.

#### ANNEX, paragraph 1, line 4

The main aim of the FAST research programme is the analysis of scientific and technological changes in order to highlight their long—term implications and consequences for the Community's R & D and other policies.

Α

#### MOTION FOR A RESOLUTION

closing the procedure for consultation of the European Parliament on the proposal from the Commission of the European Communities to the Council for a decision adopting a research programme of the European Economic Community on forecasting and assessment in science and technology (FAST), 1983-1987

#### The European Parliament,

- having regard to the proposal from the Commission of the European Community to the Council (COM(82) 855 final)<sup>1</sup>,
- having been consulted by the Council (Doc. 1-1182/82),
- having regard to the report of the Committee on Energy, Research and
   Technology and the opinion of the Committee on Budgets (Doc. 1-379/83),
- having regard to the result of the vote on the Commission's proposal,
- A. noting that the rate of change in science and technology is so rapid that 5 year predictions are difficult to make and that this is the timescale within which firms make their corporate plans,
  - 1. Notes that the FAST programme has developed into an important instrument of common research policy;
  - 2. Insists that the mandate or terms of reference for future programmes be more precisely drawn to ensure that:
    - (a) tasks are more limited in timing and scope to serve as tools of management for decision-taking at the political level,
    - (b) a clear separation be made between the tasks for action and tasks for longer term strategic contemplation, the latter to be assigned for preparation by the academic world,
    - (c) in general the service of many already established FAST institutions be used to prepare studies for action,

<sup>1</sup> OJ No. C89, 31.3.1983, pp 9-11

- (d) the Commission concentrates on the identification of sectors requiring study, the precise terms of reference for each, the careful assignment of tasks, and the interpretation of the results of such studies for translation into action policies;
- 3. Calls for a reassessment of the budget requirements of the Commission, on the assumption that no additional in-house staff appointments be made, though this may well result in a higher expenditure on work to be contracted out;
- 4. Regards the analysis of long-term technical change as a genuinely European undertaking:
- 5. Requests, in view of the experimental nature of the five-year programme, that the Commission gives an interim report to the Parliament not later than the end of 1985;
- 6. Welcomes FAST's intention to maintain Europe's industrial autonomy;
- 7. Congratulates those responsible for initiating and executing this first experimental FAST programme, endorses the idea of FAST being given a further opportunity to prove its usefulness, but insists that the criticism and recommendations set out in this motion for a resolution be incorporated into the terms of reference of any future programme;
- 8. Recommends that the appropriateness of locating the FAST-team in the Directorate General for the information market and innovation or in the Directorate General for the internal market and industrial affairs, should be examined in order to recognize and ensure that there is an effective and efficient exchange of information between the different services of the Commission, since the programme embraces more than policy for science and technology;
- 9. Hopes that the Community and the Member States will make greater use of the results of FAST I;
- 10. Calls on the Commission to take account of the results of FAST I in the 1984-1987 research framework programme, and to incorporate current results of FAST II in its evaluation;

- 11. Stresses the central role of work in our industrial society, hopes that FAST II will devote particular attention to changes in the concept of labour;
- 12. Welcomes the consideration given to the needs of the economically weaker regions of the Community under FAST, and hopes that the Community's industrial and regional policy will be aligned with the results of FAST;
- 13. Hopes that the analysis of long-term technical change will be extended to problems of the Third World;
- 14. Welcomes the Commission's intention to establish an informal network between research centres in the Member States and the FAST group;
- 15. Hopes for improved and current information on the activities of FAST and the outcome of its work;
- 16. Regards the appropriations and posts earmarked as adequate, but hopes for improved cooperation between FAST and the Commission Directorates-General;
- 17. Instructs its President to forward to the Council and Commission, as Parliament's opinion, the Commission's proposal as voted by Parliament and the corresponding resolution.

#### EXPLANATORY STATEMENT

#### I. POLITICAL STATEMENT

- 1. At first reading of the mass of documentation and reports relating to the 1978 FAST mandate and the programmes for implementation there was a great temptation to view the whole Commission proposal with the greatest suspicion and cynicism. To a practising politician with long and deep involvement in the world of industry, industrial relations, and commercial decision—taking, the whole concept of FAST appeared to be more relevant to the academic environment of a university than to the needs of a political executive institution like the Commission.
- 2. Indeed there were many occasions when the whole process appeared to savour more of intellectual flight into realms of fancy, of speculation, and academia, rather than to serve as a tool of management to enable executive decisions (or recommendations for such decisions) to be taken.
- 3. The rapporteur was sorely tempted to recommend that the whole Commission proposal be scrapped, public funds and brilliant minds redirected, and replaced by the purchase of a few magic crystal balls for issue to heads of all divisions of the Commission.
- 4. In addition and this was a serious suggestion at first those senior staff appointments in the Commission, who it is claimed seriously need the kind of enlightenment which FAST purports to be able to provide, should be filled by men who have extensive experience in the sectors listed in the 1978 mandate e.g. information technology et al. From them might come, for consideration by Commissioners, proposals for policies with a far higher content of objectivity and immediacy.
- 5. However, in the short period available for discussions and enquiries in large national and international organizations and governmental agencies, it clearly appears to be the growing practice for departments or teams to be established to carry out the role and functions comparable to those instituted under the initial FAST programmes.

6. On the basis of these investigations therefore the rapporteur's initial cynicism has been replaced by a constructive though critical assessment of the concept of FAST, the FAST mandate and programmes, and the Commission's proposals for the inclusion in the 1984 budget of a further FAST programme and staff to manage it.

#### II. BACKGROUND

- 7. The 1978 FAST mandate which defined the scope, means and objectives, and the results subsequently achieved in executing that mandate must naturally constitute the background to any assessment of the desirability of continuing FAST. To some extent, this also applies to the decision as to how the programme might be pursued, i.e. the content of any prospective new mandate and its conditions of implementation, including staff and budget factors.
- 8. The 1978 mandate comprised 3 themes:
  - analysis of <u>existing</u> research activities in forecasting and assessment ... in science and technology
  - highlighting the <u>prospects</u>, <u>problems</u> and potential <u>conflicts</u> which might affect the long term development of the community and proposing <u>alternative</u> guidelines for Community R & D
  - establishment of an ad hoc system of collaboration between specialist research groups and hence the creation of a forecasting network within the Community.
- 9. It must be made clear from the outset that the mandate was and still is of immediate interest and well-balanced. It could not have been other than broadly conceived, but at the same time it left tremendous scope for missing the mark. The objective was to create an <u>instrument</u> for framing research and development policy in this vital area, an instrument for <u>decision-makers</u>, be these persons or groups involved in the political, economic or industrial fields, whose task it is to map out R & D guidelines at national and Community level.
- 10. The initial point of criticism which the rapporteur wishes to make, therefore, is directed at the 1978 decision-makers who did not lay down a clear, operational mandate. Much of the criticism set out below is rooted in the imprecise mandate and will be expressed in part in the form of a number of proposals or recommendations for FAST II and its scope and content, since there should be no doubt that FAST I should be continued.

- 11. The first of the above-mentioned 3 themes existing research activities has clearly not been studied in anything like the detail which would have been necessary to permit the best possible exploitation of the two subsequent themes. It is possible that the FAST team was not allocated sufficient personnel, time and budgetary resources for this purpose, but one might well ask whether parts of the research projects conducted under the FAST programme have already been carried out elsewhere and are therefore tantamount to duplicated effort. Forecasting in a large number of areas is obviously not the exclusive preserve of FAST.
- 12. The creation of a forecasting network, the third theme, must also be qualified in that it apparently concerns only the projects selected by the FAST team. Besides having oerated for only a limited period during the mandate, its factual scope is diffuse and restricted in nature. Its value is therefore contingent upon the relevance of the subjects selected for study under the second theme.

#### III. RESULTS OF FAST

- 13. After spending a great deal of time (perhaps an unwarranted amount of time) on determining the actual content of the mandate, the FAST team came to the conclusion that decision-makers involved in future developments within the Community would have to deal with 3 main themes:
- work and employment problems in the eighties
- major changes in the uses of information technology over the next 20 years
- major changes in the uses of the biological sciences in the next 30 years.
- 14. This analysis hardly contains any surprising elements but its importance must be emphasized since decisions affecting all 3 areas must be taken immediately in the cast of R & D in technology and science, bearing in mind the long lead times needed to implement initiatives of this type. An illustration of this is the fact that work and employment problems always remain topical despite varying pressure on decision-makers. On the other hand, developments in biological science will affect our daily lives and will depend not only on decisions taken 'today' but also on those taken 'yesterday'. I quote this example merely as a means of pointing out the importance of not setting a rigid schedule for the analysis, as this could lead to totally wrong conclusions.

- This leads on to the first observation. The FAST I team, on the basis 15. of studies already conducted, proposes to continue or commence specific research projects in a FAST II programme (set out in the proposal for a Council decision and in the annex thereto). Although the projects proposed are obviously relevant, the 4 main categories - as in the first FAST mandate are very broadly conceived as to their content and their objective and are, therefore, imprecise. The major new clarification in relation to FAST I is that economic and industrial growth factors are given greater priority. However, there is no indication in the Commission proposal of which FAST I results have led to this conclusion. Even a close reading of the FAST I results, which are not contained in the Commission proposal (which also present the reader with the same impossible task of comprehending the text as the present proposal, owing to the total lack of transparency, systematic approach and readableness), provides no clarification or reasoned indication of priorities. It is conceded that the subject is extremely complex and wide-ranging but the priorities proposed for future R & D activity would seem to have been chosen at random. Virtually any R & D subject concerned with society as a whole could be deemed to be relevant but one is left with the impression that an infinite number of other subjects could justifiably be regarded as equally relevant. Are the subjects selected for research the most relevant and therefore entitled to receive priority? FAST I does not provide an answer.
- 16. This awkward uncertainty leads to the next observation that there is a lack of analysis of the possibilities, problems and conflicts currently facing political and, in particular, economic/industrial bodies or decision—makers. The impression is that the study has been too academic and too out of touch with reality. It is typical perhaps that the more the problems studied relate to the present and the more the studies depart from the 30—year analysis category towards the current decade, the more diffuse the results and hence the R & D guidelines which were the aim of the studies.
- 17. In fact, some of the national delegations which have evaluated FAST in the Advisory Committee on Programme Management point out that the majority of the studies have been interesting, even excellent, but of no practical value. This naturally leads on to a basic question: who cannot use the results? Are they of no value to the previously mentioned categories of decision-makers? The present rapporteur unfortunately feels that only a limited number of decision-makers in the Commission departments have in fact made use of some of the results. And would these have proposed other

R & D activities than have been the case, in agriculture for example, if FAST had not existed? In other words, is FAST a working instrument? The question cannot simply be answered using FAST as a basis.

#### IV. RECOMMENDATIONS FOR FAST II

- 18. It is obviously easier to criticize than to produce results in the area which FAST has had to cover. The rapporteur proposes, nevertheless, that the research subjects for FAST II should be less academic and more directly utilizable in establishing and implementing R & D in those Community sectors in which endeavours are being made to realize a desirable policy at both national and Community level. Some results can be seen at Community level (the framework programme, ESPRIT, JRC), though one must doubt their applicability at other levels. It is therefore proposed that the FAST II mandate should incorporate the following elements and conditions of implementation:
- (a) greater <u>priority</u> for problem areas in the <u>economic/industrial</u> sector.

  This also includes involving experts in the field to determine the content of the mandate in respect of priority research areas and subjects;
- (b) greater use of <u>existing FAST activities</u> in the Member States, i.e. use of 'local talent' and <u>greater coordination</u> of national projects. Here it ought also to be possible to identify which R & D projects could be implemented most expediently at the national or Community level;
- (c) clear identification of areas in which Community efforts could be intensified. This must be justified in a transparent manner so that the decision-makers do not conclude at the end of the project that it was interesting but irrelevant;
- (d) work towards closer relations between <u>users and producers</u> of R & D in technology, bearing in mind that <u>science</u> is also a <u>service</u>;
- (e) involvement of a greater number of external experts;
- (f) closer collaboration between the Commission's various Directorates—General and creation of a regular internal network for cooperation.

  Attainment of this aim should not call for additional personnel;

- (g) the external network must be enlarged to enable relevant experts to take part. More resources should be allocated to this and <u>not</u> to the internal network, the principal task of which is to analyse and evaluate the external work (arising from national cooperation and contract work) in preparation for submitting R & D proposals. FAST must not be used as a self-explanatory justification for the creation of ivory towers or bureaucratic inertia;
- (h) FAST II must result in a <u>plan of action</u> and not in the a priori conclusion that FAST III is a necessity. FAST is too imbued with 'flights of fancy', based on verisimilitudes. There must be well-founded conceptions of a future reality. The results of FAST II must be credible and well-substantiated. FAST must produce <u>political options</u> for the users;
- (i) given that the specific content of the FAST II Mandate is to be analysed and laid down in more detail in the introductory phase, it is proposed that the decision-making bodies at Community level should be briefed concisely and precisely on the results achieved in the discussions and given an opportunity to submit amendments and corrections so that no-one can claim upon conclusion of the programme that for various reasons it was not possible to implement essential parts of the FAST II mandate.

#### OPINION OF THE COMMITTEE ON BUDGETS

Letter from the President of the Committee to Mrs WALZ,
President of the Committee on Energy, Research and Technology

27 May 1983

Dear Mrs Walz,

<u>Subject</u>: Proposal for a decision adopting a research programme on forecasting and assessment in science and technology (FAST) (1983/87) (COM(82) 855) (Doc. 1-1182/82)

The Committee on Budgets considered this proposal at its meeting of 25/26 May 1983. Following discussion, which criticized particularly the lack of complete reports in all official languages, the Committee on Budgets concluded that the proposal could be accepted.

Yours sincerely,

Erwin LANGE

There were present: Mr Lange, Chairman; M.P Notenboom, Vice-Chairman; Mrs Barbarella, Vice-Chairman; Mr Abens, Mr Arndt, Mr Baillot, Mr Klepsch (deputizing for Mr Konrad Schön), Mr Langes, Mr Saby and Mrs Scrivener.