II

(Acts whose publication is not obligatory)

COUNCIL

COUNCIL DECISION

of 26 October 1983

adopting the second stage (January 1984/March 1986) of the multiannual research and training programme for the European Economic Community in the field of biomolecular engineering

(83/533/EEC)

THE COUNCIL OF THE EUROPEAN COMMUNITIES,

Having regard to the Treaty establishing the European Economic Community, and in particular Article 235 thereof,

Having regard to the proposal from the Commission (1),

Having regard to the opinion of the European Parliament (2),

Having regard to the opinion of the Economic and Social Committee (3),

Whereas Article 2 of the Treaty assigns to the Community *inter alia* the task of promoting throughout the Community a harmonious development of economic activities, a continuous and balanced expansion and an accelerated raising of the standard of living;

Whereas by Decision 81/1032/EEC (4), the Council adopted a multiannual research and training programme in the field of biomolecular engineering; whereas the programme is to be implemented in two stages, the first stage running from 1 April 1982 until the revision of the programme in 1983 and the second stage from this revision until 31 March 1986;

Whereas the Council decided that the amount of the appropriations and the staff required to execute the programme is to be re-evaluated when the programme is revised;

Whereas the implementation of the first stage of the programme through research and training contracts has clearly confirmed the need for an extension of the programme during the second stage;

Whereas the importance of research and training at Community level in the field of biomolecular engineering is fully recognized in the framework programme (1984 to 1987) prepared by the Commission;

Whereas account should be taken of the opinion of the Scientific and Technical Research Committee (Crest) on the Commission proposal;

Whereas account should be taken of the opinion of the Advisory Committee for the Management of the Biomolecular Engineering Programme,

HAS DECIDED AS FOLLOWS:

Article 1

The second stage of the multiannual research and training programme, for the European Economic Community in the field of biomolecular engineering, hereinafter called 'the programme', is hereby adopted in the form set out in the Annex for the period starting on 1 January 1984 and ending on 31 March 1986.

(1) OJ No C 180, 7. 7. 1983, p. 10.
(2) Opinion delivered on 14 October 1983 (not yet published in the Official Journal).
(3) Opinion delivered on 28 September 1983 (not yet published in the Official Journal).
(4) OJ No L 375, 30. 12. 1981, p. 1.

Article 2

The funds estimated as necessary for the execution of the second stage of the programme, which are to be added to those already allocated for the first stage, should be seven million ECU, including expenditure on an additional staff of two.

Done at Luxembourg, 26 October 1983.

For the Council

The President

G. MORAITIS

ANNEX

1. **Research actions**

1.1. Development of second generation bioreactors (multienzymatic, multiphase or requiring a co-factor) for detoxification and for industrial applications including agro-food applications. Research activities are also included in this sector focusing upon :

— the study of the physiology and the stability of cell populations, including genetically manipulated cells, in relation with whole cell immobilization,

— the analysis of enzyme inactivation and the preservation of activity in immobilized systems (particularly under non-physiological conditions characteristic of high salinity, non-aqueous, high temperature and extreme pH environments).

1.2. Improved production, by means of biomolecular engineering methods, of substances for :

— animal husbandry (particularly vaccines and hormones),

— agro-food industries.

1.3. Upgrading of plant products, particularly ligno-cellulose, by means of biomolecular engineering methods.

1.4. Improvement, by means of genetic engineering, of plants and micro-organisms which play an important role in agriculture. Research activities in this sector are to include :

— the characterization of the structure and the expression of microbial and plant genomes, including organelles of DNA and plasmid DNA,

— the study of the molecular mechanisms of interactions between plants and symbiotic micro-organisms and the improvement by genetic engineering of these symbiotic relations,

— the development of methods for the identification, transfer and expression of new genetic information in cultivated plant species,

— the control of regeneration and differentiation of plant cells and plant protoplasts into mature and fertile plants,

— the use of biomolecular engineering for the early detection of genetic or pathogenic changes in plants.

1.5. Development of methods for detecting contamination and for the assessment of possible risks associated with applications of biomolecular engineering in agriculture and industry.

The financial resources for the execution of research actions shall not be lower than 80 % of the total budget allocated to the second stage of the programme.

2. **Training**

2.1. Development of new reactors using immobilized multi-enzyme systems, including those requiring multi-phase environment and co-factor regeneration.

2.2. Development of bio-reactors for human detoxification.

2.3. The transfer of genes from diverse sources to the bacterium Escherichia coli, the yeast Saccharomyces cerevisiae and other suitable organisms.

2.4. Development of cloning systems.

2.5. Gene transfer in micro-organisms and in plants important ot agriculture.

2.6. Improvement of methods for detecting contamination and for the assessment of possible risks associated with applications of biomolecular engineering in agriculture and industry.

The financial resources for the execution of this training action shall not exceed 20 % of the total budget allocated to the second stage of the programme.