

# Unesco and science policy

Further recommendations of Unesco meeting of experts on science policy selected by Governments of the European Member States in Budapest from 4-7 July 1972.

G. Szigeti, Observer on behalf of EPS and member of EPS Executive Committee, has pointed out that in addition to the recommendations on the prospects for European co-operation in science (reported in the last issue 37 (August 1972)), the following four recommendations were also unanimously adopted by the Unesco meeting.

## **On the planning aspects of science policy-making**

The Committee of Experts, considering that it has emerged clearly from its deliberations that planning problems are among the most important of all the questions encountered by the Member States in the field of science policy, recommended to European Member States and competent international organizations that future work in science policy accord priority to planning problems, and in particular to :

- 1 Planning by objectives in science policy, and the formulation of objectives for research and experimental development (R and D) ;
- 2 Determination of priorities in R and D and the criteria used in priority setting ;
- 3 Long-term planning methods in the field of science policy and research ;
- 4 The integration of science policy in overall socio-economic planning.

The Committee also recommended that, as to the modalities of the work to be conducted on these themes at the international level, the need be recognized for the pooling of experience and for mutual assistance between interested Member States, by means, in particular, of :

specialized meetings whose task it would be to compare planning methods and achievements, exchange of published material concerning the Member States' medium and long-term plans and policy statements in respect of R and D ; and finally, when appropriate, research on a voluntary and co-operative basis on topics to be identified at the specialized meetings envisaged above.

## **On forecasting aspects of science policy**

The Committee of Experts, noting that science and technology are increasingly determining the qualitative changes and patterns of economic growth in society,

recalling that the social, economic and cultural goals of nations not only set the pace for R and D, but that they also undergo rapid adjustments or reappraisals as a result of scientific and technological breakthroughs,

recognizing moreover that the pattern of world needs and resources is such that national long-term planning can no longer be conceived of solely in terms of increased material prosperity, if only because this framework gives insufficient weighting to conditions which will critically affect the future quality of man's life, believing that due concern for the creation of conditions which will be conducive to a life of acceptable quality has introduced a new dimension into national science policy-making, and considering that the responsible national bodies would do well to take this new dimension into account when considering the alternative futures in respect of which they are nowadays called on to draw up alternative long-term plans for R and D,

recommended to science policy-making bodies of the European Member States and to the competent international organizations, as a matter of urgency :

- (a) To stimulate the study of socio-economic development phenomena in an expanded framework, linking these phenomena with the study of all natural processes and equilibria relevant to man's existence and the quality of that existence. There is room for such studies both at world level and other levels of geographical and economic disaggregation ;
- (b) To encourage further methodological research into forecasting techniques in the field of science and technology ;

- (c) To recognize that the studies and the methodological research referred to above at points (a) and (b) are important elements in the setting of viable long-term priorities for R and D, and that they should be seen as being intrinsically interrelated.

## **On international exchange of data on the profile of R and D effort in the European Member States**

The Committee of Experts, considering that the initiation and planning of international co-operative research requires adequate factual knowledge of the relevant aspects of the prospective partners' scientific and technological potential,

considering further that the gathering of such data by the national science policy-making bodies is in any event an inherent element of the R and D planning process,

mindful of the need for internationally comparable statistics in the field of science and technology,

believing that international gatherings whether at ministerial or at expert level (for example the Minespol Conference and the present Budapest meeting) have provided useful opportunities for the exchange of data — statistical, organizational and thematic,

recommended to Unesco to pursue, in collaboration with the appropriate authorities of its European Member States and competent international organizations :

- (a) The development of adequate and comparable statistical indicators of the national R and D efforts and, if so possible, the outcome of these efforts ;
- (b) The collection, analysis and dissemination of statistical, organizational and thematic data in the science policy field ;
- (c) Methodological studies and mutual information of interested specialists among its European Member States on modern methods of surveying the national scientific



potential and on the treatment and analysis of statistical data deriving therefrom.

### On the management aspects of science policy and on the efficiency and effectiveness of R and D

The Committee of Experts, considering that the good management of R and D at all levels and the question of optimization of the efficiency and effectiveness with which such R and D is conducted, are coming to assume ever greater importance for all national science policy-making bodies, recommended to European Member States and competent international organizations that this trend be recognized as calling for studies and research at both the national and international level.

Among the priority topics selected by the Committee in this respect are the following :

- (a) The integrated management of the national R and D system, including inter-branch and inter-disciplinary relations ;
- (b) The management and organization of research in universities, research institutions and individual research units including the study of the organization and functioning of entities performing R and D, with a view to the isolation of significant indicators permitting an objective evaluation of their internal efficiency and external effectiveness ;
- (c) Transfer problems in the application of R and D results to production, and to socio-economic needs.

## Society News

### Computational Physics

The Board of the Interdivisional Group on Computational Physics for the three-year period from 11 April 1972 :

Chairman : *A. Schlüter* (Max-Planck-Institut für Plasmaphysik, Garching-bei-München)

Secretary : *D. Biskamp* (Max-Planck-Institut für Plasmaphysik, Garching-bei-München)

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*J. Nadrachal* (Institute of Solid State Physics, Prague)

*C.L. Pekeris* (Weizmann Institute of Science, Rehovath)

*K.V. Roberts* (U. K. A. E. A., Abingdon)

*R.Z. Sagdeev* (Institute for Physics and Astronomy, Moscow)

*M.J.G. Veltman* (Institute for Theoretical Physics, Utrecht)

### ESO / CERN Proceedings

The Proceedings of the ESO/CERN Conference on Auxiliary Instrumentation for Large Telescopes, held in Geneva from 2-5 May 1972, are now available for US\$ 10.— (including postage) from

ESO-TP Division - c/o CERN  
CH-1211 Geneva 23/Switzerland

### Atomic Spectroscopy

The following members of E.G.A.S. have been elected to the Board for a period of three years :

*J. Blaise* (Orsay)

*E. Meinders*, Secretary (Amsterdam)

*A. Steudel* (Hanover) re-elected

*G. Zu Putlitz* (Heidelberg).

Other members of the Board are :

*B. Edlén*, Chairman (Lund)

*A.H. Gabriel* (Culham)

*P. Jacquinet* (Orsay)

*W.H. King* (Newcastle-upon-Tyne)

*J. Margerie* (Caen)

*T. Skalinski* (Warsaw).

### Physics in Astronomy

The result of the election for Board Members of the Physics in Astronomy Division is that the following twelve people have been elected :

*A. Blaauw* (E.O.S. Hamburg)

*M. Kuperus* (Utrecht)

*P.O. Lindblad* (Stockholm)

*G. Marx* (Budapest)

*P.G. Mezger* (Bonn)

*E.R. Mustel* (Moscow)

*F. Pacini* (Frascati)

*B. Paczynski* (Warsaw)

*M.J. Rees* (Cambridge)

*E. Schatzman* (Paris)

*D.W. Sciama* (Oxford)

*A.W. Wolfendale* (Durham).

### Honorary Officers of The Institute of Physics

The following Members have been elected Honorary Officers of The Institute of Physics and will take office on 1 October 1972 :

*President* Sir Brian Flowers  
FRS

*Vice-President* P.F. Chester

*Honorary Treasurer* H. Rose

*Honorary Secretary* R. Press  
(re-elected)



## EPS Reprints

### A Guide to Europhysics Conferences

Prepared by the Advisory Committee on Conferences, approved by the Executive Committee, and adopted by Council, 'A Guide to Europhysics Conferences' is now available as a reprint. It costs Sw.Frs. 10 (including postage) and may be obtained from the Main Secretariat. Also, it is sent to Conference Organizers who seek the 'Europhysics' label or EPS sponsorship for their events.

### Europhysics Style Manual

A guide to authors of papers in Europhysics Journals prepared by the Advisory Committee on Publications, 'Europhysics Style Manual' is now available as a reprint according to the following scale of charges (including postage) :

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