

EC/US HIGH LEVEL CONSULTATIONS ON MAY 25, 1978
STATEMENT BY MR. SCHUSTER
THE EC COMMON POLICY IN SCIENCE AND TECHNOLOGY, AND
THE US/EC R&D COOPERATION

For the first time R & D figures on the agenda of an US/EC High Level Consultation in order to review the existing R & D US/EC cooperation and identify possible extension to new R & D fields.

The development of a common policy in science and technology in the EC has two stages or two phases. Phase nr. 1 from 1958 to 1974 is characterized by the development of two sectoral activities, namely steel coal on the one hand and the nuclear field on the other hand. This, and everybody knows it, led to the crisis of Euratom and some major difficulties in developing a common nuclear policy.

Phase 2 started in 1974. It is only since a Council resolution of January 1974 that one can speak of a comprehensive Community research and technology policy. This policy covers in principle all areas, except defense and the industrial secrets.

The instruments are

- coordination of national policies,
- common action of Community interest.

But the Community should not have to handle everything. There must be a selection to define actions of EC interest and we have progressively defined a double filter.

Filter nr. 1 : the Community's research activities should be directed towards the Community's specific requirements and should accordingly be developed in view of existing Community sectoral policies, such as energy, agriculture, environment. The research and development activities we undertake are designed to further the attainment of the aims of a Community sectoral policy and at the same time help in developing new sectoral policies, such as "raw materials" or "social and sociological problems".

Filter nr. 2 : the Community should neither copy nor compete with national research and development activities; the Community should carry out such research and development activities as should appropriately be developed at Community level. Certain criteria have been laid down in this connection and I should like to mention some of these. Projects which, by reason of the considerable financial and human resources they require, cannot be undertaken on a national basis; for example, the JET fusion programme (Joint European Torus), an experiment which cannot be carried out successfully by national efforts alone, but only at Community level. Secondly, projects for which development costs are large and for which foreseeable outlets require a vast market. This is the case, for example, for data processing, where it is essential that we unite our efforts to set up a competitive and viable industry. Thirdly, projects which, by their very nature, are transnational and whose impact extends beyond national boundaries, as for example is the case with telecommunications, transport and the dissemination of information. Further criteria are also worthy of mention, for instance projects which, since they are a response to the Community's collective requirements, are common to all our Member States, for example reactor safety, environmental questions and issues, and reference materials, all of which are actions of common interest.

In carrying out research, we should ask ourselves whether such research fulfil these criteria.

Our points of gravity are the following :

1. Resources.

- Community R & D programs are developed in the fields of
- energy (conservation; fossil energy sector; nuclear fission and fusion; new non-nuclear energy sources such as geothermal energy and solar energy; hydrogen as new energy vector; energy systems analysis);
 - raw materials (primary and secondary);
 - agriculture and food resources.

2. Environment

3. Life in society.

Under this chapter, must be mentioned, inter alia, medical research, urbanism and habitat.

4. Services and infrastructure.

Two fields of Community activity qualify more particularly as "services" and "infrastructure", namely, the Community Bureau of References (BCR) and Scientific and Technical Information (STI).

I should not like to go into more details. But I should stress one important feature of our new policy. We are open for worldwide cooperation and the common policy must be complemented by a large measure of international cooperation.

The European Community will spend in 1978 at both national and Community level 26 billions of units of account i.e. 30/31 billions of US dollars for research and development for peaceful purposes. This is to compare with a US R&D Budget for 1978 which amounts to 44 billions of dollars, 50 % of it spent for national defense purposes.

With the development of the new common policy, new impetus for the US/EC collaboration has arisen. What is the state of our cooperation today ?

A. Bilateral R&D cooperation between US and EC

Let us make the inventory of the existing EC/US cooperation, the cooperation under preparation and the new envisaged cooperation.

- Existing cooperation

- a) in the nuclear field, collaboration between the Whole Core Accident Code Experts Group (WAC) and NRC.

Experts from NRC are participating in comparative calculations performed by the WAC experts group which is a subgroup of the Fast Reactor Safety Working Group. These calculations refer to severe fast reactor accidents. They are performed for a 1.000 MWel fast "model" reactor using codes developed in different countries of the Community and the USA.

The results obtained so far were very satisfactory. They were discussed in great detail as well as the basic features of the codes used. The comparative exercise was found very interesting and useful. The American participation (NRC and DOE) was very much appreciated by the WAC Group.

- b) In the non-nuclear field, a collaboration has been established between the European Commission and the Brookhaven Laboratory. This collaboration takes place in the field of energy system analysis and modelling with particular emphasis to develop energy R&D strategies and to study the global resource-price relationships for the future.

- Cooperation under preparation

- a) in the nuclear field :

- 1) a bilateral arrangement between the USNRC and the Joint Research Center of CEC will deal with nuclear safety information and reactor safety research.
- 2) a further arrangement in the nuclear R&D field is being prepared by CEC and DOE experts. It will deal with research linked to radio-active waste management. For the CEC, this includes current direct as well as indirect action. So far, potential specific areas of cooperation have been identified, such as management of low-level solid waste, management of gaseous waste, study of deep geological disposal, etc.. Other bodies such as USNR may also be interested in such an agreement.

- b) in the non-nuclear field :

A cooperation is under preparation concerning R&D on the environmental consequences of fossil energy production.

- New envisaged cooperation

On the occasion of the recent visit in Brussels of Mr. Frank PRESS and Mrs. MINK, three new fields of possible cooperation have been identified

a) Primary raw materials

The recently adopted EC research programme on primary raw materials covers three main areas dealing with exploration, ore reprocessing and mining technologies. Similar programmes exist on the US side;

b) Medical research

Preliminary contacts between offices in charge of medical research programmes in the US (NIH) and the Commission have shown a potential interest for cooperation in this field;

c) The CEC intends to start a five-years programme on forecasting and assessment on the field of science and technology (FAST).

Preliminary studies on this subject have been done in "Europe + 30".

The US are presently undertaking a fact finding study "Global 2000" which may detect gaps in this field.

There is an interest to compare methodology and differences in the approaches chosen on both sides. This could possibly be done during a workshop to be attended by specialists from both sides.

For the 3 above-mentioned cooperation activities, it is suggested that both sides designate responsible liaison officers.

For the future, programmes in other S&T fields are also envisaged : As soon as the E.C. internal decisions will have been taken, the following R&D fields could possibly be added to EC-US cooperation :

- secondary raw materials
- climatology
- enzyme technology - genetic engineering.

B. Multilateral R&D cooperation which includes among other partners, US and EC.

The main international organizations and undertakings where the US and the European Community do cooperate within a multilateral framework are for

Atomic Energy Agency) and INFCE (International Nuclear Fuel Cycle Exercise).

Within IEA, EC and US cooperate in 14 of 16 working parties. Specific cooperation is being developed in 6 IEA research projects.

Within IAEA, US and EC participate on a worldwide basis to an exchange of information regarding the research in the field of thermonuclear fusion. This is of great importance at the present juncture when one is considering the after JET period.

As far as INFCE is concerned, the Commission and the 9 Member States are actively participating to the work of this international conference, which has been launched by President Carter.

In conclusion, one could say the following : a Community common R&D policy is taking place; there is already an existing R&D US/EC cooperation; further development of this cooperation is envisaged. In order to make such cooperation successful, we have to be selective.

Primarily, we have to make a success of our R&D cooperation. I mean something which is really operational progressing steadily and of mutual benefit.

How to proceed now ? This is what we have to define.