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** Mr Spinelli, the member of the Commission of the European Communities with special responsibility for research and industry, replied before the European Parliament to an oral question on the FUTURE OF EURATOM put by the Parliamentary Committee on Research and Energy. According to Mr Spinelli, the national research policies are not capable of dealing with the problems that face Europe: the recent failure of the European Space Conference proves that it is virtually impossible to dovetail the various research policies planned at the national level. The Commission has therefore proposed a set of measures which concern both the Joint Research Centre and, on a broader scale, the whole range of problems facing the Community in the research sector (see "Research and Technology" No. 75).

At the close of debate the European Parliament called upon the Commission to state publicly and categorically that it could no longer be responsible for the situation unless the Council of Ministers showed a clear resolve to remedy matters by approving the reorganization of the Joint Research Centre and its multiannual programme and by taking the steps proposed by the Commission to enable the policy for research and development in the Community to be viewed as a whole.

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** In reply to a written question from Mr Glinne, a Belgian member of the European Parliament, concerning the CONCORDE aircraft, the Commission of the European Communities stated that the 74 options taken out on this aircraft by 16 companies have all been renewed in the last few months; for the Community and the United Kingdom, the options are: Air France 8; Lufthansa 3; Sabena 2; BOAC 8. The sonic boom problem comes within the context of environmental policy, from which the Commission obviously cannot dissociate itself. Lastly, adds the Commission, when the time comes it will assess the expediency, alluded to by the Member, of taking steps regarding the possible broadening of the Franco-British scheme into a seven-country venture (the Community countries plus the United Kingdom).

** THE SUPPLY OF ENRICHED URANIUM AND PLUTONIUM TO THE COMMUNITY COUNTRIES in 1967, 1968 and 1969 was the subject of a memorandum recently published by the European Communities' Statistical Office. For the first time, this memorandum is able to list deliveries as well as orders. ANNEX 1 contains a summary of its contents.

** THE FIGHT AGAINST AIR POLLUTION is the subject of a reply given by the Commission of the European Communities to a written question put by Mr Glinne, a Belgian member of the European Parliament. The text of the reply is given in ANNEX 2.

** PROTECTIVE MEASURES AGAINST NUCLEAR RADIATION are dealt with in a long reply given by the Commission of the European Communities to a written question from Mr Glinne, a Belgian member of the European Parliament, who expressed anxiety concerning statements made by two American scientists, Mr J.W. Goman and Mr A.R. Tamplin. The full text of the Commission's reply is given in ANNEX 3.

** To a written question from Mr Glinne, a Belgian member of the European Parliament, concerning ECONOMIC PENETRATION BY THE UNITED STATES IN EUROPE, PARTICULARLY IN THE ELECTRICAL ENGINEERING SECTOR, the Commission of the European Communities replied as follows:

"Certain of the Community governments and the Commission have stressed at various times, and again recently, the need to strengthen the technological and industrial capacity of the Community's electrical engineering industry by merging firms which are below the profitability and efficiency threshold. In the Commission's opinion, such mergers should take place within the Community framework. Nevertheless, since the Ateliers de Construction Electrique de Charleroi were taken over by Westinghouse, the Community electrical engineering industry has seen no further mergers. One should, however, note the development of certain cooperative schemes in the field of high temperature reactors".

** On 12-13 November 1970 a group of Dutch parliamentarians visited the Ispra Establishment of the Joint Research Centre, at the invitation of the Information Service of the Commission of the European Communities.

ANNEX 1The Supply of Enriched Uranium and Plutonium
to the Community Countries (1967, 1968 and 1969)

(memorandum by the Statistical Office
of the European Communities)

The supply of enriched uranium and plutonium to the Community countries is the subject of a memorandum compiled by the Statistical Office of the European Communities which, for the first time, is able to report the deliveries and not merely the orders recorded in 1967, 1968 and 1969.

The deliveries of special fissile materials from the United States or the United Kingdom are effected in performance of and within the context of the Euratom/US and Euratom/UK agreements for cooperation. The enriched uranium is mostly delivered in hexafluoride form; it is processed and worked by the Community nuclear firms and then delivered in fuel element form to the customer. Thus the last-named does not receive enriched uranium directly from the United States: the material passes through one or two intermediaries, who are not necessarily of the same nationality as the customer, so the receiving country is not necessarily the country of ultimate destination.

The contracts entered into with the enriched uranium producers are of several kinds - leasing contracts, sales contracts, or, since 1 January 1969, the "toll enrichment" contracts which provide for enrichment in the American gaseous diffusion plants of natural or slightly enriched uranium acquired beforehand by the customer.

To ensure comparability of data through the various stages of fuel processing, the quantities of enriched uranium are calculated in the following tables on the basis of the weight of uranium-235 they contain.

1. Enriched uranium imports into the Community countries in 1969, mainly from the United States, involved 3,255 kg of uranium-235, representing approximately 110,000 kg total uranium.

The Community's enriched uranium imports			
Year	Total (kg U ²³⁵)	Final destination	
		Community	Non-member countries
1967	3571	-	-
1968	1638	1607	31
1969	3255	2477	778

Taking into account present fuel consumption, during the first charge, in the enriched uranium nuclear power plants, annual imports of 3,500 kg U²³⁵ represent an initial electricity generating potential of about 20,000 million kWh (half the Netherlands electricity output), or the equivalent of seven million tons of coal.

2. Enriched uranium processing breaks down by country as follows:

Year	Unit	Ger.	France	Italy	Neth.	Belg.	Community
1968	kg U ²³⁵	842.7	253.0	-	-	28.1	1124.1
	%	75.0	22.5	-	-	2.5	100
1969	kg U ²³⁵	2971.7	180.9	41.1	-	39.3	3233.9
	%	91.9	5.6	1.3	-	1.2	100

3. The final enriched uranium demand is as follows:

Year	Unit	Ger.	France	Italy	Neth.	Belg.	Euratom	Community
1968	kg U ²³⁵	254.7	405.7	684.9	189.6	36.9	35.1	1606.9
	%	15.9	25.2	42.6	11.8	2.3	2.2	100
1969	kg U ²³⁵	1812.8	175.0	361.4	29.5	74.3	24.2	2477.2
	%	73.1	7.1	14.6	1.2	3.0	1.0	100

The above table shows that Germany is at present the major customer for enriched uranium in the Community; she is at present engaged upon a big nuclear energy development programme based on enriched uranium reactors.

4. The plutonium requirements of the Community countries are still modest, pending the fabrication of plutonium fuel elements for fast neutron reactors. Research needs, however, are already boosting demand considerably, the chief suppliers being the United States and the United Kingdom.

Plutonium imports into the Community

Year:	Unit	Country of origin			Total imports
		US	UK	Other non-member countries	
1967:	kg Pu	6.2	7.7	0	13.9
	%	44.6	55.4	0	100
1968	kg Pu	83.6	0	0	83.6
	%	100	0	0	100
1969	kg Pu	112.9	24.3	7.8	145
	%	77.9	16.7	5.4	100

Year	Recipient country					Community
	Germany	France	Italy	Netherlands	Belgium	
1967	5.2	2.3	-	0.3	6.1	13.9
1968	53.7	29.8	-	0.1	-	83.6
1969	120.7	-	3.0	-	21.3	145.0

ANNEX 2The Fight Against Air Pollution in the Community

(reply by the Commission to a written
Parliamentary question)

The problems of air pollution in the Community have not escaped the attention of the Commission, which is studying the various aspects of the question. The Commission considers it essential to mount a medium-term programme of action concerning the new measures to be adopted in the Community, as it stated in its communication to the Council dated 17 June 1970.

The Commission would point out that, at its recommendation, the Council on 20 March 1970 adopted a directive calling for alignment of the Member States' laws regarding the measures to be taken against pollution by gases emitted by controlled-ignition engines fitted in motor vehicles (official gazette No. L 76 of 6 April 1970). The Commission is taking part in the work undertaken by other institutions with the aim of finding the best means applicable in Europe to fight air pollution. In this capacity it is participating in the activities of the Council of Europe and of the UN Economic Commission for Europe.

The Commission has taken notice of the conclusions of the Department of Health, Education and Welfare referred to by the Honourable Member. It should be remarked that those conclusions can hardly be applied as they stand to Europe, where urban sprawl, motorization and the types of vehicles employed are not the same as in the United States. Nor in fact does the Department of Health, Education and Welfare, in view of the complexities of the problems, advocate general enforcement of the use of lead-free motor fuels in the immediate future, but recommends rather that their introduction be spread over some ten years.

Before considering what measures should be adopted in the Community, we must wait for the results of the work in progress on the hazards entailed by air pollution in various regions or districts and on potential methods of prevention. These findings, moreover, will make it possible to assess the expediency of applying measures of a fiscal nature.

ANNEX 3Protection Against Nuclear Radiation in the Community

(Commission's reply to a written Parliamentary question)

The various problems raised by the Honourable Member have been and are still being studied by the Commission's appropriate departments and by the working parties set up under Article 31 of the Euratom Treaty, which deals with the establishing of radiological protection standards.

The quantitative assessment of the risk incurred by man through the peaceful uses of atomic energy is a complex problem which has not yet been fully solved. This is, in fact, the ultimate practical aim of the biology and health physics research programmes which the Commission runs jointly with the Member States, the findings from which are used to update the European radiation protection standards.

The International Commission on Radiological Protection, which comprises the most eminent specialists in protection against ionizing radiation, has set limit values for the exposure of workers and the general public, based on the most reliable hypotheses in the present state of scientific knowledge.

For more than twelve years the maximum permissible dose values proposed by the ICRP have been adhered to practically throughout the world; in the Community countries, those values are adopted in the Euratom Basic Standards, which were promulgated in the form of Directives by the Council of Ministers dated 2 February 1959, 5 March 1962 and 27 October 1966. These standards are compulsory for the six Community countries and form a common standard basis for the practical regulations issued at national level.

In the field of radiological protection the regulations are harmonized as closely as possible in regard to radioactivity monitoring, the prevention of irradiation accidents and the practical radiological protection arrangements in all places of work where there is a radiation hazard. The nuclear sector is one in which coordination of the Member States' activities has been achieved with maximum efficiency.

As to the reactions evoked by the statements of Mr Gofman and Mr Tamplin, it should be pointed out that at the Brighton Congress referred to in the Parliamentary question, Dr Morgan, Chairman of the International Radiological Protection Association, disputed the American scientists' findings and stated unequivocally that these findings were scientifically unacceptable. The figures put forward by the two authors concerning the increase in the number of cancer cases are based on dubious premisses and give a wrong interpretation to certain statistical data which can be used for determining, as far as this can be done, the delayed hazard of exposure to ionizing radiation. This opinion is shared today by radiological protection authorities and in particular by Dr Pochin, ex-Chairman of the ICRP, who recently published quite different figures for the delayed cancer risk after irradiation.

At the New York Symposium, held in August 1970 by the International Atomic Energy Agency and the US Atomic Energy Commission, it was stated that the total dose to the population from today's use of nuclear sources amounts to only 0.5% of the limits currently accepted by international recommendations. The Working Party set up at the Commission under Article 31 of the Treaty has also studied this problem, and it concluded at its meeting of June 1970 that there was no need, at the moment, to lower the radiological protection limits, which guarantee adequate protection for workers and the public.

The fact that radioactive elements concentrate in living organisms is well known to radioecologists and is the subject of international surveys and research, the Community being particularly active in this sphere. The procedures adopted at present by the Community countries are based on observance of the irradiation doses delivered to man, and make it impossible for members of the public to be contaminated by animal or vegetable produce containing radioactive substances in such high concentrations as those mentioned in the Parliamentary question.

Radioactive waste is not discharged to the natural environment until after compulsory consultation of the Commission under the terms of Article 37 of the Treaty and after exact determination of the possible consequences to the human race. This method is likewise applied to nuclear-powered ships.

The Commission's experts consult together before major international meetings, as at the Brighton Conference, and before other similar meetings on subjects connected with the irradiation of people and the contamination of the environment.