COMMISSION OF THE EUROPEAN COMMUNITIES

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THE INTERNAL ENERGY MARKET

(Commission Working Document)

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Introduction

1. "There are still considerable barriers to trade in energy products within the Community. If this state of affairs does not alter and if a common energy market is not achieved in the near future, the degree of integration achieved in this sector may well be jeopardized." These are the opening words of a communication sent by the Commission to the Council in 1968 outlining the first guidelines for a Community energy policy. Significant headway has been made since then, particularly towards a better joint definition of the major priorities for the Member States' domestic energy policies. Nevertheless, in the last 20 years there has been little progress towards a genuine common market in energy although the example of the United States or Canada shows that in those States with a federal structure a common energy market can have favourable consequences.

2. With the adoption of the Single Act in December 1985 and especially with the recent decision by the European Council[1] to assign the resources needed for the Community to make a success of the Single Act, the way is at last clear for making a reality of the European internal market. Completion of the large market by the end of 1992 has become a key objective and the focal point of the revival of the European Community.

3. The energy objectives for the Community adopted by the Council in September 1986[2] explicitly mention the need for "greater integration, free from barriers to trade, of the internal energy market with a view to improving security of supply, reducing costs and improving economic competitiveness".

4. On the basis of this objective, the Commission asked the Energy Ministers to pay particular attention to this question. At the Energy Council meeting on 2 June 1987, the Ministers therefore supported "the Commission's wish first to draw up, with the help of the parties concerned, an **inventory of the existing obstacles** and then in due course to submit to the Council appropriate proposals for the progressive elimination of such obstacles before the end of 1992". Around the same time the European Parliament and the Economic and Social Committee expressed their interest in this endeavour.

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1) European Council meeting in Brussels from 11 to 13 February 1988.

2) OJ No C 241, 25.9.1986.

5. The findings of the work carried out by the Commission are summarized in this communication which is based both on the Commission's own experience and on the experience of the public authorities and market operators. Consequently, in line with the June 1987 conclusions, it is important to emphasize that the Member States were asked for their comments. In addition, a hundred or so organizations and enterprises representing all the Member States, all the energy sources and both energy producers and energy users submitted contributions at the Commission's request.

6. This communication is based on the most complete and clear **inventory** possible of the various existing or potential obstacles to a single energy market. This inventory, which inevitably can be no more than an outline, is set out in the Annexes covering the various energy sources.

In the main body of the communication the following are examined:

(a) the **general problems** regarding the inclusion of energy in the single market concept, and

(b) the **main subjects** which the Commission feels should be given **priority attention** and the guidelines which should be laid down as a result.

PART ONE:

THE GENERAL PROBLEMS INVOLVED REGARDING THE INCLUSION OF ENERGY IN THE SINGLE MARKET CONCEPT

7. The **specific features** of the energy market help to determine what is at stake in a more integrated European energy market. However, this should not hide the **framework** (legal instruments and constraints) which must be taken into account. The proposed method of making a reality of the single energy market is based on the specific features in question, on what is at stake and on the constraints on the energy market.

1 The specific features of the energy market

8. The commonly used expression "energy market" could give one the impression that energy is a comparatively homogeneous sector. However, if one looks at this sector in greater detail it is quite evident that this market is **extremely diverse** in terms both of products and of end-uses. It should be stated first of all that while energy is by nature a product its marketing involves a considerable service element which varies, however, considerably from one energy source to another.

9. Quite apart from the physical distinctions between the different energy sources, it should be mentioned that the end-uses of energy sources are **not homogeneous** either, as an energy product may be used as a fuel, as a raw material or as motive power depending on how it is processed. Some energy end-uses therefore inevitably involve virtually captive markets such as road transport or petrochemicals. Others, e.g. furnace and steam end-uses, are more open to competition. The gas and electricity distribution monopolies, whether statutory or de facto also contribute towards the creation of captive markets, having an effect on the competitive situation in the Community.

10. There is also a considerable amount of diversity as regards **energy market operators,** which range from small and medium sized enterprises (SME) to multinationals, with a host of national, private and public companies in between. In view of their very different statuses, each operator has different rights, facilities and obligations when operating on the market.

11. Political traditions, taxation habits and energy resources also vary very considerably between Member States. Consequently, rules and behaviour have developed in ways which are at times very different.

12. The above factors demonstrate that it is rather the very nature of energy products and the conditions under which they are produced and used which explain the differences from one country to another. Accordingly, more often than not the specific features of each of the domestic markets and their historical development explain why, today, the energy market is still comparatively **partitioned** in the Community and there are therefore many barriers to the free movement of energy products.

2 What is at stake

13. The single market is a means of cementing the economic integration of the Community and, more prosaically and in the shorter term, a means of making it **more competitive** in a world which is increasingly open to demanding competition.

14. Hence, a more integrated European energy market should **reduce energy costs,** to the direct benefit of individual consumers but also of user industries. (Energy represents 25 to 30% of costs of production in the steel, glass, aluminium and building materials sectors).

    The industries in question will, as a result, become more viable and may increase their competitivity, and the economic growth thus generated will have favourable effects on employment, etc.

15. The single market should also have a beneficial effect on the **structure of the Community's energy industry:** it will make it possible to derive greater advantage from the complementarities, improve the cost structure and rationalize energy production, transmission and distribution activities. In short, it will encourage the maintenance or development within the Community of healthy and prosperous energy enterprises which are better able to deal with international competition and benefit from attractive and secure supply conditions.

16. It must be acknowledged that a more integrated energy market is a significant additional factor as regards the **security of supply** for all Member States. Greater interconnection of equipment would make it possible to increase both the solidarity between Member States and the flexibility of the industry. It would therefore increase the emergency resources available in the event of a crisis and create the possibility of additional trading.

17. An increase in **trading** between Member States is one of the results which might be expected from the internal energy market. It would therefore make a greater contribution than at present to a reduction in costs. In this area, there would seem to be room for improvement in the Community, although the situation varies fairly considerably from one energy source to another. In 1986, for example, trade in crude oil (from the United Kingdom) represented nearly 15% of refinery processing, and trade in oil products represented over 20% of internal deliveries. In the same year, trade in gas (from the Netherlands) amounted to approximately 12.5% of Community consumption. On the other hand, in that year there was much less intra-Community trade in coal (less than 3% of total consumption), although it has to be admitted that the room for increase is limited. Intra-Community trade amounted to less than 5% of total Community consumption in the case of electricity (a very great proportion of which was in the form of balanced exchanges) a sector where, despite the inherent features of electricity, an increase in trading, based on the advantages of situation, would have a significant impact on average costs.

18. The establishment of a more integrated energy market is of vital importance to the future of our Community. We should therefore endeavour to identify all the potential or existing obstacles confronting the various energy sources and the various Member States. The credibility of the exercise depends to a large extent on this desire for transparency without reservations or taboos.

19. The **"cost of non-Europe"** in the energy sector is affecting our economic performance, even if it is difficult to evaluate the implications. First estimates indicate that, excluding the "public market procurement effects", it could amount to at least 0.5% of the Community's GDP. The potential benefit of "more Europe" would be twofold: a reduction in costs as a result of greater competition and a reduction in certain unit costs as a result of the effect of scale and the optimization of investment or management.

20. A desire for transparency, with no concessions but also without preconditions, guided the drawing-up of the inventory of obstacles set out in the annexes. These are potential obstacles to a more efficient European industry, and systematically, and for each obstacle, a comparison should be made of the costs and benefits of removing them.

21. Not all the obstacles can be removed overnight. In addition, the progress towards a single market for energy must also take into account the objective constraints on achieving the objectives in question.

3 Framework of Exercise

22. The legal instruments available to the Community for the attainment of the internal energy market are no different from those which allow the realisation of Europe without frontiers. In this respect energy products and the services connected with them are in the same category as other products and services.

There are however particular constraints which apply to the attainment of the internal market in the energy area: in addition to the general problem of the economic and social cohesion of the Community, there is also the specific problem of security of supply and the strategic aspects of energy products.

a) Energy's strategic nature

23. The strategic nature of energy is self-evident and goes a long way to explaining the attention which countries (and not only in the Community) have always paid to energy, especially since 1973.

Even if this role is bound to change with the advent of the single market and in view of the objectives of the Community programme, certain imperatives described below will remain.

24. The single energy market should contribute to the attainment of the Community's energy policy objectives, the most recent of which (for 1995) were approved by the Energy Council in September 1986.

Hence, for example, a single energy market must not result in a watering-down of the diversification objective and in particular, even in the present circumstances, the objective of limiting to approximately one-third net imports of oil and petroleum products relative to total energy consumption.

The energy policy of the Community rests on an appropriate combination of the play of market forces, observed in particular by the internal market provisions, and the political measures guaranteeing or providing for Community supplies.

25. The **public authorities** will still have a role to play. Their responsibilities may change, however, or the level at which authority is exercised may alter (e.g. responsibilities may be transferred to decentralized regions or to the Community). In certain areas, it will remain essential, whilst respecting the Treaty rules, in order to monitor the safety of installations or guarantee public safety, (particularly concerning the environment) to ensure that the quasi public service nature of energy continues to apply (**continuity of supply**), to fulfil certain obligations directly (by continuing to promote **innovative energy technologies** in order to prepare for the future independently of short-term market signals) or to take due account of the **social and/or regional aspects** of energy.

There will therefore still be a role for the public authorities but it is evident that the very spirit of the large market presupposes that the responsibilities in question will increasingly be exercised in a Community perspective and less and less simply on the basis of domestic considerations.

26. In addition, a single European market is not automatically synonomous with unconditional or unlimited opening-up of the market vis-à-vis the **outside world.**

To be sure, in view of its trade aspects, there is inevitably an international side to energy. The Community cannot disregard this basic fact: it depends on outside suppliers for nearly one-half of its energy supplies. At present the degree of dependence is 70% in the case of oil, 35% in the case of gas and solid fuels, and by the end of the century could still amount to at least 70% in the case of oil and perhaps 40% or more in the case of natural gas and solid fuels.

It is also true that the Community is not immutable and that further enlargement cannot be ruled out. Furthermore, there are certain links already (e.g. electricity transfers between the Scandinavian countries and the potential for greater integration among the Mediterranean countries) extending beyond the Community: it will be in the interests of all concerned to strengthen these links rather than to loosen them. Where energy and other goods and services are concerned, the Community is in favour of **free trade** by the very nature of the Community and the objectives which it pursues.

However, this natural inclination must not backfire on the Community and turn it into a sort of free-trade dumping ground for unscrupulous competitors who continue to protect their markets to some extent. In the energy sphere, the Community should therefore adopt a **common external and commercial policy** to enable it, where necessary, to obtain reciprocal concessions from its partners, on the lines of the Uruguay Round. This notion of **reciprocity** is essential.

27. This raises the parallel question of the **Community's energy industry.** Here too, joint ventures with other countries and within the Community itself should be encouraged: this is a potential factor in security of supply as a result of the flexibility which it would entail and the pooling of interests which it would encourage. However it would not bechauvinistic of the Community but rather realistic to impose, or at least consider imposing, limits and there also reciprocity should be sought with our external partners.

This is, however, a problem which transcends the energy sector and on which the Community will have to state its position.

As a matter of priority, the European internal market must benefit European consumers but also Community energy industries which need fortifying in order to play a bigger role in Europe and beyond in an environment of greater international competition.

(b) **Framework of action**

28. The attainment of the internal energy market depends first and foremost on the accomplishment of the provisions concerning the energy sector in the 1985 White Book. In the first place, it concerns the application of Community Law (cf. paragraphs 152-159 of the White Book). It then concerns the application of the other priorities contained in the White Book, such as the removal of technical barriers (harmonisation of rules and norms, paragraphs 67-80; opening up of public procurement, paragraphs 81-87) or the removal of fiscal barriers (notably the approximation of indirect taxation, paragraphs 185 and following).

29. Beyond the framework fixed by the White Book, it is necessary to study the other obstacles to the internal energy market which are specific to energy. These obstacles have been identified and are presented in the inventory given in the second part of this paper. They must be made the subject of an in-depth examination designed to define their character, their origin and their economic consequences for the Community. Complementary studies will be required to decide the necessary action in this regard. One can take as an example, among the obstacles, exclusive rights given in respect of the construction or use of infrastructures which, in certain cases, can have results having the effect of quantitative restrictions to energy imports or exports.

In studying these cases, the Commission must take into account the reasons for such measures with regard to the general objectives of Community energy policy, always respecting Community Law.

Some of the cases identified in the annexes are already under examination by the Commission o the basis of these principles.

30. Moreover, the Community, principally on the basis of Article 100A of EEC Treaty, can apply the necessary judicial instruments for the reconciling of the objectives of free circulation and the constraints of security of supply.

(c) **Economic and social cohesion**

31. Another limit must be borne in mind in connection with a more integrated energy market: the need for **economic and social cohesion,** the importance of which is vigorously and clearly stated in the Single Act. This imperative must not serve as an excuse for inaction, but it will be necessary to ensure that the transition proceeds smoothly.

A very important factor in this connection is the Commission's desire, in reforming and increasing the **Structural Funds,** to give fresh impetus towards a more homogeneous economic and social area within the Community. The first two objectives in this connection is the expansion and adjustment of **structurally backward** regional economies and those affected by **industrial decline.** No less important is the very clear support for these objectives given by the European Council at its meeting in Brussels in February 1988.

In this context, a major political concern in the energy sphere is that the completion of the energy market, within its objective of reducing unit costs, should contribute to the diminution of differentials in terms of wealth and living standards within the Community.

32. This will be a major challenge, and it will be difficult to strike a balance between efficiency and equity. The Valoren programme adopted by the Council at the end of 1986 has opened up a path which should be followed. The proposal of the Commission concerning the reform of the Structural Funds (COM 88/144 dated 23 March 1988) should allow a betterlink between regional policy and other Community policies (notably environmental protection and technological development) including energy policy. These proposals envisaged, in effect, that Community policies and priorities would be taken into account at the overall planning stage of interventions (Community support framework) rather than at the stage of preparing and drawing up of concrete interventions.

4 Suggested approach

33. These general considerations whose relevance to energy is increasing because of its strategic role, and the various general objectives[3] which influence the energy policies of Member States, fully justify the necessity for Europe to bring about a genuine single market in the energy sector.

34. To succeed, the approach adopted requires the fulfilment of a certain number of preconditions.

The first precondition is the greatest possible **transparency** with regard to potential obstacles: this is the purpose of the descriptions given in the annexes. The second precondition is adequate consultation with and information from the various parties concerned, such as has already been undertaken during the preparation of the inventory of obstacles. Means of discussion must be established in which contradictory opinions can be expressed in order to contribute to the search for appropriate solutions based on the widest possible information.

35. Subject to these provisos, the Commission has four sets of actions in order for the Community to benefit from the potential added value attaching to the existence of the Community.

First, there is the application of the provisions of the Treaties and secondary legislation which give the Commission its own powers to ensure competition is respected and solidarity is implemented. This set of actions should allow the elimination of many of the obstacles listed in the annexes.

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3) See the report on the 1995 objectives and the review of the Member States' energy policies. COM 88/174 of 6 April 1988.

Then, there is the application of the provisions concerning energy contained in the White Book. In this context, the Single Act has introduced an innovation in making more frequent the possibility of taking majority decisions and in strengthening the influence of the Parliament in these decisions.

Third, there are the new provisions in the Single Act concerning environmental protection.

Finally, if necessary and when the complementary studies have been carried out, new Commission initiatives in the specific domain of energy may be justified. This final set of actions, in which the Commission has been particularly active in the energy field in the course of the last fifteen years, has allowed the Community to affirm its identity in this specific area, whilst respecting certain differences.

36. In the light of the inventory in the annexes, the priorities set out below and the application of its own areas of competence, the Commission will draw up a progress report on this matter before the end of 1989.

PART TWO

SUGGESTED PRIORITIES REGARDING THE OBSTACLES RELATING TO THE ESTABLISHMENT OF A SINGLE ENERGY MARKET

37. The barriers are very diverse in type and in significance: this explains why the Commission hopes that some of them may be mitigated or even disappear simply as a side-effect of the progress towards a large internal market.

The origins of and reasons for these barriers vary a great deal. Most of them are the end-product of domestic rules and regulations originating in an often distant past predating the European idea: this applies for example to all the potential obstacles arising from purely domestic monopolies. Others, which are more obscure but no less effective in impeding intra-Community trade, have to do with technical specifications. Some of the obstacles are highly political: for example the aid given to national energy producers, in particular the coal industry, which can obviously have an impact on electricity trading. Last but not least, some of the obstacles arise from quasi-psychological concerns generated by markets which have traditionally been extremely partitioned: an extreme example of this is the behaviour of many national electricity companies which strive to be self-sufficient on a national basis.

38. The achievement of the internal energy market depends on four sets of actions:

- the carrying out of the provisions concerning the energy sector in the 1985 White Book;
- the determined application by the Commission of the provisions of Community Law;
- the attainment of a satisfactory equilibrium energy/environment;
- the definition of appropriate means, to be selected case by case, in areas specifically related to energy policy.

1. Application of the "White Book"

Here the aims are the removal of technical barriers (whether they concern the harmonisation of rules and technical norms or the opening up of public procurement) and the removal of fiscal barriers (notably by the approximation of indirect taxation).

A) Removal of technical barriers

a) Harmonisation of rules and technical norms

39. The national differences in rules (legally binding) and technical norms (whose application is usually voluntary) constitute a barrier to the realisation of the internal market in general and to the energy area in particular. These differences affect equally the making of energy equipment used by the energy industry as well as equipment destined for energy users.

In this field the **"new approach"** adopted by the Council in 1985 (Council Resolution of 7 May 1985 - OJ C 136 of 4/6/85) should allow a harmonisation of technical rules by the adoption of the Community directives envisaged in the White Book. A first directive has already been adopted by the Council in June 1987 concerning ordinary pressure containers, other directives were proposed in 1987 and more will be put forward in 1988. These concern principally machines, electronic measurement instruments and gas appliances.

40. The "new approach" directives should lay down the essential requirements for **health and safety,** their application can be facilitated by the use of harmonised norms established by CEN and CENELEC the European standards organisations.

The object of these directives is to guarantee the free circulation of goods as well as guaranteeing health and safety. It is necessary to underline the importance of harmonised norms and standards to ensure the opening up of public markets.

41. The differences in the **specification** of petroleum products can result in adverse economic effects on the oil-refining industry which is obliged to split up production on the basis of the requirements of the national markets. These differences, which affect all Member States, are the result of national legislation or inter-industry agreements. Their perpetuation runs counter to the objective of the free movement of goods.

The **Community legislation** only harmonizes a small number of aspects: for example, the standard EN-228 concerning lead-free petrol defines a number of joint specifications for motor spirit but leaves other specifications to the discretion of the Member States.

Differences in specifications could be maintained provided that there are acceptable reasons for doing so. For example, the differences in climate within the Community might warrant the existence of two or even three zones with separate specifications for certain liquid fuels (transport diesel), although two such zones should be adequate in any given country.

b) Opening up of public procurement

42. The vast majority of purchases of energy equipment (in the broadest sense) are the subject of operations conducted by public enterprises.

This is therefore an extremely vast area which is little known and where intervention by the public authorities, such as it is, is rarely official. It may, nevertheless, be very effective and, in a Community which is still in the making, national chauvinism is often a natural reaction. The Commission should examine if these practices constitute an obstacle to a reduction in energy prices/costs, the first and foremost objective of the internal energy market and if tney are compatible with the Treaty rules.

43. These attitudes or rather the behavioural anomalies undoubtedly exist in the case of all energy equipment and all Member States.

44. So far the Community directives on public procurement do not apply to energy.

This state of affairs must change. Both the 1985 White Paper and the various subsequent political decisions taken by the Council have confirmed this. Apart from the general improvement of the contract-award rules, in particular as a result of greater transparency regarding works and supply contracts, it has therefore been **decided** that the **energy sector** i.e. energy production, processing, carriage and distribution should be included in the new Community provisions regarding the award of public contracts.

45. The Commission will submit to the Council **before mid-1988** proposed legislation on sectors excluded at present, including **energy.**

The provisions liable to be included in these proposals where the energy sector is concerned are at present the subject of detailed interdepartmental discussion and talks with the parties concerned (in an ad hoc advisory committee).

46. There is a specific problem where purchases are concerned: namely purchases of **energy** for transformation or resale by energy sector undertakings which in many cases represent a major proportion of their activities. To include energy purchases whether they be fuels or electricity within the provisions to open up public markets offer certain advantages such as a coherent and global approach yielding financial benefits. However, the inclusion of these purchases raises questions which go far beyond the objectives sought in the policy of opening public markets. Indeed a Community policy for these purchases largely falls within Community energy policy. Their inclusion in the measures envisaged to incorporate the excluded sectors in the area of public purchasing risk to complicate and delay final adoption of those measures. A specific policy for such purchases should be considered independently of proposals being prepared concerning public markets for supply and work.

B) Removal of fiscal barriers **(Approximation of indirect taxation)**

47. The differences in the way in which energy is taxed in the Member States is very widely considered to be a **major obstacle** - possibly the biggest - standing in the way of an internal energy market.

The Commission has stated its position on this, and its August 1987 proposal to the Council[4] will of course provide the basis for work in this connection. In particular, the discussions in the Council will make it possible to shed light on the method of harmonizing petroleum excise duty.

4) COM(87)320 to 327.

48. Energy is concerned both by the VAT aspect and by the harmonization of excise duty on petroleum products. The differences at present are quite considerable in this respect. For example, at the end of 1987 the tax (VAT and excise duty) on premium petrol was less than 250 ECU/m^3 in one Member State but over 650 in another, compared with a Community average of around 400 (the range being - 40% to + 60%). At the same time, the excise duty on heavy fuel oil ranged between 0 and nearly ECU 50/tonne.

2. Energy and the application of Community Law

49. In the White Book on the achievement of an internal market the Commission indicated that a strong competition policy will play an essential role in keeping and reinforcing the internal market, in particular to ensure freedom of movement.

In the annexes of this communication the obstacles to trade in energy between the Member States have been described. In its efforts to eliminate such obstacles, the Commission is guided by the same approach which has been outlined in the White Book on the internal market. In cases where such obstacles constitue a violation of the Treaties it will take the necessary steps to eliminate such infringements.

To follow this approach the Commission has in the EEC Treaty essentially four sets of instruments. Those which ensure the free circulation of goods and services, those in respect of state monopolies of a commercial character, the rules of competition and the state aids. The powers of the Treaty in these respects are autonomous powers of the Commission and have been included in this part of the Report for the sake of completeness.

A. Free movement of goods

50. The provisions of the Treaties designed to ensure the **free movement of goods** are Articles 30 to 36 EEC Treaty and Article 4a ECSC. Articles 30 to 36 EEC apply equally to trade in energy except for coal, for which Article 4a ECSC provides a special provision, laying down the same principles. As for nuclear minerals and fuels there are the special provisions of Chapter VI of the Euratom Treaty which regulate the market.

51. The provisions of the EEC and ECSC Treaties prohibit any measures by the Member States which either directly or indirectly, actually or potentially constitute a barrier to intra-community trade[5]. They lay down the principle that every product which is legally manufactured and commercialized in one Member State may circulate freely within the Community, unless mandatory requirements for the common good or the requirements of Article 36 EEC Treaty justify derogations from this principle[6].

A large variety of measures are covered by these Treaty provisions, regardless of whether they distinguish between national products and imported ones.

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5) Case Dassonville 8/74, 1974 ECR 837.

6) Case de Dijon 1979 ECR 649.

52. Such measures include for example:

the requirement of import licences,
the requirement to present a certificate of origin,
any rules which require mutuality for imports of exports,
any rules which lay down different requirements of imports or exports,
any restrictions or requirements for the storage of goods,
restrictions on the use of national utilities,
incitations to purchase national,
certain price controls, or
regulations which lay down technical requirements for a product.

53. Those measures constitute an infringement of the abovementioned Treaty rules, unless there are reasons to justify them. Such reasons are either the mandatory requirements accepted by the Court of Justice, which include the effectiveness of fiscal supervision, the prevention of unfair competition, the protection of the environment and consumer protection, or those contained in Article 36 EEC. The exceptions to the free movement of goods justified under Article 36 include public morality, public policy, public security as well as the protection of health and life of humans, animals and plants. Measures to safeguard the supply of energy, which have a restrictive effect on trade might therefore be justified on the grounds of public security[7]. Imported products from third countries which are in free circulation within the Community may be subject to restrictions through safeguard measures under Article 115 EEC or 71(3) ECBS respectively.

54. However, there are limits to the Member States' freedom to adopt measures on these gounds. They do have to respect the principle of proportionality. The measures have to be a suitable means of achieving the ligitimate aim which is pursued and they have to be necessary to pursue this aim. If there are other measures which could be taken to achieve the legitimate aim which are less restrictive of trade between Member States then only these measures will be acceptable in Community Law. However, the second sentence of Article 36 indicates that such measures may not serve as a means for arbitrary discrimination or disguised trade restrictions.

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7) Case Campus Oil 72/83, 1984 ECR 2727.

B. State monopolies of a commercial character

55. Two considerations should govern reflections in this respect.

(1) In accordance with the particular characteristics of the energy sector, there has been a large recourse to such national monopolies (with very diverse characteristics) in several fields such as petroleum, gas and electricity.

(2) Such monopolies are subject to the rules of the Treaty and more particularly Article 37, which provides that when the transition period has ended no discrimination regarding the conditions under which goods are produced and marketed may exist between nationals of Member States.

56. In the annexes the different types of existing monopolies are explained in detail as well as the potential obstacles that they can present to a better integration of the Community energy market.

This is a fundamental area as much for its diversity and judicial complexity as also for the potential effect that each important change could bring about in the Community's energy structure.

57. The Commission considers therefore that this is a **priority area.** It considers also that for the reasons detailed above a definitive solution merits a more careful examination.

58. For the moment the Commission proposes in this regard the following **orientations:**

59. Oil Monopolies

The adjustment of the exclusive rights for imports and distribution of petroleum products coming from Member States must be carried out in conformity with the principles contained in Article 37 of the EEC Treaty and the corresponding articles of the Accession Treaties (Spain, Portugal) which deal explicitly with Articles 37 and 90.

The situation in regard to nine Member States has been examined for conformity with Article 37 and this process is underway in Greece, Spain and Portugal.

In the application of this provision it has not in the past been envisaged to act against the exclusive rights which can exist vis-à-vis the refining and/or distribution of national products or products imported from third countries.

It remains therefore to be examined if these rights conform to the integration of energy markets as envisaged up to 1992.

60. **Exclusive rights to import and export other products**

Member States have reserved for themselves or delegated to public or private enterprises exclusive rights for the importing or exporting of other energy products. This is particularly the case in the gas and electricity fields.

The Commission should examine in what manner these measures are compatible with the provisions of Article 37 and the actions it may be suitable to take in this respect.

61. **Exclusive rights of transport and distribution**

For certain energy products such as electricity and gas for example, the States or the regional entities give exclusive right of transport and distribution to public and private enterprises.

It is appropriate to make an inventory and to examine in what sense these exclusive rights prevent or make more difficult exchanges between Member States. It is accordingly appropriate to examine if such a situation is compatible with the rules of the Treaty and more particularly with Articles 30 and 37.

More specifically in the **transport** domain and in regard to the **distribution of electricity and gas** (even if these two sectors have characteristics which set them apart) two essential economic problems seem to dominate:

- how to encourage the **free transit** of natural gas and electricity inside the Community while having a high level of security of supply and having the conditions of transport on an economic basis? This would permit a transport or distribution company to have direct access to a resource.

- under what possible conditions **direct access** to a resource might be extended to a large industrial consumer.

Both these two options imply that third parties could have the possibility to have access, on payment of a reasonable tariff, to existing transport networks (ie **"common carriage"** - common transport for third parties).

C. Rules of competition

62. The rules of competition contain rules for undertakings as well as for Member States. These rules allow the Commission to act against all barriers to exchanges between Member States caused by undertakings whether private or public. In the energy sector the Commission will be inspired by these principles in the examination of particular cases that it will take up.

63. In the case where barriers to exchanges between Member States result from the activities of an enterprise it is Articles 85 and 86 and Council Regulation 17 of 6/2/62 (O.J. 13, 21/2/62 p. 204) which apply. In its decision of 27/1/87 [8] the Court of Justice confirmed that these rules apply to all sectors with the exception of those that are subject to a special regulation as in the case for agriculture, and road, rail, sea and air transport. The Court expressly added that Article 85.3 allowed the characteristics of the sector in question to be taken into account without it being necessary to resort to a regulation under Article 87.2 (c).

64. Also public undertakings and undertakings to which Member States grant special or exclusive rights remain subject to the rules of competition and in particular Articles 85 and 86 within the limit of the specific derogation provided for in Article 90 (2).

65. In the **Coal** Sector the provisions of the ECSC Treaty (Articles 65 and 66) relating to cartels and mergers will be applied.

D) State Aids

66. To reinforce the internal market, it is particularly important to respect Community discipline in the domain of State aids. This implies a rigourous application of the rules of the Treaty with a view to eliminate the distortions of competition and to permit increased competitivity.

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8) Case 45/85, Verband Der Sachversicherer E.V. against the Commission - Competition - recommendation in relation to fire insurance premium.

67. In the coal area, state aids are the concern of decision 2064/86/ECSC. The essential aim of this decision is to ensure transparency in aids, to allow them to be controlled and to facilitate the restructuring process in the industry. In conformity with that decision the Commission will make a report to the Council before the end of 1990 on any problems encountered in its application.

68. The other energy sectors are embraced by the rules of the EEC and Euratom Treaties. The Commission is going to examine the situation of State aids to energy producers, where direct aids are concerned, (for example for investments) or indirect (for example for research and development on nuclear). Secondly the Commission wishes to examine on a case by case basis the use of energy tariffs as a means of giving aids to energy consumers and particularily in the sectors where energy costs are an important factor. The Commission has already taken certain decisions in this area, for example gas pricing in the horticulture and fertiliser sectors.

69. Finally the Commission is in the process of drawing up an inventory of aids existing in the different economic sectors, including energy. This work will be based in particular on the indications given in the annexes to this document.

70. The application to the energy area of Community Law and particularly all the provisions relative to the free circulation of goods and services, to State monopolies of a commercial character and to the rules of competition is without any doubt, one of the essential ways to arrive at a better-integrated energy market. The Commission intends therefore to continue to apply itself to this task with determination, account being taken of the special characteristics of the energy sector.

Concerning exclusive production rights, the Commission will study their economic implications.

3. Environmental protection

71. There have been major developments in recent years in energy sector standards designed to protect the environment. The Commission has submitted to the Council a proposal designed to lay down emission standards for large combustion plants, and progress has been made in the discussions on this delicate matter. The Commission will also be proposing emission standards for small and medium-scale combustion plants.

72. An essential element of a unified energy market is harmonisation of safety standards and their application. However, the legal framework in this sense is largely limited to radiation protection aspects as set out in Chapter III of the Treaty entitled "Health and Safety".

73. The Commission is also concerned about the effects of applying such standards to the cost of producing and using energy. For example, it has reported to the Council on the impact of the rules adopted by certain Member States with regard to refining. The Commission has established that legislative differences can have a major impact on costs: it has suggested that the completion of the large market would put an end to this situation. The Single Act allows Member States which so wish to apply more stringent standards for the characteristics and composition of certain potentially polluting products (Article 100 A 4).

74. The Council has already in the area of increased environmental protection confirmed the principle of the existence of different standards within a range, for example, the Council Directives on the lead content of petrol (85/310/EEC) and the sulphur content of gas oil (87/219/EEC). This raises two problems:

(a) In Member States with stringent standards, will it be possible to market products complying with less stringent standards, bearing in mind the objective of free movement of goods by 1992?

(b) In Member States with less stringent standards, there is already an influx of lower quality products which are disturbing trade.

These various problems raised by the two requirements to complete the internal market and to increase environmental protection were solved by the provisions of Article 100 A 3 of the Single Act which states "The Commission in its proposals envisaged in paragraph 1 concerning health, safety, environmental protection and consumer protection, will take as a base a **high level of protection**".

75. In general, the Commission, working in conjunction with the parties concerned, will give detailed consideration to the question of how, at Community level and with regard to the energy/environment relations, to reconcile the requirements of a high level of protection and the possibility for certain Member States of adopting more stringent or less stringent measures than the Community average.

4. Areas specific to energy

Two areas emerge as priorities: energy prices and infrastructures.

A) Costs, prices and tariffs

76. Clearly, the differentials within the Community between energy costs, prices and tariffs are decisive factors in the development of energy trade.

In theory, the problem is simple: "realistic" costs, prices and tariffs - meaning that they are established under objective conditions (in particular without interference from the public authorities, more often than not for reasons that have nothing to do with energy) and transparency - should provide the driving forces for competition and trade.

In actual fact, things are not quite so simple: the annexes to this communication set out as complete an inventory as possible of obstacles in this connection to a more integrated energy market.

77. In the replies to the Commission's request for comments on existing obstacles there are a number of recurring themes such as the discrepancies in cost structures in certain Member States, the lack of transparency in pricing (in particular in the case of large energy users) and certain apparent inconsistencies between the respective price and tariff structures for the various fuels (in particular in the case of gas and electricity) and between the price levels in different Member States.

78. There is, to be sure, a certain amount of "case law" on the matter: general Council conclusions, recommendations and resolutions, and the Council's 1981 and 1983 recommendations concerning electricity and gas tariffs. The discussions on a Commission communication to the Council submitted in September 1984 (COM(84)490) on the application of the Community's energy pricing principles in Member States were indicative of the problems involved: in June 1985 the Council was unable to reach a consensus on the conclusions to be drawn from this paper.

With regard to pricing in general, fresh progress is essential in order to give an impetus to the internal market concept.

79. With this aim in view, the Commission:

- will submit to the Council during the second half of 1988 a detailed comparative analysis of energy prices plus conclusions and proposals regarding transparency of prices, in particular for large industrial users. A specific method should, in this case, make it possible to combine a minimum of transparency with dialogue between the parties concerned and a normal degree of confidentiality (secret statistics), while paying special attention to the economic importance of large energy consumers in the Community.

- will examine the price structures in the Member States:

  - in order to verify that the approaches to allocation between industrial and domestic users, **between industrial sectors and within a given industrial sector are homogeneous** and compatible with the completion of the internal energy market, and also in order to see how the pricing principles already adopted can be made more convergent.

- will examine the conditions, costs and pricing principles applied to **transfers** of energy.

- will examine in detail and in conjunction with the parties concerned the **cost structures** in the various energy sectors and assess these cost structures in order to determine whether they are compatible with the principles regarding transparent and realistic costs. The **electricity** sector could serve as a test case for this exercise.

B. Infrastructure

80. The existence of adequate infrastructure is a sine qua non for the transfer of energy and hence a prerequisite with a view to securing flexibility, greater security of supply, and in the final analysis a more integrated Community energy market.

Fortunately, the Community already has considerable facilities in this area. There are already major European networks for electricity (UCPTE, UFPTES, SUDEL and NORDEL grids), natural gas, and even crude oil and petroleum products. This is the result of international cooperation between national enterprises (mostly public ones), and the infrastructure in question has been made possible as a result of the economic and commercial viability of the operations.

81. However, it should be possible to go further in this area with the prospect of a more integrated Community energy market. To be realistic, however, we must bear in mind the need to reconcile two imperatives: firstly, the infrastructure operations must satisfy (and continue to satisfy) minimum economic and commercial viability criteria; secondly, these operations, in which cost is important, should be major factors

presupposes that they should be encouraged).

82. To this end, two additional possibilities could be envisaged. Firstly, it is worth trying to use for this purpose a proportion of the structural Funds, EIB and other financial instruments designed to revitalize developing regions in view of the need for greater economic and social cohesion. The recent decisions taken by theEuropean Council undoubtedly increase the scope for action in this connection. Secondly, it should be possible to declare certain large-scale energy infrastructures as being of Community interest. They can then receive special treatment once the Council has adopted the Commission proposals concerning large-scale infrastructure of Community interest (docs. COM(86)727 and COM(87)724).

83. Three major types of infrastructure should be considered: reception infrastructure, storage infrastructure and transmission and distribution infrastructure. Special attention should be paid to natural gas and electricity.

The process of integration of the European gas pipeline network must be continued in order to establish a genuine common market in natural gas. This is a matter which concerns the countries which are not yet linked up to the European network, namely the United Kingdom, Ireland, Spain, Portugal and Greece. The Community's natural gas industry could, for example, also set up a flexible joint body to deal with carriage and the administration of the European gas pipeline network, access to which would be open to all transport companies in the Community.

The problem is much the same where electricity is concerned. Optimum utilization of infrastructure should be sought through further network interconnection (Ireland and Greece) or by striving towards "Europeanizing" the existing networks to some extent and, where appropriate, increasing their capacity. All this would increase electricity transfers and improve the administration of such transfers, while facilitating transmission and/or transit operations.

84. The Commission therefore wishes to encourage all measures which would promote optimum utilization of existing energy infrastructure in the Community:

(a) Where reception infrastructure is concerned, the Commission will examine the possibility of encouraging the development of port reception infrastructure for coal (coal terminals: main ports or dispersal ports) and natural gas (natural gas terminals: for deliveries in the unaltered state or as LNG).

(b) Where carriage is concerned, the Commission will draw up a report on the possibility of having recourse to the "European Economic Interest Grouping" status, whereby various interested parties can participate, so as to promote the Europeanization of the existing networks, an increase in their capacity or the development of new networks.

Such developments could concern virtually all forms of energy: solid fuels (pipeline transport of water-coal mixtures or fuel oil-coal mixtures), petroleum products (possible extension of existing networks), and electricity(widespread interconnection; development of intra-Community transfers taking into account the surplus production capacity in certain countries).

(c) Where storage is concerned, the Commission will investigate the possibility of establishing a Community oil-storage capacity and for natural gas which, by virtue of its location and its size, could reduce costs and increase security.

85. After making appropriate contacts and on the basis of the requisite studies, the Commission will report to the Council by the end of 1989 on all these aspects of energy infrastructure in the light of the internal market.

ANNEXES

ANNEX I

SOLID FUELS

Contents

SOLID FUELS

A. SOLID FUELS IN THE COMMUNITY ENERGY MARKET

1. Contribution made by solid fuels.

In 1986, solid fuels accounted for about 30% of Community energy production.

The production of **coal** (203 million tonnes coal equivalent (tce)[1] in 1986) breaks down geographically as follows:

United Kingdom	43%
Germany	41%
Spain	7%
France	6%
Belgium	3%

The production of **peat and lignite/brown coal** (46 million tce in 1986) is concentrated chiefly in four Member States:

Germany	68%
Greece	16%
Spain	9%
Ireland	4%

As far as supplies are concerned, coal imports have been increasing throughout the Community for many years now. Since imports have risen faster than consumption, the share of imported coal in total coal consumption increased from 10% in 1973 to more than 30% in 1986. The Community's main suppliers are, in decreasing order of importance, the United States, Australia, South Africa and Poland.

Intra-Community trade in 1986 was about 10 million tce or 3% of the total Community consumption of solid fuels. Most of this trade consisted of traditional supplies of coking coal and coke from Germany and, to a much lesser extent, some deliveries of steam coal from the United Kingdom.

2. Situation of the industry

Except in the United Kingdom, where major restructuring has taken place over the last two years, the financial situation of the coal industry worsened in 1986, chiefly as a result of a fall in the prices of

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[1] 1 tce = 0.7 toe.

imported coal, expressed in national currencies, on which the prices of much Community-produced coal are aligned.

(ECU/tonne)

Financial situation of the companies

	Production costs			Revenue		
	1984	1985	1986	1984	1985	1986
Germany	108	108	116	96	98	103
Belgium	107	121	120	73	78	63
France	99	105	100	67	69	60
United Kingdom	137	130	78	70	74	62
Spain			80*			56*

* Spain = estimate

Private, public and semi-public companies are involved.

There are eight German companies. Ruhrkohle AG is owned by a variety of shareholders, the chief of which is VEBA (37%). The other shareholders are Beteiligungs-Gesellschaft für Energieunternehmen mbH (22%), Thyssen Stahl A.G. (12%), Société nouvelle Sidéchar (8%), Montanverwaltungs-Gesellschaft mbH (10%) and Verwaltungsgesellschaft Ruhrkohle-Beteiligung mbH (10%). Saarbergwerke is owned by the State (74%) and by Saarland (26%). The majority (96.5%) of the capital of Eschweiler Berwerks-Verein Ag is held by Arbed SA Luxembourg. Auguste Victoria is owned by BASF while the majority shareholder of Sofia Jacoba is the Dutch group Robeco. Preussag Kohle, a subsidiary of Preussag AG, is a private company, 25% of whose shares are held by the Gesellschaft für Energie und Versorgungswerke mbH, a subsidiary of the Westdeutsche Landesbank. Two small private companies, Dr. Arnold Schäfer gmbH and Merchweiler Berwerksgesellschaft mbH, produce a total of 500 000 tonnes.

Brown coal is extracted by Rheinische Braunkohlenwerke AG, a subsidiary of the largest Germany electricity producer Rheinische-Westfälisches Elektrizitätswerk AG.

In the United Kingdom, British Coal - known until 1985 as the National Coal Board - was created in 1946 by the 1946 Coal Industry Nationalization Act. This Act transferred to British Coal all the mining assets which had been nationalized by the 1938 Coal Act. As defined in the 1946 Coal Industry Nationalization Act, the functions of British Coal include coal production in the United Kingdom, the efficient development of the mining industry and the supply of coal in the best interests of the community both in terms of quantity and quality. More than 95% of all deep mines are worked by British Coal but

a few small independent producers operate under licences granted by British Coal pursuant to the 1946 Coal Act. Open-cast mining accounts for some 15% of all coal production in the United Kingdom and it is undertaken by private operators: 90% of such production is carried out under contract to British Coal while the rest is carried out on the operator's own account under licence. The producers in question form the National Association of Licensed Opencast Operators (NALOO).

In France, almost all coal production is the responsibility of the nationalized company "Charbonnages de France" (CdF). The exceptions are the Arjuzanx lignite mine (owned by EdF) and a few other very small private collieries.

In Belgium, coal production is concentrated in the Campine coalfield. The mining company, Kempense Steenkohlenmijnen, is a semi-public company in which the State has a controlling interest, holding about 77% of the capital.

In Spain, coal production is shared among 235 firms. Half this production is publicly owned while the other half is shared by a large number of private firms each producing at least 5 000 tonnes per year. The leading Spanish mining company, HUNOSA, is publicly owned. All the other mining companies except ENDESA, FIGAREDO, HULLASA and ENCASUR are privately owned.

In Portugal, coal is produced by the Empresa Carbonifera do Douro SA, which belongs to a public holding company.

In Greece, lignite is mined by the Public Power Corporation (DEI), which is publicly owned.

In Ireland, peat is extracted by the public company Bord na Mona, set up in 1946 by the Act of the Oireachtas for the purpose of developing peat resources.

B. OBSTACLES WITHIN THE SOLID FUELS SECTOR

3. Community legal framework

Assessment of the potential obstacles calls for three preliminary remarks:

- solid fuels are covered by two Treaties: the Treaty of Rome (EEC) in the case of peat and lignite/brown coal and the Treaty of Paris (ECSC) in the case of coal, brown-coal briquettes and semi-coke derived from brown coal;

- Article 71 of the Treaty of Paris provides that the powers of the Governments of Member States in matters of commercial policy shall not be affected by that Treaty;

- the Single European Act does not alter the provisions of the Treaty of Paris.

Theoretically, potential obstacles might occur:

- at the level of intra-Community trade,
- downstream of the coal industry,
- at the level of Member States' importing policies.

The technical and economic characteristics of lignite/brown coal and peat offer little financial incentive to intra-Community trade or imports from non-Community countries.

4. Intra-Community trade

The entry into force of the Treaty of Paris created a single unrestricted market within the Community. It should also be noted that relatively small and ever-decreasing quantities of coal are involved in intra-Community trade.

5. Vertical agreements between producers and consumers

The purpose of these agreements is:

- to provide coal producers with a long-term guaranteed market enabling them, in principle, to maintain production capacities in the long term: they largely rule out competition from other coal suppliers and other forms of energy;

- to provide users with a supply of coal guaranteed both in terms of quantity and quality, regardless of market fluctuations and, in the case of the iron and steel industry (Hüttenvertrag in Germany), regardless of short-term fluctuations in its own demand.

Such agreements often mean that prices are fixed at levels which do not necessarily correspond to market realities.

In **Germany**, the "Jahrhundertvertrag" requires that electricity producers undertake, regardless of their requirements (until 1995) and the current economic situation (until 1991), to consume about 640 million tce of german coal until 1995. A compensation fund financed by a 7.25%

charge on electricity consumption (Kohlepfennig) refunds to the electricity producers, in respect of 22 million tce/year, the price difference between Community coal purchased at cost price (Schwantag formula) and that of heavy fuel oil and, in respect of 11 million tonnes, the price difference between Community-produced and imported coal.

In the **United Kingdom**, there is an understanding between British Coal and the Central Electricity Generating Board (CEGB) whereby the CEGB will, until 1991, consume as much coal as technically possible and obtain 95% of its supplies from British Coal. For the financial year 1986/87, this understanding meant that British Coal would supply the CEGB with 72 million tonnes of coal at a price based on three quality brackets. For 1986/87, the average price of deliveries was about UKL 42.2/tonne or 172 pence/gigajoule.

In **Spain**, a new method of awarding contracts for coal supplies to power stations was agreed in 1986 between CARBUNION and the association of electricity producers UNESA. Under this agreement, all producers or groups of producers whose production exceeds 50 000 tonnes/year may conclude long-term contracts with the electricity producers at a reference price. These agreements are subject to certain requirements such as improved efficiency of the mining companies or, failing that, lower production levels. After negotiation between the parties concerned, the contract is submitted for approval to the Spanish authorities. Mining companies whose production costs exceed the reference price may ask the electricity producers for a price supplement to cover the gap between their production costs and the reference price. The additional price paid by the electricity producers will be reimbursed from a fund to which the electricity producers pay contributions.

These agreement do not explicitly rule out the use of Community-produced coal from other countries and therefore do not, in principle, constitute barriers to the free movement of Community coal: however, they do considerably restrict competition from imported coal and from other energy sources.

The support provided for the coal industry by such agreements serves virtually the same purpose as the approach adopted by other coal-producing Member States where the price of nationally-produced coal is aligned on imported coal prices, the price difference being met directly from public funds.

6. Agreements between coal producers and traders

The purpose of these agreements is to cut the cost of marketing coal for household, tertiary and small-scale industrial consumption. To this end, the market is walled off by granting exclusive territorial rights to coal traders. In addition, the sale and resale prices are frequently fixed by the producer, thus eliminating any possible price-based competition from other coal traders.

These practices constitute a barrier to the free movement of coal, chiefly within the Member States but also occasionally between Member States.

7. **Free movement of coal imported from non-Community countries**

The problem arises from the fact that the ECSC Treaty differentiates, in its provisions, between the Community-produced coal and coal imported from non-Community countries: it establishes a common market for Community-produced coal (Art. 2 and 4 ECSC) whereas imported coal is governed by the commercial policy of each Member State (Art. 71 ECSC). Some countries impose no restrictions whatsoever on imports while others have introduced systems of licences and/or quotas or have made imports subject to monitoring by a public body.

In **Germany**, coal imports are subject to restrictions on the basis of Article XIX of the GATT. This quota, broken down by consumption sectors, is fixed at 23 100 000 tonnes/year until 1990: 35% is earmarked for heat production and 35% for thermal power stations.

In **France**, all imports are carried out by the Technical Association for Coal Imports (Association Technique pour l'Importation Charbonnière: ATIC) and are subject to licences.

In the **United Kingdom**, coal imports are covered by the open general import licence system and in practice, therefore, are unrestricted.

In **Belgium**, importers may import coal on presentation of the purchase contract; import licences are issued as a matter of course.

In **Spain**, a quota is laid down annually, broken down by consumption sector. Imports are subject to licences issued by the Ministry of the Economy and Finance, after approval by the Ministry of Industry.

The free circulation in the Community of imported coal from third countries poses problems in relation to National measures of commercial policy set out above.

In the past, such conflicts have been settled by decisions of the Court of Justice or by the Commission authorizing derogations, based on Art. 71(3) ECSC, (mutual assistance).

8. Technical barriers

In addition to these problems of a purely commerical nature, various technical barriers still exist in the different Member States, encouraging the use of national technologies. The market penetration of solid fuels should be improved by removing such barriers, since this will lead to increased competition between producers of equipment for burning solid fuels and thus to lower capital costs.

C. SUGGESTED PRIORITIES IN THE SOLID FUELS SECTOR

9. Application of Community legislation

Between 1965 and 1986, some 50 000 million ECU were spent on aid schemes and other measures to support current production and this figure has recently increased significantly as a result of the fall in world prices for coal and the value of the dollar. Whereas, in 1986, the average price for imported coal was about USD 50/tonne (approximately 40 Ecus), the average cost price of Community-produced coal was more than USD 100/tonne (approximately 80 Ecus).

Commission Decision No 2064/86/ECSC establishing Community rules for State aid to the coal industry allows the Commission to authorize such aids only where they contribute to the achievement of one of the following aims:

- improvement of the competitiveness of the coal industry, which will help to ensure greater security of supply;
- creating new capacities, provided that they are economically viable;
- solving the social and regional problems related to developments in the coal industry.

Although these aids and measures draw on limited public funds and are, in some cases, a less than optimum use of available resources, this does not mean that, today they contravene the competition rules within the coal industry because in practice there is only local supply markets available for some local enterprises. In assessing the distortions of competition which such aids or schemes might cause within the Community energy sector, account must be taken of the advantages and direct or indirect assistance from which, in some cases, other branches of the energy industry might benefit.

ANNEX II

OIL

Contents

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OIL

A. OIL IN THE COMMUNITY ENERGY MARKET

1. **The contribution made by oil** to the Community's energy supplies is very large at present and is likely to remain so up to and beyond the year 2000. In 1986 oil covered about 46% (32% of that imported) of the primary energy needs of the Community. In the same year, total oil consumption (including international bunkers) in the Community was approximately 500 million tonnes. The latest estimates from the Commission's departments indicate that total energy consumption is likely to increase and that the share of oil in primary energy consumption should fall only slightly, to between 42 and 45% in 1995.

   The share of oil products in energy consumption varies according to the sector of activity, from 12% in electricity generation to 97% in transport. Unlike the other sectors, where substitute energy sources exist and are already extensively used, in transport the consumption of oil products has grown continuously since 1973, a trend which is likely to continue.

2. **The oil sector** can be regarded as one which is already **to a large extent subject to competition** within the Community energy sector as a whole.

   A number of factors have helped to bring this about, including:

   - global integration of the markets for crude oil and petroleum products;
   - the large number of operators in the oil industry in the Community, be they integrated multinational oil companies, national companies or independent distributors;
   - the ample supply of petroleum products from Community refineries, whose aggregate capacity is big enough to satisfy demand, and from refineries in non-Community countries;
   - the numerous ways and means of moving products: by sea, inland waterway, rail, road and pipeline;
   - lack of a network structure; with oil, unlike natural gas and electricity, the consumer can choose between a number of competing suppliers;

- price transparency, be it of international prices (as quoted on the Rotterdam and Genoa oil markets) or those paid by final consumers (the Commission's Weekly Oil Bulletin). Nevertheless, the representativeness of prices quoted on the international market might be questioned, in any case in respect of certain products in which the number of transactions is limited, e.g. with naphtha at Rotterdam.

There are nevertheless still a number of obstacles to completing the internal market, and they must be removed by 1992.

3. The table in Annex VI shows the difference in the **prices** (net of tax) **paid by consumers** in the twelve Member States, and reflects the situation as at 14 September 1987.

As can be observed from the table in Annex VI, there are major differences, even if account is taken of differences in distribution costs, which are included in the figures in the table.

The removal of the remaining obstacles, and the increased competition on oil markets which should result from it should help bring about an alignment of pre-tax prices and of prices inclusive of tax owing to the proposed tax harmonization.

4. **Place of oil in the energy balance**

By recommending that the share of (imported) oil be limited and that it should be replaced by other forms of energy, the Community's energy objectives have introduced an element of discrimination against oil which has taken the practical form of:

- a statutory limit on certain uses (Directives on the use of oil and natural gas in power stations);
- subsidies for competing forms of energy;
- higher taxes than on competing forms of energy; and
- restraints or bans on publicity for certain oil products.

The new energy objectives for 1995, which the Council adopted in 1986, recommend in particular that oil's share in primary energy consumption should be limited to 40%, the share of imported oil to 33% and that the contribution of oil and natural gas to electricity generation should not exceed 15%.

As these objectives are intended to bring about more diversification and enhanced security of energy supply for the Community, they should not be called into question by the completion of the internal market; after 1992, therefore, oil products could still be subject to higher taxation than competing energy products.

With a view to completing the internal market, however, it has to be stressed that measures taken by the Member States to limit oil consumption must be applied in a coordinated and harmonized way, so that they do not cause any unacceptable upheaval in energy markets. The proposals which the Commission has already put forward for harmonizing indirect taxation (see paragraph 22) will serve that end.

B. POTENTIAL OBSTACLES WITHIN THE OIL SECTOR

Potential obstacles to the completion of the internal market in the oil sector, which are listed below, are set out in an order running from the activities of the upstream industry, namely oil exploration and production, to downstream activities, namely refining and marketing of petroleum products. The removal of these obstacles will help to approximate conditions of competition among the integrated oil companies and also between them and the independents.

5. Exploration and production monopolies

Member States concerned: Denmark, Greece, Ireland, Italy and the Netherlands.

These Member States reserve certain exploration and production rights to their national oil companies.

In Denmark, Greece, Ireland and the Netherlands, the national oil company has a right to participate in any commercial oil discovery.

In Italy the Po Valley region and some of the Adriatic offshore areas are reserved for the national oil company which has a prospecting monopoly throughout the Italian offshore area. When exploration areas areallocated, it has the right to retain 25% of the areas prospected. ~~ENI~~ It also has the right of pre-emption over any oil or natural gas produced in Italy.

6. **Exploration licensing procedures**

Member States concerned: all those where oil exploration activities are conducted.

Non-discrimination in access to the Community's oil resources is an important element in maintaining free competition between operators in the oil sector.

Exploration-production licences (concessions) should be issued according to criteria which are both transparent and non-discriminatory with respect to companies from the Community.

Reciprocity clauses violate these principles of transparency and non-discrimination.

7. **Oil-field development conditions**

Member States concerned: all those where oil development and production activities are conducted.

The requirements laid on companies for the development and exploration of oil fields are often associated with "unwritten clauses" under which they are obliged or encouraged to order services and purchase equipment from national suppliers.

Interference of this kind by the authorities in order to direct the choices made by companies which have received licences should be cut out. Consideration will have to be given to whether the rules on transparency which are to be introduced in respect of public procurement contracts could be made to apply in such cases.

As part of this exercise, practices of these kinds have been pointed out to the Commission specifically in connection with bringing oil and gas fields into production.

8. **Taxation of oil production**

Member States concerned: all those where oil is produced.

Without a detailed study of taxation on oil production, it is difficult to discover how various tax systems affect the development of fields and affect the conditions of competition.

Since the fall in oil prices in 1986, however, diverging trends have been evident, with some countries reducing taxation to stimulate exploration and development and others keeping it unchanged.

It would appear to be difficult to harmonize taxation levied on crude oil production, for account has to be taken of differences in the costs of developing different oil and gas fields, which vary according to their location and characteristics; it could, nevertheless, have a beneficial effect on competition and on Community production capacities.

9. **The landing obligation**

Member States concerned: Italy and the United Kingdom.

Both these countries impose an obligation to land petrol produced offshore within their jurisdiction at a port under their own jurisdiction before it is dispatched to any other destination. In the United Kingdom it is possible to apply for an exemption.

Even if it is the case that up to now exemptions have been granted, this obligation could, in some cases, also increase costs.

10. **Restrictions on imports of crude oil and/or petroleum products from certain non-Community countries.**

Member States concerned: Spain, Greece, France and Portugal.

Spain, Greece and Portugal restrict the right to import petroleum products from non-Commmunity countries to the company which is managing the monopoly or entities acting in place of the monopoly. Operators independent of the monopoly are not allowed to import products from non-Community countries.

France has limitations on the entry into its territory of crude oil and products imported directly from non-Community countries.
The creation of an internal space without frontiers makes it necessary to develop common arrangements and a common policy for trade in oil and petroleum products with non-Community countries.

There is also a need for harmonization of the rules governing origin in relation to imports of oil products from non-Community countries; at present national rules apply, namely:

- in France, oil products are deemed to originate in the country which produced the crude from which they are derived; and

- in the other Member States oil products are deemed to originate in the country where the last substantial processing operation was carried out on the crude in question.

11. The obligation to accept crude oil acquired by the State

Member States concerned: Spain and France

These countries require their oil refiners to accept oil which has been acquired by the State.

The policy of State-to-State procurement of oil grew up in the years of the oil crisis as a means of ensuring a country's oil supplies. In the present, and foreseeable, state of the oil market it is no longer warranted. It might add to the oil companies' costs, because in State-to-State contracts the purchase price of the oil in question is generally higher, and so might have an impact on competition between companies.

12. The obligation to use national-flag shipping for the carriage of crude oil and/or petroleum products by sea.

Member States concerned: Spain, France and Portugal.

A home-flag obligation applies:

- in Spain, for supplies of crude oil and petroleum products;
- in France, for two-thirds of crude oil supplies; and
- in Portugal, for supplies of crude oil and certain petroleum products.

At the end of 1986 the Council adopted Regulation (EEC) No 4055/86 applying the principle of freedom to provide services to maritime transport between Member States and between Member States and third countries (OJ of 31.12.1986).

The Regulation provides for the elimination of unilateral national restrictions on the carriage of certain goods, conveyance of which is entirely or partially reserved to ships flying the home-flag, which were in operation before 1 July 1986, on the following timetable:

- before 31 December 1989 for transport operations between Member States performed by ships flying the flag of a Member State;

- before 31 December 1991 for transport operations between Member States and third countries performed by ships flying the flag of a Member State; and

- before 1 January 1993 for transport operations between Member States and third countries performed by other ships.

The Member States concerned may not introduce home-flag obligations which are more restrictive than those in operation on 1 July 1986 and they must remove existing obligations of this kind by the date laid down in the Council Regulation.

This Council Regulation does not relate only to the carriage of oil and products but covers all merchant fleets and makes provision for the ending of restrictions on transport operations between Member States and also between a Member State and a third country; it also applies to transport operations performed by ships which are not flying the flag of a Member State.

13. **The obligation to use a national carrier for the inland transport of oil products**

Member State concerned: Germany

German law requires oil products to be carried by national inland waterway, rail and road carriers.

This obligation runs counter to the objective of having freedom to provide services, in the transport area, which is envisaged in the Treaty.

This obligation does not apply, however, to imported products which have been loaded outside Germany (e.g. in the Netherlands) which could take advantage of more attractive terms (e.g. on the Rhine, owing to the greater competition that prevails on that waterway).

14. **Exclusive right of refining**

Member States concerned: Spain, Greece, France and Portugal

The adaptation of oil monopolies has so far affected only commercial aspects, in particular the liberalization of trade in refined products between Member States. The monopoly on refining (i.e. production), whether it involves only one company - as in Portugal - or several - as in Spain, Greece and France - has remained outside the scope of the various adjustments of monopolies.

15. **Exclusive right to market the output of national refineries on the domestic market**

Member State concerned: Spain

In Spain the State has vested in one company (Campsa) the exclusive right to market the output of Spanish refineries with regard to the chief products intended for the domestic market.

This prevents any other distributor from obtaining the chief oil products direct from a Spanish refinery in order to sell on the domestic market.

This exclusive right should be abolished (Article 37 of the EEC Treaty) before the end of the transitional period on 31 December 1991.

16. **Quantitative restrictions on the importation of EEC oil products**

Countries concerned: Spain, Greece, Ireland, Italy and Portugal

- In Spain imports of EEC oil products are limited by quotas agreed in the Accession Treaty. These quotas are increased each year. Any restriction on imports will have to be abolished not later than the end of the transition period on 31 December 1991.

- In Greece, imports of oil products are limited owing to the continued existence of an obligation to purchase from State-owned refineries. For the first half of 1987 it was obligatory to buy 40% of quantities released for consumption. The Commission has initiated infringement proceedings against this quantitative restriction on imports.

- The Greek Government has made provision for the phasing-out of the purchase obligation at present laid on oil products distributors in Greece.

- In Ireland oil distribution companies are required to purchase (35% of quantities released for consumption) from the country's only refinery. The Court of Justice of the European Communities took the view that, subject to certain conditions, the restriction of imports could be accepted for the sake of security of supply.

- In Italy, according to information supplied to the Commission, it is believed that the legislation presently in force prohibits the bringing into refineries of semi-finished products from other Member States. In the case of finished products, the prohibition is believed to be total and to cover products from other Italian refineries as well as those from other Member States. This situation is presently under examination by the Commission services.

- In Portugal the situation is similar to that in Spain except that the transitional period will end on 31 December 1992.

17. Import licences and declarations for EEC oil products

Member States concerned: Belgium, Spain, Greece and Portugal.

In Belgium there is still in operation a system of automatically-issued import licences for oil products, which operates in the framework of controls on imports of harmful substances. The Commission has opened an infringement file.

In Spain and Portugal there are import licences under the system of import quotas for the transitional period.

In Greece licences have been replaced by prior declarations by importers. These declarations, which are used to monitor imports statistically, should be replaced as soon as possible by the use of a single administrative document.

18. Prohibition of trans-frontier deliveries affecting distributors not approved in the country of destination

Member States concerned: Spain, Greece, France and Portugal.

In these Member States legislation relating to oil provides for a special status for importers/wholesale distributors of oil products. Only undertakings which are approved on this basis are permitted to market products in the nation's territory.

"Trans-frontier" deliveries by distributors who are approved in or who operate in another Member State, but are not approved in the country of destination - as is generally the case - are thus prevented.

19. Differences in rules and technical norms applicable to petroleum products

Member States concerned: all.

Different specifications for oil products are brought in by national laws or by agreements between industries.

Community law harmonizes only a few aspects (e.g. the lead content of petrol) and in some cases even permits a choice between two values for a given characteristic (e.g. the sulphur content of gas-oil, where Member States may choose between 0.3 and 0.2).

These differences in standards add to costs during production, storage and transport of oil products. The extra costs are chiefly borne by those companies which supply several national markets from one refinery or a small number of refineries.

Nevertheless, there remains the problem of permitted ranges in Community standards: for example, will it be possible for gas-oil with a 0.3% sulphur content produced in accordance with the standard (be it Community or national) in one Member State to enjoy freedom of movement and be used in a country which requires the lower maximum content namely: 0.2%?

A final point is that some differences in specifications which are based on climatic factors could be upheld.

20. Differences in compulsory storage arrangements

Member States concerned: all.

Community law on security stocks requires Member States to hold stocks of the three main categories of oil products equivalent to not less than 90 days of consumption at the preceding year's rate. Community law also allows stocks of crude oil to be taken into account and allows reductions of the storage obligation for Member States where this is warranted by indigenous production. It allows bilateral agreements between Member States under which part of the compulsory stocks may be held in another Member State.

The Member States have passed on this obligation to the oil companies (refiners and/or distributors) in various ways. In general terms, the Member States fall into two categories:

- those which have set up a central storage agency which administers part of the obligation (D, NL, DK, F - from 1 January 1988). In Greece and Portugal stocks belong to the State;

- those in which the entire obligation is the responsibility of the oil companies (B, F - up to 31 December 1987 - IT, IRL, ES and UK).

Differences in national law and in procedures for holding security stocks often mean that oil companies operating in one Member State are in a different situation from those operating in other Member States, from both an operating and financial point of view.

These differing situations result in differing costs which help to cause differences in price net of tax on the various markets.

The Commission has already informed Member States of its preference for a system with a central storage agency, both from an operational point of view (should the safety stocks be drawn upon) and from the point of view of aligning the costs incurred as a result of the obligation to retain minimum stocks.

Should all Member States accept the Commission's point of view, consideration could then be given to harmonizing the way in which the central stocks are financed and the way in which the obligation is allocated between the central agency and the oil companies.

In addition, the objective of completing the internal market makes it necessary to review certain provisions which are currently accepted:

- Will it be acceptable for certain countries (i.e. Denmark and Portugal) to impose more stringent obligations? In Portugal at present it is 120 days' stocks.

- Will it continue to be justified for certain producer Member States to enjoy a reduction in their stocks obligation - amounting to 15% at the most - or, conversely, should not all Member States be granted an average reduction based on Community oil output?

  At present the obligation on the United Kingdom is to maintain 76.5 days' stocks. For the other producer Member States it is between 76.5 and 90 days' stocks.

- Is it still necessary to have bilateral agreements between Member States so that stocks can be held in another Member State? In any event, will it be acceptable under such agreements for certain Member States to authorize a company's undertakings in another State to hold stocks on their premises, but not to permit their own undertakings to hold stocks in the partner's Member State (so-called "one-way" agreements)?

- The obligation to maintain stocks is based on the quantities consumed on the home market. Might it not be necessary to extend this definition to cover quantities consumed on the home markets of other Member States, given the prospect that internal frontiers will be eliminated in 1992?

21. Pricing systems

Member States concerned: Spain and Greece.

In Spain prices at which oil products are sold to consumers are set by the authorities in accordance with national criteria; a single price is fixed for each product. An infringement procedure has been initiated by the Commission.

In Greece the maximum selling prices to consumers are based on a pricing formula. The Commission has disputed certain aspects of these pricing arrangements and has initiated an infringement procedure.

Some of the other Member States have a maximum-price system (Belgium, Ireland, Italy, Luxembourg and Portugal).

A system under which a maximum selling price to consumers is set may be compatible with Community rules if it actually permits operators to import EEC products, i.e. if the maximum price is sufficiently high to permit operators to include in their selling price the (extra) costs of importing.

In the other Member States there is no form of price control (Germany, Denmark, France, the Netherlands and the United Kingdom).

22. Differences in indirect tax systems with regard to oil products: Excise duty and VAT

In August 1987 the Commission submitted to the Council a series of communications and proposals concerning indirect taxation with a view to completing the internal market:

COM(87) 320: Completing the internal market: approximation of indirect tax rates and harmonization of indirect tax structure.

COM(87) 323: Completing the internal market - The introduction of a VAT clearing mechanism for intra-Community sales.

COM(87) 324: Proposal for a Council Directive instituting a process of convergence of rates of VAT and excise duties.

COM(87) 327: Proposal for a Council Directive on the approximation of the rates of excise duty on mineral oils.

Where oil products are concerned, the Commission's proposals can be summarized as follows:

Harmonization of excise duty

(a) As from 31 December 1992 Member States would apply common rates of excise duty calculated as follows:

- in the case of petrol and LPG motor fuel, the arithmetic average of the excise duty charged on each product in the Member States,

- in the case of gas oil for heating and transport and heavy fuel oil, the arithmetic average of the excise duty charged on each product in the Member States.

As an indication, and on the basis of the excise duties in force in the Member States on 1 April 1987 and the consumption structure for 1985 as used to calculate the averages for the Commission's Oil Bulletin, the common rates of excise duty would be as follows:

Leaded petrol and medium oils per 1 000 litres used as motor fuel	340 ECU
Unleaded petrol per 1 000 litres	310 ECU
LPG per 1 000 litres	85 ECU
Diesel per 1 000 litres	177 ECU
Heating gas oil and medium oils per 1 000 litres used as fuel	50 ECU
Heavy fuel oil per 1 000 kg	17 ECU

These common rates could be altered on the basis of a different date and a different consumption structure.

(b) In the meantime, the Member States will not introduce new excise duty and cannot alter the existing excise duty except to bring it into line with the above common rates.

Approximation of VAT

(a) As from 31 December 1992 Member States would charge VAT rates in the following ranges:

- reduced rate: 4 - 9%
- standard rate: 14 - 20%

The reduced rate applies to energy products for heating and lighting.

(b) In the meantime, the Member States have the option of bringing their rates into line, as follows:

- Convergence as regards the number of rates;

  . Member States with three or more rates can reduce these to two, i.e. a reduced rate and a standard rate;

  . Member States with a single rate can increase the number of rates to two, i.e. a reduced rate and a standard rate.

- Convergence with regard to the level of rates

  . Member States can alter the level of the reduced rates and the standard rate, provided that they are within or closer to the proposed limits;

  . Member States can reduce or abolish their increased rates.

23. **Existence of other indirect taxes (parafiscal, counter-cyclical, etc.)**

Member States concerned: Spain, Greece, France, Italy and Portugal.

Several Member States have counter-cyclical taxation systems which make it possible to keep the final consumer selling prices constant (recommended price in Spain and maximum price in the other countries concerned), while allowing fluctuations in ex-refinery prices.

The provisions in question are as follows:

- the monopoly revenue in Spain (monthly variation),
- the adjustment of excise duty in Greece (quarterly variation),
- the special petroleum tax in Portugal (monthly variation),
- tax changes in Italy (weekly variation).

In France there is a parafiscal levy which accrues to the Institut Français du Pétrole.

Other indirect taxes might continue to apply in certain countries.

In the Commission's proposal excise duty is set at a common rate for all countries, and variations in one or Member States will no longer be allowed.

Similarly, counter-cyclical taxation would be prohibited unless it was accepted by all Member States and applied simultaneously.

C. SUGGESTED PRIORITIES IN THE OIL SECTOR

24. **The approximation of taxation**

The approximation of taxation (see paragraphs 22 and 23) is a priority objective for the Commission and the Community. Attainment of this objective will make it possible to eliminate a major component of the divergence between prices (all taxes included) of oil products on the consumption markets. Tax accounts for some two-thirds of the final price

in the case of petrol (from 56% in Luxembourg to 79% in Italy) and about one-half in the case of automotive gas oil (from 42% in Luxembourg to 62% in Ireland).

The **Commission's proposal** concerning tax approximation will be discussed in the Council; the proposal in question is a middle-of-the-road solution, since the excise duty and VAT rates proposed are averages for the rates charged in the Member States. Although the tax burden would be virtually unchanged for the Community as a whole, the Commission's proposal might entail significant changes for certain Member States. In addition, the impact of the Commission's proposals on the tax revenue of the Member States cannot be assessed simply on the basis of oil products. Account should also be taken of the changes entailed by the approximation of taxation on alcohol and tobacco and the general approximation of VAT rates on all products and services.

Last but not least, it is not uninteresting to report that certain energy sector operators, particularly in the oil sector, are in favour of a **different approach to the approximation of taxation,** based on the criterion of inter-fuel taxation equality for identical applications. In more practical terms, this principle of neutrality of taxation vis-à-vis competing energy sources would be reflected as follows:

- In the transport sector, by taxation (excise duty plus VAT) of an equal (or similar) level for petrol, automotive gas oil and LPG motor fuel.

- In the residential sector, the abolition of excise duty on heating gas oil and the equalization of VAT rates as between heating gas oil, fuel LPG, natural gas and electricity.

- In industry and power stations, the abolition of excise duty on fuel oil and the equalization of VAT rates for fuel oil, coal, natural gas and electricity (for large consumers).

Some Member States have in fact already adopted a more neutral taxation policy vis-à-vis energy sources. The problem posed by this alternative approach is that it would rule out an effective means of discouraging certain oil end-uses and encouraging the rational use of oil.

25. **Among the other obstacles mentioned in the oil sector, the Commission considers that the following should be removed as a matter of priority:**

- The **differences** in rules and technical norms applying to petroleum products.

- The obstacles as the result of the existence of **oil monopolies.** In this area, the Commission proposes:

  to complete the adaptation of commercial monopolies, in particular in the new Member States: import restrictions (paragraph 16), import licences (paragraph 17) and price systems (paragraph 21) and to review certain provisions concerning the monopolies which are at present accepted: exclusive right of refining (paragraph 14), exclusive right of marketing national products (15) and prohibition of cross-frontier deliveries (paragraph 18).

- Obstacles to **internal transport** (paragraph 13) as part of the liberalization of services.

ANNEX III

NATURAL GAS

Contents

NATURAL GAS

A. NATURAL GAS IN THE COMMUNITY ENERGY MARKET

1. Contribution made by natural gas

Until the late 1950s the gas industry in Western Europe produced mainly manufactured gas derived from coal and, later, oil. In the early days, Europe's natural gas industry was confined to sites close to the fields in Italy (the Po Valley) and France (Lacq). The natural gas boom in Europe started in 1959 with the discovery of the giant Groningen field in the Netherlands, followed by other significant strikes under the North Sea. Groningen gas provided the driving force for the development of Europe's natural gas industry, as it was exported to Belgium, France, Germany, Italy and Luxembourg in particular. In 1986, gas exports from the Netherlands to other Member States accounted for almost 26% of all gas imports in the Community. On the other hand, the Community now depends on imports from non-Community countries (the Soviet Union, Norway and Algeria) for 35% of its gas supplies, with the figure expected to rise to 40% or more from the year 2000.

In the space of 15 years (from 1971 to 1986) natural gas's share of primary energy consumption in the Community doubled from 9% to 18%. Abundant resources in Western Europe, particularly in Norway but also in the Netherlands and the United Kingdom, and from the Community's traditional outside suppliers (the Soviet Union and Algeria) coupled with the environmental advantages suggest that natural gas should remain a major contributor to the Community's primary energy supplies in the future.

2. Situation of the industry

Production

Private or public, multinational or national oil companies produce virtually all the natural gas in the Community.

Transmission and distribution

National or regional monopolies or virtual monopolies dominate the natural gas transmission and distribution industry in Europe. Primarily for economic and technical reasons gas producers hold a monopoly over transmission, distribution and, in some cases, imports. However, this

is not a monopoly in the strict economic sense since they have to compete against other energy sources on each of their end-use markets.

With the exception of the United Kingdom and, to a large extent, France, where a single undertaking controls imports, transmission and sales to end-users in industry or the home, all the Community Member States have opted for a two-tier supply structure:

1. **Gas-transmission** undertakings buy gas from producers under long-term (20-25 year) contracts, transmit it and resell it in large quantities to industrial users, power stations and public distributors. Each of these Member States apart from Germany has just one transmission undertaking. Some of them are public-sector undertakings, others are privately owned and the rest are a mixture of the two.

2. **Public distribution undertakings** resell relatively small quantities of gas to members of the public and small industrial consumers. Every Member State (apart from the United Kingdom and, to a large extent, France) has several different public distribution undertakings, most of them public or semi-public undertakings operating on a regional or local basis.

These public distribution and transmission undertakings are granted exclusive operating concessions by the national, regional or local authorities.

Penetration of the energy market by natural gas

The share of the Member States' primary energy supplies taken by natural gas also varies widely. The role of natural gas in each Member State's economy depends primarily on the indigenous gas resources available and on the vintage of the gas industry.

There is a marked difference between Member States with a relatively long-established gas market, such as France, Italy, Germany, the United Kingdom and Belgium and those relatively new to gas, such as Denmark, Ireland and Spain. Greece and Portugal are planning to introduce natural gas to their primary energy supplies in the future.

3. Structure of the gas market in the EEC

The structure of the gas market also varies widely from one Community country to another. In practice, the relative share taken by the three main end users - the domestic and commercial market, industry and power stations - depends on a wide range of factors, such as indigenous resources available, import opportunities, the relative competitive position of different sources, environmental legislation, industrial structures, population density, geographical features and government policy.

4. Future demand

Natural gas consumption in the European Community totalled 199 mtoe in 1987 or 18% of the primary energy supply. Looking ahead, gas consumption is generally expected to rise moderately to around 200 mtoe by 1990 and reach 210 mtoe by the year 2000. New markets are opening up in Denmark and will, in the near future, open up in Greece and Portugal. Elsewhere the market and infrastructure are expanding, as in Italy and Spain.

A number of potential developments, particularly in environmental legislation and in technologies for burning natural gas, could push consumption well above the latest forecasts.

Although the future of natural gas in the Community looks reasonably optimistic, natural gas nevertheless faces a host of challenges. Fierce inter-fuel competition on end-user markets, stronger energy saving campaigns or slower economic growth than forecast could all curb its growth.

B. POTENTIAL OBSTACLES WITHIN THE NATURAL GAS SECTOR

5. Integration in the gas sector: extent and limitations

Developments in the natural gas sector are favourable for the creation of a genuine common market in natural gas:

The cross-frontier cooperation which has gradually developed between gas companies on the continent with a view to moving the gas bought, often jointly, as safely as possible. Gas-transmission undertakings carry

natural gas to the consumer countries via international pipelines, often managed by subsidiaries jointly owned by the gas companies in each country concerned (see Annex VI). This extensive interconnection of the gas grids in Europe reflects the growing interdependence of the gas industries in the Community, with the notable exception of the United Kingdom, Ireland and Spain, none of which is yet connected to the European grid, plus Greece and Portugal, both of which plan to introduce natural gas into their primary energy balance in the near future.

A study for the Commission by the Economic Research Committee of the Gas Industry (COMETEC-GAZ) on the European gas pipeline grid's contribution to security of supply in the Community has reported in detail on the degree of cooperation between gas companies in Europe.

For example, their collaboration has opened up enough outlets in Europe to make it economic to develop the vast Troll field in Norway and to exert pressure on the purchase price. Troll gas will significantly improve security of supply in the Community in the long term (2020 and beyond).

6. Towards a European purchase price

Recently, in a situation characterized structurally by a small number of gas - importing companies and suppliers, and in market terms by the switch from a seller's to a buyer's market, similar terms, more in line with the new conditions on the market (collapse in oil prices), have been obtained by importing companies from one and the same seller. The next stage in this process could be a European purchase price, a sure sign of the progress being made towards a genuine common market in gas.

7. Further integration of the European gas grid

Over the years the gas pipeline grids have gradually been interconnected as trade in natural gas has expanded. Already the Community imports a little over one-third of its gas from outside the Community. By the year 2000 this figure could reach 40% or more. New supply contracts concluded by the gas companies will increase the volume of gas crossing the Community's frontiers and are bound to encourage further integration of the grid.

The latest communication from the Commission to the Council on natural gas[1] stressed that "a fully integrated grid is a necessary condition for the development of a truly common market for natural gas" (paragraph 13(ii)) and that "the Community should encourage and, where possible, facilitate further integration" (paragraph 61). This applies in particular to the countries not yet linked to the European grid, i.e. the United Kingdom, Ireland, Spain, Portugal and Greece.

The conclusions of the Energy Council meeting on 2 June 1987 stressed that "the Community and the Member States should encourage further integration of the gas grid, having regard at all times to the geographical situation of certain Member States." They also stated that "the gas industry should continue the process of integrating European gas grids" and that "cooperation between Member States' gas companies is particularly important."

8. Natural Gas - Price transparency

There are sound technical and economic reasons for the existence of monopolies or virtual monopolies in the natural gas transmission and distribution sector (to avoid a jumble of pipelines on the same territory and the resultant costs to the consumer). However, in situations like this it is essential to ensure compliance with the **rules on competition** so that a genuine common market in natural gas can be created. The Commission has various ways of ensuring this:

The **price-transparency** principle is enshrined in the April 1983 Council Recommendation on natural gas prices and tariffs[2]. Price transparency is essential for fair competition on the gas market.

Transparency is particularly difficult to achieve in relation to **off-tariff sales to industrial consumers.**

Practices vary widely from one Member State to another. Sales to industrial consumers are based on pre-set tariffs in France, Italy, the Netherlands and Belgium. But in the United Kingdom and Germany individual contracts are concluded. Even the countries with industrial tariffs grant special rates to very large consumers or to groups of undertakings from the same industry.

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1 COM(86)518, 11.12.1986.

2 OJ No L 123, 11.5.1983.

The Commission's efforts to improve the transparency of off-tariff sales, mainly in Germany and the United Kingdom, have yet to bear fruit, mainly because of the objections raised concerning the confidentiality of individual contracts.

In this connection, it must be stressed that the Commission has no intention of publishing individual rates. It fully understands the need for a degree of business secrecy. Nevertheless, further progress could be made if every effort were put into seeking an appropriate solution to this problem.

In practice, unclear pricing hampers consumers from exercising their right to ensure that their rivals enjoy no artificial price advantages.

It is equally unacceptable from the Community point of view for any State or undertaking to take advantage of price and tariff transparency guaranteed in another Member State to attack tariffs decided in the other country as incompatible with Community legislation, while such transparency is lacking in the former country.

9. Harmonization of taxation

Natural gas taxes vary sharply from one Community country to another. Annex VI gives details. These taxes should be harmonized, following the broad lines of the Commission's recent proposals on the convergence and approximation of VAT rates. Other specific taxes in certain countries, such as the tax on large industrial consumers in France (see Annex), lead to discrimination between natural gas consumers in different Member States.

10. Technical standards

Common standards should be encouraged. There are a certain number of technical barriers in existence and currently the Commission and the European gas industry are working on a Directive on the safety and inspection of gas appliances. This Directive is to be based on the new approach to technical harmonization and standards laid down in the Council Resolution of 7 May 1985 (OJ No C 136, 4.6.1985).

11. Opening-up of public contracts

In 1985 the Community's gas transmission and distribution undertakings invested nearly 5 billion ECU, mainly in high-pressure and low-pressure pipelines, storage facilities and gas terminals. Some of this equipment comes from high-tech sectors in which very few firms compete. Also, some large transmission undertakings have subsidiaries specializing in installation design and manufacture (as in France, Italy, Germany and the United Kingdom). The question whether new rules should be applied to the gas sector in relation to purchasing procedures is being considered as part of the overall policy that the Commission is currently preparing for the sectors excluded from the present directives. Concrete proposals will be made shortly.

12. Constraints on the free movement of natural gas

At **Community level** there is the 1975 Council Directive on the restriction of the use of natural gas in power stations[3]. In 1988 the Commission will examine the need to reconsider the use of natural gas in power stations.

The **national legislation** varies considerably, as described below. The biggest barriers to the free movement of gas in Europe are government controls on natural gas imports and exports and undertakings holding a monopoly or dominant position enabling them to block movements of natural gas.

13. Exploration and production

The possibility of exploring for and extracting natural gas is based on licences, concessions or authorisations granted by the State. Typically, there is a two-phase procedure involving a licence to explore for oil and gas and secondly a concession to exploit the gas found. The licences for exploration vary considerably from one Member State to another. The length of their validity varies considerably. In Italy, the national oil company has been given exclusive rights to search for gas on the Italian Continental Shelf and is the sole concessionaire in the Po Valley. The national oil company has first option on gas from the Italian offshore fields and according to certain operators, the purchase conditions of this gas are fixed case by case.

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3 OJ No L 178, 9.7.1975.

Licences for both exploration and exploitation are granted under a series of differing conditions. Some Member States seem to require that the licensee is a legal entity registered in the Member State (France and Spain) and others (Italy) forbid any change in the participation of the licensee without the permission of the State. A combination of these factors can give rise to the situation that there must always be local participation in the corporate structure of the licensee.

14. Transport

Transport of gas in the Member States is characterized by the existence of statutory or de facto monopolies in the market place. Only in West Germany are there a number of actors but even here there is one dominant transport enterprise. In the UK, a new legal instrument has been introduced in the form of the Common Carriers provisions of the 1986 Gas Act, which require pipeline owners to carry for third parties under certain conditions but as yet no use has been made of these provisions. In the Federal Republic of Germany, there is no legal mechanism outside of competition rules, for the dominant transporters to carry gas for third parties. Italy has, however, provisions which come close to this. In Trentino-Alto Adige and Sicily, legislation provides that, where the transport concessionaire is not the lessee of the gas field itself, the lessee of the field has the right to make use of the pipeline within the limits of available capacity. The conditions for such carriage are to be laid down by the "Assessore" for Industry and Trade.

The presence of dominant or monopoly transmission undertakings in each Member State gives rise to segmentation of the Community market; these undertakings can restrict the through transport of gas and even where no specific legislation exists, can block the import and export of gas.

15. Storage

The Member State's legislation on the storage of gas, where it exists, is principally concerned with questions of safety and environmental protection. The different laws are also a reflection of the differing underground storage possibilities in the different Member States.

These laws can only be considered as a barrier to trade where the possibility of granting exclusive licences to the use of the substrata in question exists or where, as in Italy, the applicants for a licence to store gas underground must prove that they are in a position to carry out, directly or through an intermediary, a programme of gas transport and distribution for public purposes, taking advantage of the proposed storage.

In Belgium, under certain conditions, the owner of a cancelled mining concession is given priority when it comes to awarding a licence to use the mine as a gas storage site. One reason for this appears to be the old mine owner's continued responsibility for the upkeep of the mine even when the concession to store gas in the mine has gone to another. This provision could theoretically be a barrier to the establishment of a gas network where storage was needed.

16. Distribution and marketing

Characteristically there is in the EC a clear distinction between the transport of natural gas and its distribution to end consumers. Distribution companies tend to be restricted to a local area and locally owned, usually by the local administrative body. Again, legislation in this area is mainly concerned with safety, the right to enter property, to dig up roads, the obligation to supply, etc.

Geographical concessions to supply gas to final consumers are usually of a long period e.g. seventy-five years in Spain. Of interest in Spain is Article 64 in the State Contracts Law which provides that these lengthy administrative concessions are not to be considered as monopolies. The exact meaning of this provision is not clear.

National legislation concerning tariffs is usually targeted on the distribution companies as the legislation is designed to protect small consumers.

17. Imports and exports

There is some form of effective control in all Member States on the import or export of natural gas. Even Luxembourg, which does not export natural gas, has effective control over the import by means of its controlling interest in SOTEG, the sole importer. This control is either specifically provided for in national legislation or is a condition of production licences or transport concessions. In the UK, exports are subject to the discretion of the Secretary of State.

The legal basis for the import and export control by the State is not always clear. In the Netherlands, for example, Gasunie has the exclusive right to import and purchase gas and thus has de facto the sole right to export.

C. SUGGESTED PRIORITIES IN THE NATURAL GAS SECTOR

Most of the measures listed below will have to be taken by the industry itself, mostly following a common policy agreed at Community level. In a few cases, however, the Commission will have to propose legislation to bring about greater integration on the gas market.

18. Prices and taxation

The points on which progress is most urgently needed are:

(a) Greater price transparency for off-tariff sales in the countries where there is not yet enough transparency (i.e. United Kingdom and Germany).

(b) Harmonization of taxation.

19. Gas pipeline network

Interconnection of the European gas pipeline network must continue as the market expands (see the abovementioned conclusions of the Energy Council on 2 June 1987).

20. Decompartmentalization of the natural gas markets: Common carriage

(a) The exclusive transmission concessions must be checked to see how to facilitate the free movement of natural gas whilst maintaining a high level of security of supply and economic transmission conditions. Transmission or distribution undertakings could be allowed direct access to the resources in question.

(b) The prospect of extending direct access to resources to large industrial consumers should be considered in the light of the results obtained in connection with point (c).

The above two points both hold out the possibility of giving third parties access to the grid as against payment of a reasonable charge (the "common carrier" system).

ANNEX IV

ELECTRICITY

Contents

ELECTRICITY

A. ELECTRICITY IN THE COMMUNITY ENERGY MARKET

1. Contribution made by electricity

Electricity represents a vital and integral part of the energy balance of the Community. Not only does electricity use make a major contribution to industrial productivity and the quality of life but electricity also provides the principal vector for the contribution to energy use of primary energies such as nuclear, solid fuels, hydro and other renewable energies and enables dependance on oil to be reduced. Over 33% of total primary energy use in the Community was devoted to the production of electricity in 1986, as Table 5 (Annex VI) indicates, the actual proportions varying in the Member States up to almost 47% in France. The table also indicates that electricity's share of Community final energy consumption was 16.4% and that the average annual electricity consumption/inhabitant in the Community was 4287 KWh, varying significantly between Member States (36% above the average in Germany, 61% below the average in Portugal).

2. Situation of the industry

In considering the Internal market in electrical energy and how to achieve acceptable levels of economy, security of supply and freedom from unacceptable restrictions of competition, the special characteristics of the sector must be borne in mind. Not least of these are the technical requirements which arise from the necessity, for economic and statutory reasons, to ensure acceptable levels of reliability and security of supply. Furthermore, electricity cannot be stockpiled, unlike other energies, and there is thus a requirement to match supply and demand at all times. The ownership patterns and operational structures of the distribution, production and transmission elements of the electricity sector differ between Member States, having varying degrees of horizontal and vertical integration and reflecting the historical development of the sector.

3. Network interconnection: extent and limits

The nature of electricity production, in suitable and separated locations, requires that electricity be transmitted to the point of use within areas, regions and Member States and also across frontiers. This imposes technical requirements for the operational management of such transmissions to reduce the inevitable power losses to a practical minimum, in the interests of economy and energy efficiency. Electrical interconnection across national frontiers has developed over many years as a logical extension of local, regional and intra-national interconnections, driven by the economic and technical advantages of more economical use of production facilities and increased reliability of supply. In the EEC this has resulted in one of the most closely

integrated high-voltage international networks in the world, although Ireland and Greece, are still not directly interconnected with any other Member States. Table 6 (Annex VI) gives, for 1986, both the balanced interchanges with other countries (including non-EEC) and the net exports or imports of electrical energy for each Member State together with, as an indication of the orders of magnitude, the relationship between the net exports or imports and the total electricity consumption in each country. International exchanges are managed, without executive powers, by co-operative organizations of electricity utilities. These are UCPTE[1], UFPTES[2], SUDEL[3] and NORDEL[4]. The utilities themselves enter into commercial arrangements for the exchange and net transfer of electrical energy. Commercially, transfer arrangements are of three types:

- hour-by-hour exchanges on a cost basis
- contracts (usually short-term) for net transfers
- permanent arrangements for the transfer of energy from jointly-owned production plant in a neighbouring country.

Furthermore, it should be noted that all the elements of the international interconnection system are owned by monopolies, and transfer arrangements are co-operative and not mandatory. These interconnections do not, by any definition, constitute a common carrier system.

4. Future demand

Current indications for the future are of continuing, steady increases in overall electricity demand, some 2%/annum, up to the year 2000 and an increasing share of electricity in final energy demand. There are, however, uncertainties concerning the future development of the prices of primary energies for electricity production which will clearly affect not only the relative electricity production costs in the Member States but also the economics and dynamics of electricity exchanges between regions and Member States with differing electricity production costs.

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[1] UCPTE - Austria, Belgium, France, Germany, Italy, Luxembourg, Netherlands, Switzerland, Greece, Portugal, Spain, Yugoslavia.

[2] UFPTES - France, Iberian Union.

[3] SUDEL - Austria, Italy, Yugoslavia.

[4] NORDEL - Denmark, Norway (+Finland and Iceland).

B. POTENTIAL OBSTACLES WITHIN THE ELECTRICITY SECTOR

5. National legal framework

The Commission is currently carrying out a study of the statutory and administrative framework within which the electricity utilities in the Community operate. The results of this study are not yet available and hence detailed references to these in this text are limited.

Furthermore the text is oriented towards highlighting the principle issues, to assist in the debate of these issues, and to suggesting priority areas of consideration. The comments which have been made to the Commission by interested parties, in response to the Commission's request for views on the development of the internal energy market, have been taken into consideration. This section deals with distinct aspects of the electricity sector.

6. Electricity generation by public enterprises

The concept of an open internal market in electricity production implies the production of electricity on an economically competitive basis, subject only to the protection of the environment and the requirements of the Community energy policy. The public electricity producers have noted that there exist inequalities of treatment of electricity producers within the Community, amongst which are:

7. differences of fiscal and financial treatment of producer utilities. Leaving aside differences of ownership structure, which are not relevant to this discussion, differences of fiscal treatment of producer companies (whether publicly or privately owned) and differing criteria of access to capital markets and State aids, eventually benefitting electricity utilities, result in distortions of overall production costs. (This aspect applies also to distribution and transport companies). Furthermore, the financial situation of utilities is influenced by the treatment of asset evaluation and depreciation policy and conditions of access to capital markets, for which the rules vary between Member States. All these factors are determinants of the revenue required by utilities and thus influence the pre-tax prices of electricity and hence competition. **The extent to which harmonization of these factors would be conducive to a more open market is an issue for further consideration.**

8. differences in the consent procedures for the authorization of new construction, particularly site authorization, which result in differences between utilities in their ability to properly manage their investment programmes, with the possible over- or under-supply of production facilities and the consequential effect on overall production costs. Such consent procedures, varying as they do from Member State to Member State, are arguably not always best suited to the subject of power station construction. It can also be argued that, apart from land-use, energy policy and environmental questions, authorization should always be granted provided that a real market for electricity production can be demonstrated. This is also an issue for further study;

9. the cost of electricity production depends on the cost of fuels, particularly in conventional power plants. The opening of the internal market in other energies would imply equivalence of access conditions to fuels for electricity production by production utilities in all Member States. Apart from Community policy considerations, there exist statutory or de facto restrictions on the fuels (imported coal, natural gas) to which the electricity producers may have access as well as certain requirements to use quantities of high-cost indigenous coal (i.e. in Germany and the United Kingdom). Such restrictions are at the root of many of the differences in pre-tax electricity prices which exist throughout the Community and result, in general, from national rather than Community energy policies. Within the concept of an open market in energy **it is essential to find an acceptable solution to this issue within the Community energy policy;**

10. differences which exist between Member States concerning standards of environmental protection and other security measures affect, differentially, the costs of electricity production. Such requirements affect capital, operational and maintenance costs, may affect the output capacities available and arise in general from differing national policies. **An open internal market would imply some degree of harmonization of such requirements.**

11. The electricity interconnection network

Internal high-voltage system interconnection within national boundaries is highly developed in most Member States. Ownership patterns vary, with single ownership of the entire high-voltage networks in F, IT, IRE, PT and EL and multiple ownership of regional sections of the networks in the other Member States. Whatever the ownership, the operation of the networks is generally managed on a national basis except in Germany, where the structure is more decentralized. It is known that some systems (e.g. U.K., D, IT) have a certain degree of common carrier obligations but all systems are effectively concessionary monopolies.

12. Compartmentalization

The national and international interconnection systems operate at present principally as links between producer/distributor systems (largely within national frontiers) rather than as systems linking all distributors with lowest cost-generation sources on an international basis. These is no obligation to use international interconnections, although it is true that such interconnections are used to achieve better economy and security of the national systems and have significant influence on the requirements to maintain peaking and reserve levels of production capacities. It is, therefore, **an issue for consideration as to whether a change in the operational (as distinct from the ownership) system would be conducive to further opening of the internal market.** This would imply some separations between the operational aspects of production and interconnection such that the interconnection system would, irrespective of Member State, seek to provide the most economic (based on comparative advantages) and secure supplies to the distribution utilities on a more Community-oriented basis;

13. Common carrier

Arguments in favour of the use of all the interconnection systems on a "common carrier" basis (although this is not well defined) have been put forward, particularly by large electricity consumers and large auto-producers. The benefits of such an approach are said to include the ability of consumers (or distribution utilities) to obtain supplies from any suitable low-cost production source. It must be noted that the arguments put forward by the electricity producers concerning the technical problems of management and security of supply are very powerful and are borne out by experiences in other countries. The definition of the obligations and application of the concept of a "common carrier" is not simple. **Nevertheless, this is an issue for consideration.**

14. **Supplies available to distribution utilities**

In any event, to be consistent with the principle of an open market, distributors should charge prices which, inter alia, accurately reflect the cost of the **most economic electricity supplies** available to them, consistent with supply security. Supplies may be available to distribution utilities from the high-voltage transmission system and from production units delivering directly to the distribution network, the latter including private industrial auto-producers and private producers using renewable energy sources (wind, small hydro, etc.). Concerning industrial auto-producers and other private producers producing electricity from sources desirable in energy policy terms (combined heat and power, renewable energies and waste), **it is clearly desirable that the delivery of electricity from such producers to the public network should not be unjustifiably hindered.** To this end, the Commission is preparing a draft Framework Recommendation concerning cooperation between public and private producers, which will shortly be submitted to the Council for approval. Supplies from many such producers are delivered directly into the distributor utilities' networks whilst other such supplies are delivered into the high-voltage transmission system; this aspect is discussed above (see Para 12).

15. **Electricity supplies to large consumers**

Large electricity consumers are particularly sensitive to industrial competition and the effect of differences in electricity prices throughout the Community. Such consumers have made known their view that they should be able to obtain electricity supplies from any production source, not only their (monopoly) distributing utility, if a more economic source can be found. This implies that such supplies should be transported via the distribution and transmission networks on the basis of a supplier/consumer contract. The public supply utilities argue against such arrangements, pointing to the technical problems which may arise in ensuring continuing security and reliability of the distribution and transmission networks. It can also be argued that the "creaming-off" of the most economic

production sources by consumers having the most purchasing power would result in the inequable treatment of less powerful consumers (including domestic), whose electricity prices would be more influenced by the production costs of the less economic production sources.

The technical argument of network reliability is a powerful one and the question merits further study. **This is, nevertheless, a significant issue which must be considered** in the context of the monopoly situations of the distribution utilities.

16. Electricity distribution to consumers

In every Member State, the distribution of electricity to consumers (usually at low or medium voltage) is a statutory monopoly or a de facto monopoly (e.g. by contract to municipalities in Germany) of a distribution utility. This situation has existed for many years and can be said to have certain advantages. It would be absurd to suggest multiple connections from different distributors to a consumer's premises. Furthermore, distributors have, in most cases, a statutory obligation to maintain acceptable levels of security of supply and supply conditions (of voltage, frequency, etc.); although there are significant variations in the nature of such supply conditions within the Community, and this reinforces the need for the level of technical and operational control of the distribution systems by the distribution utilities currently executed within the monopoly systems. There is, however, an argument for **a degree of harmonization of the behavioural patterns of distributors towards consumers**, in terms of the technical conditions of supply and pricing and tariff structure practices. The latter is already the subject of an existing Council Recommendation (81/924/EEC) but **the issue of a more regulatory approach might well be considered**, for example by limiting the duration of exclusive contracts.

17. Taxation of electricity

Electricity prices to consumers vary widely between Member States. Pre-tax prices depend on a number of factors which are discussed above (Paras. 6-11) but there are also significant variations of post-tax prices introduced by differences in the rate of Value-Added Tax and other specific taxes in different Member States. Indications of these variations are given in Annex. In cases where VAT is deductible, the approach to deductibility varies between Member States. **The magnitude of these variations is sufficient to induce distortions of competition, unrelated to the economics of electricity production or transport.** The Commission's attention has been drawn to these factors by Member States, electricity producers and consumers and they clearly represent an issue of concern, even though they may not affect electricity transfers between systems or Member States.

18. Improvement of cost or price transparency

It is difficult to argue in favour of an open market in electricity on the grounds of increased competitiveness and economy whilst discounting the importance of transparency. **Transparency is a significant issue** and includes the following elements:

a) **electricity prices:** with one exception, electricity prices have already a high degree of transparency. The exception is prices to certain large electricity consumers, which these consumers argue should be non-transparent for commercial reasons. However, electricity consumption by large consumers, although they are small in number, can represent a significant proportion of total consumption;

b) **electricity transfer prices:** prices at which electricity is transferred between systems (or across frontiers) are not transparent. Such prices cannot be directly related to prices to consumers supplied from these systems. It is thus not possible to assess the relationship between these prices and production costs nor the actual or potential impact of electricity transfers on consumer prices;

c) **fuel prices for electricity production:** the prices paid by producers for fuels are not transparent, thus inhibiting comparison of such prices within the Community and assessment of the reasons for differences;

d) **production costs:** production costs from individual production units are not transparent, although this would appear to be an element in the appreciation of electricity transfer possibilities.

It would seem appropriate to consider the issue of price and cost transparency on an overall energy basis, in the light of its potential contribution to a more open energy market.

C. SUGGESTED PRIORITIES IN THE ELECTRICITY SECTOR

From the above it is clear that, in the electricity sector, a number of issues arise in the context of a more open internal market in electricity. Whilst further study may be required to assess the relative impact of these issues in this context, the potential problem areas which impact on the economic and competitive aspects of electricity and are suggested for priority consideration are summarized below.

19. Fiscal treatment and access to the financial market

- Differential fiscal impositions on electricity prices and the modalities of such impositions.
- Differing financial treatment of and requirements for electricity utilities.

20. Standards and administrative constraints

- Lack of harmonization of technical requirements for electricity supply to consumers.
- Differing standards for environmental protection and security requirements for electricity production plant.
- Differing requirements for the authorization of the construction of power plants.

21. Monopolies and exclusive rights

- Monopolies of electricity distribution to consumers.
- Exclusive rights of the use of distribution and interconnecting transmission systems, particularly insofar as this affects consumers' ability to obtain supplies from sources other than their allotted distributor.
- Exclusive rights of operation of high-voltage interconnection systems, particularly insofar as this affects the use of the lowest-cost production sources and the supply of electricity to distributors under the most economic conditions.
- Lack of liberal access to fuel supplies by electricity producers.

22. Prices and costs of electricity

- Lack of harmonization of pricing and tariff structure practices.
- Lack of transparency of electricity prices to large consumers, electricity production costs, prices for electricity transfer between systems and fuel prices for electricity production.
- General consideration of the role of transparency in an open internal market.

23. **Infrastructure**

- Lack of high-tension electricity interconnection of Ireland and Greece with other Member States.

- The existing limitation of the operational aspects of the high-voltage interconnection system (see also Para 17 above) insofar as they affect aspects of the common carrier concept and the economics of electricity supply to consumers.

- Operational aspects of the high-voltage system affecting the producers' requirements for peaking and reserve capacities.

ANNEX V

NUCLEAR ENERGY

Contents

NUCLEAR ENERGY

A. NUCLEAR ENERGY IN THE COMMUNITY ENERGY MARKET

1. The different sensitivities which exist between Member States with regard to nuclear questions have had an effect on the development of different national regulations in this area, creating therefore, certain barriers to the internal market.

   The following text refers only to technical obstacles constituting a barrier to the internal market in nuclear materials.

2. Contribution made by nuclear energy

In 1987, nuclear energy accounted for 14% of total energy production (2% in 1970) and 35% of electricity production. However, the situation varies considerably from country to country: in France and Belgium almost 70% of electricity is nuclear-generated whereas in Denmark, Greece, Ireland, Luxembourg and Portugal nuclear energy is not used at all. The Member States which use (or envisaged having recourse) to this energy form have (or did have) important research and development programmes. The Community is in the same position.

In 1995 some 40% of all electricity produced in the Community will be nuclear in origin.

3. Development and security

The Community's energy objectives for 1995 recognize the importance of nuclear power in supplying the Community with energy and they stress the need to ensure that all aspects of the planning, construction and operation of nuclear plants satisfy optimum security conditions.

4. Competitiveness and costs

Electricity costing studies in respect of base-load plants due to enter service in 1995 show that electricity can be generated more cheaply from nuclear fuel than from coal and even more cheaply than from other fossil fuels: electricity generated from coal is estimated to be between 18% and 70% more expensive than nuclear-generated electricity, the figures varying from country to country.

Nuclear power requires a more complex series of fuel-processing operations than is the case with other energy sources and it depends on sophisticated power stations. These characteristics are reflected in the structure of electricity costs. Only 10% of those costs are accounted for by expenditure on the raw fuel (uranium): 18% are accounted for by the various fuel-processing operations. The largest proportion (57%) relates to the capital costs of nuclear power stations. The balance (15%) represents the running costs of those power stations.

B. POTENTIAL OBSTACLES WITHIN THE NUCLEAR ENERGY SECTOR

5. Community legal framework

The legal basis for the single market in nuclear fuels is Chapter VI of the EURATOM Treaty, which enshrines the principle of, and lays down the procedures for, the regular and equitable supply of ores and nuclear fuels to all Community users.

In 1984, the Member States defined and published a joint position[1] stating the conditions under which nuclear materials must be transferred between Member States in order to comply with the non-proliferation policy of each of those States. Thanks to the implementation of that declaration, nuclear materials move freely within the Community provided that a set of non-discriminatory precautions, known in advance, are adhered to.

The declaration, which is essential to the continued unity of the market, has not yet been enshrined in Community law.

In practical terms, however, trade is becoming compartmentalized and inflexible although this is, generally speaking, not the result of obstacles to the internal market.

6. Enrichment and reprocessing

At the most important stages of the fuel cycle, such as enrichment or reprocessing, where massive non-adaptable investment is required, producers have sought long-term contractual commitments and even financial contributions from their trading partners in a number of Member States. Consequently, market shares are now frozen and short-term competition is limited although the market is unquestionably operating successfully.

Market developments can take place only in the long term, once the current contracts have expired or when new plans are made leading to new arrangements for industrial cooperation. It will then be up to the Community to promote potential economies of scale and to ensure, as hitherto, that there is no discrimination between operators.

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1 Declaration on politicial cooperation, 20 November 1984.

7. Prospecting and extraction of uranium

On the other hand, as regards uranium prospecting and extraction, it is to be feared that the situation in certain countries presents a potential obstacle to the completion of the internal market. The incomplete information currently available shows that certain countries impose restrictions on the activities of foreign companies or explicit conditions relating to the nationality of company managers. In other countries, discrimination may arise from particular conditions attaching to the granting of authorizations.

C. SUGGESTED PRIORITIES IN THE NUCLEAR ENERGY SECTOR

8. Market for equipment and components

One of the objectives for the internal energy market is to cut costs and increase economic competitiveness. In the case of nuclear electricity, its costs are dominated by the investment cost of power stations and their finance. This is why particular importance attaches to cost transparency and the market for equipment and components. This subject may appear to be only marginally relevant to this document but it is of such fundamental importance that it cannot be omitted and deserves to be treated at greater length, perhaps elsewhere.

An examination of the current situation shows that the national markets are, for the most part, walled off. This is an established fact in France, Germany, Italy and the United Kingdom, but the Belgian and Spanish markets also show signs of inflexibility. Even subcontracting accounts for a very small proportion (3 to 4%) of the Community market and has been in decline for the last 10 years. Faced with shrinking Community and world markets for equipment, national industries have consolidated their self-sufficiency.

At the present time, however, there is a very considerable production overcapacity, making it even more desirable that the industry should be technically rationalized and its structures simplified, as was stressed in the illustrative nuclear programme under Article 40 of the EURATOM Treaty (COM(85)401, paragraph 76). The heavy electrical engineering industry seems likely to undergo this type of restructuring.

One of the problems to be overcome in harmonizing the various industries is to ensure that the different national systems of construction and safety standards are mutually compatible.

This is one of the aspects which must be taken into account when updating some features of the 1985 programme: the Commission is undertaking this task in 1988, in preparation for the single market.

Another important aspect will be the scope and impact of extending to the energy sector the Directives concerning the procedures for awarding **public works and supply contracts,** as is shortly to be proposed by the Commission.

ANNEX VI

Contents

1 - Consumer prices for petroleum products
(net of duties and taxes)

Situation at 14 September 1987

Price net of tax	Premium petrol	Regular petrol	Automative gas oil	Heating gas oil	Residual fuel oil, high sulphur
	1 000 L	1 000 L	1 000 L	1 000 L	tonne
EEC average in ECU (*)	187	164	188	156	107
(%)					
BELGIUM	102	110	104	96	94
DENMARK	115	132	114	115	108
GERMANY	92	90	94	93	92
GREECE	87	89	69	83	87
SPAIN	104	110	102	104	96
FRANCE	95	114	101	114	93
IRELAND	128	140	133	119	142
ITALY	102	99	102	97	94
LUXEMBOURG	114	124	101	113	101
NETHERLANDS	106	-	98	100	104
PORTUGAL	109	113	97	-	133
UNITED KINGDOM	106	114	105	116	112

Source: Commission Oil Prices Bulletin No 403

(*) The average is obtained by weighting the quantities consumed in each country in 1985.

2 - International gas pipelines in Western Europe

I. Existing pipelines

Country of origin of gas	Name of international pipeline	Transit country	Member State of destination
Netherlands (Slochteren)	Distrigaz network North-South (Poppel-Blaregnies)	Belgium	Belgium + France
Netherlands	TENP	Germany/ Switzerland	Germany + Switzerland + Italy
Norway	Gasunie network	Netherlands	Netherlands + Belgium
Norway	Gasunie network + SOGEO (Belgium)	Netherlands + Belgium	Netherlands + Belgium + France
USSR	MEGAL	Germany	Germany + France
USSR	TAG	Czechoslovakia/ Austria	Italy
USSR	WAG	Czechoslovakia/ Austria	Germany + France

Pipelines managed by joint subsidiaries of gas companies

TENP	SNAM/Ruhrgas
TAG	SNAM/ÖMV (Austria)
MEGAL	Ruhrgas/GDF/ÖMV
WAG	Ruhrgas/GDF/ÖMV
SEGEO	GDF/Distrigaz

II. Planned pipelines

Country of origin of gas	Transit country	Member States of destination
Norway (Sleipner + Troll via the Zeepipe)	Belgium	Belgium + France (+ possibly other customers, e.g. Spain)

3 - Taxation of natural gas

I. Value added tax (VAT) on sales of gas (as percentage of price net of VAT)

	1987
Germany	14
France	18.6
Italy (domestic)	9
Italy (non-domestic)	9 - 18 1/2
Netherlands	20 - 6
Belgium	17
Luxembourg	6
United Kingdom	0
Ireland	10
Denmark	22
Spain	12
Portugal	8
Greece	?

VAT is deductible in the case of industrial and commercial consumers who are subject to the general tax arrangements.

II. Specific taxes

(a) France

On 1 January 1986, a domestic tax was introduced on the consumption of natural gas used as a fuel where deliveries to the users exceed 5 million kilowatt hours. In 1988 the tax is 0.56c/kWh.

(b) Italy

A consumption tax of Lit 30/m^3 is levied on sales of natural gas for domestic uses: domestic users in the Mezzogiorno are exempt from this tax. It is included in the basis of assessment of VAT.

1

2

(c) Netherlands

An environmental tax is currently levied at a rate of 0.05 ct/m^3 and is included in the basis of assessment of VAT. The tax applies to all consumers.

(d) Spain

A municipal tax is charged at the rate of 1.5% of the price net of tax and is included in the basis of assessment of VAT.

4 - Taxation of electricity (1986)

1. Value added tax (VAT)

VAT is calculated and applied to the price excluding VAT but including any specific taxes, except in France where VAT is calculated on the price including specific taxes. The rates are as follows (at 1.1.1987):

Belgium- 17%; France- 18.6%; Italy (domestic)- 9%; Italy (non-domestic) 9%-18%; Holland- 20%; Luxembourg- 6%; UK- 0%; Ireland- 0%; Denmark- 22%; Spain- 12%; Portugal- 8%; Greece- 18%; Germany- 14%.

2. Specific taxes

Germany - A compensatory tax is levied to promote the use of Community coal in power stations (since 1975). The rate varies throughout the country, the Federal average is 3.3% and is likely to increase.

France - Municipal and Departmental taxes are levied which aggregate, depending on the area, to between 4% and 13.2%.

Italy - A state tax is levied which, depending on the region, varies between 0.55 and 1.1 LIT/KWh for domestic consumption and, depending on the region and the level of consumption, between 0.325 and 1.1 LIT/KWh for non-domestic consumption. Certain types of consumption are exempt from this tax. In addition, a Municipal tax is applicable to domestic consumption (block of 75 KWh/month) at 13 LIT KWh and Municipal and Provincial taxes applicable to non-domestic consumption (1000 KWh/month) at 5.5 LIT/KWh.

Denmark - A Government tax, deductible in the same way as VAT, applies at the rate of 19 ore/KWh.

Greece - A stamp duty, applicable to domestic consumers only, is levied at the rate of 1.2%.

Portugal: An inspection tax is levied at the rates of 7.5 esc/month for domestic consumption and 37.5 esc/month for industrial consumers.

5 - Electricity in the Community energy market

1986

(1) Member State	D	F	IT	NL	B	L	UK	IRL	DK	EL	ES	P	EUR 12
(2) Electricity demand (TWh)	383,7	316,8	199,9	66,9	53,9	3,8	282,8	11,3	28,8	27,3	119,7	21,2	1516,3
(3) % Share of electricity in final energy consumption	16,8	18,5	16,2	8,9	14,3	11,1	16,3	13,6	16,6	18,2	20,5	21,9	16,4
(4) Consumption inhabitant (KWh/annum)	5851	5318	3194	4414	5162	10297[1]	4240	2912	5254	2507	2790	1862	4287
(5) % of total primary energy devoted to electricity production	45,0	46,7	24,0	22,0	31,6	5,1	35,9	28,3	38,1	37,6	34,1	23,5	33,1

6 - Cross-frontier transfers of electricity (including non-EEC) 1986

Balanced interchanges consist of equal quantities exported and imported at differing times. The one-way quantities of these exchanges are given in (2) below). The additional net import or export quantities are given in (3) below.

(1) Member State	D	F	IT	NL	B	L	UK	IRL	DK	EL	ES	P	EUR 12
(2) Balanced exchanges (TWh)[2]	14,5	7,6	1,8	0	5,3	0,4	-	-	0,7	0,3	2,9	1,0	61,6
(3) Net Import (+)/ Export (-) (TWh)	+4,6	-25,5	+22,1	+2,3	-0,2	+3,5	+4,2	-	+1,4	+1,2	+1,2	+1,9	+14,2
(4) (3) as %age of total electricity consumption	1,1	7,6	10,3	3,3	0,3	78,0	1,4	-	4,5	4,0	0,9	8,6	0,8

(1) Luxembourg is exceptional in that 63% of electricity consumption is in the industry sector, compared with 45% for EUR 12.
(2) TWh = KWH x 10^9