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Telecommunications Regulation in the European Community

The Commission of the European Communities as Regulatory Actor

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I. PROPOSALS AND ARGUMENTS IN PERSPECTIVE

I.1. Introduction

When in the early eighties telecommunications technologies, markets and regulation in the EC countries were going through a process of change, the European Community initiated what in the years to follow would become a fully fledged telecommunications policy.[1]

Traditionally in the EC countries, Telecommunications Administrations controlled or had strong influence on the entire domestic telecommunications sector. At the international level mainly technical coordination took place in regional (CEPT, Eutelsat) and global (ITU, Intelsat) fora in which the same Telecomunications Administrations were represented. However, rapid and fundamental technological change, new characteristics of telecommunications equipment and services markets, and liberalization in third countries put

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1. See : - Communication from the Commission to the Council on telecommunications, COM (84) 277, 18 May 1984,
- Council Recommendation of 12 November 1984 concerning the implementation of a commom approach in the field of telecommunications,
84 / 549 / EEC.

growing pressure on the existing regulatory regimes in the EC Member States. It was in this context that the Commission of the European Communities[2] published its "Green Paper on the development of the common market for telecommunications services and equipment" (COM (87) 290, 30 June 1987). For the first time, a framework for telecommunications regulation at the EC level was introduced. In the Green Paper the future regulation of telecommunications is strongly linked to the overriding aim of the creation of the internal market for 1992.

The purpose of this paper is to examine the policy proposals made by the CEC concerning the regulation of the telecommunications sector.[3] The definition of a policy problem and of the alternative solutions is an important tool to manage the scope of conflict.[4] The perception of individuals and groups whether and how their interests are threatened or opportunities presented, will be strongly influenced by the definition of problems and solutions. Consequently, the study of policy proposals may help us to understand why actors participate in or abstain from political action. It may also clarify the resulting struggles over policy adoption (the pattern of politics) and the development of the policy.[5]

To gain a fuller appreciation of the CEC's proposals for telecommunications regulation, we will first look at the context of the sector developments. Since the sector consists of rather different sub-sectors, an initial distinction has been made between the telecommunications equipment market

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2. In the rest of this paper, the name "Commission of the European Communities" will be used in the abreviated form "CEC".
3. EC regulation in related areas (eg. broadcasting, information protection) fall mostly outside the scope of this paper. Neither will we look at EC policy in the field of telecommunications insofar as it is not concerned with regulation (eg. R&D projects, infrastructure projects, services projects).
4. See : Kellow, A., 1988; Kingdon, J. 1984 : p.115.
5. See : Lowi, Th., 1976; Polsby, N., 1984.

(section II.1.), the market for network provision (section II.2.) and the services market (section II.3.).

In the third chapter, the actual proposals of the CEC - to a large extent already announced in the Green Paper on telecommunications - will be presented. At the same time we will indicate the EC recommendations, directives and regulations[6], relevant with regard to these proposals. Four main areas of regulation have been identified (section III.1 - 4).

Taking up again these four areas of regulation, main arguments concerning the problems and alternative solutions will be outlined in chapter IV. This chapter is based on literature and policy documents.

In the concluding chapter, the policy proposals and action of the CEC will be set against these arguments in order to clarify the interests at stake and the scope of the underlying conflicts. At the same time, this may increase the insight in the present political pattern and policy development as well as in the strategic rationale behind the phrasing of the CEC's proposals on telecommunications regulation.[7]

However, in order to gain a better grasp of the interests at stake in the cloud of arguments surrounding each policy issue, first of all a distinction will be made between three levels of argument (section I.2). As elaborated following (section I.3.), this distinction seems especially helpful in the complex context of EC regulation of the telecommunications sector.

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6. Here, the word "regulation" is used as it is formally defined in article 69 of the EEC-Treaty. It refers to a category of Council decisions with its specific characteristics.

7. See: Wallace, W. , 1984 : p. 415-425; Mansbach,R. and J. Vasquez, 1981.

I.2 Three Levels of Argument

Arguments concerning problems and alternative solutions with regard to a (regulatory) policy tend to be characterized by the intertwining of the different interests at stake. Consequently, arguments and counter-arguments may address conflicts of a different nature. In order to avoid ambiguity and confusion of this kind, three levels of argument have been distinguished. These levels relate respectively to :

a. the proper allocation of rule-making authority

b. the relative importance of goals of regulation

c the appropriateness of a regulatory command as a means.

a. The legitimacy of regulatory authority

The interest at stake at this level is the rule-making authority and (public) competence stemming from regulation.[8] Arguments in this discussion address the appropriateness of the allocation of this authority. They may also relate to the transfer of competence inherent to a change in the substance of regulation itself.

These arguments with regard to the legitimacy of authority relate in constitutional governments mostly to the horizontal or the vertical division of power: respectively among the three branches of government and between the different levels of government. This does not necessarely mean that arguments defending a particular allocation between the branches of government are intended to further a certain allocation along the vertical dimension or vice versa.[9] Besides, other allocations of authority are the

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8.See: Driver, C., 1980: p.258; Dethier,R., 1985: p. 140 - 142

9. For example, the small role of elected legislative bodies in EC decision making is used as an argument against the transfer of sovereignty to the EC level

subject of discussion such as between bodies representing or connected with different interests in society (but horizontally and vertically at the same level) eg. different regulatory agencies, different ministries or different international organizations.

b. The goals of regulation

The interests at stake are the goals to be enhanced by regulatory commands. Arguments pro or contra particular commands are based on the importance of the goal towards which these commands are directed. At the same time arguments may concern the justification of a priority among goals. The focus is thus on the finality of the substance of regulation rather than on the legitimacy of the source of regulation or of authority transfer as a result of (new) regulation.

Regulation is justified insofar as it is needed to overcome the failure of an unregulated market place to serve the "public interest".[10] Two main types of failure dominate in the arguments: 1. the market falls short in allocative efficiency;
2. the market is unable to realize distributive equity.

Phenomena in the market which are often considered to be at the root of a distortion of allocative efficiency and which need to be controlled or corrected by regulation are in particular: natural monopolies, excess

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10. The arguments justifying regulation because of the need of regulation to overcome defects of the market, do not pre-empt explanations of the cause of decisions for (particular) regulatory commands in terms of motivation of the competent decision makers, organizational or institutional characteristics, etc.

profits, excessive competition, externalities and inadequate information.[11]

Standards of social justice or equity may be used for the justification of regulation with certain distributive effects. Increased distributive equity is in particular sought for between:
- income groups and consumer groups;
- geographical areas (regions):
- industrial sectors (including service sectors).

To the extent that regulatory commands furthering allocative efficiency and distributive equity are mutually exclusive, trade offs have to be made and priorities have to be set. However, increased allocative efficiency is by some authors (under particular conditions) considered to be the best means to further distributive equity.[12] Moreover, regulation justified by efficiency arguments may have (unexpected) distributive effects , while regulation justified by distributive arguments may have (unexpected) efficiency effects

Some other justifications for regulation used in this context are the protection of national security, privacy, cultural identity and pluralist values.

c. The appropriateness of regulatory means

Of central importance in this discussion are the specific qualities of chosen means. Arguments addressing the appropriateness of a means are in the first place based on the efficiency of this means to realize a certain goal. For example, typical means to overcome allocative efficiency defects of the

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11. Breyer, S. 1988: p. 1 - 9.
12. See: Vogelsang,I. 1988: p.203.

market are the control of market entry and exit, prices and profits, product output and quality, as well as the prescription of standards, procedures and performance levels.

However, human constraints - such as a limited capacity for logic reasoning and incomplete knowledge - exclude conclusive data on the efficiency of alternative means. The standards with which to measure efficiency of means, however, are hard to disassociate from the preference for goals.[13] As a consequence, arguments concerning the efficiency of means with regard to certain goals tend to become intertwined with preferences for means in their own right.

At the same time, the decision maker is confronted with the fact that means themselves are not neutral[14] :

- most means will have particular "side effects" , and the appreciation of these "secondary" consequences will influence the evaluation of the means in question;
- means may be related to an ideology and therefore be linked to a whole set of preferences and beliefs;
- preferences for certain means may be related to time (eg. the duration of effect) and the order of events.
- the choice of means will influence the internal conditions of the choice situation itself. This may consequently influence the criteria by which the appropriateness of means will be judged.[15]

Since the late-70s, there has been a increasing knowledge of and concern with the costs of regulation. Technical an organizational inefficiency in regulated industries and allocation inefficiency in the affected industries

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13. See: Zinke, R., 1987: p. 72.
14. See: Majone, G., 1989: p. 15 - 20 ; Holzman, M., 1958.
15. March,J. and J. Olson, 1983: p. 736 - 737.

(eg. compliance and lobbying costs) as well as allocation inefficiency by customers (distortion of input use), and by the regulatory authority (administrative costs), have increased the pressure for regulatory change.[16]

With liberalization, new competition is expected to diminish the need for regulation with its high efficiency costs. However, liberalization alone does not guarantee effective competition, and a thorough analysis of the obstacles to competition an competitiveness may obliterate the need for corrective regulation. Moreover, competition need not by itself reduce the demand for regulation. The transition process towards liberalization and new competitive market sectors may call for new forms of regulatory control.[17] Free entry may have negative effects on products and service quality and lead to externalities. New demand for regulation can arise in reaction to distributional effects of liberalization (eg. regional development, industrial policy objectives). Finally, at the international level, the coordination and harmonization of market and technical regulation is of growing importance. A balance have to be found between the benefits of open markets, appropriate regulation and harmonized regulation, and the cost of market entry barriers and growing dependence.[18]

I.3. EC Regulation of the Telecommunications Sector

In the case of EC regulation some specific problems arise at each level of argument. The particular complexity of the policy process and the intensity

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16. See: Utton, M. 1988: p. 2 - 8.
17. See: Robinson, P., 1987: p. 372.
18. See: Stevers, E., and Ch. Wilkinson, 1988.

of the conflicts underlying policy proposals may be elucidated by the identification of the level of the argument used.

The arguments relating to the proper allocation of competence and rule-making authority gain a singular importance in the case of EC regulations. First, because new and often more extensive regulation at the EC level implies an increase of competence of the EC institutions. Moreover, precedents may be set for further EC ruling, due to the procedure used[19] and due to the content (area) to which the rule applies. If a (new) domain is considered to fall under the internal competence of the EC, the Member States are not allowed to issue new conflicting rules and existing rules are to a large extent subordinated to new EC rules.[20] [21] Since this concerns a devolvement of sovereignty by the Member States, the discussion on the proper allocation of competence is likely to be exceedingly intense. Consequently, this level of argument is likely to be rather pervasive (although not necessarily easy to recognize) in discussions resulting from policy proposals for EC regulation. This will be even more so if the Council can decide upon the regulation by more lenient voting rules (eg. simple majority vote) or if the CEC assumes direct rule-making authority based on articles of the EC treaties.

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19. For example, in 1988 France took the Commission to Court when it used art. 90.c. of the EEC-Treaty to bring in a directive to liberalize the market for telecommunications equipment without having to pass through the Council of Ministers and the European Parliament. The French, supported by other Member States, argue that this article can not be used to lay down laws in new areas.

20. See: Louis, J.-V. 1988: p. 143 - 151.

21. See: Sharpf, F., 1988: p. 258. Scharpf points out that to the extent that policy areas ar pre-empted by EC competence, Member States will be precluded from dealing individually with these problems, even if the Community can not agree on an effective solution. This illustrates the vulnerability of this kind of joint-decision systems.

With regard to the goals of regulation, since most decisions on EC regulation have in the end to be made by the Council, agreement on the goals to be furthered has to be established by at least a majority of the Member States. Agreement or reconciliation will be harder to work out, the more the parties involved differ and have different perceptions of their own interest. On the one hand there will rarely be a single optimum regulatory solution for any market defect in allocative efficiency, on the other hand, standards of distributive equity are especially subject to national cultural and economic differences. As for allocative efficiency, this means that Member States have an incentive to block agreements which do not allot them the lowest cost.[22] In the case of distributive equity, the discussion tends to be politically sensitive.[23] Moreover, at the EC level is a noticeable absence of fundamental consideration and consequent formulation of explicit common political values as a reference for and justification of policy proposals.[24] Agreement on a balance between efficiency and equity goals, combined with considerations of national security, cultural identity etc., will need to reconcile these differences.

Agreement on the ends to be furthered does not necessarily imply agreement on the means to be used. In addition, national or regional characteristics may ask for different means in order to further similar goals. Especially in a short term perspective, liberalization of markets may affect highly industrialized and rural regions inversely. At the same time, distributive effects of regulatory commands are difficult to foresee and judge ; not only among consumer groups and industries, but also between countries and regions.

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22. See: Gatsios, K. and P. Seabright, 1989.
23. See supra note 7.
24. See: Wallace, W. 1983: p. 420 - 421.

The growing comprehensiveness and importance of the telecommunications sector reinforce the complexity and intensity of the debate on EC telecommunications regulation. The convergence of technologies and market sectors [25] has created confusion about rule-making authority as issues cut across traditional lines of regulatory responsibility.[26] Moreover, this convergence has led to the interference of the different values and regulating principles dominant in the formerly distinct sectors.[27] This development is aggravated by the politicization of telecommunications regulation. The crucial role of this sector for the economy, its growing penetration of daily life and the high visibility of distributive effects in the case of liberalization and cost based pricing have enhanced this growing political attention. Another important factor is the internationalization of the debate on telecommunications regulation. The growing importance of trade in telecommunications equipment and services (see chapter II) and the need for network and service interoperability has led to strong pressure for international efforts to reach agreement on regulation of the telecommunications sector. This pressure is particularly strong at the EC level. Finally, telecommunications is linked to such sensitive objectives as the safeguarding of national security and independence and to the regulation of access to and distribution of information.

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25. Convergence of technologies of in particular the telecommunications, the information and the audiovisual sector has led to new entry and new forms of collaboration in the market. At the international and domestic level, firms predominatly active in these three sectors and even in rather unrelated sectors have been entering the expanding market for telecommunications equipment and services.
26. See: Stevers, E. and Ch. Wilkinson, 1988.
27. See: Sola Pool de, I., 1983.

II. DEVELOPMENTS IN THE TELECOMMUNICATIONS SECTOR AND MAJOR REGULATORY ISSUES

The telecommunication sector has undergone a fundamental change due to technological innovation ; in turn, company strategies, user demand, and regulation - in constant interaction with each other - are influencing technological change. This technological development is in particular characterized by the convergence of technologies from originally separated sectors. The transformation of the telecommunications, information and audio-visual sectors towards an integrated unity, causes regulatory confusion at several levels. The issues cut across traditional lines of regulatory responsibility creating tensions among regulatory bodies. This is aggravated by the growing comprehensiveness of the issues under contention, rapid change and increased political interest due to the growing impact of this sector on the economy and the society at large.

Both, the crucial role of this sector for economic development, and strong pressures from the side of providers and users have increased the emphasis on economic and trade aspects; we see a general tendency towards market liberalization and increased concern with harmonization and transparency of technical standards and access conditions. Globalization of telecommunications markets (equipment, infrastructure and services), the related increased importance of interconnectivity of networks and legal issues affecting the free transmission and use of information (e.g. privacy protection, intellectual property, national security) have enhanced a shift from regulation at the national to the international level. Consequently, regulatory boundaries are not only blurred between the different sectors (horizontally), but also between the different levels of government (local, national, regional, global) (vertically) and thus adding to the current confusion and uncertainty in telecommunications regulation.

This illustrates on the one hand the growing role reserved for telecommunications regulation at the EC level, and on the other hand the importance of indicating clearly the subject matter of regulation and the issues in contention. The purpose of this chapter is then to identify the major issues in the current regulatory debate in the EC; this will at the same time highlight the growing importance of the European dimension. In order to come to grips with the rather comprehensive telecommunications sector we will subsequently deal with its equipment markets, infrastructure markets and service markets. For each we will look at the traditional situation, the major changes during the last decade, and consequent problems and choices at the moment arising at the regulatory level.

II.1. The Telecommunications Equipment Markets

The European telecommunications equipment markets have been characterized by fragmentation[28], concentration[29], and strong cooperation between national suppliers and the national telecommunications administration[30]. However, telecommunications technology has changed dramatically since the early seventies. This change is marked by :

- rapid innovation

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28. No Member State of the EC has a market counting for more than 6% of hte world market, whereas the American market counts for 36% and the Japanese market for 11% of the world market. (Ungerer,H., 1988: 33)

29. The seven main European enterprises account for 75% of the total volume of the EC production of telecommmunications equipment : Alcatel 28%, Siemens 18%, GPT 7%, Ericsson 6%, Bosch 6%, Philips 6%, Italtel 4%. Source : BIPE / The Economist, 25 feb. 1989, p.82.

30. The national telecommunications administrations buy 70% of their total purchase from "national champions". Interdependence has been enhanced by the development of specific technology and standards for each national network. (Ungerer,H., 1988: 220)

- high diversification
- integration of telecommunications, information and audio-visual technologies
- growing R&D costs (in absolute terms and as percentage of total costs)[31]
- shorter production cycles and depreciation periods.

Growing R&D costs and shorter production cycles have forced European equipment firms to seek new markets and to cooperate in R&D[32] ; this has led to fierce competition[33], common R&D projects[34], and a considerable amount of mergers and joint-ventures during the early eighties[35]

Existing links between "national champions" and the telecommunications administrations have been weakened due to these developments. Moreover, this weakening has been enhanced by the growing volume of equipment bought by private consumers. This is in the first place due to the developments in the

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31. A digital switching system now costs up to 1 000 million ECU in R&D, with a life cycle of just 10 years, compared with 15 to 20 million ECU for electromechanical switching systems in the early 1970s, with an expected life-cycle of 20 to 30 years and no major changes to the system during operation. (Ungerer,H., 1988: 113-114)

32. Today, about 80% of the R&D costs for many types of equipment, but especially for switching, are accounted for by the deveopment of software. It is for these products that potential economies of scale are highest and therefore savings gained by a larger market are greatest.

33. The main revenue of the European telecommunications equipment firms still comes from the public exchange market (switching systems). In Europe, 8 digital switching systems has been developed (compared to 3 in the USA and 2 in Japan), each needing 8% of the world market in order to break even. (Ungerer,H., 1988: 113-114)

34. See in particular R&D projects in the frameworks of ESPRIT, RACE and EUREKA.

35. See: The Economist, 25 feb. 1989: 82 ; Ungerer,H., 1988: 128.

customer premises equipment (CPE) markets.[36] On the one hand, CPE markets are growing much faster than the markets for public network equipment, and on the other hand, there is a tendency towards the opening up of the public (reserved) parts of the terminal markets. At the same time the importance of the private market is increasing due to the rapid development of satellite networks (especially for point -multi point connections): first, because a growing number of satellite networks are private[37] and second because of the development towards small privately owned satellite receivers[38]

Pressure for change of existing markets and regulation has also been increased due to the growing number of (potential) entrants. Convergence of technologies of originally separated sectors, promising growth prospectives[39] and liberalizations of telecommunications markets in countries such as the UK, USA, Japan and Canada make the telecommunications equipment markets especially attractive.

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36. The CPE markets are characterized by a rapid convergence of information and communication technologies and by a development towards multifunctional terminals. At the moment, major markets exists in PABXs (private automatic branch exchanges), LANs (local ara networks) and fax-machines. These markets are expected to grow by more than 30% a year over the coming decade. (The Economist, 25 feb. 1989: 82 ; Ungerer,H., 1988: 47)

37. A considerable amount of new satellite systems are planned for the comming years. Parallel to the Eutelsat system, is the development of national systems and systems of private European as well as American enterprises. (Ungerer,H., 1988: 75)

38. More powerfull satellites allow for smaller satellite receivers : ROES (receive-only earth station for reception only) and VSATs (very small aperture terminal), a satellite earth station with very small antenna.

39. Investment in telecommunications equipment and related computer-based terminal equipment in the Community over the next 20 years will be between 500 000 to 1 000 000 million ECU. Public investment in ISDN is estimated at 300 000 million ECU of which is 25% for terminals. Private professional investment is estimated at 400 000 million ECU. MSE are expected to spend 50% of their investment on terminal equipment, and big enterprises 66%. (Ungerer,H., 1988: 84, 87)

Pressure for re-assessment of regulation in the EC countries has finally been enhanced since on the one hand there has been recognition of the increasing importance of the telecommunications equipment markets as growth markets and as markets of strategic importance to high technology and the economy as a whole[40], while on the other hand the competitiveness of European enterprises is seen to be decreasing. Since 1982 the EC have seen an 80% fall in its telecommunications equipment trade-surplus, including an actual total deficit to the USA and Japan.[41]

Major issues in the regulatory discussion with regard to telecommunications equipment markets in the EC are :

- open access to the public network equipment markets of other EC countries: Since telecommunications belongs to the so called "excluded sectors" it is not subject to the free trade and non-discrimination requirements of the EEC-Treaty (art. 7, 30 and 37) and the MS are allowed to have closed national tendering procedures. The voluntary and partial opening of

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40. Over the next ten years, Community gross domestic product resulting from telecommunications and closely related activities is projected to grow from 3 up to 7%. The telecommunications sector together with the aero-space sector are the highest civil investment sectors in the EC. (Ungerer,H., 1988: 96)

41. The world production of telecommunications equipment is 90 000 million ECU. THe EC production amounts to 17 500 million ECU of which 4 300 million is exported. The EC consumption is 16 300 million ECU of which 3 100 million is imported (the EC depends for 50% of its needs for essential integrated circuits on import). The total trade surplus is 1 200 million ECU.
EC export to the USA is worth 370 000 million ECU and EC import from the USA amounts to 1 000 000 million ECU. EC export to Japan is worth 39 000 million ECU and EC import from Japan 725 000 million ECU.
At the same time the NICs are gaining a growing share of the market e.g. USA import of telecommunications equipment comes for 3,6 % from the EC, for 51% from Japan, for 11,3% from Taiwan and for 7,3 % from Honkong.
Source: estimations based on EC studies / Ungerer,H., 1988: 95,96,99,111-113.

procurement of the telecommunications administrations under Council Recommendation 84/550/EEC has had some effect. However, strong pressure exists for a total opening up of public procurement in the EC.

- liberalization of the reserved parts of the terminal markets:
To the extent that terminals were considered as part of the public network, terminal provision to users fell under the "natural monopoly" of the telecommunications administrations (e.g. telephone, modem, telex, PBX). Today, this monopoly for terminal provision is under attack due to rapidly growing demand and pressure for market entrance. In addition, the necessity of a monopoly for the safeguarding of network integrity and safety is contested.

- measures necessary to ensure market participation in the competitive markets on fair terms:
. separation of regulatory and operational activities in order to prevent possible abuses of dominant position in type approval,
. fair type approval procedures by the authorities of other Member States.
. clear and available definitions of relevant standards e.g. technical interfaces or network terminal point.

- measures to stimulate the functioning of a open market at EC level:
. mutual recognition of type approval certificates for telecommunications terminal equipment
. transparency and harmonization of standards for network and terminal equipment.

- action at the international level in a multilateral or bilateral context:
. pressure for (de-facto) opening up of telecommunications equipment markets in third countries
. stimulation of transparency and harmonization in international standards
. promotion of "European" standards in international standardization bodies.

II.2 The Telecommunications Infrastructure Markets

Until the end of the 1970s, the structure of the telecommunications sector was characterized by strict monopoly regimes on a national basis. Markets and network technology were consequently fragmented along national lines and limited to the provision of a few standard services. The monopolies were held by national telecommunications administrations who were mainly concerned with the general provision of national public telephone services[42] and the management of national network investment[43]. Slow moving technology allowed for 20 to 30 years depreciation periods. Exclusive rights on telecommunications satellite transmission, as well as on the provision of earth station facilities to access the space segment for telecommunications services, have usually been held by the telecommunications administrations.[44] International cooperation was mostly

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42. Over the period 1970-1980 the difussion of telephone grew at an accelerated speed in Europe and since the end of the 1970s in most EC countries declining growth rates in telephone connections have become visible. During the rapid growth period governments and telecommunications administrations had come to be strongly marked by the goal of general provision of national public telephone services which moreover, accounts for 85 - 90% of their revenue. Source : International Telecommunications Union / yearbook of common carrier statistics (1988).

43. Within the Community, the value of the network installed is estimated at close to 200 000 million ECU. This means that the telecommunications networks are by far the largest Community asset in information technology. Source : International Telecommunications Union / Yearbook of common carrier statistics (1988).

44. From the regulatory point of view satellite systems are divided into three parts : the uplink, the satellite or space segment and the downlink. The uplink is related to the right of radio signal transmission which is hold by the state. In the EC, terrestrial and mobile transmissions are derogated to public authorities (e.g. telecommunciations administrations) and RPOAs (recognized private operating agencies). The provisions regulating

(Footnote continues on next page)

limited to : standard setting for national network interconnection, exchange of adminstrative, operational, tariff and statistical information, allocation of frequencies and geo-stationary satellite positions, and agreements on accounting practices and principles.[45]

In the beginning of the eighties a whole new set of developments began to put pressure on the existing regulatory regimes in the EC countries. Technological developments in switching, transmission and terminal functions, combined with an increasing demand for high quality telecommunications services and pressure for free and fair market access from third countries and EC based enterprises, lay at the origin of these developments.

Digitalization of network switching and transmission functions, the introduction of new transmission technologies (e.g. optical fibre, satellites, cellular radio), and the increased intelligence of digital terminals have had a dramatic impact on network performance.[46] The

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(Footnote continued from previous page)

the use of the geostationary orbit are agreed upon in the ITU. The availability of space segment capacity is mainly governed by Intelsat and Eutelsat in which governments and their designated telecommunications entities are participating. The downlink is specified in terms of services and in most EC countries not strictly regulated (e.g. easily obtainable licences).

45. The main fora for international cooperation for the European telecommunications administrations are : CEPT (Conference Europeenne des adminstrations des Postes et des Telecommunications), Eutelsat (European Telecommunications Satellite Organization), ITU (International Telecommunications Union), Intelsat (International Telecommunications Satellite Organization), CEN (Comite Europeen de Normalisation), Cenelec (Conference europeenee des administrations des postes et des telecommunications), and since april 1988, ETSI (European Telecommunications Standardization Institute).

46. See : European Commission, 1987 (COM (87)290) :28-43 ; OECD/ICCP, 1987.

introduction of computer technology for network intelligence and the digitalization of signals carrying different forms of information (sound, text, moving image), allows for increased differentiation of network based services. The increased flexibility in network configuration made possible by a combined use of cable, satellite and mobile communication, as well as by the advances in terminal technology, reinforce the development towards service diversification. It also leads to the blurring of traditional boundaries between the roles of different networks, between network and terminal functions, and between service provision in telecommunications information processing and broadcasting. Moreover,this change in technologies has also major implications for network economics. The importance of distance as cost factor has fallen compared to the connection and usage time cost factors. The cost base for long distance traffic has therefore decreased compared with the costs of provision of local traffic.

Globalization of the economy, growing need for data communication due to the increasingly wide spread use of computers and technological potential for a wide range of new telecommunication services have increased user-demand.[47] Large multi-plant companies in particular, express their need for sophisticated and flexible services with a high degree of reliability and security and more cost based pricing of long distance services.[48] Moreover, there is an increasing demand for non-switched leased lines from the telecommunciations administrations which are mostly provided at flat rates[49] . These leased lines are enhanced with private customer premises equipment to realize the needed indoor service provision; resale of spare capacity is still forbidden in most EC countries. By pass[50] and the

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47. See: Leeson,K., 1987 ; Curien,N. and Gensollen,M., 1987.
48. see : Mansell, R. a.o., 1988 : 15.
49. Leased lines are mostly provided against at a fixed monthly rate independent of the intensity (volume, distance) of traffic for which it has been used.
50. See : Bar,F. and Borrus,M., 1987.

pressure for liberalization of the network (e.g. private lines, resale of leased lines, private satellite systems) and services markets (see section II.3) will increase to the extent that the telecommunications administations are unable to cope themselves with these services demands.

Regulatory reform in third countries (e.g. USA, Japan, Canada) and in other sectors stimulates a re-assessment of the existing telecommunications regulation in the EC countries. Current trends towards liberalization of the telecommunications sector in some EC countries also enhances the acceptance of and the need[51] for regulatory change in the EC in general. The promising growth perspectives of the network based services market are attracting new entrants into the network provision markets as well as into the services markets.[52] Consequently there is a growing pressure for market entrance coming from the above named third countries[53] as well as from EC based enterprises.

Finally, re-assessment of regulation in network (and services) markets is taking place because of the growing interests involved : huge network investment is projected for the coming two decades (network investment has a very high multiplier effect on the terminal and services markets[54]). At the same time a growing danger of by-pass is developing in the form of:

- increased use of leased lines and indoor services preempting the demand for upgraded public network provision
- a growing share of privately owned telecommunications networks

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51. Deregulation in the U.K. and the price-competition between the two British common carriers, British Telecom and Mercury, caused considerable price decrease for transatlantic traffic in the U.K. Already 40% of the total transatlantic traffic from this side of the ocean is handled by the U.K. (Dang Nguyen,G., 1985: 81)
52. See: Robinson, P., 1987.
53. See: Federal Communications Commission (FCC), 1987.
54. See: Ungerer,H., 1988: 83.

- avoidance of low quality and high tariff countries by international routing strategies
- the taking into account of the telecommunications environment in decisions on investment and establishment by companies.[55]

Important developments are also taking place in the field of technical standard setting.[56] The accelerated pace of technological development, the growing diversity and complexity of technical devices and related services, and the increased tecnological feasibility of interconnection have increased enormously the workload in the field of technical standard setting. At the same time benefits to be gained of interconnectivity have become more important. Interconnectivity allows for more intensive use of network based services and for economies of scale and scope for equipment and service providers. It also helps to decrease replacement costs (allowing for step by step upgrading), costs of interfaces and expenditure on hardware and software. Moreover, it would contribute to the elimination of trade barriers. During the last years, an increasing number of standardization bodies are handling demands for standards. There is also a growing extension of models and concepts originally developed and adapted in technical bodies into regulatory policy areas. In many cases no technical optimal decision exists and choices have to be based on the consequences for the structure and functioning of telecommunications markets.

There is a growing interest in telecommunication issues at the international level. The technological and market developments in the telecommunications sector have considerably increased the importance of international telecommunications traffic as well as the pressure for free and fair access to foreign markets. Consequently, network related issues regarding free

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55. See: Bruce,R., J.Cunard and M.Director, 1988: 26.
56. See: Brenton,M., 1987.

access, fair competition and interconnectivity are getting more attention in international fora and in bilateral relations.

In the following areas of infrastructure provision major re-assessment of the existing regulation is taking place in the EC:

- The monopoly regime of infrastructure provision and operation :

The rationale for monopoly provision and operation of the telecommunications network has been based on the assumptions that it is a natural monopoly and that it provides an effective framework for achieving the universal service goal. Both assumptions are now being challenged (see III.2). The fading boundaries between the different types of network (e.g. switched or distributive cable, satellite, or microwave networks), and between network and terminal functions ask for regulatory adjustment. Moreover, considerable pressure exists for liberalization of the network markets in order to improve network and service provision, and to stimulate international trade in services. Consequently, decisions have to be made with regard to :

. the conditions for ownership (construction), provision and operation of the different types and parts of telecommunication networks, given the universal service and network integrity objectives;

. the boundary line between the public network and customer premises equipment i.e. where will the interface be placed and which intelligence functions will be provided by the public network[57] ;

. the provision and usage conditions of leased lines (e.g. shared use, third party use, resale of spare capacity)[58] .

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57. See: Hutcheson Reid,A., 1987, for a further treatment of the implications of where the network/customer premises boundary is placed for the structure and functioning of the telecommunications markets.

58. See: Analysis and Forecasting Group (GAP), 1988.

- Measures necessary for participation on fair terms in competitive markets :

. the requirement of financial transparency for telecommunications administrations, especially with regard to cross-subsidization between monopoly and competitive markets;

. the separation of regulatory and operational activities of network providers, in particular with regard to network provision licensing;

. the general provision of clear definition of requirements imposed by telecommunications administrations for leasing of the lines for resale e.g. technical interfaces, tariff principles, conditions of use;

. relaxation of organizational and financial constraints imposed on the telecommunications administrations e.g. free access to the capital market, control over internally generated funds and financing sources;

. protection of the telecomunications administrations where they are put at a disadvantage due to their responsibility for the safeguarding of public service goals (universal service at reasonable prices, network integrity) - this relates to tariffs for (eventually non-reserved) "basic" services (e.g. local telephone) and for tariffs for leased lines and their resale .

- Measures promoting the interconnectivity of the network :

. requirements with regard to transparency and availability of specifications of technical standards;

. harmonization of technical standards.

- Action at the international level in a multi-lateral or a bilateral context :

. re-assessment of international regulation on network provision under the

Telegraph and Telephone Regulations of the ITU/WATT-C[59] and the ITU/CCITT and CCIR recommendations[60] (e.g. concerning the principles of provision of international circuits (leased lines), network protection, non-discrimination and cooperation obligations, and technical standards)

- negotiation on market access conditions for network provision and on usage conditions for leased lines (e.g. the Uruguay Round)
- future regulation of two-way satellite communications and the relationships between Intelsat, Imarsat, Eutelsat, national and private systems[61] ;
- the stimulation of transparency and harmonization of international standards.

II.3. Telecommunications Services Markets

With variations on the main theme, telecommunications services in the EC have been provided by the national telecommunications administrations under strict monopoly conditions. Also for the provision of telecommunications services by means of satellite networks, exclusive rights have normally been held by the telecommunications administrations. The services offered have in general been limited to plain telephone, telex and since the late seventies, data services. Due to the overriding social objective of universal service

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59. In Melbourne, December 1988, a World Administrative Telegraph and Telephone Conference was held to consider proposals for a new regulatory framework. Regulations approved by WATT-C 1988 are binding on all ITU members who ratify the new Regulations. For a further treatment of this subject see paragraph II.3.

60. These recommendations are probably not part of a legal instrument having the force of an international treaty. (Bruce,R. and J.Cunard, 1987: 12-13)

61. See: European Commission, 1987 (Com (87)290 appendices): 107-110.

at reasonable prices, cross subsidization between high and low density lines as well as between long distance and local services have been a common feature. International traffic fell and still mainly falls also under the same monopoly rules. Bi-lateral arrangements are made between the national telecommunications administration and the responsible body abroad. Moreover, the international telecommunication services sector will be covered by the 1973 Telegraph and Telephone Regulations of the ITU until July 1990.[62] These regulations (with the status of an international treaty) contain only general provisions[63] . Insofar as the services are concerned, most of these provisions are related to the obligation of universal service provision on non-discriminatory conditions, the obligation to ensure service quality, and to accounting practices and principles.

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62. In 1982, the Plenipotentiary Conference of the ITU convened the World Administrative Telegraph and Telephone Conference to be held in December 1988, to consider : "to the extent necessary...", "...proposals for a new regulatory framework to cater for the new situation in the field of Telecommunications services". The draft regulations for WATTC '88 became subject of an intense debate. Differences of view relate to the scope of service providers and services which should be covered by the new regulations. Proposed wording in the draft regulations left room for very broad applications. Another point was the absence of any reference to preferential accounting procedures which are sought by developing countries. However, all 112 accredited representatives of Member countries of the ITU signed the new treaty in Melbourne (9 dec. 1988) after some major changes in the proposed draft. The new Telegraph and Telephone Regulations will come into force on 1st July 1990. In particular, art. 1.7 of the draft regulations was modified as to allow each country to decide on its own regulatory policies with regard to the provisioning of telecommunications facilities and services. A new art. 9 was added, embodying a legal recognition of the possibility of making special (bilateral) arrangements outside the Regulations to meet specialized needs. For a more detailed treatment see :Bruce,R. and J.Cunard, 1987; Raveendran,L. 1989.

63. All questions of detail are dealt with by the CCITT and CCIR recommendations. CCITT : Comite Cnsultatif International Telegraphique et telephonique (ITU) ; CCIR : Comite Consultatif International des Radiocommunications (ITU).

Regulation of the telecommunications services has come under strong pressure mainly due to the same interrelated developments which have led to a re-assessment of regulation of the telecommunications infrastructure markets (see section II.2.): technological developments, growing user demands, liberalization in other countries and increased pressure for free and fair market access.

Technological innovation created a substantial potential for service differentiation and a reduction in distance and capacity based costs. Increasing importance of information based services in the economy, globalization of economic and social relations, growing international competition and rapid improvement of telecommunications service provision abroad created in the EC countries a strong demand for new telecommunication services at more cost based prices. However, at the same time public telecommunications services markets in the EC began to show a growing supply constraint.[64] Domestic development of new services provision has been slow and prices stayed relatively high. Delayed upgrading of the public network, restrictions in terminal markets, cross subsidization and rather poor marketing skills of the telecommunications administrations have been blamed. Moreover, the development of a services market at the EC level has been seriously impeded by the high costs of crossing frontiers. Substantial problems of incompatibility,(e.g. absence of agreements on high level protocols for services), differences in charging principles and accounting methods with related complicated international billing procedures discouraged the development of new telecommunications services at the EC as well as at a global level.[65] Major examples can be found in the markets for Packet switched data, videotex and mobile services. The growing mismatch between demand and supply has generated strong criticism on current regulation of the telecommunications services markets in the EC.

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64. See: Leeson,K., 1987.
65. See: Ungerer,H. 1988: 113-120.

Liberalization of network based services markets in countries such as the UK, USA, Japan and Canada allows for international by pass (see section II.2.) and leads to increased pressure for free and fair access to EC markets. Moreover, the value added network (VAN) services in particular, are important growth markets. They are projected to grow between 25 and 30% annually in Europe, although in 1986 they accounted for still only 1% of total telecommunications revenue. Enterprises inside and outside the Community are eager to enter this promising market and are pressing for open market access and competition.[66]

The growing concern with unfulfiled and underdeveloped demand, international and private by pass (see section II.2.), pressure for open and competitive services markets and the slow development of a sector crucial for the development of an information based economy and society have made untenable current regulation in the EC countries.

The increase in volume and diversity of national and international telecommunications traffic, has caused a growing interest in the compatibility and inter-operability of telecommunications services. A major discussion has developed with regard to the formal status and the level of detail of standardization of technical specifications and administrative procedures.[67]

The growing importance of the international dimension in telecommunications regulation (see here above) is illustrated by the growing attention paid to trade aspects and the general politicization of the (international) discussion.[68] Since the way topics are distributed over the different negotiating fora, is likely to influence considerably the direction and pace

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66. For example : IBM, AT&T, along with new entrants in this market such as EDS of General Motors, Geisco of General Electric, ITJ and IDC of Japan.
67. See: Naslund,R., 1988.
68. See: Stevers, E. and Ch. Wilkinson, 1988.

of multilateral negotiations, the appropriateness of the fora involved has become a important part of the discussion on international telecommunications (services) regulation.

Major issues under contention in the discussion on the regulation of telecommunications services markets in the EC are :

- The degree of liberalization desirable in the provision of telecommunications services.

The natural monopoly rationale for the regulation of telecommunications services is more and more being called into question. However, different opinions exist with regard to different parts of the services markets. Accordingly, distinct regulatory regimes have been proposed for different categories of services (e.g. local versus long distance services; basic versus value added services). Major decisions is this context concern :

. the conditions for market access (e.g. monopoly, restrictive licensing, free entry) given the objective of universal service provision;
. the creation of different regulatory regimes for distinct services markets;
. the criteria by which services and related markets will be distinguished;
. the criteria by which different networks and related services markets will be distinguished.

- Measures necessary to ensure fair competition for all participants in the market :

. fair access and usage conditions imposed by monopoly holders of network facilities to (other) competitive service providers;
. creating transparency in the financial relations between governments and telecommunications administrations;
. control on cross subsidization between reserved and competitive services markets;

. separation of the exercise of regulatory functions and commercial activities (e.g. licensing);
. control on the abuse of dominant positions by former national monopolies and emerging international conglomeration;
. relaxation of organizational and financial constraints imposed on former national monopolies;
. protection of national administrations insofar as necessary for the proper exercise of their social objectives such as universal service at reasonable prices (e.g. the imposition of general charging principles[69]).

- Measures promoting the inter-operability of telecommunications services.[70]
. transparency and accessibility requirements for standards (e.g. network interfaces, network functions, services protocols) and procedures (e.g. charging principles, usage conditions) conditioning the smooth inter-operability of telecommunications services;
. harmonization of the same requirements.

- International action in a multilateral or bilateral context.

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69. The restructuring of the current tariff structures is one of the major issues in the discussion on the future of the public telecommunications network. The change in network economics, by pass, and eventual opening up of the service markets dictate more cost based pricing. However, this may impede the social objective of universal service at reasonable prices. Another issue under consideration is the principles on which charging should be based e.g. services may be tariffed on a per bit (volume) or per bit/second (volume/duration) basis. If such tariffication principles are applied exclusively, it implies that transmission capacity cannot be unbundled from the rest of the services, therefore cannot be priced separately and thus cannot be used to estabish a private (leased) network nor provide basic input for new telecommunications-based services. See: Hutcheon Reid,A., 1987: 112 ; Lees,C., 1988.

70. See: Gilhooly,D., 1988.

- the optimal degree of flexibility of the international regulatory regime for telecommunications services provision : a balance between national autonomy, and the protection of national markets, particular user groups, and network and service inter-operability;[71]
- the delimitation of distinct service markets covered by different regulatory regimes : general agreements on criteria for categorization;[72]
- assessment of the "economic harm" provision in the Intelsat convention with regard to direct access to space segment capacity and the permission for separate systems to compete with Intelsat and Eutelsat;
- agreement on international accounting methods and K-factors;
- the stimulation of international arrangements for network and services inter-operability;
- agreement on acceptable restrictions on access to and distribution of information ("appropriate regulation").[73]

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71. The issue of mutual commitment to ensure the enforcement of each other's laws in cases where they cannot be effectively enforced, is becoming more and more important with privatization and the opening up of markets to foreign providers of facilities and services.

72. The distinction between basic and value added or enhanced services in particular, has been a major problem in the regulatory decision making on telecommunications service markets. Since no clear technical criteria exists, boundaries have to be based on other considerations. (See: Bruce,R., 1987).

73. This concerns regulation for the safeguarding of e.g. national security, personal and commercial data protection, intellectual property rights, pluralism, cultural identiy, public order, national advertisement revenues.

III. EC ACTION IN THE FIELD OF TELECOMMUNICATIONS REGULATION

In this chapter an overview will be given of the most recent actions (e.g. proposals, recommendations, resolutions, decisions, directives) of the Commission, the Council and the European Parliament, with regard to telecommunications regulation. This will be preceded by a short introduction on the establishement of a coherent CEC telecommunications policy.

During the seventies, the telecommunications sector was not yet considered a priority sector for the European Community. The Commission of the European Communities (CEC) had not recognized the sector as a policy area in its own right and several Directorate Generals (DGs) dealt with different aspects in a rather haphazard manner. However, the industrial perspective of telecommunications received increasing attention and in 1983, the Commissioner responsible for industrial policy (M. Davignon - DG III) made the break-through initiative for the formulation of an EC telecommunications policy ("Davignon Report": Com (83)329). In 1984, the Commission put forward its Telecommunications Action Programme which was approved by the Council in the same year.[74] Within the Commission the Information Technologies and Telecommunications Task Force was set up, initially to monitor the ESPRIT programme (1983). This Task Force, mainly coming out of DG III (responsible for industrial policy), quickly acquired a central role in CEC telecommunications policy making. It developed new forms of consultation and negotiation with the PTTs and the hardware industry : e.g. the Senior Officials Group of Telecommunications (SOGT) and the"Groupe d'Analyse et de Prevision" (GAP). The SOGT was set up in 1983 as a consulting body with national officials and has the backing of the national

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74. See respectively : Com (84)277, 18 may 1984 and Council Recommendation of 12 November 1984 (84/549/EEC).

telecommuniations administrations. The GAP was set up jointly by the IT&T Task Force, and by representatives of the telecommunications administrations and the European telecommunications hardware industry. As the main partner for the telecommunications administrations and hardware industry in the Commission, the IT&T Task Force took over and developed more and more aspects of telecommunications policy making. Apart from R&D and infrastructure projects, harmonization of standards, and public procurement, the Task Force became more involved with service provision. In autumn 1986, DG XIII (Information Market and Informations Services) was absorbed by the IT&T Task Force. The head of the Task Force (M. Carpentier) became the Director General of a "new" DG XIII for "Telecommunications, Information Industries and Innovation". As far as Telecommunications regulation is concerned, DG IV (Competition) is probably the second major DG involved[75] and often "chef de file" of Commission proposals and directives on telecommunications regulation.

With the publication of the Green Paper on Telecommunications[76] in 1987 _ mainly prepared by DG XIII (D) and in close cooperation with the SOGT - the European Commission introduced for the first time a programme for regulatory adjustment in the telecommunications sector at the EC level. The Green Paper stresses the importance of the telecommunications sector for the European economy, Community cohesion and for the achievement of the completion of the Community-wide market for goods and services by 1992. (Green Paper, p.23). Therefore, by way of responding to the current transformation of the sector, it proposes the introduction of the necessary European scale and the removal of trade barriers in order to improve the competitiveness of

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75. Depending on the particular issue, one or more other DG will be involved in addition to DG XIII : in particular DG IV (competition), DG III (the internal market), DG I (external relations), DG XII (R&D), DG XVII (broadcasting).

76. "Towards a dynamic European economy - Green Paper on the development of the common market for telecommunications services and equipment", COM(87)290, 30 June 1987.

the European telecommunications sector (Green Paper, p.13). The general orientations of the Green Paper for the establishment of the internal market in telecommunications are summarized in ten positions (A - J) (see: annex B).

In this chapter, Community action will be indicated with regard to each of these ten positions as well as with regard to the programme of action set out by a more recent Communication of the Commission[77]. (This state of action has been updated to 30 september, 1989.) Other major documents[78] in this context are the Council Resolution of 30 June 1988, as a result of the first "Telecommunications Council"[79], The Council Resolution of 27 April 1989[80](to a lesser extent) , and the two Motions for Resolutions of the

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77. "Towards a competitive community-wide telecommunications market in 1992 - implementing the Green paper on the development of the common market for telecommunications services and equipment (State of discussions and proposals by the Commission)", Communication from the Commission of 9 February 1988, COM(88)48. This Communication reviews the proposals advanced in the Green Paper in the light of the comments received up to then, establishes priorities and proposes strict deadlines for implementation.

78. The opinions of the Economic and Social Committee are not incorporated into the text, but can be found in : Opinions of the Economic and Social Committee of 18 November 1987 (87/C 356/12) and of 27 April 1988 (88/C 175/13).

79. Council Resolution 30 June 1988 on the deveopment of the common market for telecommunications services and equipment up to 1992 (88/C257/01). This was the first time that a Council was meeting for telecommunications exclusively; until then telecommunications issues were dealt with by the Council on Industrial Affairs.

80. The second meeting of a Telecommuncations Council took place at 27th of April 1989. The resulting resolution is confined to standardization issues: Council Resolution on Standardization in the field of information technology and telecommunications (89/C117/01). The Council "invites the Member States to nominate without delay national standardization bodies which will participate in the procedures for the adoption of ETSI (European telecommunications Standard Institute) standards in so far as they have not yet done so". In general, the council asks the administations, public network operators, industry, research institutes and users who are members of ETSI, as well as the Commission, to contribute to the coherent development of ETSI.

European Parliament of resp. 8 and 11 November 1988[81]. Four main categories of regulatory action have been distinguished (1 - 4).

III.1. Positions and (proposed) action concerning the liberalization of equipment, infrastructure and services markets.

a. The equipment markets

- The Green Paper (positions F) pleads for the full opening of the terminal equipment market (by 31st december 1990). Opening must ensure unrestricted provision within and between Member States - in competition with the telecommunications administrations. This proposal is realized and supported by :

. Commission Directive of 16 May 1988 on competition in the markets in telecommunications terminal equipment (DG IV : "chef de file");

. Council Resolution of 30 June 1988 (88/301/EEC); see in particular point 4;

. European Parliament Motions for Resolution of 8 November 1988 (Doc. A - 2-0252/88 - PE 124.496/fin.), in part. point 8, and of 11 November 1988 (Doc. A - 20259/88 - PE 118.194/fin.), in part. point 6.

- Receive Only Earth Stations (ROES) should be assimilated with terminal equipment (Green Paper: position F). Communication COM (88)48 (p. 13) points

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81. European Parliament - 8 November 1988. Report drawn up on behalf of theCommittee on Economic and Monetary Affairs and Industrial Policy on the need to overcome the fragmentation in telecommunications. Rapporteur: Mr. A. Metten. Document A 2-0252/88 - PE 124.496/fin.
European Parliament - 11 November 1988. Report drawn up on behalf of the Committee on Transport on posts and telecommications. Raporteur : Ms. U. Braun-Moser. Document A 2-259/88 - PE 118.194/fin.

out that consensus is only possible as long as ROES are not connected to the public network. In the Commission directive on competition in terminal markets (16 may 1988) art. 1 this is taken into account : "Terminal equipment also means ROES not reconnected to the public network of a Member State". This point is not mentioned by the Council Resolution and EP Motions quoted here above.

- The Communication of the Commission (COM(88)48) p.22, expresses the essential objective to ensure non-discriminatory open procurement in the telecommunications network equipment markets. (telecommunications administrations still have exclusive or special right for network provision.) The Commission has sent a proposal to the Council to this end and which would replace a Council Recommendation of 1984 recommending a minimal non-discriminatory tendering for network equipment of 10% of the value of annual orders. This proposal is in principle supported by the two Motions of the European Parliament. The main references are :

. Proposal for a Council Directive on the procurement Procedures of Entities Operating in the Telecommunications Sector (presented by the Commission), 11 October 1988;

. Council Recommendation of 12 November 1984 concerning the first phase of opening up access to public telecommunications contracts (84/550/EEC).

b. The infrastructure markets

a. The Green Paper accepts (positions A) continued exclusive provision or special rights for the provision and operation of the network infrastructure by telecommunications administrations. Member States are free to choose a more liberal regime but network integrity should be safeguarded. This position is supported by the Council Resolution of 30 June 1988 ("Whereas" 4) and by the two Motions for Resolution of 8 November (see point 10.) and of 11 November (see point 2.b.) 1988 of the EP.

b. Competitive offering of two way satellite communications systems should be allowed on a case by case basis and closely monitored (Green Paper: position A). Communication COM(88)48 (p. 24) of the Commission indicates that on this point a common position still has to be worked out. The Council Resolution of 30 June 1988 states that "a common position on satellite communication should be worked out, taking account of general rules of operation and exploitation of the network environment, as well as the competition rules of the Treaty (EEC) and existing international commitment of Member States". The EP Motion for Resolution of 8 November seems to favour a competitive framework for satellite communications (point 11).

c. The services markets

- The Green Paper acknowledges (positions B) that continued exclusive provision or special rights for a restricted number of "reserved" services should be allowed, but only insofar as essential - at this stage - for safeguarding public service goals. The Green Paper sees voice telephony as the only obvious candidate for exclusive provision. Position C of the Green Paper proposes free competitive supply for all other services - including in particular value added services - for private use, shared use, or provision to third parties. Communication COM(88)48 (p. 17) declares that all non-reserved services should be opened by 31st December 1989. A Commission Directive under art. 90(c) regarding the liberalization of the telecommunications services markets had been prepared (DG IV : "chef the file") and was accepted by the Commission (i.e. the board of Commissioners) in July 1989. The second and latest Telecommunications Council of 27 April 1989 had expressed strong objections against this draft Directive ; not least because of its legal base. The Council Resolution of 30 June 1988 (art. 4 and art.2) supports the positions B and C of the Green Paper. These positions are also supported by the two EP Motions for Resolution of 8 November (point 10 and 11) and 11 November (point 2a and c) 1988.

III.2. Positions and (proposed) action concerning fair competition in (newly) open markets.

a. Effective Community-wide opening of the terminal equipment market requires the introduction of transparent technical specifications and type approval procedures. This involves among others full publishing of type approval procedures, appropriate cost and time requirements for completion of the procedures and availability of network terminal points for suitable connection. (Green Paper : position F) This position is given form in the Commission Directive of 16 May 1988 on competition in telecommunications terminals markets (point 9 and art.3 - 8).

In parallel the Green Paper emphasizes the importance of the full mutual recognition of type approval for the effective competition in terminal equipment markets (position F). It proposes the extension of the current Council Directive 86/361/EEC. At the moment a proposal of the Commission for the Council on the full mutual recognition of type approval is in the latest stages of preparation.[82] The Council Resolution of 30 June 1988 (art. 4) confirms the importance of "quickly reaching agreement on full mutual recognition of type approval for telecommunications terminal equipment".

. Main reference : Council Directive of 24 July 1986 on the initial stage of the mutual recognition of type approval for telecommunications terminal equipment (86/361/EEC).

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82. The Commission tries to find a common position closest to direct mutual recognition of certificates given by acredited national laboratories. This would allow for the abolition of recognition procedures of these certificates by national as well as by other Member States' regulatory bodies.

b. Position E of the Green Paper stresses necessity of a clear community-wide definition of general requirements regarding network infrastructure provision imposed on providers of competitive services by telecommunications administrations. A Community Directive on such requirements (for so called "Open Network Interconnection") is seen as the necessary counterpart to acceptance of the monopoly on network infrastructure provision of telecommunications administrations (Green Paper, p. 69). Open Network Interconnection requirement should in particular include : clear interconnection and access obligations by telecommunications administrations, and consensus on standards, frequencies, tariff principles and usage conditions for leased lines, public data networks and ISDN. At the moment, the Commission's proposal to this end is under consideration by the Council (COM(89)325). The Council Resolution of 30 June 1988 (art. 2) states that "rapid definition, by Council directives, of technical condition, usage conditions and tariff principles for ONP, starting with harmonized conditions for the use of leased lines, is of crucial importance ... for a common market for non-reserved telecommunications services".

. Main references:

- Proposal for a Council Directive on the Establishment of the Internal Market for Telecommunications Services through the implementation of Open Network Provision (ONP). Proposal from the Commission of 20 December 1988 (COM (88)825).
- Revised proposal for a Council Directive on the establishment of the internal market for telecommunications services through the implementation of Open Network Provision (ONP). Proposal from the Commission of 10 August 1989 (Com (89) 325).

c. Position G of the Green Paper proposes the separation of regulatory and operational responsibilities, both currently held by telecommunications administrations in most Member States. Such separation is necessary in order to prevent abuse of dominant positions in e.g. type approval, licensing, interface specifications, allocation of frequencies and general surveillance of network usage conditions. The problem of separation of regulatory and

operational functions is treated in the draft Commission Directive on the liberalization of the service markets, which is now under consideration by the Commission (see here above under 1.c.). The Council Resolution of 30 June 1988 supports this position (art. 5.1.) as well as the two EP Motions for Resolutions of 8 November (point 12) and of 11 November (point 3) 1988.

d. The Green Paper (p.76-79) stresses the importance of clear requirements for transparency in financial relations between Member States' governments and the telecommunications administrations combined with a relaxation of organizational and financial constraints for competition on fair terms in (new) competitive markets. Moreover, the abolition of fiscal frontiers and the objective to arrive at a state of equal competitive conditions in the sector, requires adapting the fiscal conditions (in a number of MS, public telecommunications are still exempted from Value Added Tax). The Commission intends to apply Directive 80/723/EEC (extended to Telecommunications by Directive 85/431/EEC) which requires transparency in the financial relations between MS' governments and their public undertakings, to the telecommunications sector. The Commission presented on 17 June 1987, an amended proposal for an 18th VAT Directive, which makes provision for obligatory taxation of these public telecommunications suppliers. It will have effect from 1st January 1990. The Council Recommendation of 30 June 1988 (art. 5.3.) supports in general terms the "creation of a transparent fiscal environment".

e. Position H and J of the Green Paper expresses the need to apply the general rules of competition laws (art. 85, 86, 90 / EEC) in a systematic way for both telecommunications administrations and (other) competitive providers. Particular attention should be given to practices of cross subsidization by telecommunications administrations (e.g. with regard to competitive services and equipment), and to abuse of dominant positions especially by telecomunications administrations and big multinational

conglomerates. The Commission intends to issue guidelines regarding the application of competition rules to the telecommunications sector and on the way review should be carried out. The Commission Proposal for a Council Directive on the Procurement Procedures (COM(88)378) (see here above under 1.a.) also contains measures to safeguard independent procurement decisions. Council Resolution of 30 June 1988 (art. 5.2.) stresses the importance of the application of competition rules to the telecommunications administrations and private providers.

III.3. Positions and (proposed) action concerning inter-operability and community-wide services markets.

a. The Green Paper emphasizes (position D) that Community-wide network integrity and full interconnectivity are essential elements for a common market in telecommunications equipment and services. The strict requirements for standards for network infrastructure and services are seen as mandatory, but should not impede the capability for innovation.

General rules for procedures in the field of technical standards and regulations, are for the greater part laid down in :

- Council Directive of 28 March 1983 on a procedure for the provision of information in the field of technical standards and regulations (83/189/EEC);
- Council Directive of 24 July 1986 on the initial stage of the mutual recognition of type approval for telecommunications terminal equipment (This directive also establishes the NET (Normes Europeennes de Telecommunications) mechanism.);
- Council Decision of 22 December 1986 on standardization in the field of information technology and telecommunications (87/95/EEC).

Action on more specific standards with regard to network infrastructure has been taken through :

. Council Directive of 3 November 1986 on the adoption of common technical specifications of the MAC packet family of standards for direct satellite television broadcasting (86/529/EEC);

. Council Recommendation of 22 December 1986 on the coordinated introduction of the Integrated Services Digital Network (ISDN) in the European Community (86/659/EEC (See also in this context the Communication from the Commission of 31 October 1988 concerning ISDN (COM(88)589));

. Council Directive of 25 June 1987 on the frequency bands to be reserved for the coordinated introduction of public pan European cellular digital land based mobile communications in the Community (87/372/EEC).

Many other activities has been undertaken in order to stimulate standard setting and harmonization as well as the development of Community-wide network inter-operability. This has especially been done through R&D programmes and infrastructure and services projects, e.g., RACE, STAR, TEDIS, INSIS and CADDIA. See in this context also Commission proposals for a comprehensive infrastructure development, e.g., Com(87) 724 and COM(88) 341, the establishment of ETSI (European Telecommunications Standards Institute) by CEPT by April 1988 as proposed in the Green Paper, and the Council Resolution of 27 April 1989 (89/C117/01)on standardization and the development of ETSI.

b. The Green Paper (p. 79-82) emphasizes the importance of common tariff principles for the promotion of European wide services. It proposes to this end that tariffs should follow overall cost trends and that higher transparency and convergence of accounting rates and K-values should be sought so as to realize a European tariff-zone (national frontiers should be irrelevant for calculation of tariffs). Clear Community wide tariff principles should also exist for access to leased lines (see above under 2.b. : ONP). The Council Resolution of 30 June 1988 (art. 3) merely stresses

the importance of common tariff principles. The EP Motion for Resolution of 8 November 1988 (point 10 and 15) states that "prices should be reasonable" and "telecommunication structures should be more transparent". The EP Motion for Resolution of 11 November 1988 (point 2.g.) states "tariff structures should be geared to self-financing, taking account of market conditions and the importance of service universality".

III.4. Positions and (proposed) action concerning common external positions

Position J of the Green Book expresses the urgent requirement for the Community to define a Common position on the major international questions in the field of telecommunications.

a. Major issues in multilateral fora on which common positions have to be worked out relate to (see: Green Paper, p. 170-173 and COM(88)48, p.24,26 and 27) :

. the review of international telecommunications regulation in the WATTC "88 [83]

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83. The European Commission had made great attempts to achieve a common position through the SOGT. However, during the WATTC in Melbourn clear differences in the positions of the Member States persisted. In accordance with the Council decision of 28 November 1988, the Member States have, nevertheless, accompanied their signature of the final acts of the WATTC-88 by a joint declaration stating that they will apply the International Telecommunications Regulation in accordance with their obligartions under the EEC Treaty. A second occasion was offered with the ITU Plenipotentiary Conference at Nice, which began on 23 May, 1989 and lasted for 5 and 1/2 weeks. As the supreme policy and management body of the ITU, this Conference re-examined the contents of the ITU Convention and the structure and operation of the ITU. Five resolutions and recommendations adopted by the WATTC '88 were placed before the Plenipotentiary Conference for review and appropriate action.

. a regulatory framework for a fair open international trading environment in the context of the Uruguay Round[84]

. regulation and development of international satellite communications, in particular with regard to Intelsat and Inmarsat.

b. Bilateral issues (EC - third country) relate mainly to discussions on market access and general trading conditions with the USA and Japan, and the evolving relation with Efta countries and the Third World. (see: Green Paper, p. 158-169)

The Council Resolution of 30 April 1988 (art. 11) as well as both EP Motions for Resolution of 8 November (point 16) and of 11 November (point 7) confirm the importance of a coordinated community positions in the international telecommunications context in general.

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84. See: Stevers E. and Ch. Wilkinson, 1988.

IV. DISCUSSION ON TELECOMMUNICATIONS REGULATION AND MAJOR ARGUMENTS

In the Member States of the European Community, a lively discussion has evolved on regulatory change in the telecommunications sector. In this chapter a schematic overview will be given of the major proposals and lines of argument. The arguments considered here concern the efficiency of the proposed measures (in terms of means) in realizing allocative efficiency, distributive equity and authority allocation objectives. Since each of these objectives may be affected by measures aimed at another objective (thus rather as a side effect), arguments concerning such measures may also be based on the evaluation and appreciation of their side effects. Arguments concerning the justification of the objectives in themselves fall outside the scope of this paper.[85] The four types of regulatory measures identified in the last chapter will be taken up again.

IV.1. Measures Regulating the Structure of the Telecommunications Market

a. The telecommunications equipment market

The main proposal concerning the access to national equipment markets is the opening up of public procurement.[86]

85.This implies that, when compared with the three levels of argument distinguished in section I.2., this chapter will focus on the third level of argument : the appropriateness of regulatory commands as means.

86. The public monopolies for network provision in the EC Member States buy between 75 and 90% of the equipment sold in the EC traditional equipments markets. Most of this equipment is bought from national champions. (Ungerer, H., 1988: p. 220)

Most arguments in favour of the opening up of public procurement in this sector are based on allocative efficiency considerations. Open markets would force former national champions to improve their compatibility and provide solutions of bigger markets. (see section II.1.) Counter arguments based on efficiency considerations appeal to the profitable synergy resulting from close cooperation between an expert buyer and a producer.

Arguments against the opening up of public procurement for telecommunications equipment are for a large part based on equity and independency objectives with regard to the nation state. Among them are the traditional arguments for protectionism and arguments pointing out the strategic importance of telecommunications technology for the economy, national security and the (information) society in general. These arguments are in turn contested by the defenders of free trade.

The proposals for the opening up of public procurement of telecommunications equipment are seldom directly justified by the effect in terms of authority allocation. However, it is likely to increase the influence of competition and trade authorities at the cost of telecommunication specialist and ministries. Moreover, it may de-politicize procurement decisions and increase the role of international "trade bodies" such as GATT and the CEC. In the actual decision making process such (side) effects are likely to play a role.

The development in the terminal market is towards complete liberalization. Arguments in favour of such liberalization are based on competition and economies of scale and scope.[87] Competition and increased efficiency would stimulate innovation and considerably enhance the choice of the buyers.

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87. See: Bruce, R. J. Cunard and M. Director, 1988.

On the other hand, fear of the harm caused to the technical facilities and personnel of the network provider has been expressed by the national telecommunications administrations. Furthermore, equity arguments such as the consequent income loss for the public monopolies and the likely augmentation of imported terminals[88], are raised against complete liberalization of the terminal market.

The most likely effect of such regulation on the allocation of authority is an increased control of the competition and trade authorities on the conduct of producers in this market sector.

b. The telecommunications network and services markets

Major proposals for change in the entry and exit regulation of telecommunications network and services markets concern the liberalization of (part of) these markets.

Arguments used in favour of such liberalization are in the first place based on the allocative efficiency advantages of competition and of the absence of regulation.[89] Liberalization would lead to competition and eliminate the necessity for regulation needed in monopoly markets to prevent abuse of monopoly power.[90]

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88. See the example of the liberalized terminal market of the UK : Hills, J., 1989: p.168; The Economist, 25 feb. 1989: p. 82.

89. See: OCDE / PIIC, 1987.

90. Liberalization is considered especially important for the telecommunications sector because of its rapid technological delopment, the growing demand for value added network services and adjusted network architectures, the increased danger of international bypass, and the importance of this sector for general economic development and trade in services more in particular.

The costs of regulation and the nature of the mismatch between regulatory measures and the characteristics of economic processes in the market, vary according to the institutional context in which regulatory decision making takes place.[91] In most Member States of the EC, the public telecommunications company enjoys a more or less important degree of autonomy from the central government. A major cause of distortion of regulatory efficiency identified in these countries is the lack of a protective barrier between the public company and the government. As a consequence, the government tends to make use of the company for (short term) objectives contrary to the interest of an efficient telecommunications company. For instance, the public telecommunications company often lacks the autonomy and flexibility necessary for adequate financial planning and for efficient internal organization and personnel policy. This is especially deplored for a sector characterized by rapid change and a growing importance.

Arguments defending the allocative efficiency of a formal monopoly for telecommunications network and services markets appeal for a large part to their natural monopoly characteristics. The natural monopoly characteristics of these markets might result from three factors[92] :

1. the existence of economies of scale due to an optimal use of all components of the network;
2. economies of scale obtained from the conceptualization and operation of the network by a single operator;
3. economies of scope stemming from the combined provision of different types of services.[93]

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91. See: Ergas,H., 1987: p. 63 - 68.
92. See: Ergas, H., 1987: p. 56 - 59.
93. In spite of extensive research conducted in recent years - especially on the first type of scale economies mentioned here (eg. local versus long distance telecommunications) - the actual degree of such economies remains a matter of discussion. See for example : Knieps, G., 1988: p. 5 - 6; Breyer, S., 1988: p. 1020; Noll, R., 1988: p. 6; Ergas, H., 1987: 56 - 68.

A second category of efficiency argument in favour of a formal monopoly concentrates on the costs of the regulation that will still be necessary, or is in particular necessary, in liberalized telecommunications network and services markets. Moreover, special regulation is expected to be indispensable during the transition period. This regulation is likely to suffer from the same efficiency drawbacks as most regulation[94] and consequently it is argued that it would be preferable to put more effort into the improvement of the existing regulation of the telecommunications monopoly markets.[95]

Among arguments in favour of a formal monopoly, much importance is also given to those based on distributive equity objectives. The main argument is that a (public) monopoly is the best way to safeguard the public service objectives of universal service provision at reasonable (average) prices. Protection from other entrants is needed to allow for deviation from cost based pricing in the form of cross-subsidization for cost averaging. This would hurt the "average consumer" (residential users, small and medium seized enterprises) and benefit big enterprises and multinationals.[96] On the other hand many arguments address the disadvantages of this cross-subsidization; they refer to the inherent lack of transparency of its income distributive effects and to the consequent lack of public control on this income distribution.[97]

A much proposed solution in the discussion on a regulatory framework for telecommunications regulations is the so called "mixed regime". In this scenario some parts of the telecommunications market would be liberalized

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94. See for example: Fromm, G., 1981; Posner, A., 1974; Stigler, G. 1975; Wilson, J., 1980.
95. See Ergas, H., 1987: p. 72 - 73 for suggestions of regulatory reforms to improve the relations between the government and public enterprises.
96. See: Hills, J., 1989: p. 164; Noll, R., 1989: p. 36-37; Utton, M., 1988.
97. See: Breyer, S., 1988: p. 1030-1031; Vogelsang, I., 1989: p. 204.

while other parts stay reserved. However, different opinions exist as to the optimal delimitation between the competitive and reserved parts (partly related to the difference in current national situations). A major point of discussion in this context is, whether the monopoly should also have access to the competitive parts of the telecommunications market. Even more fundamental is the discussion on the advantages and disadvantages of a mixed regime as such. Some authors[98] , question the feasibility of a mixed regime at the long term; they believe it inherently unstable and very hard to regulate efficiently. Main factors of instability would be:

- the absence of objective criteria to draw a line between the different parts of the market (eg. between basic and value added service,and between public and private network functions)[99] ;
- the strong pressure for market entry in the reserved parts of the market (at the national and international level)[100];
- the problem of bypassing when it leads to economic waste and harm to consumers. Bypassing is likely to occur if (big) users have access to lines with lower average costs than the (national) public network[101];
- the complexity and enforcement problems of the regulation needed for mixed regimes. A major concern is the safeguarding of fair competition while preventing bypass and economic waste[102].

Proposals for change in structural regulation in the telecomunications network and services markets are seldom justified by objectives of authority allocation. However, the perception of how the different proposals would influence this allocation will influence the appreciation of these

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98. See: Knieps, G., 1988: p. 19 - 24; Breyer, S., 1988: p. 1027 -1031; Ergas. H., 1987: p. 69 - 71.
99. See: Bruce, R., 1987: p. 78 - 110.
100. See: Noll, R., 1988: p. 33 -34; Knieps, G., 1988: p. 21.
101. See: Breyer, S., 1989: p. 1028.
102. See: Breyer, S., 1988: p. 1038 -1043, and paragraph IV.2. of this paper.

proposals. At the national level, liberalization of network and services markets will probably imply a loss of competence for the ministry or agency responsible for telecommunications. At the same time , bodies responsible for competition policy (at the national and/or at the international level) are likely to enlarge their field of influence. Liberalization of the telecommunications sector might end its exclusion from (certain) antitrust provisions and increase the influence of bodies in charge of anti-trust policy. When changes in telecommunications regulation require a change of law through a parliament, liberalization with increased need for conduct regulation (especialy during the transmission period), may increase the involvement of parliament with telecommunications regulation.

IV.2. MEASURES REGULATING THE CONDUCT IN THE TELECOMMUNICATIONS MARKET

Decisions concerning the structure of the market are directly related to decisions on rules commanding the conduct of firms in that market. Therefore, in this paragraph we will discuss proposals for conduct regulation with regard to specific proposals for a certain market structure.

a. The telecommunications equipment market

Proposals for the opening of (public) procurement of telecommunications equipment are generally accompanied by proposals for rules on transparency in administrative procedures and technical requirements as well as on rules guaranteeing due process in procurement decisions. These measures are aimed at safeguarding fair competition among competitors allowed into the market (eg. EC based companies, companies from all other countries).

Effective competition in liberalized terminal market is generally considered to depend upon a significant simplification of the procedures for the official recognition of type approval certificates. Most countries, however, will demand that direct recognition of certificates will be mutual, and that the quality of foreign type approval procedures is guaranteed.

Arguments based on equity considerations mainly concern regulation of the market structure. For instance, to what extend should competition be allowed in the different telecommunications market sectors. Conduct regulation in this context is to a large extent intended to guarantee fair competition, and is mainly judged by its efficiency merits. However, at the international level, similar arguments as used against liberalization and free competition are sometimes used to promote national or regional regulation which favours local companies (eg. regulation allowing for unfair access conditions).

A transfer of authority may indeed result from such conduct regulating measures as mentioned above. Public bodies may lose part of their influence due to tighter rules on open and fair public procurement and a shift of responsibility may take place from telecommunications departments to departments responsible for competition and trade. At the same time, this may stimulate the use of international trade fora by the national authorities responsible for trade policy. In the case of the terminal market, national procedures may be simplified at the expense of the public office (eg. the national PTTs) responsible for the official recognition (validation) of type approval certificates (delivered by national laboratories). Direct validity of these certificates at the national as well as at the international level would make redundant their official recognition (validation) by these administrative bodies, and consequently reduce their influence on the process of standard setting and implementation of access conditions. Moreover, it is likely to enhance the role of international standardization bodies.

b. The telecommunications network and services markets

Proposals on conduct regulation made in connection with proposals for liberalization of the telecommunications network and services markets, are mostly aimed at the realization of effective competition. They tend to deal with the balance in market power between the former monopoly and new entrants in these markets.

Three major concerns and related proposals for regulation may be distinguished:

- The former monopoly is feared to have an advantageous position in the market and therefore, it is argued, should it be "handicapped" by special regulatory requirements. Other authors however, contest the need for and stress the disadvantages of such regulatory handicapping.[103]
- The former monopoly might have a special relation with the government which needs to be changed in order to place it in an equal position with its competitors. Regulatory change is proposed to increase the financial and organizational independence of the former monopoly.[104] Other proposals refer to the need for transparency in the financial relations between the former monopoly and the state.
- Responsibility for regulation is considered irreconcilable with operation in competitive markets. Regulation guaranteeing the separation of these activities is proposed in order to prevent abuse of regulatory power by the former monopoly.

Proposals for a mixed regime under which the monopoly is also allowed into the liberalized part of the market, are often combined with proposals to guarantee fair competition in these liberalized parts. On the one hand regulation is thought necessary in order to control for internal cross

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103. See: Breyer, S., 1988: p. 1038 -1043.
104. See: Ergas, H., 1987: p. 72.

subsidization by the monopoly so as to enhance its position in the competitive markets. On the other hand, regulation should guarantee that the monopoly gives its competitors fair access to underlying facilities which fall under its monopoly.

Measures proposed for the regulation of monopolistic telecommunications markets resume to a large extent the existing regulation. However, a multitude of proposals have been made in order to improve and adapt the traditional rules. New approaches to price regulation have been developed and proposals have been made for the revision of the relationship of the monopoly with the state (eg. privatization).[105]

The regulation concerning technical standards is also likely to have important implications for the conduct of telecomunications firms in the market. The regulatory discussion on standardization in the field of telecommunications may be divided into four major areas of concern:

- the formal status of a technical standard and of related requirements (eg. voluntary standards or standards with the force of a regulatory mandate);
- regulation concerning the procedures and bodies involved in the standard setting process;
- the content and the degree of detail of formal technical standards;
- harmonization of regulation on technical standards (see section IV.3.).

Efficiency considerations seem to have inspired most proposals for change of conduct regulation. Nontheless, their social and distributive implications are at the basis of some of the counter arguments. For example, fair competition rules are opposed since they may have negative consequences for

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105. See for a further development of the discussion of regulatory reform for (public) monopolies in Europe : Bauer, J., 1987; Utton, M., 1988; Ergas, H., 1987: p. 71 -73.

the national industry or for less industrialized countries.[106] Increased financial autonomy of the monopoly excludes its financial contribution to other public services sectors (eg. postal services). Privatization has among others been rejected on ideological grounds and because of its consequences for the change in status of the employees.[107] Moreover, proposals for regulation on tariff principles - which restricts the conduct of companies in the telecommunications market - have, besides on efficiency considerations, certainly been based on equity considerations.

Most proposals on tariff regulation concern either tariffs for end-consumers or tariffs for leased lines. In the case of end-consumer tariffs, arguments concern the value and feasibility of cost averaging versus cost based or cost oriented pricing with regard to the different types of telecommunications services. It is argued that tariff principles for leased lines should prevent cream-skimming by competing service providers in order to safeguard the financial viability and herewith the public service function of the (public) monopoly. Others have argued that consequent high tariffs would hinder rapid innovation and the development of value added network services, and lead to international by passing.[108]

The consequences of the above mentioned proposals for conduct regulation for the allocations of (rule-making) authority, may be at the basis of some of the counter arguments. Due to replacement of some structural regulations by more complex and harder to enforce conduct regulations[109], the department

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106. See: Hills, J., 1989: p. 165.
107. See: Vogelsang, I., 1989.
108. See: Bruce, R., J. Cunard and M. Director, 1988: p. 8 - 11 and 41 - 183.
109. See: Kay, J. and J. Vickers, 1988. These authors emphasize the advantages of structural regulation as compared to conduct regulation. It is much simpler in content, easier to enforce, and more effective in preventing anti-competitive behaviour.

responsible for these regulations might gain more influence. At the same time, access of the (public) monopoly to competitive markets is likely to make it lose its regulatory responsibilities. It will depend on the national context whether this authority would be transfered to (another) service in the same ministry or to for example a more independent agency.[110] Finally, increased autonomy and flexibility of the public enterprise may at the same time engender a more severe control of the responsible ministry as well as increased political supervision.

IV.3. Harmonization by Means of Telecommunications Regulation

In this paragraph we will merely look at formal harmonization by means of regulation at the EC level. The discussion on harmonization of telecommunications regulation at the EC level mainly concerns the structure of the markets and the need for related regulation of market conduct. Conduct regulation is here meant to include regulation on technical standards and tariff principles.

Most proposals in favour of harmonized telecommunications regulation at the EC level are based on efficiency arguments. These arguments hold that such regulation would be a means to stimulate and safeguard an open and efficient trading environment. EC regulation should therefore guarantee free access to telecommunications equipment, network and services markets. Moreover, it should control for fair access and competition conditions. Finally, in order to stimulate the development and use of international service provision (at least at the EC level), regulation should guarantee the compatibility of equipment and the interoperability of telecommunication services.

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110. See: Hills, J., 1989: p. 167.

The quest for free access to EC telecommunications markets links the discussion on harmonization of telecommunications regulation to the discussion on the optimal market structure : proponents for open markets tend to join forces with proponents for EC harmonization. Similar arguments as examined in section IV.1. are used pro and contra. In addition, arguments concern the margin of freedom which should be left to the Member States and differ as to whether free access should also be granted to the rest of the world.

Proposals for fair and efficient competition in telecommunication markets at the EC level, are again mainly the same as those examined in section IV.2. In addition, the more countries are involved in the competitive markets, the stronger are the demands and arguments in favour of rules on transparency, mutual recognition, government aid, usage conditions, tariff principles, technical standards etc. Issues of discussion related to the EC level of regulation concern more specifically, the margin for national deviation (i.e. the legal status and degree of detail of the regulation), and the need to adhere to treaties or recommendations made in the framework of international fora such as the ITU (CCITT), the GATT and IntelSat.[111]

The harmonization of technical standards and of tariff principles are important issues in the discussion on EC telecommunications regulation. The harmonization of both, are often considered as necessary conditions for the development of a common EC telecommunications market.

Most arguments in favour of EC regulation of technical standards are also based on efficiency considerations. However, efficiency arguments are also used against government intervention and in favour of voluntary standards

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111. See: Richardson, J., 1986; Stevers, E. and Ch. Wilkinson, 1988.

developed by the industry.[112]

Efficiency arguments are used to defend the harmonization of tariff principles as a means to reduce access barriers to national markets and to improve the interoperability of telecommunications services (eg. simplification of billing procedures and reverse charging mechanisms). A divergence in tariff principles among countries forms an impediment to transborder service provision. Counter arguments are often based on equity considerations and point out that tariff setting is closely linked to equity objectives which are likely to differ from country to country. Harmonization of tariff principles may disturb the delicate balance between national access regulation and tariff setting and consequently block the realization of particular equity (and efficiency) objectives. Other arguments concern the distributional effects among countries because of the different national circumstances.

Harmonization of regulation at the EC level will imply a certain transfer of sovereignty to the EC institutions. This is used as an argument in its own right against as well as in favour of EC regulation (see paragraph I.3.). In the case of regulation of standards and tariff principles, the development of the technical standards and the setting of the tariffs may also be transfered to international bodies more or less independent of the international regulatory authority, in casu the EC institutions. The separation of technical and regulatory functions will probably mean a loss of influence from telecommunications authorities to the benefit of trade and economic affairs officials.

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112. For a more detailed discussion on the arguments pro and contra the regulation of technical standards see for example: Pelkmans, J., 1987; Brenton, M., 1987; Bruce, R., J.Cunard and M. Director, 1988.

VI.4. A Common External Position as a Means

The subject of this paragraph is limited to one proposition in the specific context of EC telecommunications policy making. The proposition entails the working out of a common position among the Member States on international telecommunications regulation. Therefore, arguments for and against the definition of a common position will be examined.

Arguments concerning the desirability of a common position are based on :

1. the relevance of a common position for the realization of EC regulation on telecommunications
2. the side effects of a common position for objectives of authority allocation.

The issue under discussion and the specific circumstances (eg. the international forum responsible, the degree of discrepancy among Member States positions, flexibility of the proposed international regulation, timing, the formal competence of the EC on the matter) will determine the importance attached to a common position on a specific matter. However, at a more general level it can be said that arguments are based on:

- The importance of an agreement on the external policy for the establishment of an open internal market or of the harmonization of national telecommunications regulation at the EC level.
- The extent to which a common external position will strengthen both, the position of the EC Member States in international negotiations and their influence on the resulting international regulations.

- The repercussion of international telecommunications regulation for EC regulation (de-jure and de-facto).[113]

In the case of international telecommunications regulation a common position is argued to be important to the extent that it is considered important to promote international regulation which is not in conflict with (proposed) EC regulation and which does not pre-empt negotiations in other international fora which are considered more appropriate for dealing with the matter. In some measure, such concerns have been expressed in the quest for international regulations or recommendations which will leave a certain margin of freedom to the contracting parties.

The side effects of a common external position on the allocation of authority is bound to play an important role in the discussion on the desirability of a such-like common positions. Prior agreement on a certain common position will restrain the Member States in their negotiations with other countries. At the same time, it will probably increase the political weight of the European Community as a negotiating partner : a European Commission elaborating a common position and eventually conducting negotiations on behalf of the Member States is likely to gain in authority.

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113. The European Community has the competence to conclude international treaties concerning areas in which it has internal competence (according to the three commanding treaties). However, the Community (according to international law) has to respect the obligations of Member States stemming from international treaties concluded before their ratification of the Community Treaties. Such obligations do not bind the EC nor the other Member States. (Louis, J-V., 1988: p. 89 - 90.)
The Member States do not have the competence to conclude an international treaty which would be in conflict with internal EC rules - including those stemming from international treaties concluded by the Community. The Member States can conclude international treaties on areas where no internal treaties exist, but posterior Community rules will prime over the treaties concluded by individual Member States. (Louis, J-V., : p. 91; Schermers, N., p. 241 - 246.)
However, the de-facto influence of international regulations may easily exceeds the restraints of the legal framework.

At the same time, a shift in competence might take place from the more technical Directorates to the Directorate responsible for external relations[114] : most of the external negotiations by the EC are conducted not by the technical Directorates but by the Directorate responsible for external relations. This need not be the case for negotiators representing the Member States.

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114. See: Robinson, P., 1987; Russel Pipe, G., 1987.

PROPOSALS OF THE CEC IN PERSPECTIVE

The core set of ideas of the telecommunications policy proposed by the CEC displays the importance it places on the need to achieve greater economic efficiency and the integration of national markets by means of free and competitive trade.[115] The CEC states, that the current transformation of the telecommunications sector requires adjustment at the European level : trade barrriers should be removed in order to improve the competitiveness and development of the European telecommunications sector (eg. Green Paper, p. 13). The CEC's account of causes and consequences of the undesirable circumstances enhances the legitimacy of the solutions it proposes. A solution, in accordance with the development of the internal market and a solution, which will bring the CEC considerable regulatory authority in the telecommunications sector.

When the proposals of the CEC are set against the more general discussion on telecommunications regulation (chapter IV), it is striking that problems and solutions are presented in terms of trade barriers and free competition. The most sensitive distributive equity arguments have been evaded by leaving the Member States free to continue the exclusive provision of network infrastructure and plain voice telephone service.[116] The transfer of authority - although seldom made explicit, but implied in the proposals of the CEC - is justified by economic efficiency and the virtues of de-regulation. Rather ironically, the liberalization of the telecommunications market at the national level requires new (conduct) regulation at the EC

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115. See: - Davignon Report : Com (83) 329
- Green Paper : Com (87) 290
- Communication of the CEC : Com (88) 48.

116. The plain voice telephone service accounts for 85 to 90 % of the PTT's telecommunications revenues. (Ungerer, H. 1988, p. 33).

level in order to guarantee fair and effective competition.[117] In addition, the CEC proposes to solve the problem of access barriers to national markets by the inclusion of standards, principles and procedures in the legal system of the EC. For instance, harmonization of technical standards and tariff principles, as proposed by the CEC, would mean that these standards and principles get the force of a regulatory mandate. The CEC prefers an extension of the EC legal system rather than leaving harmonization to the discretion of the industry. The relevance of a common external position is emphasized. It will enhance the position of the (C)EC in negotiations on international telecommunications regulation. Conflict between regional (EC) and global regulation may (for the time being) be prevented by negotiating a compatible and flexible regulation at the global level.

The CEC's definition of the problems (causes and consequences) and solutions may be seen as the result of the interaction among a number of contextual factors. Some relevant factors will briefly be mentioned below.

The main values expressed in the CEC telecommunications policy are in accordance with the market ideology of the Treaty of Rome. This means that the CEC appealed to values already present in society at large and moreover, at the origin of the creation of the European Economic Community. The success surrounding the choice to appeal to these values has probably been reinforced by a general change in attitude towards the role of governments. In the early eighties, a general perception of "government failure" - in particular its impotence to replace or improve the efficiency of the market - had led to a rise in the popularity of the notion of de-regulation. The 1985 White Paper "Completing the Internal Market" and the consequent development of the "1992 project" have, moreover, been based on the same

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117. See: Kay, J., and J. Vickers, 1989, about the disadvantages of conduct regulation as compared with regulation of the market structure.

core values. The overall stimulating effect of the 1992 project has certainly been advantageous to the development of the CEC's telecommunications policy. The importance of the telecommunications sector for the European economy, Community cohesion, and for the achievement of the completion of the internal market is, indeed, stressed in the Green Paper (p. 23).

The decision of the CEC to expand its activities in the field of telecommunications from mostly R&D and infra structure projects to the domain of regulation, confirms an inherent logic within the functioning of the EC institutional system. The EC system contains perverse incentives for the CEC to expand the scope of its regulatory activities : perverse, since it allows the CEC to increase its own role (i.e. to benefit), while the costs of enforcing EC regulations are borne by the Member States. Inadequate budgetary resources in particular, do not constrain the ability of the CEC to regulate. The issuing of regulation, moreover, is in accordance with market ideology as long as it can be justified by market failure and the need for de-regulation and liberalization at the national level.

Developments in telecommunications technology and markets, have created strong pressure for regulatory change in the EC Member States. At the same time, regulatory boundaries have been blurred between former separated sectors (eg. telecommunications, information, audio-visual) and between the different levels of government (see chapter II). De-regulation and liberalization in third countries (eg., the USA, Japan and Canada), as well as in other EC countries (especially in the UK) have led to pressure for a similar revision of telecommmunications regulation in the EC.

Important initiatives were taken by big European (equipment) industries.[118] They stressed the importance of bigger home markets and congruent national regulation. The more technocratic decision making at the EC level promised, at that time, to be more succesful than decision making at the national level (At the national level, distributive equity considerations and vested interest (for instance of the PTTs) are likely to carry more weight.) Multi-nationals with a growing need for high quality (international) telecommunications services, and potential new entrants in the diversifying and expanding telcommunications market also strove for liberalization and free trade. A European Community speaking with one voice in negotiations with third countries (eg. USA, Japan) would be more effective in defending the interest of the European telecommunications industry.

In fact, the major losers in the whole process of telecommunications liberalization and free trade seem to be the national telecommunications administrations. From the beginning however, the IT&T Task Force developed close cooperation with the national PTTs and the CEPT (see chapter III). Already in 1983, it set up the SOGT, a consulting body with national officials and backed by the national telecommunications administrations. The SOGT has become an important channel for reaching consensus on problem definitions and solutions. As mentioned before, compromises have been found

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118.In spring 1983, twelve major European electronic companies wrote an urgent letter to the Council of Ministers, which stressed the weak position of the European IT industry, to support the before mentioned Davignon Report. (It is interesting to note that part of he success of the Davignon report has been explained by its emphasis on the competitive position of the European information technology industry, rather than on the realization of an internal market.) At he same time, the European information technology industry established SPAG (Standards Promotion and Applications Group), which submitted a proposal to the Commission and to the Governments of the Member States for an European information technology standardization policy. The twelve companies involved were: General Electric Company, ICL and Plessey from the UK; Thomson - Brandt, CIT - Alcatel (CGE) and Bull from France; Siemens, AEG and Nixdorf from West-Germany; Olivetti and STET from Italy; Philips from the Netherlands.

which leaves Member States the freedom to keep large parts of their monopoly regime and allows PTTs to enter competitive parts of the telecommunications market.[119]

The complexity of the interests at stake and the ever changing configuration of contextual factors and actor alliances lead one to expect that many hindrances still have to be overcome by the CEC. Seeds for future disruptive processes may already be found in the characteristics of the telecommunications regulation as proposed by the CEC, and in the internal functioning of the CEC.

- The combination of partial liberalization at the EC level and the continuing toleration of monopolies for the important telephone service sector will probably lead to mixed regimes in most Member States. The inherent instability of mixed regimes has been described by several authors in this field (see sections IV.1. and 2.).
- Uncertainty still exists about the efficiency effects of liberalization in terms of economies of scale and scope (see section IV.1.)
- The pressure to realize distributive equity objectives in liberalized markets may lead to complicated and costly procedures.[120]
- The slow progress of harmonization of technical standards by means of EC regulation threatens to cause unacceptable delay in the R&D and implementation processes.
- Arguments used in favour of harmonized regulation at the regional level are likely to be increasingly transposed to demands for regulation at the global level. Consequently, the tension between the regional and global

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119. In the USA, a major discussion is going on, whether the BOCs (public monopolies providing local telephone services) should be allowed to enter the competitive parts of the telecommunications services markets. See: Breyer, S., 1988; Noll, R., 1988.
120. See: Ergas, H., 1987.

regulation of telecommunications will grow (particularly in the context of the ITU, IntelSat, GATT, Unctad). This is due to the fact that the telecommunications sector depends on harmonization for the mere functioning and provision of its facilities and services.

The growing amount and complexity of EC regulations is bound to aggravate the already visible lack of central coordination and political guidance in the regulatory process in the Community. Compartmentalization of the different Directorates General (DGs) and the lack of horizontal coordination at all levels of the organizational hierarchy have been recognized as defects which handicap the decision making process in the CEC[121]. Competence struggles and differing opinions (related to differences in professional bakcground and clienteles) among DGs involved in the same policy have also been mentioned in this context.

The growing need for expertise and contol over implementation in the telecommunications regulatory process, will require an increase in the number and level of specialisation of officials. The divergence between telecommunications specialists and the increasingly involved competition and trade officials is, given the present structure and functioning of the CEC, likely to cause problems of coordination. In accordance with the CEC's own appeal to the values incorporated in the free trade perspective, increasing demand for global regulation - with de-regulation at the lower (regional) levels - may be expected. These developments may lead to a reformulation of problems and solutions at the EC level, which may then include institutional reform of the regulatory process in the telecommunications sector.

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121. See for example: Casese, s.(ed.), 1987; Coombes, D., 1970; Jamar, J. and W. Wessels (eds.), 1985; Michelman, H., 1978; Poullet, E. and G. Deprez, 1976; Spierenburg Report, 1979.

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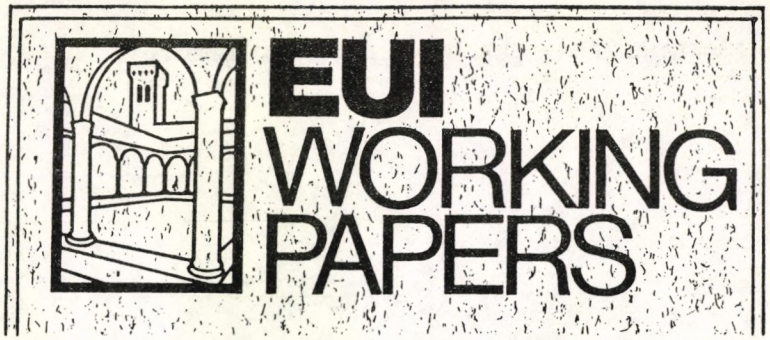

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