II

(Acts whose publication is not obligatory)

COMMISSION

COMMISSION DECISION

of 17 February 1995

declaring a concentration to be compatible with the common market

(Case IV/M.468 — Siemens/Italtel)

(Only the English text is authentic)

(95/255/EC)

THE COMMISSION OF THE EUROPEAN COMMUNITIES,

Having regard to the Treaty establishing the European Community,

Having regard to Council Regulation (EEC) No 4064/89 of 21 December 1989 on the control of concentrations between undertakings [1], and in particular Article 8 (2) thereof,

Having regard to the EEA Agreement and in particular Article 57 (1) thereof,

Having regard to the Commission Decision of 14 October 1994 to initiate proceedings in this case,

Having regard to the opinion of the Advisory Committee on Concentrations [2],

Whereas :

(1) The abovementioned operation concerns the establishment of a joint venture between STET — Società Finanziaria Telefonica — per Azioni ('STET') and Siemens Aktiengesellschaft ('Siemens').

[1] OJ No L 395, 30. 12. 1989, p. 1. Corrigendum : OJ No L 257, 21. 9. 1990, p. 13.
[2] OJ No C 176, 11. 7. 1995, p. 4.

I. THE OPERATION AND THE PARTIES

(2) On 26 March 1994, STET and Siemens signed a memorandum of understanding aimed at the creation of a European Telecom group capable of playing a major role as an international supplier. In the notified operation the parties will transfer to the joint venture their Italian subsidiaries, Italtel and Siemens Telecomunicazioni (ST), for developing, manufacturing, sales and service activities in the field of telecommunications.

STET and Siemens will create a holding to which STET will transfer initially 60 % of the capital stock of Italtel (the remaining 40 % equity being contributed later) and Siemens will contribute by transferring the whole capital stock of ST as well as an amount in cash.

(3) STET is an Italian company of which 46,61 % of the capital shares (64,20 % of the ordinary voting shares) is owned by the Istituto per la Ricostruzione Industriale SpA (IRI). STET coordinates the activities of a group of companies operating in the field of telecommunications.

(4) STET operates a fully independent company and its stock is quoted on the Milan Stock Exchange. IRI's function is limited to that of a holding company on behalf of the Italian State, and for the purposes of this notification, STET is considered to be 'an economic unit with an independent power of decision' as described in recital 12 of the Merger Regulation.

Italtel is the manufacturing and marketing company of STET in the telecommunications sector. STET holds 100 % of Italtel's registered shares.

Italtel is mainly active in developing, producing and marketing systems and equipment for public and private telecommunications in the fields of switching, transmission systems, mobile radio networks, PBX's and terminals.

(5) Siemens is a publicly held German industrial and electronics company and the ultimate parent of the Siemens group of companies. The principal activities of Siemens are: industrial and building systems, drives and standard products, automation, automotive systems, power generation (KWU), power transmission and distribution, semiconductors, medical engineering, public communication networks, network systems, passive components and electron tubes, private communication systems, defense electronics and transportation systems.

ST is a wholly-owned Italian subsidiary of Siemens, with manufacturing, sales and services activities in the fields of public and private telecommunications equipment, systems and services, including public and private switching, transmission, fixed and mobile radio networks, as well as terminal equipment for the private market.

(6) After several years' work on the rationalization of the Italian telecommunications sector in the current year a single telecommunication operator has been established. Further to the resolution of the shareholders of SIP, Italcable, Iritel, Telespazio and Sirm on 19 May 1994, the deed merging the other concessionaire companies into SIP was signed on 27 July 1994 and took retrospective effect in accounting and fiscal terms as of 1 January 1994.

The merger was implemented on 18 August 1994. While retaining its present name, SIP has also been entitled to adopt the name of Telecom Italia SpA for all legal purposes. As a result of the operation STET has 56,10 % of the ordinary shares of Telecom Italia and IRI 2,81 % of the ordinary shares. Telecom Italia is listed on the stock market and the remaining part of the share capital is held by private minority shareholders.

With the abovementioned operation and the other subsequent resolutions the major parts of the steps for the completion of the plan for the reorganization of the Italian telecommunication sector according to the lines approved by the Italian Government have been taken.

In particular the company which is active in the provision of the telecommunication services (Telecom Italia) has been separated within the STET group from the companies which are in charge of the equipment manufacturing activities (Italtel, Sirti and Aet).

The remaining steps of the reorganization plan concern the transfer from Telecom Italia of its mobile phone operations and space divisions to independent companies.

(7) Italtel had been looking for a technological partner in the past. It first established a number of agreements with AT&T which included the acquisition by AT&T of a minority stake in the capital share of Italtel. The agreements with AT&T have now been terminated and AT&T has sold its stake back to STET.

II. THE CONCENTRATION

Joint control

(8) STET and Siemens shall each own 50 % of the share capital in the joint venture. The joint venture will have a nine-member Board of Directors. STET and Siemens will appoint four members each, while the ninth member, the Chairman of the Board, will be designated by STET and approved by Siemens.

(9) The Board shall be governing body of the joint venture and shall have the authority to adopt resolutions on any matter not reserved by virtue of law to the shareholders' meeting. The resolution of key decisions will be adopted by the Board of Directors with the approval of the STET and Siemens' representatives. These decisions inlcude among others:

— the approval of the strategic business plan and the yearly budget,

— the proposals of the CEO as to the appointment and removal of senior officers of the joint entity and of the Board members of the holding's subsidiaries.

(10) With regard to matters reserved to the shareholders meeting's decision, under the shareholders agreement each party commits itself to vote its shares in conformity with the proposals previously approved by the Board according to the above.

(11) Each of the parties will have the right of veto at least over the principal decisions concerning the joint venture, which are mentioned under point 9. Therefore, they will have joint control over the joint venture.

Full function entity

(12) The parties will transfer to the joint venture their Italian subsidiaries which are active in the manufacturing of telecommunication equipment. The operation will bring about the industrial merger of the activities of the parties in the product areas of switching, transmission, radio systems, mobile radio and private communication systems and terminals. The joint venture will have all the assets and resources necessary to perform all the functions of an autonomous entity, including R&D, manufacturing and distribution.

For the main products of the public telecommunication sector (public switching systems and transmission) the bulk of the sales of the joint venture will continue to be absorbed by the Italian telecom operator, which is controlled by one of the parents (STET). A high level of sales to a parent in a downstream market could lead to questioning the autonomy of the joint venture. It is true that for the foreseable future Telecom Italia will be the only buyer on the public telecom markets. This is due to the infrastructure monopoly and not to the fact that the manufacture of telecommunication equipment is an auxiliary activity to the provision of the service.

Absence of coordination

(13) While Siemens will remain active in the same product markets as the joint venture outside Italy, STET is to withdraw from the markets concerned by transferring its relevant business to the joint venture. The only exception to this is that AET, a subsidiary of STET, is active in one of the markets (transmission) affected by the operation. However, Siemens does not retain any business activity for transmission in Italy. At European level AET turnover in transmission is of minor importance ; it represents less than 1,5 % of the total market. Furthermore, the potential for coordination arising from this situation is minimal given the fact that the activities of AET in the transmission market in Italy are of minor importance in relation to the overall activities of the merged entity (around 2%).

With regard to the role of Marconi as a competitor of Italtel on the relevant markets, it has to be considered that recently Marconi, which is an Italian company which forms part of the GEC group and Finmeccanica, a company which, like STET, also belongs to the Italian State holding company, IRI, established a concentrative joint venture [1] which will operate in a number of communications market segments including some (PTT network management and supervisory systems, infrastructure for cellular radio networks and terminals for public cellular radio network) in which the parties are present. Although IRI is the ultimate holding company of both Finmeccanica, which owns 50 % of the share capital of the Marconi/Finmeccanica joint venture, and STET, which will have a 50 % stake in the Siemens/Italtel joint venture, there is no link between STET and Finmeccanica, both of which operate as separate economic units, conducting their business independently from each other.

Thus effectively only Siemens will remain active on the joint venture's markets. Having transferred its assets and expertise in the high-tech products concerned, it would be costly and commercially unreasonable for STET to attempt to re-enter the market. There is therefore no relevant risk of coordination arising from the notified operation.

III. THE COMMUNITY DIMENSION

(14) The undertakings concerned have a combined aggregate worldwide turnover in excess of ECU 5 000 million. STET achieved a turnover of ECU 16 174 million in 1993 and Siemens one of ECU 42 087 million in the financial year ending on 30 September 1993. They both have a Community-wide turnover of more than ECU 250 million. They do not achieve more than two-thirds of their aggregate Community-wide turnover in one and the same Member State. The operation therefore has a Community dimension. The operation is not an EEA 'cooperation' case within the meaning of Article 58 and Protocol 24 of the EEA Agreement.

[1] OJ No C 253, 10. 9. 1994, p. 10.

IV. THE RELEVANT PRODUCT MARKET

(15) The proposed transaction concerns broadly the public and private telecommunications systems and equipment sectors. For the purposes of identifying the relevant affected product markets, the parties have subdivided the first of these sectors into four product markets :

1. public switching systems
2. transmission
3. radio systems
4. mobile radio network

and the second they have likewise subdivided into two :

5. private switching and key telephone systems (KTS)
6. communication terminals

(16) **Public telecommunications**

1. Public switching systems allow the interconnection of service users. The switched services can cover voice, data, image and text. The three main network switching nodes are characterized by :

(a) local switching functions which interconnect end-users ;

(b) transit exchanges which interconnect transmission links ;

(c) international transit exchanges which provide international services.

In the past, these switching nodes were built in analogue mode but, since the 1980s, public switching equipment with analogue technology is being gradually replaced in Europe by equipment in digital synchronous mode and new extensions in the networks are likewise being carried out in digital technology. In Italy, this process of digitalization of the network is now at around 60 % of its completion and is expected to reach 90 % by the end of 1998, according to the parties.

The current life cycle for public switching systems is around 15 years. This lengthy life cycle, despite rapid progress, is due to the possibility of adaptation and updating of the software programmes that run the switching equipment and to the reengineering of parts of the systems.

At present, the major technological trend that is influencing developments in public switching is the increasing use of software to provide intelligence in the network. Examples of this trend are TNM (telecommunication network management), IN (intelligent network), OS (operator systems) and AN (access network). The use of stand-alone modules with open interfaces allows for the continuous upgrading and enhancing of the network by such new features and services. Software is frequently updated (e.g. every six months or year) on a regular basis and has a life span of from two to five years.

In the future, the next major development in public switching systems will be the introduction of asynchronous transfer mode (ATM) technology which will allow the broadband transmission of voice, data, image and text. This technology is presently undergoing technical and commercial evaluation by telecom operators in field trials being carried out in several European countries, including Italy. However, its actual introduction in the public network is not expected before the end of the 1990s. The future of ATM switching will depend also on the attitude of the telecom operators who may be reluctant to replace expensive equipment, that has not been fully depreciated, but could be forced to do so by competition in an emerging liberalized market. Consequently, there seems to be no great certainty with regard to when ATM will find a large-scale application in voice telephony and it is possible that it may be restricted initially to an overlay network for business/service applications. According to market sources, ATM switches are expected to represent around 10 % of the sales of switches in Europe in five years' time.

With regard to the evolution of the life cycle of public switching equipment, it is thought that the major new technology developments in switching, both in software and hardware products, are more likely to expand the range of available functions, and therefore to serve new needs, than to shorten the life cycle of existing equipment. This trend is expected to continue over the next five to 10 years.

2. Transmission provides the transport function for :

(a) traffic between local central switching offices and transit central switching offices ;

(b) leased line traffic between business customers, by cable and optics.

The main building blocks of transmission are digital multiplexers and optical line terminals (the parties are not active in the cable field). The latest major development in transmission is the transition to synchronous digital hierarchy (SDH) technology from plesiochronous digital hierarchy (PDH) in network management systems equipment, which is already underway. This new technology enables ATM broadband switching and it is expected that, within five years, SDH will represent 95 % of the transmission equipment market. It is operational via TNM and will, in the future, operate via the open interfaces of AN. It is thought that the introduction of AN will open up this market and enforce competition as there will be an increasing migration of services and functionality away from central office switching into the local access networks.

The life cycle for transmission has been around 10 years when only major technological changes are regarded. This life cycle includes, however, major redesigns every three to five years of the PDH equipment which is hardware intensive. The life cycle of SDH equipment, being more software intensive, is expected to behave more like the life cycle of switching equipment.

3. In radio systems, line-of-sight radio technology provides an alternative to cables in information transport among switching offices or between subscribers and central offices. A recent important role of radio is the interconnection of large business customers to the switched network, or to corporate and private virtual networks. Line-of-sight radio is today being applied in the interconnection of mobile radio base stations, in particular in the market segment of new operators who have no cable infrastructure. Radio systems are, like transmission, migrating towards SDH. R&D expenditure is estimated at 15 %, the same level as for transmission, by the parties.

The parties include in this market microwave and UHF/VHF radio, line-of-sight antennas, feeder cables and operation support systems. The parties have confirmed, however, that neither Italtel nor any other company controlled by STET is active in the radio systems market. For this reason, the market is not an affected product market and will not be analysed further.

4. Mobile radio networks allow for communication :

(a) within the own network ;

(b) to or from another fixed or mobile network as longer as the user is within radio coverage of the mobile network.

The last major technological innovation in mobile communication networks has been the introduction of GSM, the pan European digital mobile communications systems, in 1989. GSM architecture has been clearly defined in the GSM recommendations promulgated by ETSI in the EEA countries.

The evolution in this area is expected to be towards the provision of an increasing proportion of narrowband services by mobile (e.g. cellular) systems. It is thought that the significant growth already being experienced in the customer demand for such mobile services will lead to the introduction of new technologies.

The next generation of infrastructure is expected to be direct satellite communications which it is thought will be available in 1998. With GSM technology, innovation cycles of two to three years are foreseen.

(17) **Private telecommunications**

5. In private telecommunications systems, private branch exchanges (PBX's) and key telephone systems (KTS) allow for communication within/between users, whether public or private. They are connected to the public networks via trunk lines, operating as stand alone systems or in a networking environment. Modern (ISDN) PBX's and KTS provide services such as fax-PC interworking, video-conferencing, and network management.

In the present case, data communication equipment is excluded from the market definition as neither Siemens nor Italtel ever specifically addressed this market segment. Their sales of data communication equipment are marginal (1 % of their turnover). These sales are occasional, mainly connected to the integration of OEM data products into complex projects. For these reasons, the analysis of the notified concentration will be restricted to private voice transmission equipment. The question of whether data transmission should be included in the market may be left open.

The parties point out the constantly increasing cost of R&D in private telecommunications at 10 to 15 % of turnover, due to heavy R&D competition in a market which is characterized by the rapid introduction of additional/new technologies in increasingly shorter time periods/life cycles.

6. Within the range of communication terminals, the parties indicate that for the relevant years Siemens and Italtel have only sold telephones, fax machines and cellular telephones. They have included all three products under one affected relevant product market, although they have provided separate figures relating to market estimates and market shares separately for each type of terminal. Since the notified transaction does not raise competition issues of dominance either considering an overall product market for private terminals or separate narrow markets for each type of terminal, the question of the exact product market definition can be left open.

(18) The above relevant product markets, as defined by the parties, were confirmed by the competitors and the telecom operators in the course of the investigation.

V. THE RELEVANT GEOGRAPHIC MARKET

(19) The overlap of the parties' activities and the main impact of the operation will be in Italy. Italtel only has limited sales of public telecom equipment elsewhere : ECU 1 million in Germany for public switching, limited sales of transmission equipment in Germany, the Netherlands, Portugal and Spain with a market share below 5 % in all cases, and sales of mobile radio network equipment worth ECU 24 million in Greece.

Public telecommunications equipment

(20) The parties argue in their notification that the strict application by SIP (now Telecom Italia) of Council Directive 90/531/EEC [1] (the Utilities public procurement directive) and the current level of standardization ensure that barriers to access to the Italian markets in public telecommunication equipment are of little importance. Although the public procurement directives have not yet been transposed into Italian law, according to the parties since 1993 SIP has operated its own internal rules in compliance with the directives, including the creation of a qualification system and a register of qualified suppliers.

(21) Until now, the Commission has only defined geographic markets in public telecommunication equipment in its Decision 91/251/EEC [2], Alcatel/Telettra, where the market for public telecommunication equipment was found to be national for a merger affecting Spain. Some of the factors which motivated this national market definition were specific to the situation in the Spanish telecommunications market at that time, such as : that Telefonica, the Spanish telecommunications operator, had traditionally purchased from local suppliers ; that the application of the Utilities public procurement directive would not take place in Spain for the following five years ; and that there were vertical links between Telefonica and its major equipment suppliers through minority shareholdings.

(22) Of the characteristics outlined in the decision which were specific to the Spanish market, none applies fully to the Italian market in the context of the current case. Through it is true that in the past Telecom Italia and its predecessors have purchased both switching and transmission equipment from Italtel, they have more recently also sourced significant quantities from other suppliers outside Italy. The Utilities Directive has applied to Italy since the beginning of 1993 and internal rules have been drawn up within Telecom Italia in order to comply with it. Finally, there is a type of link between Italtel and Telecom Italia in that they are both separate parts of the STET group.

(23) Traditionally, public telecommunication equipment markets have shown clear national characteristics, arising from the different attitudes and strategies of the national monopolies at the service level. Usually, domestic suppliers have enjoyed high market shares in their home countries, and other non-domestic suppliers have often served other markets from national subsidiaries there, sometimes with local manufacturing facilities.

(24) The prevailing view among manufacturers of telecommunications equipment and telecom operators is that the markets for telecommunications equipment are in the process of opening up to international competition. The following factors are relevant to that judgment :

— technological developments,

— international standards and national specifications/type-approval of equipment,

— the application of public procurement directives,

— liberalization of public voice telephony and telecoms infrastructure.

(a) *Public switching*

(25) The technology of public switching equipment is complex and has an important impact on the geographic market definition. An operator will generally only use a maximum of three different

[1] OJ No L 297, 29. 10. 1990, p. 1, replaced by Directive 93/38/EEC (OJ No L 199, 9. 8. 1993, p. 84).
[2] OJ No L 122, 17. 5. 1991, p. 48.

types of switches in significant quantities in a network. Once the suppliers have been chosen for a particular network, then those suppliers will install the switches and provide software upgrades to the operator. Should an increase in capacity be needed with requires additional switches at that location, then for technical reasons the same supplier is likely to be used.

(26) This technology 'lock-in' effect leads to differing conditions of competition at different stages in the life cycle of a switch. The opportunity to supply new switches to a network is the subject of a high degree of competition between switch manufacturers. At that stage, competition takes place amongst the major public switch manufacturers at least on a Europe-wide basis and possibly on a worldwide basis. However, once the two or three suppliers have secured the contracts, it becomes more difficult for new entrants to enter the market whilst that technology remains extant. Only in exceptional circumstances, for example if an existing supplier fails to perform to the satisfaction of the customer, will a new supplier get the opportunity to enter the market. Market structures to supply operators then remain relatively stable until the next new technology is introduced (which in the case of public switching will be ATM switching).

(27) The international standards making bodies, and in particular ETSI, are in the process of drawing up standards for public switching equipment. Other standards are developed independently and are subsequently validated by ETSI. Given manufacturers' wishes to protect their intellectual property and the continuing development of the standards, it cannot be said that international standards yet exist for digital switches. Therefore, though standardization is breaking down the barriers between markets, it has not yet completely taken place and so significant differences amongst Member States remain for existing digital switch technology.

(28) For new technology, such as ATM switches, the picture may be different. ATM switches are currently being pilot tested in a number of European countries and the testing programme is the subject of some cooperation between telecom operators. It may be expected therefore that once ATM is introduced, a higher level of standardization across Europe may have been achieved than was the case when digital switches were introduced. The experience of the manufacturers and operators in ETSI and elsewhere in cooperating to produce standards may also make a wider standards more likely with ATM and other new technology.

(29) The application of public procurement directives in the switching sector is closely related to the technology and standardization factors outlined above. Pursuant to Article 20 (2) (e) of Council Directive 93/38/EEC, Telecom operators may use a procedure without a prior call for competition, for example, where a change in suppliers would oblige the contracting entity to acquire material having different technical characteristics which would result in incompatibility or disproportionate technical difficulties in operation and maintenance. Other small purchases of equipment may fall below the threshold or be part of framework contracts covering more than one individual purchase. All these factos tend to support a national market definition. Conversely, when new technology is introduced, then the procurement directives should be applied fully, with invitations for tender from all possible suppliers. This would tend to imply a European or wider market definition.

(30) Liberalization at the level of the operator will also have an effect on the geographic market definition. Liberalization of public voice telephony, which is scheduled for 1998, the open network provision directive and, most importantly, liberalization of the infrastructure will almost certainly lead to a broader market definition than national markets as the new operators will not be constrained by the existing network standards and will have a free hand when choosing their equipment suppliers.

(31) Competition in the public switching market only properly takes place at a European level when a new technology is introduced. Once the suppliers of that technology have been chosen by the network operator, competition only takes place between these suppliers. This is as a result of the lock-in of technology and the current infrequent use of tender procedures under the procurement directives for upgrades to and extensions to existing technology. The liberalization of services and infrastructure appears to be the main factor which will ensure a European or wider market with the continuing process of European standardization also helping to confirm this market definition.

(b) *Transmission*

(32) For transmission equipment, not all of the factors listed for public switching apply. Standardization of transmission equipment is more widespread, partly because the interface aspects of the equipment are more important than for switches. A higher priority is, therefore, necessary for compatibility with other types of equipment from other manufacturers. Operators do not limit their sourcing of transmission equipment to three suppliers in the same way that takes place for switching. Market shares are therefore lower as more companies can supply one operator.

(33) Transmission equipment is a market which is more open than public switching and the market shares of the parties in the Italian market are lower. Even on the basis of the worst case scenario, which would be a national market definition, the operations does not cause competitions problems, so the precise market definition can be left open.

(c) *Mobile radio networks*

(34) Operators of mobile radio networks throughout western Europe have confirmed that they purchase telecommunication equipment throught tender procedures. The geographic location of the equipment manufacturers has little relevance in the decision to choose a supplier and in all cases the main suppliers worldwide were in a position to submit a bid. In any case, and in view of the position of the merged entity in Italy and in Europe, the exact definition of the geographic makret may be left open in this case since the notified operation does not raise serious competition concerns.

Private telecommunications equipment and communication terminals

(35) The markets of private switching and related terminals and communication teminals seem to be relatively more open to competition, with a higher penetration of non-Italian companies. None of the competitors or clients consulted during the investigation have indicated the existence of legal or technical barriers to access to Italy. In any case, and given the position of the notifying parties on these markets, the precise geographic market does not have to be defined in this decision. The notified transaction does not raise any major concerns in the markets of private telcommunication equipment and communication terminals, either at national or European level.

VI. ASSESSMENT

(36) In order to assess the competitive impact of this operation, the following factors have to be taken into account, besides the market positions of the parties :

— public procurement rules,

— changes in technology,

— trends in liberalization, and

— vertical aspects.

(A) Public telecommunication equipment

(37) A general overview of the worldwide industry of public telecommunication equipment is provided in the following ranking of companies, with their respective worldwide turnover in communications equipment in million dollrs in 1993, together with their respective share of the total sales of these companies.

Company	Sales	% share
1. Alcatel Alsthom	14 544	15,70
2. Siemens	11 986	12,94
3. AT&T	11 783	12,72
4. NEC	8 714	9,41
5. N. Telecom	7 861	8,49
6. Ericsson	7 703	8,32
7. IBM	5 300	5,72
8. Fujitsu	4 388	4,74
9. Bosch	2 655	2,87
10. Nokia	2 161	2,33
11. GEC	1 917	2,07
12. Philips	1 813	1,96
13. Samsung	1 788	1,93

Company	Sales	% share
14. Italtel	1 558	1,68
15. Ascom	1 538	1,66
16. Matra	1 508	1,63
17. Oki	1 462	1,58
18. Hitachi	1 429	1,54
19. Sagem	1 049	1,13
20. DSC	731	0,79
21. DeTeWe	721	0,78
Total	92 609	100,00

Source: Communications Week International. Companies specialized in private network systems, mobile networks or data networks have not been included.

1. *Market shares of the parties*

Public switching

(38) The initial market shares calculated by the parties in their notification for public switching referred to a market inclusive of public switching and operating support systems (OSS), power equipment and other relating exclusively to the purchases of switching and OSS by the telecom operator (TO) in Italy. The inclusion originally of the other products in the market brought in suppliers which are not able to sell switches as such and therefore are not competitors of the parties in the strict sense, with the result that the parties' initial market shares were underestimated. On this basis, the market value, sales and respective market shares of the parties and their main competitors in Italy are established as follows:

Purchases of Telecom Italia

(Ecu million)

Italtel Siemens *Combined* Alcatel Ericsson Others	(. . .)(1)
Total	

(1) Deleted as business secret.

Market shares (1)

(in %)

	1991	1992	1993
Italtel	40-50	50-60	40-50
Siemens	5-10	5-10	5-10
Combined	50-60	60-70	50-60
Alcatel	10-15	10-15	10-15
Ericsson	15-20	10-15	15-20
Others	10-15	10-15	15-20
Total	100	100	100

(1) Precise figures deleted as business secret.

Competitors have broadly confirmed this magnitude of market shares, although they estimate that Siemens and Italtel combined share remained at roughly 60 % in 1993.

(39) Market shares in the Community amount to 20 % in 1991, 23 % in 1992 and 24 % in 1993 for Siemens and 12 % in 1991, 12 % in 1992 and 8 % in 1993 for Italtel. The combined market share represents therefore 32 %, 35 % and 32 % respectively.

(40) The main impact of the notified operation from a competition point of view is in principle restricted to Italy, since the sales of Italtel and the overlap of the parties' activities are basically concentrated in this country. In a broader geographic market, Italtel

is a smaller player, and the joint venture is not likely to have a significant impact on the competitive relations between the 10 leading worldwide suppliers of telecommunication equipment. The combined market share of the parties in the sales of public switching equipment in Italy will be substantial by the usual standards applied under Regulation (EEC) No 4064/89 (about 55 to 60 % depending on the year taken as reference). However, it has to be noted than this market share is not higher than the market shares of the leading suppliers in other Member States. Information submitted by the parties themselves, competitors and the public telecom operators (TOs) in Germany, France, the United Kingdom, Spain, Denmark, Netherlands, Belgium and Ireland show in fact that the Italian market structure is relatively less concentrated than in any other Member State of a comparable size, regardless of the extent of liberalization.

(41) The high concentration of the supply of switches in all Member States is largely explained by the fact that TOs normally limit the number of different technologies or systems coexisting in a network to a maximum of two or three. Factors such as network management, training, service logistics, security and the introduction of new services in the network lock operators into a limited number of suppliers. Furthermore, once a technology has been introduced into the network, given the long life cycle of switches (around 15 years, never less than 10, see point 16), demand for public switching is basically driven by upgrades and extensions of the network. This market must be awarded to the original supplier of the already installed switch for reasons of costs and efficiency. With the exception of the time when a new major technology (i. e. digitalization) is going to be introduced in the basic network, demand for switching equipment is largely determined by this lock-in effect arising from the original choice of suppliers for the installed base. This fact has been confirmed by both competitors and TOs and it is further confirmed by the existing situation in various Member States.

(42) In Germany, the public network includes only two technologies: Siemens' and Alcatel's. There are other suppliers of public switches (Bosch and DeTeWe for instance), but the supply Siemens' technology under licence. In France, Alcatel and Ericsson supply all the purchases of France Telecom, since the French network is composed of only these two systems. In the United Kingdom, the installed base comprises switching systems from GPT and Ericsson. It is true that there are other companies suppling switches to British Telecom (BT), such as Alcatel, Northern Telecom and AT&T. However, these purchases referred to one-off operations for field trials or for the establishment of overlay networks to provide special services, such as a virtual private networks or free call services. Their share of BT's purchases is limited, and their presence does not alter the fact that BT's basic network comprises only two switching systems, and that therefore GPT and Ericsson account together for most of BT's purchases of public switches. In Belgium, only two systems are used: Alcatel and Siemens. In Spain, the basic network is composed of Alcatel switches and to a lesser extent, Ericsson and AT&T. In Portugal all purchases of equipment in 1992 to 1994 were supplied by either Siemens or Alcatel, since these are the only systems installed. In Ireland, the network is based on Ericsson and Alcatel systems. Finally, three different system are installed in Italy: those from Italtel, Alcatel, and Ericsson. Siemens' subsidiary in Italy sells Italtel's systems under licence. Consequently, Italtel, Alcatel and Ericsson account for most of the purchases of switching equipment of Telecom Italia.

(43) In view of the above considerations, it cannot be concluded that aggregation of the market share within the merged entity in Italy constitutes in itself a proof of possible dominance. A high concentration of the supply of public switching systems is the normal consquence of the basic rationale underlying demand for these products.

Transmission

(44) The sales and respective market share of the main competitors for transmission equipment in Italy are as follows according to the notification:

Sales of main competitors

(Ecu million)

STET Siemens *Combined* Alcatel Marconi Others	(...)
Total	

Market shares (1)

(in %)

	1991	1992	1993
STET	30-40	40-50	30-40
Siemens	10-15	5-10	5-10
Combined	50-60	50-60	40-50
Alcatel	25-30	20-25	25-30
Marconi	15-20	15-20	15-20
Others	5-10	5-10	5-10
Total	100	100	100

(1) Precise figures deleted as business secret.

(45) Market shares in the Community amount to 18 % in 1991, 20 % in 1992 and 18 % in 1993 for Siemens and 8 % in 1991, 9 % in 1992 and 5 % in 1993 for Italtel. The combined market share represents therefore 26 %, 29 % and 23 % respectively.

(46) The lock-in effect arising from the installed base described above for public switching plays a much lesser role with respect to transmission. Standardization for transmission is relatively more advanced and generally TOs in the EC tend to diversify more their sources of supply. Detailed information submitted by TOs in the United Kingdom, France, Germany, Denmark, Belgium and Spain as well as Telecom Italia show that there are usually at least three main suppliers of transmission equipment, and in most cases several other less important ones.

2. *Public procurement*

(47) Purchases of public switching and transmission equipment in the EC have been subject to the public procurement directive, Directive 93/38/EEC for almost two years now.

Switching

(48) Purchases of public switching under the public procurement directive, however, have in most cases been carried out without using a call for tenders procedure. Most of these purchases have been done either applying the derogation pursuant to Article 20 (2) of the Directive which includes an exception for technical reasons or reasons connected with protection of exclusive rights, or under multiannual contracts entered into be the TOs with their traditional suppliers prior to the entry into force of the Directive. Suppliers of public switching equipment have also stated that the situation is not likely to change in the future, with regard to the extension or upgrading of the installed base. As stated above, there are technical reasons for awarding this type of contract to a given supplier. However, public procurement is likely to play a more important role at those times when TOs are considering the introduction of new major technological developments (such as digitalization or ATM broadband switching) in their networks. This situation opens up the possibility for TOs to consider new suppliers and for suppliers to enter *de novo* a public network. In this situation, tendering procedures would indeed be justified. An example of this is provided by the pan European ilot trials of ATM switching. Telecom Italia, as most of the other 15 TOs involved in this trial, issued a call for tenders following the procedures foreseen in the Directive. The call for tenders was published in the *Official Jorunal of the European Communities* and the technical specifications were based on ETSI standards. Eight manufacturers were in a position to bid, including Italtel and Siemens. The competition was won by Erricsson and Alcatel.

Transmission

(49) Because of the lesser constraints to diversify the sources of supply and the relatively higher degree of standardization of transmission equipment, the impact of public procurement has been relatively higher in this market. In 1993, three TOs had purchased significant amounts of their requirements after calls for competition. In 1994, there has been a significant increase in the proportion of purchases acquired after calls for tender, and TOs in other Member States have started to use them. However, in most cases, the larger part of the purchases were still attributable to multiannual contracts established before the entry into force of Directive 93/38/EEC, notably in Italy.

3. *Technology*

(50) The public telecommunication equipment industry, and in particular the development and manufacture of public switching, is research intensive. Companies typically spend around 15 to 20 % of their turnover in R&D. The cost of developing a new generation of telecommunication switches has been estimated as high as ECU 4 billion by the parties. The figure varies depending on whether it refers to a small local switch or a major international exchange. Lifetime expenditures for a major family of digital exchange systems (such as EWSD from

Siemens or Linea UT from Italtel) approach ECU 1,6 billion. According to information submitted by the parties, the main suppliers of public switches (Alcatel, AT&T, Ericsson, Northern Telecom, Siemens) each invested close to 500 million dollars or more in R&D for public switches in 1992. These costs must be regarded as necessary to be able to maintain a competitive position from a technological point of view. Long-term viability in the market requires therefore a certain minimum amount of sales in order to be able to develop a new generation of switches and maintain the usual ratio in the industry of R&D expense to sales. Technology constitutes therefore another factor leading to a relatively high concentration of supply.

(51) The major technological developments regarding public switches have been described above, under product market definition. An important effect in this context is that major technological innovations typically give rise to operators considering new suppliers and suppliers considering opportunities to enter into new markets. In this context, and to analyse the possible impact of the notifed operation, it has to be noted that Telecom Italia has already made its choice of suppliers of digital switches (Ericsson, Alcatel and Italtel). Although ST has sold switches in the past in Italy, it has to be noted that these were not Siemens switches, but UT switches manufactured under licence from Italtel.

(52) The digitalization of the Italian network was decided according to an architecture defined during the 1980s, when the decision to move from analogue systems to digital systems was taken. This architecture is based on about 600 areas, within each of which the switching system is homogeneous. At that time, SIP assigned each single switching area through negotiations with all manufacturers of switching equipment that were able to guarantee maintenance service and assistance throughout the whole national territory. The last assignment of an area was done in 1991. It is improtant to note that with the transition from analogue to digital, SIP considered reducing the number of systems in its network from three to two, in line with the situation in other Member States. The choice has been described by representatives of Telecom Italia as a trade off between increased operating costs (in terms of maintenance and introduction of new services) and maintaining leverage against suppliers. The decision was taken to accept higher operating costs and maintain three different systems in the network, unlike most other TOs in the Community.

(53) The next technological discontinuity that may be compared to digitalization is the introduction of ATM switching. At present, no competitor expects large commercial orders for ATM switches in the public sector before the end of the century. Furthermore, there is at present uncertainty about the extent to which ATM switches will really replace digital public voice networks. The possibility remains that ATM will only be introduced in overlay networks for specific services of a limited scope, or that it be restricted to LAN or LAN interconnections. In any case, it has to be noted that the next round of competition for public switching will take place, if at all, under a market structure that will have been substantially modified by liberalization of basic services (anticipated in Italy by 1998) and infrastructures.

(54) With respect to ATM switches, it has to be noted that the experience in those countries that have started to introduce overlay networks with ATM switches or in the commercial applications for ATM in data transfer has shown the emergence of non-traditional public telecommunication equipment suppliers. According to specialized press reports, there are number of non-conventional suppliers of public switches that have already won commercial contracts from public network operators in the United States of America, Finland, Switzerland, the United Kingdom and Denmark.

4. *Liberalization of services and infrastructures*

(55) Competitors contacted by the Commission in its enquiries, have stressed that liberalization of services and infrastructures is more relevant to the actual functioning of the public telecommunication equipment markets than the traditional approach based on standardization and public procurement. Liberalization of public voice service is planned from 1 January 1998 [1]. Furthermore, the Council of Ministers agreed on 17 November 1994 on the principle that public telecommunications infrastructures should be liberalized at the same time as the remaining services. It has to be noted that Italy is not among the countries that have requested specific derogations to these objectives.

[1] Council resolution of 22 July 1993 on the review of the situation in the telecommunications sector and the need for further development in that market (OJ No C 213, 6. 8. 1993, p. 1)

(56) According to some competitors, the progressive liberalization of services (private telecommunications, GSM) has reduced the potential for revenues of the TOs. TOs have lost significant markets and when they have still maintained a presence in those markets, prices and margins are in any case constrained by competition. The result of the liberalization of services could therefore, indirectly induce pressure on TO's to purchase equipment competitively even in the non-liberalized areas if they want to maintain their overall profits. Most other competitors have nevertheless focused on the liberalization of infrastructures as the determinant factor to introduce actual competition in this market.

(57) On the other hand, it has to be considered that even if infrastuctures are fully liberalized, the current monopolists will still enjoy a very strong position in their home markets until new entrants progressively set up their own infrastructures. In any case, the decisions as to the principle of liberalization and its time frame have been already adopted. This is of particular importance in view of the long life cycle of switches, because the decisions as to the infrastructure that TO's will build in the following years will have an irreversible impact for a long time frame, and consequently, the decisions regarding the choice of systems and technologies that will determine the basic telecommunications infrastructure of a country cannot ignore the future impact of these measures.

5. *Vertical aspects in public telecommunication equipment*

(58) One of the reasons for which the Commission decided to open a second phase investigation in this case relates to the fact that one of the parents of the joint venture, STET, controls Telecom Italia. Telecom Italia enjoys exclusive rights to provide public telecommunication services and to install and operate the relevant infrastructure in Italy and consequently, it is not subject to the usual competitive constraints in its own markets. On the other hand, the other parent of the joint venture, Siemens, is a European and world leader in telecommunication equipment. Therefore the notified operation raised serious doubts as to its compatibility with the common market since there was, in principle, scope for STET and the joint venture to significantly distort competition among suppliers of public telecommunication equipment in Italy.

(59) After the second phase investigation, and having consulted a large number of telecommunication equipment manufacturers and telecommunication operators, the Commission concludes that the notified concentration does not create or reinforce a dominant position in the markets of public telecommunication equipment (switching and transmission) for the reasons given gelow.

(60) First of all, it is necessary to examine the extent to which the notified concentration creates a market structure such that the objective interest of STET to force Telecom Italia to pursue an anticompetitive purchasing policy, or give privileged treatment to a supplier, is created or reinforced. In this respect, it has to be noted that if the notified concentration is not implemented, STET will continue to have full control of Italtel through the ownership of its share capital. In the situation where the concentration has been implemented, the benefits of any privileged treatment to the joint venture imposed on Telecom Italia by STET would be shared with Siemens. Prima facie, the notified operation reduce therefore the objective interest of STET or Telecom Italia to favour the joint venture at the expense of Telecom Italia, for instance by accepting higher prices for equipment. This is more so since Siemens gains a direct influence only over the equipment supplier (Italtel), and no influence at all over the telecom operator (Telecom Italia) or over its parent (STET). Such an operation would be of a very different nature.

(61) STET's or in the last instance, IRI's, economic interests are much wider with respect to the provision of telecommunication service than with respect to the manufacture of telecommunication equipment. The turnover generated by Telecom Italia represents roughly 80 % of the total turnover generated by the companies belonging to the STET group.

(62) Although STET has control of Telecom Italia, a large part of the share capital of both companies (over 40 %) is in private hands. Both companies cannot be identified as one single entity and certainly the interests of a large part of the shareholders of Telecom Italia are clearly distinguishable from those of the future joint venture. The distinction between the interests of the service activities and the manufacturing activities within the STET group has been further reinforced in the framework of the reorganization of STET, through the creation of Tecnitel, a 100 % owned company of STET. Tecnitel constitutes a separate organizational level in the structure of the STET group whose main function is the supervision of the manufacturing activities of STET, including the planning, technical and economic control of the manufacturing

businesses and the exercise, on behalf of STET, of the voting rights in the shareholders meetings in the manufacturing companies. Furthermore, in the course of the proceedings, STET stated in writing that it would not interfere in the purchasing policy of Telecom Italia, more in particular with regard to the choice of suppliers, and that it will maintain a clear separation of the Boards of Directors, the CEO, and in general the management of Telecom Italia, Tecnitel and the companies of the Italtel group.

(63) The structural characteristics of the public telecommunication markets described above, and the evidence gathered during the investigation, indicate that the entry of Siemens in the capital of Italtel will not result in a significant deterioration of the conditions of competition. The shareholder link between Siemens and STET and STET and Italtel is unlikely to have any major effect during the process of upgrading and extending of the existing network, since the decisions about the systems on which the network will be based have already been taken. This is further confirmed by the forecasts of revenues established by the parties for the joint venture, where most of the growth of the joint venture's turnover will be achieved through exports. The joint venture agreements set a target for the joint venture attain 40 % of its sales on export markets by 1997. Furthermore, none of the current competitors of the parties in Italy have approached the Commission during the second phase investigation to express serious concern as to maintaining their present position in Italy.

(64) With regard to the longer term, and in particular to the introduction of new technologies, the markets for telecommunications equipment are in the process of transformation due to (i) the possible development of large markets because of technological developments, (ii) the fact that the effects of standardization and public procurement legislation will progressively have a larger impact in opening up national markets, (iii) the further progress towards liberalization of services and, foremost, the liberalization of infrastructures which will lead more and more to the creation of a worldwide market for public telecommunications equipment. The effects of the combination of these developments have already been seen in the area of mobile communications, where the definition of a European standard (GSM), the liberalization of services and the liberalization of infrastructures have resulted today in the creation of a European, if not worldwide, market for the supply of telecommunication equipment.

Mobile radio networks

(65) In mobile radio the market share of Italtel in the last three years has been declining (from 64 % in 1990/91 to 39 % in 1992/93), while Siemens has reached a 6 % market share in 1992/93. The main competitors of the parties are Ericsson with a market share of 41 % in 1992/93 and Alcatel with a market share of around 10 %.

Furthermore the market for mobile radio networks in Italy has been opened to competition with the introduction of a second GSM mobile phone operator Omnitel-Pronto Italia Consortium which has been awarded the contract by the Italian Government after bidding.

From the investigation carried out in the European countries already opened to competition it can be stated that the access of a second mobile phone operator for GSM in Italy will have a significant impact on the competitive situation of the market of the equipment for mobile radio. In fact it is the usual practice of the new operators to build their own infrastructure for the provision of mobile telecommunication services utilizing the equipment of a variety of manufacturers. Some of the GSM operators have more than one supplier for each of the various parts of the mobile radio infrastructure (switching, base station, microwave equipment and terminals).

GSM is an autonomous network, interfacing with the rest of the telecommunication infrastructure at clearly defined points. GSM architecture has been defined in the GSM recommendations promulgated by ETSI and adopted as national standards in the EEA countries. The clear architecture and interface structure of GSM have had the effect of creating a truly European-wide (and subsequently worldwide) market for the equipment.

Generally the suppliers of infrastructure are chosen on a worldwide basis via tenders. A lot of suppliers were invited to tender for contracts. These include Siemens, Ericsson, Sel-Alcatel, Nokia, Motorola, Matra, AT&T, Northern Telecom and Orbitel.

The more common criteria followed by GSM operators to award contracts to suppliers are :

— technology,

— reputation of the supplier,

— price,

— engineering and technical knowledge,

— ability to meet delivery requirements.

The choice of equipment is crucial for the competitiveness of the service of GSM operators. Even if the market of the service has a strong local component, the market for GSM's equipment is worldwide.

(B) **Private telecommunication equipment**

(66) With regard to private telecommunication equipment, for the segment of PBX, KTS and related terminals, the market share of Italtel has been declining (from 22,9 % in 1990/91 to 17 % in 1992/93), while Siemens had a market share of 9 % in 1992/93. In compliance with the Commission Directive 88/301/EEC of 16 May 1988 on competition in the markets in telecommunications terminal equipment [1], the individual markets are now fully liberalized. There is a large number of manufacturers which are active on the market. In line with the fragmented production sector, distribution is carried out by a large number of sellers.

(67) With regard to private telecommunication equipment, the customers contacted in the investigation have stated that, even after the completion of the transaction, they will continue to have a sufficient number of alternative suppliers to purchase from. Generally they have indicated that they purchase through SIP, which has given them the possibility of choosing the products of different manufacturers (Siemens, Alcatel, Italtel, Ericsson). They have also indicated that there are other potential suppliers like Philips, Olivetti, IBM and Northern Telecom. The competitors contacted by the Commission have in general stated that they do not face any major obstacle to selling in Italy.

(68) The position of the merged entity in any of the private telecommunication equipment markets is comparatively weaker than in the public telecommunication sector in terms of market shares. Also, Italtel has lost significantly in its market share in the last three years. Even though SIP continues to enjoy a very strong position as a distributor direct sales from suppliers to customers are possible in the absence of legal barriers. The competitors have stated that they can address the Italian market selling directly or through channels of distribution other than SIP, like independent distributors.

VII. **CONCLUSION**

(69) For the reasons outlined above, the Commission considers that the proposed concentration does not lead to the creation or reinforcement of a dominant position in any of the markets identified above in the sectors of public and private telecommunication equipment, as a result of which effective competition would be significantly impeded in the common market within the meaning of Article 2 (3) of Regulation (EEC) No 4064/89. The concentration can therefore be declared compatible with the common market,

HAS ADOPTED THIS DECISION:

Article 1

The proposed concentration between STET and Siemens is declared compatible with the common market and the functioning of the EEA Agreement.

Article 2

This Decision is addressed to:

STET Società Finanziaria Telefonica SpA
Corso d'Italia 41
I-00198 Roma

and

Siemens Aktiengesellschaft
Wittelsbacherplatz 2
D-80333 München

Done at Brussels, 17 February 1995.

For the Commission
Karel VAN MIERT
Member of the Commission

[1] OJ No L 131, 27. 5. 1988, p. 73.