COMMISSION OF THE EUROPEAN COMMUNITIES

COM(83) 573 final

Brussels, 29 september 1983

COMMUNICATION FROM THE COMMISSION
TO THE COUNCIL ON TELECOMMUNICATIONS
- LINES OF ACTION -

1. TELECOMMUNICATIONS - AN IMPORTANT ECONOMIC SECTOR IN ITS OWN RIGHT - IS DEVELOPING INTO A MAJOR INFRASTRUCTURE FOR THE COMMUNITY'S INDUSTRIES AND SERVICE SECTORS.

Telecommunications offers the key infrastructure for the development of the all pervasive New Information Technologies (IT). It will account world-wide for some 100 billion $ US of the 1990 IT industry which will be well over 500 billion $ US in total ($ US 1980).In the Community, it currently buys 17% of micro-electronic components - the main IT technology. It is a vital medium for IT technologies in general, and it is the base for emerging markets for information and other services.

Over the period 1983-1993, the telecommunications equipment sector, together with telecommunications services, will become one of the largest industry sectors.

2. In June 1983, the Commission put forward a first communication on the urgent problems in the Community's telecommunications sector and on the need for a Community telecommunications policy (COM(83)329).

It further set out the role of telecommunications in the context of the new policies requested by the Stuttgart mandate in its communication on raising the industrial competitiveness of European enterprises put forward in September 1983 in preparation of the Athens European Council (COM (83)547) - a Community policy for telecommunications is both indispensable in its own right, and goes hand in hand with one of the two other major priorities proposed in the industrial field, the ESPRIT research programme in Information Technologies.

In this context, the importance of a new policy approach to telecommunications, at a Community level, has been confirmed in recent memoranda by Member States on priorities for the new Community policies.

The present communication is intended to set out first conclusions and to indicate main lines of proposed action.

3. THE COMMUNITY AND THE MEMBER STATES MUST CREATE THE ENVIRONMENT FOR COMMUNITY-WIDE TELECOMMUNICATIONS MARKETS WHICH ALLOW EUROPEAN ENTERPRISES TO ATTAIN COMPETITIVENESS.

Competitiveness must be based on profitability. Sufficient profitability and therefore long-term viability depends on home-markets of sufficient size and, under European conditions, these can only be provided by the Community as a whole.

Investment in telecommunications represents the major current public effort towards shaping future markets in the Community. Total investment in the telecommunications infrastructure, according to the present rhythm of investment in the Member States, is estimated for the next decade at well over 150 billion $ U.S. (1980 $ U.S.).

It will be decisive for the Community's economic future whether this investment will lead to fragmented national markets and infrastructures in the Community, and to non-viable closed-off industrial structures; or generate Community-wide leading-edge markets which could drive the long-term economic revival of the Community.

4. The present situation and major problems in the key segments of the telecommunications market may be viewed as follows:

- the major telecommunications market - comprising switching, transmission and certain terminating equipment - is oriented largely towards its main application, i.e. telephone communication. Digitalisation of the network will be the major task during this decade and absorb the bulk of planned investment resources. 70-90% of this market is in the Community dominated by nationally oriented public procurement, resulting

in the fragmentation of this major part of the Community's telecommunications market into ten separate national markets. Several past Commission initiatives to address this problem via opening of the public markets have proved unsuccessful.

- the newly developing "telematics markets" comprising a wide range of new products represent vast markets with substantial growth potential - telematics terminals, private exchanges, new consumer electronics, office equipment and computer systems. Industrial expansion in these markets closely depends on the environment established by the network infrastructure. A critical problem is notably the rapid development of new services for the Community's enterprises at a multinational level - a problem of special relevance also to the Community's small and medium-sized entreprises.

  In this area, divergences in regulatory policies, in standards and acceptance procedures, and in the timing of the availability of facilities have up-to-now prevented true Community wide markets. A major problem is early general availability and precise timing of integrated voice and data network facilities up to transmission rates of 64 000 bit/s - facilities to be provided within concepts such as the ISDN.[1] Up-to-now, plans for ISDN in the Member States are widely diverging. The resulting lack of market transparency at Community level threatens the competivity of the European telematics industry - confronted with mounting pressure from the US and Japan.

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[1] *ISDN Integrated Services Digital Network. In current narrow-band ISDN concepts, user access would be generally limited to 64 000 bit/s

the future "wide-band networks"[2] - networks suited for video-communications and television distribution - depend for their development on public initiative for creating the infrastructures required in a growth-oriented forward-looking manner, and on early stimulation of the private user sector.[3] While it seems generally acknowledged that the ultimate aim of telecommunications development should be a wide-band network integrating narrow-band ISDN and wide-band communication and distribution, the timing of the availability of such infrastructures at the European level, and the plans for services to be offered are currently widely diverging; resulting in uncertainty for long-term planning and developments by European industry and by the Telecommunications Administrations, given the very massive amounts of investments required and the general scarcity of means.

5. This fragmentation of the Community telecommunications market into national markets has led to:

   - insufficient investment, from a macro-economic point of view, concerning notably the establishment of ISDN-type facilities and the lack of effort towards an accelerated development of wide-band services, at a Community level - their early availability is indispensable for the Community-wide development of the telematics industry and the rapid take-off of new service industries.

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[2] transmission rates of and greater 2 Megabit/s, based on modern cable, micro-wave, and optical fibre techniques.

[3] such as taking place by cooperation in the introduction of new services, as in the case of the shared experience on European television programmes (pilot project EURIKON and its future extensions)

- insufficient industrial structure, notably in the bulk telecommunications segments of switching and transmission. In Europe, nine different public switching systems have been developed on a national market basis - in contrast to the three projects in Japan and four United States projects, each with access to a much larger home-market.

- while the present bulk telecommunications market is fragmented into ten national markets and consequent negative effects currently become more and more evident in the perceptible decline of the Community's telecommunications export position, the planning divergences for narrow-band integrated services and the future integrated wide-band network threatens to sow the seed for future fragmentation in the two major growth areas - the new telematics markets and the new wide-band service markets.

- market fragmentation in the Community and the resulting orientation of enterprises towards national telecommunications policies of the Member States have led to an almost complete lack of spontaneous cooperation between European enterprises capable of providing a viable industrial structure in the longer term in this field. On the contrary, European firms, in order to attain viable shares of the world market, orient themselves more and more towards cooperation with US and Japanese firms, thus reinforcing the divergence of industrial policies and markets within the Community.

The divergence and uncertainty of telecommunications development in the Community and the fragmentation of its markets contrast with outside development:

- Japan has set up an overall planning framework with its $ 119 billion INS project ("Information Network System"). Within the firm limits of economic viability and technical feasibility, this gives a stable frame of reference to Japanese telecommunications infrastructure investment and developments

for its enterprises up to the year 2000. Japanese exports in advanced telecom are already now advancing at an astonishing rate in major markets.

- The new approaches to telecommunications policies in the United States and the subsequent restructuring of ATT are leading in this area to a more active American export policy in this sector, as shown both by US initiatives in international bodies concerning telecommunications markets and by first indications of a more restrictive policy regarding general availability of ATT research results.

6. A FORWARD-LOOKING APPROACH TO TELECOMMUNICATIONS MUST CREATE A COMMUNITY-WIDE TELECOMMUNICATIONS SPACE AND COMMUNITY-WIDE TELEMATICS MARKETS.

It must contribute towards industrial competivity in this sector, and must facilitate the multinational operations of the Community's enterprises - notably also of the smaller European information based companies depending on universal advanced public networks. It must lay the basis for the development of new markets and the new information and related services, and it must provide a major contribution to economic recovery and the creation of new employment.

Determined Community action towards these ends will be necessary, in the interest of all Member States. Such action , in order to be realistic and effective, must be sustained and should develop progressively. It should aim at:

- clearly defining Community-wide stable framework conditions for the rapidly developing new markets in which private investment is either predominant or making major contributions: the telematics, and the future wide-band / services, markets.

- allowing for the requirements for scale, notably in R&D, indispensable to develop the key technologies and systems, notably micro-electronics and opto-electronics, and related transmission and switching systems.

- towards this purpose, stimulating the cooperation of European firms, where appropriate, and within the limits of healthy competition.

- strengthening Community solidarity in this field in defending its interests at world market level.

- finding a realistic approach towards the opening of the present bulk telecommunications markets, given the entrenched national interests in this field.

- basing the approach on the cooperation of those who have the technological and management capability to master the vast and complex system telecommunications now represents: the PTT Administrations of the Member States; and on the joint concertation of the Administrations, of industry, of national government, and of the Community.

7. In order to attain these objectives, and within the spirit of the Stuttgart mandate aiming at the development of new forward-looking Community policies, the COMMISSION PROPOSES, AT THE PRESENT STAGE, TO THE COUNCIL TO ADOPT SIX MAJOR LINES OF ACTION:

I. SETTING MEDIUM- AND LONG-TERM OBJECTIVES AT THE COMMUNITY LEVEL. Generating more planning certainty is the essential pre-condition for shaping Community-wide markets and stimulating public and in particular corporate and private investments.

The Community needs a common long-term objective, with appropriate phasing of development at Community level towards this end, providing a stable common framework, allowing the inventory of needs and their articulation in common, and stimulating convergence over time, according to special situations and requirements in the Member States. Setting medium- and long-term objectives must include the taking into account of the new macro-economic role of telecommunications for the Community as a whole.

Such a framework must be based on the cooperation of those who have the responsibility to economically manage the resources invested : the PTT Administrations of the Member States. It must draw on the experience and exchanges in the established international organizations in this field, notably the Conference of European Postal and Telecommunications Administrations (CEPT) and the International Telegraph and Telephone Consultative Committee (CCITT); but, must also build on the firm framework of common political will in the Community

Concertation conceived in this spirit, will also create, at Community level, the forum at which emerging problems can be identified and priorities can be discussed.

II COMMON ACTION ON RESEARCH AND DEVELOPMENT REGARDING THE KEY SEGMENTS OF FUTURE DEVELOPMENT, in order to give a new stimulus to cooperation in research in this field, and to reach the economies of scale indispensable for the Community's future competitivity.

This concerns in particular cooperation of both industry and PTT research facilities on the development and engineering of the common projects proposed under IV, and on the

critical bulk segments on which industrial competitivity depends - including cooperation on the development of switching and transmission facilities, and research on required micro-electronic components, user interfaces, opto-electronics and related local broadband networks which will be a major component of the markets of the nineties - markets in which small and medium-sized enterprises will also have an important role to play.

Cooperation of this type will also help to use fully the results of the broader pre-competitive research on IT base technologies, to be carried on in the context of the ESPRIT programme.

III COMMON ACTION AT COMMUNITY LEVEL TOWARDS THE DEVELOPMENT OF FIRM INTERFACE STANDARDS AND A DEFINED MARKETPLACE WITHIN THE COMMUNITY, AND DEVELOPMENT OF COMMUNITY SOLIDARITY TOWARDS THE OUTSIDE. Community-wide defined interfaces between the public networks and the private telematics markets are needed in these new growth sectors by industry, private investment, and users. Building as far as possible on the work in CEPT and CCITT, the implementation of homogenous standards in those segments of the Community's telecommunications market where acute problems are posed at present, will also facilitate the development of acceptance procedures for equipment which correspond to the new requirements of speed and market development.

Reducing uncertainty for investors must also include a common position of the Community on the new international trade issues in telecommunications. Community solidarity can assure the effective defense of the Community's industrial and economic interests in the framework of the existing international bodies.

IV COMMON DEVELOPMENT OF THE TRANSNATIONAL PART OF THE FUTURE TELECOMMUNICATIONS INFRASTRUCTURE IN THE COMMUNITY, in order to generate a pace-setter for development and concrete common projects on which actual solidarity can develop and future oriented cooperation of industrial firms can be probed.

In a first stage, developments should notably satisfy the need for the rapid build-up of services for the Community's enterprises. In particular the economic success of smaller European information-based companies will depend on rapid progress along the lines proposed, aiming at the accelerated availability of a general advanced public network at the Community level. This will thereby be a necessary complement to other present Community initiatives aiming at the full use of the growth potential of small and medium-sized enterprises for the Community's economy.

Common development could draw on past and present experiences of cooperation in related fields. However, it should be backed by the more solid setting the Community can offer, notably Community financial support in both its forms : budget and lending instruments.

The cooperation could have three major priorities, all of them central to the creation of Community-wide markets :

- Transnational development of voice and data integrated services facilities at the Community level, with agreed timing for international availability in the Community, with agreed common interfaces for telematics equipment, and with flexibility respecting national extension of these facilities which remain the individual Member States' responsibility.

- Development in common of intra-European terrestrial broad-band links for carrying voice, data, and, as needs develop, video services, based on the most advanced optical fibre techniques. This common project should provide for an advanced Community-wide market in one of the key technologies of the future where the Community may otherwise fall back with regard to Japan and United States. It should allow European enterprises to form consortia and to work together in the development of this new technology.

- Common development of broad-band services at a Community level using the satellite communications currently being established by Member States, EUTELSAT and the European Space Agency (ESA), with the intention of later transfer to the terrestrial broad-band network, as appropriate. This should allow the active market development of broad-band services aimed particularly at the needs of the European business community, thus creating Community-wide markets for the new broad-band services, accelerating their introduction, diminishing uncertainty with regard to their market potential and pre-empting divergent developments in the Member States.

V USING FULLY THE MODERN TECHNIQUES OF THE NEW TELECOMMUNICATIONS FOR ADVANCING THE COMMUNITY'S LESS FAVOURED REGIONS, AND DEVELOPING THEIR INFRASTRUCTURE, by continuing the large scale investments of Community financial instruments in this field, notably of the European Regional Development Fund (ERDF), the European Investment Bank (EIB) and the New Community Lending Instrument (NCI).

As regards the lending instruments (EIB and NCI),the Community interventions in telecommunications, in 1982, have by-passed 600 Mio ECU. The share of these investments with regard to the total activity of these two instruments is increasing and will attain 15% for the current year.

Thus, the telecommunications sector is provided with substantial support in financial terms. This support will be the more effective, the higher the percentage of advanced technology projects. It should be also noted that NCI III has now the possibility to finance large-scale investment in industrial enterprises, when related to industrial cooperation at a Community level, and to advanced technologies.

VI COMMON ACTION LEADING TO THE OPENING OF THOSE PARTS OF THE COMMUNITY COMMUNICATIONS EQUIPMENT MARKET DOMINATED BY PUBLIC PROCUREMENT.

Setting the framework and undertaking the actions outlined above will create a new context and allow new approaches in this field, facilitating the working out of fair trade-offs for the parties involved. The courage to accept economic realities, and the development of Community solidarity towards the outside will be required.

Progressive opening of the telecommunication bulk markets will be the indispensable condition for a viable Community telecommunication sector in the longer term.

8. The new telecommunications will be a base infrastructure for the Community's future economy. They present a chance to improve economic efficiency and to diminish the separations and divergencies within the Community caused by distance. They will allow the Community to contribute more effectively to the advancement of the infrastructures in developing countries, notably as regards the Community's partners within the Lomé Convention, and to provide them with the most modern technologies. They offer a new range of services enhancing freedom of choice and the quality of life for Community citizens.

The Commission considers as indispensable, a firm commitment by the Council towards undertaking action along the lines proposed; in order to create conditions in the Community which will permit the problems posed in the telecommunications sector to be surmounted.

The Commission requests the agreement of the Council along these lines, in order to set into motion the more detailed definition of options and procedures leading to the progressive development of a common Community policy for telecommunications.1