DECISION No 1336/97/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL

of 17 June 1997

on a series of guidelines for trans-European telecommunications networks

THE EUROPEAN PARLIAMENT AND THE COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty establishing the European Community, and in particular the first paragraph of Article 129d thereof,

Having regard to the proposal from the Commission (1),

Having regard to the opinion of the Economic and Social Committee (2),

Having regard to the opinion of the Committee of the Regions (3),

Acting in accordance with the procedure laid down in Article 189b of the Treaty (4) in the light of the joint text approved on 16 April 1997 by the Conciliation Committee,

- (1) Whereas the establishment and development of trans-European telecommunications networks aim at ensuring the circulation and exchange of information across the Community; whereas this outlay in equipment is a precondition to enable citizens and industry — especially SMEs — in the Community to derive full benefit from the potential of telecommunications so as to make possible the establishment of the 'information society', in which the development of applications, services and telecommunications networks will be of crucial importance with a view to ensuring the availability for each citizen, company or public authority, including in the less developed or peripheral regions, of any type or quantity of information they may need;
- (2) Whereas, in its White Paper on 'Growth, Competitiveness and Employment', the Commission stressed the importance of establishing the information society, which, by introducing new forms of economic, political and social relations, will help the Union to face the new challenges of the next century, including the challenge of employment

creation; whereas this was recognized by the Brussels European Council of December 1993;

- (3) Whereas the internal market constitutes an area without borders, within which the free movement of goods, persons, capital and services has to be ensured, and where Community measures already adopted or in the process of being adopted require significant exchange of information between individuals, economic operators and administrations; whereas the fact of possessing efficient means of exchanging information is of vital importance for improving the competitiveness of undertakings; whereas these exchanges of information can be ensured by trans-European telecommunications networks; whereas the availability of trans-European networks will strengthen social and economic cohesion in the Community;
- (4) Whereas establishment and development of trans-European telecommunications networks must enable information to be freely exchanged between individuals, economic operators and administrations, while respecting individuals' rights to privacy and intellectual and industrial property rights;
- (5) Whereas, in June 1994, in their report on 'Europe and the global information society', which they prepared for the Corfu European Council of 24 and 25 June 1994, the members of a group of prominent representatives of industry recommended the implementation of trans-European telecommunications networks and the securing of their interconnectivity with all European networks; whereas the report identified mobile communications as a pillar of the information society whose potential should be strengthened; whereas the Corfu European Council gave its general approval to that recommendation;
- (6) Whereas those recommendations were followed by the Commission in its communication to the European Parliament and the Council entitled 'Europe's way to the information society: an action plan'; whereas the conclusions of the Council meeting on 28 September 1994 on this action plan stressed the fact that the fast development of high-performance information infrastructures is essential for the Community on the basis of a global, coherent and balanced approach;
- (7) Whereas Article 129c of the Treaty requires the Community to establish a series of guidelines covering the objectives, priorities and broad lines of

⁽¹) OJ No C 302, 14. 11. 1995, p. 23 and OJ No C 175, 18. 6. 1996, p. 4. (²) OJ No C 39, 12. 2. 1996, p. 20. (³) OJ No C 129, 2. 5. 1996, p. 32. (°) Opinion of the European Parliament of 1 February 1996 (OJ No C 47, 18. 2. 1996, p. 15) Council Common Position of 21 No C 47, 19. 2. 1996, p. 15), Council Common Position of 21 March 1996 (OJ No C 134, 6. 5. 1996, p. 18) and Decision of the European Parliament of 17 July 1996 (OJ No C 261, 9. 9. 1996, p. 59). Decision of the European Parliament of 14 May 1997 and Council Decision of 26 May 1997.

measures envisaged in the sphere of trans-European networks; whereas these guidelines must identify projects of common interest; whereas trans-European networks in the area of telecommunications infrastructure cover the three layers constituting these networks: applications, generic services and basic networks;

- (8) Whereas the information society cannot develop without the existence of accessible applications, and especially applications of collective interest, addressing user needs as well as possible, and taking into account, where appropriate, the needs of the elderly and disabled; whereas applications will thus form an important part of the projects of common interest; whereas the applications relevant to teleworking must take account in particular of legal provisions concerning workers' rights applying in the Member States concerned;
- (9) Whereas projects of common interest can, in many cases, already be implemented in the present telecommunications networks, especially the Euro-ISDN, and thereby offer trans-European applications; whereas guidelines have to be drawn up to identify these projects of common interest;
- (10) Whereas there should be coordination between the implementation of the proposals chosen and similar initiatives adopted at national or regional level in the Community;
- (11) Whereas in the selection and implementation of such projects account should be taken of all infrastructures offered by incumbent and new providers;
- (12) Whereas on 9 November 1995 the European Parliament and the Council adopted Decision No 2717/95/EC on a set of guidelines for the development of the EURO-ISDN (Integrated Services Digital Network) as a trans-European network (1);
- (13) Whereas the present networks, which include existing ISDN, are evolving towards becoming advanced networks offering a variable data flow rate up to broadband capabilities, adaptable to different needs, in particular to the provision of multimedia services and applications; whereas implementation of Integrated Broadband Communication Networks (IBC networks) will be the outcome of this evolution; whereas IBC networks will constitute the optimum platform for information society applications;

- (14) Whereas the work of the RACE Programme (specific research and technological development programme in the field of communication technologies (1990 to 1994)) laid down in Decision 91/352/EEC (2) has prepared the ground and provided the technology base for the introduction of IBC networks in Europe;
- (15) Whereas the work of the Esprit Programme (specific programme for research and technological development, including demonstration, in the field of information technologies (1994 to 1998)), laid down in Decision 94/802/EC (3), has prepared the ground and provided the technology base for the introduction of information technology applications;
- (16) Whereas the results of the work of the specific research and technological development programmes in the field of telematic systems of general interest (1991 to 1994) laid down by Decision 91/353/EEC (4) and of the specific programme for research and technological development, including demonstration, in the field of telematics applications of common interest (1994 to 1998) laid down by Decision 94/801/EEC (5) prepare the ground for the introduction of interoperable applications of common interest across Europe;
- (17) Whereas effective coordination needs to be ensured between the development of the trans-European telecommunications networks, which must address realworld concerns, without attempting to carry out purely experimental projects, and the different Community programmes, in particular the specific programmes of the fourth framework programme for research, technological development and demonstration, programmes in favour of SMEs, informationcontent-oriented programmes (such as INFO 2000 and MEDIA II) and other information society activities; whereas such coordination must also be ensured with the projects provided for by Decisions of the European Parliament and of the Council applying to trans-European networks;
- (18) Whereas the measures aimed at ensuring the interoperability of telematic networks between administrations fall within the framework of priorities adopted in relation to the present guidelines for trans-European telecommunications networks;

⁽²) OJ No L 192, 16. 7. 1991, p. 8. (²) OJ No L 334, 22. 12. 1994, p. 24. (⁴) OJ No L 192, 16. 7. 1991, p. 18. (²) OJ No L 334, 22. 12. 1994, p. 1.

^{(&#}x27;) OJ No L 282, 24. 11. 1995, p. 16.

- (19) Whereas in its communication of 24 July 1993 on preparatory actions in the field of trans-European networks in respect of integrated broadband communications, the Commission recognized the need to carry out preparatory actions with the sector actors to draw up appropriate guidelines; whereas the result of these actions forms the basis for the guidelines relating to IBC networks in this Decision;
- (20) Whereas the telecommunications sector is being progressively liberalized; whereas the development of trans-European applications, generic services and basic networks will increasingly rely on private initiative; whereas these trans-European developments must respond on a European scale to market needs or to actual and sizeable needs of society which are not covered by market forces alone; whereas, taking this into account, the interested sector actors will be requested to submit, through the application of appropriate procedures giving everyone equal opportunities, specific proposals; whereas these procedures have to be defined; whereas a Committee will assist the Commission for specification of projects of common interest;
- (21) Whereas a modus vivendi between the European Parliament, the Council and the Commission concerning the implementing measures for acts adopted in accordance with the procedure laid down in Article 189b of the Treaty was concluded on 20 December 1994 (1);
- (22) Whereas projects of common interest which relate to the territory of a Member State require the approval of the Member State concerned;
- (23) Whereas the Commission and the Member States will have to act to ensure interoperability of the networks and coordinate, on the one hand, the activities of the Member States aimed at implementation of trans-European telecommunications networks and, on the other, comparable national projects, only to the extent necessary to ensure overall coherence;
- (24) Whereas it is important, for the optimum development of the information society, to ensure an efficient exchange of information between the Community and third countries, in particular the States parties to the Agreement on the European Economic Area or countries having concluded an Association Agreement with the Community;
- (25) Whereas, however, activities undertaken in the context of these guidelines are subject to the full

application of the competition rules laid down in the Treaty and implementing legislation,

HAVE ADOPTED THIS DECISION:

Article 1

This Decision establishes guidelines covering the objectives, priorities and broad lines of measures envisaged in the sphere of trans-European networks in the area of telecommunications infrastructure. These guidelines identify projects of common interest by listing those projects in Annex I and by laying down the procedure and criteria for the specification thereof.

Article 2

The Community shall support the interconnection of networks in the sphere of telecommunications infrastructure, the establishment and development of interoperable services and applications as well as access to them, with the objectives of:

- facilitating the transition towards the information society, as well as providing experience on the effects of the deployment of new networks and applications on social activities and promoting the satisfaction of social and cultural needs and improving the quality of
- improving the competitiveness of Community firms, in particular SMEs, and strengthening the internal market,
- strengthening economic and social cohesion, taking account in particular of the need to link island, landlocked and peripheral regions to the central regions of the Community,
- accelerating the development of new growth-area activities leading to job creation.

Article 3

The priorities for the realization of the objectives referred to in Article 2 shall be:

- study and validation of the technical and commercial feasibility, followed by the deployment of applications supporting the development of a European information society, in particular applications of collective interest,
- study and validation of feasibility, followed by the deployment of applications contributing to economic and social cohesion, by improving access to information throughout the Community and building on European cultural diversity,

⁽¹⁾ OJ No C 102, 4. 4. 1996, p. 1.

- stimulation of trans-boundary interregional initiatives and of initiatives involving regions, in particular the less-favoured ones, for the launch of trans-European telecommunications services and applications,
- study and validation of feasibility, followed by the deployment of applications and services contributing to the strengthening of the internal market and job creation, in particular those offering to SMEs means to improve their competitiveness in the Community and at world level.
- identification, study and validation of the technical and commercial feasibility, followed by the deployment of trans-European generic services providing seamless access to all kinds of information, including in rural and peripheral regions, and interoperable with equivalent services at world level,
- study and validation of the feasibility of new integrated broadband communication (IBC) networks, where required for such applications and services, and promotion of the interconnectivity of such networks,
- identification and removal of gaps and missing links for effective interconnection and interoperability of all the components of telecommunications networks in the Community and at world level, with particular emphasis on basic telecommunications networks as defined in Annex I.

Article 4

The broad lines of measures to be implemented for achieving the objectives defined in Article 2 shall cover:

- specification of projects of common interest by the establishment of a work programme,
- actions aimed at increasing the awareness of individuals, economic operators and administrations of the benefits they can derive from the new advanced trans-European telecommunications services and applications,
- actions aimed at the stimulation of combined initiatives by users and providers to launch projects in the sphere of trans-European telecommunications networks, in particular IBC networks,
- support, within the framework of the methods laid down in the Treaty, for actions to study and validate the feasibility, followed by the deployment, of applications, in particular applications of collective interest, and encouragement of the establishment of public/ private collaboration, in particular through partnerships,
- stimulation of the supply and use of services and applications for SMEs and professional users, which constitute a source of employment and growth,
- promotion of interconnectivity of networks, of interoperability of broadband services and applications and

of the infrastructure they require, in particular for multimedia applications, and of interoperability between existing and broadband services and applications.

Article 5

The development of trans-European networks in the sphere of telecommunications infrastructure shall be undertaken under this Decision through the implementation of projects of common interest. The projects of common interest are listed in Annex I.

Article 6

In accordance with Articles 7, 8 and 9, projects of common interest listed in Annex I shall be specified, using the criteria listed in Annex II. The projects identified are eligible for Community support in compliance with Council Regulation (EC) No 2236/95 of 18 September 1995 laying down general rules for the granting of Community financial aid in the field of trans-European networks (1).

Article 7

- 1. On the basis of Annex I the Commission, following consultation of the sector operators and taking the other trans-European network policies into account, shall prepare a work programme, adopted in accordance with the procedure laid down in Article 8, and subsequently proceed with calls for proposals.
- 2. The Commission shall verify that the projects relating to the territory of a Member State are approved by the Member State concerned.

Article 8

- 1. The Commission shall be responsible for the implementation of this Decision.
- 2. For the cases specified in Article 9 (1), the Commission shall be assisted by a committee composed of representatives of the Member States and chaired by the representative of the Commission.

The Commission representative shall submit to the committee a draft of the measures to be taken. The committee shall deliver its opinion on the draft within a time limit which the Chairman may lay down according to the urgency of the matter. The opinion shall be delivered by the majority provided for in Article 148 (2) of the Treaty in the case of decisions which the Council is required to adopt on a proposal from the Commission.

⁽¹⁾ OJ No L 228, 23. 9. 1995, p. 1.

The votes of the Member States' representatives within the committee shall be weighted in the manner set out in that Article. The chairman shall not vote.

The Commission shall adopt the measures envisaged if they are in accordance with the opinion of the committee.

If the measures envisaged are not in accordance with the committee's opinion, or if no opinion is delivered, the Commission shall without delay submit to the Council a proposal relating to the measures to be taken. The Council shall act by qualified majority.

If, on expiry of a period of three months from referral of the matter to the Council, the latter has not acted, the proposed measures shall be adopted by the Commission.

Article 9

- 1. The procedure laid down in Article 8 shall apply to:
- the preparation and updating of the work programme referred to in Article 7,
- the determination of the content of calls for proposals,
- the specification of projects of common interest using the criteria set out in Annex II,
- the determination of supplementary support and coordination actions,
- the measures to be taken to evaluate the implementation of the work programme on a financial and technical level.
- 2. The Commission shall inform the committee, at each of its meetings, of the progress made in implementing the work programme.

Article 10

This Decision shall apply to the Integrated Services Digital Network (ISDN) without prejudice to Decision No 2717/95/EC of the European Parliament and of the Council.

Article 11

Member States shall take all the measures necessary to facilitate the implementation of the projects of common interest in conformity with Community rules. The authorization procedures which may be necessary shall be completed as quickly as possible in conformity with Community legislation.

Article 12

This Decision shall not prejudice any financial commitment by a Member State or the Community.

Article 13

The participation of third countries, in particular countries party to the Agreement on the European Economic Area or having concluded an Association Agreement with the Community, may be authorized by the Council on a case-by-case basis, in accordance with the procedure laid down in Article 228 of the Treaty, in order to allow them to contribute to the implementation of projects of common interest, and to promote the interconnection and interoperability of telecommunications networks, provided that it does not entail an increase in Community aid.

Article 14

Every three years the Commission shall submit a report on the implementation of this Decision to the European Parliament, the Council, the Economic and Social Committee and the Committee of the Regions.

The report shall contain an evaluation of the results achieved with Community support in the various project fields in relation to the overall objectives and shall contain an assessment of the social and societal impact of the introduction of the applications after they are deployed.

Together with that report, the Commission shall submit appropriate proposals for revision of Annex I to this Decision on the basis of technical developments and experience gained.

In the absence of a decision by 31 December of the fourth year, Annex I shall be deemed to have lapsed except in respect of calls for proposals which have already been published in the Official Journal of the European Communities prior to that date.

Article 15

This Decision is addressed to the Member States.

Done at Brussels, 17 June 1997.

For the European Parliament The President

I.M. GIL-ROBLES

For the Council

The President

A. JORRITSMA LEBBINK

ANNEX I

IDENTIFICATION OF PROJECTS OF COMMON INTEREST

The trans-European telecommunications networks will open up the Community market to the new applications and services which will form the basis for the development of the information society. They are essential for supporting Community prosperity, creating jobs, and strengthening economic and social cohesion.

A three-layer model has generally been accepted as the most appropriate framework for describing trans-European telecommunications networks. The layers are:

- the Applications layer, through which users interact with generic services and basic networks to meet their professional, educational and social needs,
- the Generic Services layer, which is made up of compatible generic services and their management. Through support of the applications' common requirements, and by providing common tools for development and implementation of new applications, these services supplement applications whilst aiding their interoperability,
- the Basic Networks layer, which provides the physical access, transport and switching elements of the networks, including their management and signalling. These elements ensure trans-European network interconnectivity.

These three layers form a coherent structure, where applications are supported by the two lower layers: generic services and basic networks. In particular, applications cannot be offered in the absence of one of the other two layers; however, each layer should be sufficiently open to support any element of the layer immediately above. In this context, projects of common interest should be identified on the basis of their operational capability to support the objectives laid down in this Decision.

The following sections identify in each layer of the trans-European networks the projects of common interest that must be specified in accordance with Article 9 and under the procedure laid down in Article 8.

1. Applications

Applications will need to take account of linguistic requirements and will need to be interoperable to bring the maximum benefit to the users across the Community. Where this can be applicable, they shall take into account the specific needs of less developed or less populated regions. They must address the widest possible populations of users and demonstrate citizens' access to services of collective interest. For the benefit of disabled people, special requirements should be taken into account in the early stage of the planning of projects and with regard to access to services.

The projects of common interest for applications are:

- A network for universities and research centres: an advanced trans-European network carrying multimedia applications should be established, linking universities and research centres across Europe, with open access to their libraries.
- Distance education and training: advanced distance education and training services should be made accessible to schools, colleges, businesses and individuals. Centres should be set up and made remotely accessible across the Community in order to provide courseware and training services for SMEs, large companies, education systems, and public administrations. New approaches to all relevant aspects of education and training should be developed and promoted to facilitate the transition towards the information society.
- Health telematics: trans-European networks and applications based on common standards should be deployed, which would link on a Community scale all the partners of the health sector, in particular general practitioners, hospitals and public health centres.
- Transport telematics: full advantage should be taken of trans-European telecommunications networks to provide user-oriented services, in the domains of logistical support for transport industries and of the development of value added services, such as information services, integrated payment and reservation services, trip planning and route guidance, and freight and fleet management. In addition, transport telematics services in urban areas should be covered, taking into account standardization and interoperability requirements. The deployment of these services, based on advanced fixed and mobile telecommunications networks, should provide, wherever possible, the necessary complementarity and interoperability with the trans-European transport networks.

- Telematics for the environment: trans-European networks can make an important contribution to the monitoring and management of the environment, including emergency management. This contribution can be brought about by the implementation of information systems collecting environmental data and making them available to the responsible authorities, and the establishment of reliable communications systems supporting interventions in emergency situations.
- Teleworking: the development of teleworking (in satellite offices and if possible in homes) supported by advanced telecommunications systems will help to provide new forms of flexibility in terms of the place of work and the way in which work is organized. Through the decentralization of professional activities, teleworking can also help to reduce the environmental consequences of daily commuting to population centres. The development of teleworking can be fostered by implementing projects making available individual telematic tools for teleworkers, as well as creating telework centres for itinerant workers. Special attention should be paid to evaluating and taking into account the social consequences of these applications.
- Telematic services for SMEs: projects of common interest will support the use of trans-European telecommunications applications and services by Community SMEs, with links to public authorities, trade associations, consumers, customers and suppliers and including information services and electronic trade. The awareness of telematics-based solutions in general should be raised among SMEs.
- Electronic tendering: a trans-European electronic tendering network should be set up, based on electronic procedures for the award of public contracts involving public administrations and suppliers in the Community.
- City information highways: the creation of networks and services should be promoted which interconnect households, businesses, social organizations and administrations and provide access to on-line multimedia information, education, cultural, entertainment and tourism services on a local, regional, national and Community basis. Links between city and regional networks should be promoted.
- Library services: trans-European advanced networked services involving all types of libraries (national, university, research, public, etc.) should be deployed to provide effective access to both the reservoir of organized knowledge and the cultural wealth held in libraries across the Community, in support of the economic, social, educational and cultural life of the Community.
- Telematic services for the job market: networked services, such as job information databases, should be developed to support the changing labour market in the Community and to help tackle unemployment
- Cultural and linguistic heritage: initiatives should be launched to foster the preservation of and access to the European cultural and artistic heritage, and to demonstrate the potential of the information infrastructure to stimulate creative endeavours and to support the development of local content in local languages and its dissemination.

2. Generic Services

The projects of common interest for generic services networks are:

- Implementation of operational trans-European generic services, which should include in particular electronic mail, file transfer systems, on-line access to electronic databases, and video services. As there is an urgent need for these trans-European generic services, they will use existing or emerging networks, fixed or mobile, and user access arrangements already in operation. They should include service elements operating at Community level, such as directories, clearing, authentication, data protection and information security, preservation and remuneration of intellectual property, trans-European 'kiosk' and networked navigational aids, services enabling citizens' access, payment services, etc.
- Progressive extension of generic services towards a multimedia environment. These services will offer end-users access to multimedia services, and might cover inter alia multimedia mail, high-speed file transfer and video services, including video-on-demand. Use of these multimedia services by business and residential users should be encouraged, as should the integration of new service elements such as automatic translation, speech recognition, graphical user interfaces, intelligent agents and tools for user interaction and personalization.
- Introduction of non-proprietary digital signature as a basis for open service provision and mobility of use: generic services will rely on a large number of complementary and competing service-providers. Open service provision and mobility of use will be of key importance and require electronic names (digital signatures) allowing adequate protection of privacy to be generally available and supported.

3. Basic networks

The projects of common interest for basic networks are:

- Euro-Integrated Services Digital Networks: for reasons of commercial and technical trans-European availability, ISDN is today the most appropriate digital switched basic network that can support new services and applications. Its present development makes it an opportunity for Europe, and its market and geographical extension will be justified by the implementation of these new services and applications on a European scale. However, it should be borne in mind that ISDN is only a first step and that it is going to evolve towards becoming merely a means of user access to broadband basic services. The removal of remaining gaps for the effective interoperability of services should receive special attention.
- Commercial introduction of Asynchronous Transfer Mode (ATM) and other IBC networks: this area must be considered as being of the greatest common European interest.
- Interoperation of existing and IBC networks: existing networks (for fixed, mobile and satellite services) should be interconnected and interoperate between themselves and with ATM-based high-speed networks, in order to offer the most appropriate economic solutions to the various situations which will occur during the setting up of the information society. This issue is at the core of the development of the IBC network, and is particularly relevant for SMEs, as well as for the professional and residential markets.
- Development of fixed, mobile and satellite networks with the aim of supporting the applications and services referred to above.

4. Projects of particular importance

Some of these projects of common interest are of particular importance for the development of the information society. These are generic services, the applications of collective interest concerning distance education and training, cultural heritage, services to SMEs and telematics for transport, the environment and health. Calls for proposals concerning these projects of particular importance or a combination thereof will be published, as a rule, at least once a year. The Commission will report to Parliament in this connection.

5. Supplementary support and coordination actions

In addition to its support for projects of common interest, the Community should initiate actions aimed at providing the appropriate environment. They will contribute to consensus development and concerted efforts concerning national and regional activities for stimulation and promotion of new applications and services, in conformity with the implementation of programmes in other areas, as well as the development of IBC networks. They will involve consultation with European standardization and strategic planning bodies and coordination with actions funded by the different Community financial instruments. This includes:

- development of target specifications, and transition towards these targets. These specifications will help sector actors to make sound economic investment decisions,
- definition of means of accessing IBC networks at the three specified layers,
- establishment of common specifications based on European and world standards,
- furthering cooperation among sector actors, in particular emerging and fragmented operators, such as cable television network operators, as well as with users,
- coordination of the activities undertaken under this Decision with related Community and national programmes.

ANNEX II

CRITERIA FOR THE SPECIFICATION OF PROJECTS OF COMMON INTEREST

Projects of common interest will be specified from among the projects submitted by interested sector actors in response to a call for proposals, as provided for in Article 7, on the basis of their compliance with the objectives and priorities laid down in Articles 2 and 3 respectively. These projects must be transnational in the sense that they shall be conceived to satisfy needs existing in several Member States. As a general rule, they shall be implemented in several Member States but implementation in a single Member State shall be allowed if it contributes to a broader trans-European interest.

In addition, account will be taken of the economic and financial criteria set out in Regulation (EC) No 2236/95. These criteria, which will be used in the framework of the said Regulation for deciding on the granting of financial support to a specific project, are:

- the potential economic viability of the project, which should be assured,
- the maturity of the project,
- the stimulative effect of Community intervention on public and private financing,
- the soundness of the financial package,
- the direct or indirect socio-economic effects, in particular on employment,
- the consequences for the environment,
- for cross-border projects in particular, coordination of the timing of the different parts of a project.