



COMMISSION OF THE EUROPEAN COMMUNITIES

Brussels, 30.05.1996
COM(95) 571 final

TRANS-EUROPEAN NETWORKS

ANNUAL REPORT

TO THE

COUNCIL AND

THE EUROPEAN PARLIAMENT

DECEMBER 1995

CONTENTS

CONCLUSIONS AND RECOMMENDATIONS	4
TRANS-EUROPEAN ENERGY NETWORK	6
Table: Financing the 10 priority energy projects	10
TRANS-EUROPEAN TELECOMMUNICATIONS NETWORK	11
TRANS-EUROPEAN TRANSPORT NETWORK	16
Table: Progress on Transport priority projects	24
Table: Problems concerning transport priority projects	25
Annexes: Setting up public/private partnerships in the transport sector	
I. Financing : Public/Private Partnerships	26
II. TEN and Competition in the transport sector	29
III. Public procurement rules for transport TEN	33
IV. Project authorities for trans-European network projects	34
CONNECTING WITH CENTRAL AND EASTERN EUROPE AND THE MEDITERRANEAN BASIN	36
JOINT ENVIRONMENTAL PROJECTS	40
Annexes	
I. Description of some specific waste project examples	48
II. Description of some specific water project examples	52
III. Criteria for Joint Environmental Projects	54
GENERAL TABLES:	
Progress of TEN legislative procedures	55
Community funding of TEN	56

The European Council, at its meeting in Brussels in December 1993, asked the Commission to submit to it each year in December a report on progress of the trans-European infrastructure networks in the spheres of transport and energy and on the implementation of the operation programmes in the area of information infrastructures.

The present report is drafted in the light of the conclusions of the Essen and Cannes European Councils.

CONCLUSIONS AND RECOMMENDATIONS

1. Trans-European networks are vital to jobs, competitiveness and cohesion in the European Union. Considerable progress has been made since Essen, but there remain substantial problems related to the level of priority of TENs projects in Member States and, especially in transport, their financing requires greater effort.

2. For **energy** TEN, the Commission considers that there is a need for Member States to speed up the examination of requests for authorizations. Similarly, the EIB should continue the examination of requests for financing for priority projects. The rapid adoption of the TEN energy guidelines is essential so that the Commission can implement them soon. The creation of the Internal Energy Market should also be a priority.

3. As far as **telecommunications** TEN is concerned, speedy adoption of the proposed TENs Telecom Guidelines is needed, together with confirmation of the importance of the IDA Programme as an essential component of TEN-Telecom.

4. The development of **environmental** network infrastructure requires approval of the definition of Joint Environmental Projects (JEPs) and their selection criteria. The Commission also supports moving forward into an operational phase in which a limited number of pilot projects in the waste and water sector will be selected and launched. Provisions should be considered so that JEPs could receive administrative and financial support analogous to that provided for trans-European networks.

5. For the **transport** TEN, the Council and European Parliament should compromise in order to adopt the transport network guidelines as quickly as possible.

6. Progress has been slower than anticipated on parts of some priority projects. The Member States concerned need to make concerted efforts to solve the problems that are holding up these projects, which will require national priorities to be adapted in consequence. Unfortunately, the national authorities concerned see no potential for substantial cost reductions without severely affecting the scope and viability of most of the priority projects. Research done for the Commission shows that the socio-economic return of international transport infrastructure projects is greater than previously thought. This should be taken into account when adopting the necessary decisions, requested by the Essen European Council, to "top up" the funds currently available for TENs.

7. Although the examination of individual priority projects shows substantial scope for enhancing the involvement of the private sector, very few public-private partnerships (PPPs) are being set up. In order to help in their promotion, the Commission has set up a "One-Stop" Help Desk on the application of Community public procurement and competition rules in relation to PPPs. It urges Member States to keep up political pressure to implement PPPs and, where there are legal or administrative barriers to the implementation of PPPs, to make

Extract from the Commission's "Progress on TENS" report to the Madrid European Council (CSE (95) 571).

any necessary changes. There is a need to develop public support mechanisms, including public equity, particularly for projects involving mixed sources of financing. Therefore the Commission supports the widening of the activities of the EIF to equity operations.

8. Unfortunately, Member States' funding for the priority projects has not always been made available as anticipated, resulting in delays in progress. Clear financial shortfalls are revealed so far for two priority projects, for which the Member States concerned are seeking Community financing:

<u>Project</u> <u>(1995-99)</u>		<u>Financial shortfall</u>
PBKAL	Belgian section	200 MECU
	Netherlands section	120 MECU
	UK section (CTRL)	240 MECU
HST East		200 MECU

9. The Commission urges the Member States concerned to complement the measures they have already taken and try to identify additional support to help meet these shortfalls. The current TEN budget line cannot accommodate these requests, and if Member States' action were to fail to make up the financial shortfalls, this would lead to serious delays to these already mature projects. Given the strong element of Community interest in these projects, additional Community support would be justified.

10. The Commission welcomes the establishment of "project authorities" in the form multi-national European Economic Interest Groupings (EEIGs) for the promotion phase of certain links to ensure better coordination and promote the possibilities of PPPs. It notes the particular problems that have arisen in some railway projects and urges the Council to adopt a European Company Statute, which would provide a legal vehicle for cooperation during the construction phase.

11. The Commission will focus its own work on TENs projects more sharply to help accelerate progress on the ground.

THE TRANS-EUROPEAN ENERGY NETWORK

I. Progress in the development of the trans-European energy network

The regulatory framework for trans-European energy network

1. Regarding the Community legislation specific to energy TENs, the two Commission proposals on the "**Guidelines**" and "More favourable Context" for the development of trans-European electricity and natural gas networks² were the subject of a common position of the Council on 29 June 1995. Their second reading by the European Parliament was recently completed and the final adoption of these proposals is expected by the end of 1995 or beginning of 1996. The "Guidelines" identify **43 projects of common interest** which represent a reference scheme for the development of energy networks in the coming years. The 10 priority projects confirmed at Essen are included in this scheme.
2. After the adoption in September 1995 of the regulation drawing up the rules for the **granting of financial aid** to the TEN, the Commission has been able to decide the first commitment of such aid to energy TEN projects, using the 1995 budget allocation.
3. Regarding the implementation of the **Internal Energy Market**, progress has been recorded in the discussion of the Commission proposal for the electricity market, and it is hoped that the Council could adopt a common position on this proposal before the end of this year. Such agreement would allow discussions on the Commission proposal for the natural gas market to resume as from the beginning of 1996. The Treaty rules, including the competition rules and procedures, are naturally applicable to the energy sector. This means in particular that TENS should not lead to a reinforcement of any dominant position of undertakings which control them.

Progress in building the infrastructure for the trans-European energy networks

4. The Essen Summit identified a list of **10 priority projects** in the energy sector, 5 within electricity networks and 5 within natural gas networks. These energy priority projects are:
 - (1) Italy-Greece: electricity interconnection
 - (2) France-Italy: electricity interconnection
 - (3) France-Spain: electricity interconnection
 - (4) Spain-Portugal: electricity interconnections
 - (5) Denmark: electricity connection East-West

- | | |
|-----------------------------------|--|
| (6) Greece: | main gas pipelines and LNG station |
| (7) Portugal: | main gas pipelines and interconnections with Spain |
| (8) Spain: | interconnections with Portugal and main gas pipelines in Extremadura and Galicia |
| (9) Algeria-Morocco-Spain: | gas pipeline |
| (10) Russia-Belorussia-Poland-EU: | gas pipeline. |

5. In connection with these priority projects, some progress has been achieved during the twelve months which have passed since the Essen Summit. This progress concerns mainly the natural gas projects in Spain and Portugal.

Out of the 10 energy priority projects agreed at Essen Summit:

- the 5 natural gas projects are under construction, though for the Russia-Belorussia-Poland-European Union project only the first phase is under way and for the Spanish projects the main pipelines in Galicia and Extremadura are still subject to definition.
 - 1 out of the 5 electricity projects is under construction (the Northern electricity interconnection between Portugal and Spain);
 - the construction of 3 other electricity projects has not yet started: the electricity interconnections between France-Italy and Italy-Greece because of delays in the authorization procedures and East-West Denmark connection, this project being the subject of a reassessment by its promoters;
 - as for the last electricity project, the electricity interconnection between France and Spain, construction has been suspended on the Spanish side, waiting for the authorization procedures to be completed on the French side.
6. Regarding the remaining common interest projects identified by the TEN Energy Guidelines, construction work has started in a few cases, although in most cases, the projects are in their pre-construction phase.

Financing the development of the trans-European Energy Networks

7. In general, the financing of energy networks is secured by the companies in the sectors concerned, using their own resources or calling on the capital market. For the 10 priority projects, the Christophersen Group considered that financing problems could be solved through the use of existing Community financial instruments.
8. The **total investment cost for the 10 priority projects** is estimated at around 4350 MECU; this estimate does not include the cost of the sections of priority projects to be built in third countries (in Algeria and Morocco for the Maghreb gas pipeline and in Poland, Belarus and Russia for the new Russia-EU gas pipeline). A significant part of the investment cost for the development of these 10 priority projects will come from the companies of the energy sectors concerned.

9. Community funds available to these priority projects are mainly aids from the Structural Funds (for projects in Objective I regions) and loans from the EIB and the Commission (under the ECSC Treaty). Complementary support might be given from the EIF (loan guaranties) and from the TEN Energy budget line.
10. Since 1993 the **Structural Funds** have already committed in favour of the energy priority projects around 640 MECU and are assessing demands for around 758 MECU.
11. Likewise since 1993 **Community Loans** of the order of 1380 MECU have been already agreed to by the EIB and the Commission (ECSC) in favour of energy priority projects; requests for loans of more than 500 MECU are still being examined by the EIB and Commission Services. It is worth noting that included in the figure of 1380 MECU mentioned above are loans of about 540 MECU the EIB has committed for the sections of the Maghreb gas pipeline to be build in Algeria and Morocco.
12. Regarding the granting of financial support from the **TEN Energy budget line**, an amount of 12 MECU has been recently committed with the aim of promoting feasibility and other studies concerning 12 projects of common interest from the Guidelines list, of which 3 are Essen priority projects (the France-Spain and the Spain-Portugal electricity interconnections and the Greek natural gas project)
13. Regarding the activity of the **EIF**, loan guarantees for an amount of 207.7 Mecu were signed for 2 key gas projects (the Trans-Mediterranean II gas pipeline to Italy and the natural gas project in Portugal) the last project being in the Essen priority list. This represents about 40% of the total amount guaranteed by the Fund during the first year and a half of operation (1994-1995).

Connecting the trans-European energy networks to third countries

14. Priority projects and other common interest projects do take account of the need of the energy networks of the Community to be interconnected with those of third countries. The TEN Energy Guidelines also provide for a procedure to be followed in order for such projects to be recognised as "**mutual interest projects**" by the third country(ies) concerned.
15. **Connection of the CENTREL** (Poland, Czech Republic, Slovakia and Hungary) and UCPTE electricity grids is scheduled for the last quarter of 1995. This will represent an important stage in the integration of the European electricity grids. Further extension of the UCPTE grid towards the **Balkan countries** and the interconnection of the extended UCPTE grid with the **CIS countries** are the subject of studies under the PHARE and TACIS programmes.

16. Studies of East-West **gas interconnections in Europe** and of regional projects of interest to Central and Eastern European and/or Union countries have been and are being made under the PHARE programme. These studies complement actions to be taken from 1995 in connections with projects of common interest identified by the Community guidelines.

II **Problems remaining to be solved**

17. The implementation of several priority projects is still facing problems, owing to the difficulty of obtaining the authorizations for the construction and /or of gathering finance for the investment.
18. Projects still encountering **authorization problems** delaying the beginning of their construction are:
- the Italy-Greece electricity interconnection;
 - the France-Italy electricity interconnection;
 - the France-Spain electricity interconnection
19. Projects still encountering **economic appraisal and/or financing problems** are:
- the Italy-Greece electricity interconnection (loan requested from the EIB);
 - the Denmark East-West electricity connection (the electricity companies concerned are reassessing the project)
 - the Greek natural gas project (EIB and Commission (ECSC) services have laid down certain conditions for the granting of loans);
 - the Portuguese natural gas project (loan requested from the Commission (ECSC));
 - the natural gas projects in the Spanish regions of Extremadura and Galicia (redefinition of the projects, Structural Funds (ERDF) commitments need to be redefined accordingly);
 - the Spanish section of the Maghreb natural gas pipeline project (Structural Funds (ERDF) aid has been sought and an EIB loan is envisaged)

TABLE 1

TRANS-EUROPEAN ENERGY PROJECTS: FINANCING OF THE 10 PRIORITY PROJECTS

(in MECU)

(a) ELECTRICITY NETWORK PROJECTS	TOTAL COST	EUROPEAN UNION LOANS decided [or under appraisal]		FINANCIAL CONTRIBUTION FROM THE ERDF ^(b) decided	REMARKS ON THE FINANCING SCHEME
		EIB	ECSC		
a4 Italy - Greece interconnection.	304	[100]		35	Not finalized.
b6 France - Italy interconnection.	170			Not eligible	Finalized.
b7 France - Spain interconnection.	115			Not eligible	Finalized.
b10 Spain - Portugal interconnections.	110	57			Finalized.
c2 Denmark: East-West connection.	170			Not eligible	Not finalized
NATURAL GAS NETWORK PROJECTS					
e6 Greece Main pipeline system and LNG terminal	1285	7 + [219] (e)	83 + [97] (e)	683	Not finalized
e5 Portugal Main pipeline system	462	354 (e)	[102] (e)	173	Not finalized EIF loan guarantee
f6 Spain-Portugal Interconnections Portugal-Spain	386	224 (e)		156	Finalized. EIF loan guarantee
Main pipeline systems in Extremadura and in Galicia	72				Not finalized.
h4 Algeria-Morocco-Spain Section from Tangiers (MO) to Córdoba (SP)	446	100 (c)			Not finalized.
h7 Russia-Belarus-Poland-E.U Section in Germany	830			(^(d))	Not finalized
TOTAL	4350	742 + [319]	83 + [199]	1047	

(a) Same project code as in Guidelines (OJ No C 216 of 21/8/1995)

(b) Under the Community Initiatives REGEN (89-93) and INTERREG II (94-99) and under the Community support frameworks for the periods 89-93 and 94-99.

(c) Total EIB loans decided for the "Maghreb pipeline" amount to 641 MECU, for works in Algeria, in Morocco and for the Gibraltar crossing (Tangiers - Tarifa).

(d) Sections in the Eastern Länder of Germany might be eligible to assistance from the ERDF.

(e) EIB or ECSC loans are referred to the global project which is larger than the priority project concerned.

Telecommunications Trans-European Networks

I. Progress to Date in This Field

1. The trans-European Telecommunications networks (TEN-Telecom) have been subject since 1993 to a number of actions with a view to define the proposals to be made to the Council and European Parliament, in particular for the adoption of a series of guidelines as foreseen in the Title XII of the EU Treaty. Already in 1993, two initial proposals of guidelines were sent to the Council and Parliament: one concerning trans-European networks for communication between Administrations (TNA-IDA)¹; one covering a subset of TEN-Telecom, i.e. TEN-ISDN². Furthermore, in July 1993, the Commission submitted a communication on TEN-IBC³ to the other Institutions.
2. The Council of Ministers and the European Parliament have adopted the TEN Financial Regulation and the TEN-ISDN guidelines. Moreover, the Proposal concerning the general TEN-Telecom guidelines is being examined by the Council and Parliament, and a policy debate is expected for the Telecommunications Council on 27 November 1995. The TNA-IDA initiative gave way to the proposal for an IDA Programme. This was adopted at the Industry Council meeting on 6 November 1995.
3. However, despite the progress mentioned above, previous European Council meetings (e.g. Essen) expressed themselves only in general terms about TEN-Telecom. It is therefore suggested that upcoming European Council meetings should consider TEN-Telecom in a similar way as other TEN sectors such as transport or energy for which specific projects have been identified.

Certain specific aspects of the Telecommunications sector, which lead to act in this sector in a partially different way as in the other TEN sectors, have to be recalled

i) the bottle-neck in the field of telecommunications is associated mainly with the development of applications and with problems of interoperability of generic services at European level (cf. the Bangemann Group report),

ii) any action has to take account of the increasingly liberalized context of the telecommunication sector.

TEN-TELECOM IN THE CONTEXT OF THE LIBERALIZED MARKET

4. The liberalization of telecommunications implies in particular that the projects to be supported have to be identified following a procedure which allows competition between initiatives stemming from market or social needs rather than, as in the other TEN sectors, on the basis of proposals made by the Administrations of the Member States. In this context, the role of the

¹ TNA-IDA concerns telematics applications for information exchange between Administrations

² ISDN (Integrated Services Digital Network) is a network allowing transmission under an integrated and digitalized form of voice, data and fixed images, at medium speed rates (64kb/s).

³ IBC: Integrated Broadband Communication

public authorities is to select the priority fields in which projects may receive support. Community support should be awarded to projects in areas of public interest which will bring strong socio-economic benefits and for which the financial viability is not immediately sufficient. These projects should be implemented in the framework of public / private partnerships including in particular local or regional authorities. The support awarded has to be compatible with competition law and state aid regulations.

5. In this perspective, supporting the development of trans-European telecommunications applications, generic services and networks will bring an important contribution to the exploitation of the benefits of the information society.

SCOPE OF THE IDA PROGRAMME

6. The IDA Programme concentrates on maximizing interoperability, with specific reference to increasing the efficiency, effectiveness and transparency of public services in the context of the internal market.
7. Member State Administrations and European Institutions are implementing interoperable telematic networks and services, in accordance with the Council decision, in order to exchange information by means of activities in the following specific fields:

Production and promotion of architecture guidelines and operational requirements to achieve interoperability

Practical introduction of electronic mail on the basis of X.400

Practical implementation of trans-European networks in the following areas: Customs and taxes; Fisheries; Agriculture; Social security; Public procurement; Health; Statistics; Commercial policy; Competition policy; Culture; Telematic projects aiming at facilitating the Community decision making process; Support to agencies (Environment, Internal market, Public health, Translation centre).

Horizontal activities (provision of generic services, progress in the legal and contractual framework...).

II. Results (1993-1995)

TELECOMMUNICATIONS - GENERAL

8. The preparatory phase for TEN-ISDN and TEN-IBC involved budgetary resources of 7 MECU in 1993 and 14 MECU in 1994. During the 1995 exercise, where a budget of 22 MECU was allocated, these types of action were further developed and pursued
9. These preparatory projects were either feasibility studies of pilot projects, in the domain of EURO-ISDN and broadband communications, aiming at improving the understanding on the type of actions and on the priorities which should be implemented in realising trans-European networks in these areas.
10. These actions allowed the analysis of the principal obstacles regarding the deployment and usage of ISDN based solutions through a number of feasibility studies and pilot projects, in the field of health care, teleworking, education, applications for SMEs, desktop multimedia services. In addition, studies on terminal issues and quality of service in the field of ISDN were performed.

11. The main objective of the broadband related efforts (TEN-IBC) was to gain a better understanding of the potential demand and the technico-economic viability of broadband applications, eg. in the domains of ATM-bandwidth⁴ on demand services, multimedia e-mail, scientific networks, city information highways, transfer of radiological images on ATM networks. These projects have triggered the constitution of common interest groups and consolidated the basis for launching viable trans-European applications, in particular in the fields of public interest, during the years to come.

IDA PROGRAMME

12. The following results have already been achieved:

- production of the IDA architecture guidelines;
- introduction of a backbone X.400 network offering services over and above those offered by public Administrative Domains (ADMDS) and in all 15 Member States;
- operational or pilot networks in the context of the following projects: Social security (TESS / SOSENET); Employment (EURES); customs & taxation (QUOTA, VIES, EBTI, TARIC); Agriculture (PHYSAN, IDES); public procurement (SIMAP); fisheries (FIDES); statistics (DSIS)
- e-mail connectivity for an initial group of committees comprising 270 members;
- provision of e-mail services for the European Institutions

⁴ ATM (Asynchronous Transfer Mode) is an advanced transmission and switching system using very high transmission speeds, which allow for instance the transmission of TV quality images

III. The Challenge for the Future

TELECOMMUNICATIONS-GENERAL

13. The future work programme for the trans-European telecommunications network aims to promote the implementation of trans-European telematic applications of collective interest based on interoperable generic services and on interconnected digital networks with a view to
- facilitating the transition towards the information society;
 - improving competitiveness of European enterprises and strengthening the Internal Market;
 - strengthening economic and social cohesion;
 - stimulating new activities leading to job creation.

Within these broad objectives, the 1996 work programme will establish specific priorities for each of the three levels :

- the feasibility study, the validation, and the deployment of applications of collective interest, broad enough to reach a critical mass of users and generate a strong participation of the private sector in providing investment in the context of public/private partnerships;
- the promotion of interoperable services in Europe, by establishing and implementing common specifications based on European and world-wide standards, and their extension to a multimedia environment;
- the promotion and stimulation of access to trans-European interconnected and standardised basic networks, and in particular the promotion of EURO-ISDN, the development of broadband networks (mainly based on the ATM technology), and their interconnection to mobile and satellite networks

Lastly, a specific priority for Community action is given to SMEs in two areas :

- identification of applications which have an important impact on their activities,
- a minimum presence of SMEs in the consortia responding to the Commission calls for proposals.

- 14 These issues have been considered in the Communication of the Commission to the Council and European Parliament presenting the methodology for the implementation of the information society applications and proposing the TEN-Telecom guidelines⁵. The concrete implementation of the guidelines during the year 1996 will offer the opportunity to fine-tune these principles in concrete cases

IDA PROGRAMME

The IDA Programme will obviously pursue the implementation of telematic networks while at the same time addressing and resolving a number of key issues

⁵Document COM(95)224 final of 31 May 1995

15. The legal problems affecting all electronic interchange of information / documents (such as authentication of the user(s), electronic signature, data protection and data security) are encountered by IDA projects as a matter of course. This is particularly sensitive within public administrations, given the nature of the information exchanged. Member States have quite different legislation in this area. Harmonisation is urgently needed. Some studies to this effect have been started.
16. Commitment from Member States is vital for the success of IDA projects. This has not always been forthcoming.
17. The European Parliament Opinion and the Council of Ministers have differing views on the legal basis for the IDA Programme. Such differences should not endanger the success of the Programme, as, in the past, they have with respect to budgetary resources.

IV. Conclusions

18. Telecommunications networks are the backbone of the future information society.
19. In the surge of the increasing Community activity for the promotion of the information society, 1996 will be the first year for a regular action in the field of trans-European telecommunications networks. This action is planned to be intensified during the following years, with a view to bringing a substantial contribution to the fruition of the economic and social benefits linked to the development of new services and applications on the information highways.
To allow for the implementation of projects in all proposed domains, the Council and the Parliament are requested to adopt as quickly as possible the proposed Decision on the TEN-Telecom Guidelines.
20. IDA is a concrete programme, already delivering results

The continued implementation of these administrative telematic networks will dramatically improve the management of the internal market and bring direct benefits to European citizens. The European Council is therefore requested to confirm the importance of the IDA Programme as an essential component of TEN-Telecom.

TRANS-EUROPEAN TRANSPORT NETWORK

I Progress

1. The development of the Trans-European Transport Network (TEN-Tr) requires the building or upgrading of links for the various modes of transport, in particular for the road and rail network:

TEN Transport (common position)	all railways		HST		roads	
	existing	add or upgrade	existing	add or upgrade	existing	add or upgrade
Network	50,300	23,600	5,300	13,600	48,000	27,300
Priority Projects		6,766		4,044		5,234

The "all railways" figures include high speed (HST) and conventional lines. In the years 1993-1995 about 2500 km of roads and about 2000 km of railways have been started. Substantial work has also been done on the airports of the TEN-Tr. An important upgrading programme is being prepared for the ports, which is due to be implemented next year and focuses particularly on short sea shipping.

Priority Projects

2. Community resources have been focused on the priority projects endorsed by the European Council at Essen. (see Table 1 for progress on these projects).

Community legislative framework

3. In October 1995, a Common Position was adopted in the Council on the Commission proposal⁶ on the guidelines for the development of a trans-European transport network. The European Parliament will shortly complete its second reading.

4. The Council Regulation on Financial Aid for TENs⁷ came into force on 23 September 1995.

5. The Council adopted a common position on the High Speed Train Interoperability Directive⁸ in June 1995. The "Association Européenne pour l'Interoperabilité Ferroviaire" (AEIF) has been established, to help develop standards under this Directive.

⁶ Commission proposal No COM(94) 106

⁷ Council Regulation No. 2236/95/EC.

⁸ Commission proposal No COM (94) 107

Financing

6. An overview of the present status of financing for the TEN-Tr and in particular the 14 priority projects is set out in the following table (all figures in MECU):

	Total costs up to 2010	Total Expenditure ⁹		EU grants up 1993 to 1995		EU loan operations up 1993 to 1995	
		95-99	95	Transport Budget ¹⁰	Structural Assistance ¹¹	EIB	EIF guarantees
Network	400,000	220,000	>11,000	625	3,962	6,417	161
Priority Projects only	99,000	45,000	c. 2,600	c. 362.5 ¹²	687	5,800	71

7. The European Investment Bank (EIB) has been contracting loans at a rate of 1BECU a year for priority and related projects, and is likely to continue to do so. EIB loans for TEN projects are being extended in the framework of a "TEN window" set up by the Bank following the Essen Council¹³. In the course of 1995, it has concluded new lending operations for the Øresund (688 MECU) and some of the motorway projects.

8. Created at the Edinburgh Summit in order to cover specific financial needs in relation to TENs, and formally established in June 1994, the EIF has already become involved in several priority TENs. In the case of **Malpensa airport**, 71 MECU worth of guarantees have been extended. The Fund is pursuing the identification of suitable financial arrangements for other priority projects, notably CTRL.

9. The Essen European Council confirmed the objective of facilitating public-private partnerships (PPPs) for TEN-Tr projects (see Annex I). PPPs are in place for the **Channel Tunnel Rail Link** and **West Coast Main Line** in the UK and have been introduced for three sections of the **Greek motorways**.

⁹ As reported by Member States to the Commission. This will include any financing or financial support received from Community sources.

¹⁰ Further to the TEN budget line of this year, it includes grants under another budget line of 400 MECU between 1990 and 1994.

¹¹ The Community structural assistance comprises the Cohesion and the structural funds in particular FEDER; the figures are estimates.

¹² The priority projects have only been identified as a group for funding purposes since the adoption of the TENs Financial Regulation. However, Community funding was given to projects which became priority projects, prior to 1995.

¹³ Loans extended under the TEN window can be characterised by longer maturities, adequate financial engineering and early involvement in the financial and contractual structuring of the project.

10. The Community public procurement and competition rules are often perceived as a barrier to PPPs by project promoters. Analysis has shown that the rules do include flexibility for the setting up of PPPs. The Commission has agreed guidance on the application of Community public procurement and competition rules (see Annexes II and III). The Commission has also set up a One-Stop Help Desk (fax: 32 2 295 6504) on these matters encouraging early consultation by project promoters to give better guidance and support.

11. The Commission is drawing up a "Common Transport Infrastructure Promotion Programme" (CTIPP), within the framework of Regulation 2236/95, to promote financial planning on a multi-annual basis for TEN-Tr projects. This will also provide an overview of Member States' commitments to projects within the TEN-Tr.

Coordination

12. The Commission has continued to hold project seminars for most priority projects; monthly meetings keep the Commission, the European Investment Bank (EIB) and the European Investment Fund (EIF) abreast of their respective activities; two high-level groups are ensuring better coordination of the **satellite-based positioning and navigation project GNSS** and the various aspects of **road transport telematics**. Germany has taken on the coordination of the work on a **radio-based traffic message channel for road traffic**, with the help of 11 other Member States.

13. The Essen European Council confirmed the need for cross-border "project authorities" for the larger international projects, reflecting the positive experience of such projects in e.g. the **Øresund** project and the negative impact of a lack of such coordination e.g. on the **PBKAL**. "European Economic Interest Groupings" (EEIGs) are a suitable legal instrument to ensure cross-border co-ordination in the planning phase of trans-national projects. A number of these have been established: "Alpetunnel" for the **HST Lyon-Turin** and "SEM" for the **HST South**. "ERTMS" has been set up by the operators of the high speed train services to develop a common European control command system. The Austrian Government has created a new railway infrastructure management company for the **Brenner link**, in which they would like to include partners from other Member States.

Third Countries

14. The Commission considers the development of TENs links to central and eastern Europe as a fundamental part of the pre-accession strategy for these countries and is therefore concentrating efforts on these tangible connections (see the relevant section of this annual report for more details). Work continues on linking the TEN-Tr to the networks of third countries, coordinated through the regular meetings of the G24, chaired by the Commission. A Communication is being prepared on connecting TEN-Tr with third countries' networks.

15. The Barcelona Euro-Mediterranean Conference is expected to create a framework for promoting infrastructure projects in the area, with support from the newly established Community assistance programme MEDA. More details to be found in the relevant section of this report.

II. PROBLEMS

Legislation

16. The guidelines for the TEN-Tr are only proceeding slowly through the legislative process, blocked by disagreement between the Council and the European Parliament on whether to include the priority projects agreed at Essen and on whether to include an article on the need for environmental assessments. The Commission believes every effort should be made to resolve these disagreements as soon as possible.

Priority Projects

17. See Table 2 for details. Problems have also been encountered because of Member States' reluctance to adapt their national priorities to take account of the trans-European networks. While welcoming the concept of TENs and their advantages for Europe in terms of competitiveness, jobs and economic cohesion, many countries take the attitude that it is up to other countries to develop the network, while they concentrate on national priorities without adapting their planning.

18. Methods used by national authorities to evaluate the socio-economic benefits of their sections of large scale cross-border infrastructures substantially underestimate the true gains because they each exclude the benefits to non-nationals. Such methodology may be quite appropriate when deciding the level of national subsidy for a national project, however it means that, taken together, the national measures of socio-economic benefit miss out at least half of the international benefits. For example, the benefits to French passengers travelling on the English section of the London-Paris High Speed Train are being missed, as are the benefits to UK travellers on the French section.

19. Research done for the Commission in the context of the **Paris-Brussels-Cologne-Amsterdam-London (PBKAL) High Speed Train** working group and endorsed in their report shows that including these neglected benefits increases the socio-economic return of the project by a quarter, taking it up from 7.2% to 9.5%.

20. This international element of the socio-economic return of a particular priority project can be thought of as the 'Community benefit'. Work is currently underway to measure how much has been neglected for other priority projects, although figures as large as that found for the **PBKAL** are unlikely since that project concerns so many Member States.

21. Failure to take account of the 'Community benefit' of the priority projects is one aspect of a recurring problems of low or conflicting national priorities for many of the priority projects. This is reflected in terms of slow progress in defining projects (e.g. **Brenner**), conflicting scheduling on the part of national authorities each side of the border (e.g. **PBKAL**, **HST-East**), failure to resolve financing questions (e.g. **PBKAL**, **Brenner**, **HST-East**) and inability to form multinational project authorities to coordinate work on projects (e.g. **PBKAL**, **Brenner**). See below for a more detailed analysis of problems concerning the priority projects. The

Commission believes that Member States should re-examine the prioritisation at present given to TENs projects, especially those endorsed as priority projects at Essen.

22. The Commission believes that the definition of several of the priority projects should be altered to reflect better the needs of the trans-European transport network. In particular, the **High Speed Train East** should be extended to the east and renamed the HST Paris-Munich-Vienna. The **rail/combined transport north-south route in Ireland** should be extended to Londonderry in the north. The **Lisbon -Valladolid motorway** should have a different route as proposed by the Portuguese government. The **Ireland -UK-Benelux road link** should be extended to cover rail and combined transport. This redefinition should be carried out in the context of discussion on the TEN guidelines.

Financing

23. As requested at the Cannes European Council, a review of the costs of the priority projects has been undertaken to try to identify possible reductions. The Commission has sought information on costs from Member States and has established working groups to examine in detail the possibility for cost reductions on some particular projects: **PBKAL**, **HST East**, the **Brenner link of the HST North-South** and the **Greek Motorways**. The results so far indicate cost increases rather than savings and current estimated total investment costs for the 14 priority projects are about 99 BECU (compared to 92 BECU mentioned at the Essen European Council). Reduction of these costs seems impossible without drastically reducing the feasibility and scope of the projects. The Commission is prepared, with the help of expert advice, to go more deeply into the question of cost reductions with Member States; however, it considers the matter primarily a responsibility of the authorities in the Member States concerned.

24. The budgetary restrictions in Member States continue to have a significant impact on transport infrastructure investment and appear likely to delay the progress of the TEN-Tr.

25. The planned Community TEN-Tr budget for 1995 - 1999 provides less than 4% of the total required investment for the 14 priority projects over that period. Therefore, although Council Regulation 2236/95 on Financial Aid for TENs allows the Community to fund up to 10% of the total project costs, this will not be possible. Member States have bid for nearly three times the amount available this year.

26. Problems with a number of priority projects have highlighted the difficulties of not being able to make multi-annual financial commitments from the TEN-Tr budget. In early 1995, the Commission requested information from Member States on their plans up to 1999 and is now drawing up a multi-annual programme covering public, private and Community funding. Analysis based on these figures shows severe financing problems for two projects in particular: the **HST East** and the **HST PBKAL**. For the PBKAL, Member States have requested additional Community to help meet these shortfalls of 200 MECU for the Belgian section, 120 MECU for the Netherlands section and 240 MECU for the UK section (CTRL). The French Government has requested 200 MECU of additional Community funding for the HST East.

27. While innovative forms of infrastructure provision are emerging, the existing financial support mechanisms used by the public sector are not evolving at the same pace and are too

often oriented towards traditional public financing schemes. The Community is making specific efforts to adjust and reshape its financial support mechanisms to meet these emerging needs, for example by creating the EIF, setting up the "TEN window" at the EIB, and developing new forms of Community budget support. Member States have not really taken up the challenge of finding alternatives to public finance for projects. The rather low figures for the financial return on investment for many of the projects make such propositions unattractive for the private sector, unless public commitments are given to raise the profitability or reduce risk. That many Member States are not moving to promote PPPs is shown by the low proportion (c 5 %) of applications for funding from the TEN-Tr budget in the form of interest rate subsidies. In a number of Member States legal barriers still exist, which are at odds with the European Council's repeated calls for the promotion of PPPs.

28. Of the 14 priority projects, most are purely public, but some have left some scope for the involvement of private partners (**Malpensa airport**, **TAV Turin-Venice**, Netherlands and UK sections of **PBKAL**, **West Coast Main Line**, **Ireland-UK-Benelux road links**, **PATHE motorway**). Of those priority projects still at a more conceptual stage, the **HST Lyon-Turin**, the **HST/combined transport Munich-Verona (Brenner)**, the **Lisbon-Valladolid motorway** and **HST South** are all serious potential candidates for public/private partnerships.

29. The lack of appropriate sources of equity deserves a particular mention, as this creates a "confidence gap" related to the risk of the project, which acts as a barrier to the development of PPPs. Public equity support would attract investors and introduce new forms of flexibility in the financial structure of PPPs. The EIF's statute specifically provides for the possibility of equity provision, however, a positive decision from the EIF's General Meeting is needed to allow the Fund to widen its activities, which are currently limited to issuing loan guarantees. The Commission strongly recommends that the necessary steps are endorsed by the Fund's shareholders at the next General Meeting. (See Annex I).

30. Besides equity, other forms of public support should to be used whenever appropriated to facilitate the launching of a particular project. The Commission is currently examining the possible role of several innovative means of support, such as subordinated lending and other forms of quasi-equity, contributions in kind, etc. In view of the large financing needs of some of the projects (eg **Brenner tunnel**, **HST Lyon-Turin**) the need for a more diversified loan supply, possibly involving the borrowing and lending powers of the Community, could become apparent and should therefore not be excluded altogether. The Commission is also examining other ways of reducing the confidence gap by helping counter non-commercial risk, since this is identified by the private sector as a particular obstacle to its involvement. The Commission will report on its work in 1996. (see also Annex I).

Coordination

31. Although some European Economic Interest Groupings (EEIGs) have been established, there is still considerable reluctance to create project entities (see Annex IV). The Commission feels this is particularly the case for the **PBKAL** and the **Brenner link**. The lack of such entities is often an additional barrier to the development of PPPs.

32. The unlimited liability of EEIGs makes them inappropriate for the construction phase of a project. The Commission's proposal for a European Company Statute, on the table in the Council for several years, would overcome this problem. If agreement cannot be reached quickly on this broad-ranging instrument, at least an alternative version, tailor-made for transport infrastructure should be adopted.

Imputation of costs

33. Despite the important and constantly rising demand for transport infrastructure and related services, the transport sector appears unable to generate sufficient project related revenues. The role of direct user charges deserves closer examination, since this type of revenue would not only increase the scope for private involvement by increasing the financial profitability of the projects concerned, but would also help to foster competition between transport modes on a balanced basis, while improving economic resource allocation in general. User charges moreover allow the internalisation of all or part of the external costs related to transport. This will be considered further in the Commission's Green Paper on the Internalisation of External Costs

III. CONCLUSIONS AND RECOMMENDATIONS

34. The main conclusions and recommendations are to be found in the front part of this report. They are therefore not repeated here. However, some final comments are added.

35. The Council and European Parliament should seek to adopt the transport network guidelines as quickly as possible. The TEN financial assistance regulation is based on the assumption that these guidelines are in place. Only for 1995 it contains a transitional clause which allows to use the TEN budget line without guidelines. The 1996 budget execution procedures require valid guidelines for the selection of projects to be supported.

36. The progress made so far in establishing the Trans-European Transport Network is remarkable but the progress has been slower than anticipated particularly on some priority projects. The momentum introduced by the Essen summit should be increased in order to bring these priority projects back to motion. The current methodologies under-estimate the economic return of international transport infrastructure projects; this justifies to top up the Community funds currently available for TENs but also to top up the current budget allocations of the Member States to these crossborder projects.

37. Although the examination of individual priority projects shows substantial scope for enhancing the involvement of the private sector, very few public-private partnerships (PPPs) are being set up. Member States should reexamine the potential for PPPs and, where there are legal or administrative barriers to the implementation of PPPs, to make any necessary changes. The Commission will act as follows:

- Setting up of the Commission's "One stop" Help Desk in relation to PPPs
- Study the various ways to cope with non-commercial risks.
- Setting up a multi-annual framework for the financing of TEN-Tr projects covering public, private and Community funding (the Common Transport Infrastructure Promotion Programme" or CTIPP).
- Starting the discussion on the internalisation of external costs and more balanced competition between transport modes by forwarding a Green Paper on the subject for adequate project-related revenue generation, notably in the form of direct user charge.

38. The efforts to link the Transport TEN to the networks of third countries should be continued, aiming particularly to foster public-private partnerships for projects of mutual interest.

Table 1: PROGRESS ON TRANSPORT PRIORITY PROJECTS

For the **North-South High Speed Train (HST)/Combined Transport** (Berlin-Nürnberg-München-Verona) (450 MECU spent in 1995) work to upgrade for high speeds is proceeding as planned on a 200 km long section between Berlin and Nürnberg. Signalling work has been undertaken on the Inn Valley section in Austria.

For **PBKAL** (Paris-Brussels-Cologne-Amsterdam-London HST) (500 MECU spent in 1995) the high speed train links from Brussels to Paris and to the Channel Tunnel are progressing, with the building and upgrading of links underway and proceeding according to the revised schedule. For the Channel Tunnel Rail Link (CTRL) in the UK, two bidders have been shortlisted and a winner is expected to be announced by the end of the year. A Commission chaired working group was established for the PBKAL project, which has drawn up a report on the scope for financing the project.

The Spanish and French Governments have concluded an agreement to build the **HST South** (Madrid - Montpellier/Dax) (150 MECU spent in 1995) with the possibility of involving the private sector in the cross-border section from Figueras to Perpignan. A European Economic Interest Grouping (EEIG) has been established for this, under the supervision of an Intergovernmental Committee.

The Dutch Parliament has authorised the starting of the procedures necessary to obtain a building permit for the **Betuwe Railway Line for combined transport** (80 MECU spent in 1995). This process should take about two years, after which construction may start.

The Italian and French Governments have agreed to undertake the necessary studies to complete preparatory work for the building of the cross-border section of the **HST Lyon-Turin** (40 MECU spent in 1995), the tunnel between St-Jean de Maurienne and Susa. An EEIG has been established to carry out technical studies and an Intergovernmental Committee will start work in early 1996 on preparing a concession for this link.

The **Greek motorways** (290 MECU spent in 1995) have been under construction since 1990 and are progressing as scheduled. Tendering has been completed for about 40% of the PATHE branch and 25% of the Via Egnatia. Work on the 200km Igoumenitsa-Panagia link started this year. Several sections of these projects will be built by private concessions.

The **Cork-Dublin-Belfast-Larne-Stranraer** conventional rail link (62 MECU spent in 1995) is on schedule and should be completed by 1999.

The construction of the **Malpensa airport** (Milan) (180 MECU spent in 1995) is largely complete and its connection to the railway network is progressing well.

For the **Øresund fixed link**, (450 MECU spent in 1995) work started on the tunnel under the Drogden Channel in July 1995, as did dredging and reclamation work. Work on the high bridge across the Flinte Channel and approach bridges for this is due to start in November 1995.

For the **Nordic Triangle** (360 MECU spent in 1995), major work has been carried out on the Swedish Malmö-Göteborg and Malmö-Stockholm rail links. Work on the Swedish road sections Malmö-Göteborg (E6), Malmö-Stockholm (E4) and Stockholm-Norwegian border (E18) is progressing. In Finland, the road sections east of Turku and the Helsinki bypass are progressing. Major upgrading of the rail line between Turku and Helsinki is underway and some work has started on other sections such as Kereva-Lahti.

For **Traffic Management** projects, work is in hand on the civilian satellite European Global Positioning and Navigation System (GNSS) and the first transponders have been ordered from Inmarsat. The implementation of the ground network started in Summer 1995. A bilateral agreement with our US partner, the Federal Aviation Administration, was successfully concluded at the end of October. An EEIG has also been established by the operators of the high speed train services, which is working on a common **European Rail Traffic Management System**. A **radio-based digital road traffic warning system (RDS-TMC)** is shortly to be initiated, coordinated between 11 Member States, with support from the TENs budget line.

Table 2: PROBLEMS CONCERNING TRANSPORT PRIORITY PROJECTS

Little progress has been made on a decision to build the **Brenner base tunnel** through the Alps, an essential part of the **HST/combined transport North-South** (Berlin to Verona, via München and Brenner). The economic benefits of this project will largely accrue to Southern Germany and Northern Italy, as most of the traffic will only transit through Austria. Austria's overwhelming interest is to promote a switch from road to rail for transit traffic, in order to limit the negative impact on the environment, however this interest is not sufficient to justify Austria's financing its share of the costs of the tunnel alone. Additional economic evaluation is being undertaken, which will not be completed until the end of 1996. This will be complemented by a Commission study on traffic forecasting for the whole Alpine region. The Austrian Government have created an infrastructure management company, in which they would like to include international partners, but this is also proving difficult.

Most of the work on the **PBKAL** (Paris-Brussels-Köln-Amsterdam-London HST) project is now seriously behind original schedules, which is having a significant financial impact on the completed French section, causing estimated losses to SNCF of 300 MECU. The report of the PBKAL working group, chaired by the Commission, identified significant problems with the financing of the links to the north of Antwerp and east of Liege in Belgium, highlighting a financing shortfall currently of the order of 1 BECU. Using the figures identified for this working group, after taking into account UK support, there is also a shortfall of some 240 MECU for CTRL. It is thus clear that a lack of resources could create major financial problems for this project. The absence of European-level companies to build and operate railway infrastructure is emerging as a major obstacle to financing.

The **HST East** (Paris-eastern France-southern Germany, including Luxembourg link) remains a project requiring substantial public support. Under the current French legal system private sector involvement is very difficult, however the French Government have agreed to examine the possibility of public-private partnership financing for the second phase. In 1994, the French Government officially requested a large Community subsidy for this project (530 MECU of which 360 MECU over the period 1995-99). A working group, established by the Commission and French Ministère des Transports, has reported that the current scarcity of resources in the TEN budget line will result in a project financing gap in the range of 200 MECU.

The Portuguese Government has indicated that it wishes to realign its section of the **Lisbon-Valladolid motorway**. On the Spanish side, progress is slow with major technical studies lasting three years still needed before construction can start.

Little progress has been made on the **Ireland-UK-Benelux road link**, in spite of its crucial importance.

Although the French and Spanish governments have agreed in principle to its construction, no date has yet been agreed for work to start on the **HST South** (Madrid - Montpellier/Dax).

The **Betuwe conventional rail/combined transport line** has been delayed because of planning and political problems; previously due to start in 1995-96 it is now likely to be two years later.

FINANCING : PRIVATE / PUBLIC PARTNERSHIPS

General

1. The Essen Council endorsed the recommendation of the "Christoffersen Group" confirming the objective of facilitating private/public partnerships and inviting Member States, the Commission, the EIB and the EIF to take appropriate measures to this effect. One of the main reasons for introducing the PPP model was the need to accelerate the implementation of TENs.

2. The main obstacles to changing the current model of constructing and operating the priority TENs are the lack of financial profitability of many projects as well as a number of institutional and political barriers. Moving away from the traditional approach of public funding for major infrastructure projects is not easy. Project financing, the required financing set-up for PPPs, means that debt is secured on the project revenues and physical assets, rather than on the credit support of the project sponsor. The complexity of the legal and financial basis of PPPs, combined with familiarity with public financing schemes, put PPPs at an initial disadvantage in relation to the latter. As the public sector moreover absorbs risk in a non-transparent way, financial failure does rarely come into the open. This favours the widely-held belief that the cost of capital for state-backed infrastructure is lower than for comparative financing structures involving private risk-taking.

3. Limited financial profitability is a common characteristic of projects in the transport field. They therefore inevitably need substantial grant support, amounting to significantly more than allowed under Regulation 2236/95, which limits Community support to 10% of the total project costs. The Community's Structural and Cohesion Funds provide an alternative source of support for projects in areas which qualify. For other projects, the grant contribution from the Community will remain marginal. National budgetary support is also becoming an increasingly scarce resource as Member States exert strict control over budgetary outlays in the run-up to monetary union.

4. The Community is gradually adjusting its financial support instruments to enable it to support this change in approach by participating in the financing of PPP operations whenever appropriate. However, the decisions to set up PPPs are taken at Member State level, where it is clear that the traditional inclination towards public financing is still very much alive.

Member States should be urged to renew their efforts to increase the involvement of the private sector in major transport infrastructure projects. The Commission has prepared a set of proposals on financing issues which may help to go in this direction.

Proposals for the financing of PPPs

5. Grants are the only form of support capable of filling the "profitability gap" in some PPPs. These grants should not necessarily take the form of cash endowments. They can also consist of transfers of assets (land, track, equipment), on-going concerns, or pre-existing and profitable links of the same network. Public subsidies should be determined by the expected

socio-economic benefits of a project, which for infrastructure projects will normally be above their financial profitability.

States, regions, local authorities and of course the Community, should contribute in proportion to the benefits they expect to derive from projects. In the Commission's view the Union-wide interests are not sufficiently represented in budgetary appropriations.

6. Equity capital is the foundation of the financing structure of any private firm, including infrastructure companies. Public equity does not raise the profitability of a project as such, but helps to absorb risk and attract private equity. A project's equity base is the prerequisite for attracting lending support in sufficient quantities, filling the "confidence gap" between investors and lenders. Public equity support also introduces new forms of flexibility in the financial structure of PPPs. Compared to grants, it allows for a certain return should the project perform well and, therefore, for the possibility of recouping funds and re-cycling them into other projects. The public sector can also set a cap on its remuneration, thus enhancing a project's private profitability.

Member States might want to consider using part of the grants from the TEN Budget line to finance some of their equity holdings in priority projects. More generally, public authorities should try to increase their involvement as equity providers in PPPs, hence establishing true partnership relations with private promoters and investors.

7. Subject to agreement at its General Meeting in June 1996, the EIF will soon be able to increase its role as an equity provider to TEN projects. The EIF's involvement in equity operations at this initial stage will remain limited. One opportunity which the Fund might want to consider is the investment of equity in project development authorities, as the embryo of future project implementing bodies.

The Community should strongly support this enlargement of the Fund's role, especially as the need for substantial amounts of equity from private and public investors is increasingly apparent in the framework of public-private partnerships

8. Some debt instruments (subordinated debt in particular) should be mentioned as valuable means of providing risk-bearing funds. Subordinated loans (or quasi-equity in general) allow for greater risk exposure than senior debt and therefore are a useful alternative to equity in a number of instances. Subordinated loans notably offer the advantage that managerial control remains in the hands of the equity providers as long as debt is serviced. This can be useful if the public sector wants to share part of the risks without interfering in the management of the project in question.

The use of various forms of quasi-equity should be encouraged, wherever appropriate, to favour particular forms of co-operation between the public and the private sector. The new Financial Regulation favours support in the form of subordinated debt and quasi-equity in general e.g. in the form of interest subsidies or of subsidies towards meeting the cost of guarantee fees (whether extended by the EIF or others), etc.

9. At present the EIB is the main loan finance provider for the priority projects. In a few specific instances, it might however prove useful to seek a diversification of the sources of

loan supply. The huge financing needs of some of the mega-projects (e. g. Brenner tunnel, Lyon-Torino, etc.) might provide a rationale for this approach.

In spite of the mixed views expressed so far by the Council on this option, the use of the borrowing and lending powers of the Community should not be excluded altogether as a complementary form of Community loan support.

10. In a PPP, risks should be borne by the parties best able to control them. Private infrastructure promoters agree on the crucial importance of administrative and public policy risks, such as cancellation of the project, planning delays or delays in passing legislation, legislative changes, changes in safety or other legal standards. Such risks in general cannot be borne by the private sector. The difficulty is compounded in the case of cross-border projects by the presence of different national authorities and legal systems.

The Commission acknowledges the relevance of those risks and the importance of finding an adequate solution. It will therefore undertake a comprehensive study on non-commercial risks and possible ways to cover them, notably a Community insurance or guarantee mechanism against non-commercial risks, improved contractual agreements between promoters and public authorities, legislative steps at the appropriate level, etc.

11. The frequent lack of financial profitability in transport infrastructure projects is not so much because of the particular nature of the transport sector (demand for traffic is strong and on the increase) but rather the apparent inability of the sector to generate sufficient project related revenues. Direct user charges increase competition between, and within, transport modes and allow for the internalization of some of the negative externalities linked to transport. More generally, they improve the efficiency of the allocation of economic resources. The recommendation of the Cannes European Council on "establishing fairer competition between modes of transport" pointed this way and the adoption of the "vignette" Directive 93/89/EEC on 25.10.93 constitutes another step in this direction.

Charges based on the actual use being made of the infrastructure (e.g. road tolls, etc.) should become increasingly used to develop PPPs, notably because project related revenue greatly increases the potential for private involvement, while freeing scarce budgetary resources.

12. Risk evaluation and transaction costs among the different public and private parties involved in a PPP could be reduced by improving the provision of factual knowledge so that planning and negotiations are carried out on an objective basis.

In this respect the Commission could consider ways of improving the availability of frequently up-dated traffic statistics, among which the setting up a traffic statistics observatory.

Annex II

TENS AND COMPETITION IN THE TRANSPORT SECTOR

1. The creation of the trans-European transport network will involve, at least for some of the links, calling on private investors to assist, either by themselves or together with the public authorities, in designing, funding, constructing and, where appropriate, operating the infrastructure.
2. Organizing infrastructure access so as to open it up to a range of users offering competing transport services or services in different market areas is one way of helping to obtain funding for the infrastructure as it will increase the income derived from its use.
3. The public authorities and private operators involved in projects often feel that the application of Community competition rules acts as an impediment to the development of these projects. In order to assess exactly what kind of difficulties are being faced by the promoters of projects, talks were held with representatives from railway companies, the Ministries of Transport, banks, a specialized lawyer and promoters of existing infrastructure and proposed infrastructure projects.
4. These talks have shown that there are three types of problem
 - a dearth of information on the part of the people concerned,
 - concern about the length of the procedures to be followed,
 - the basic question of how to reconcile financial profitability and freedom of access to infrastructure.

THE DEARTH OF INFORMATION

Outline of the problem

5. The talks held by the Commission have above all revealed that there is a general lack of information about Community law on the part of the promoters of infrastructure. The design of such infrastructure generally continues to be based solely on the legislation applicable in each Member State concerned and fails to give due importance to Community legislation from the initial stages of the projects.
6. Another point to emphasize is the general confusion between competition rules and Community, and/or national, rules on public procurement.
7. As a result of this state of confusion, some promoters wrongly believe that compliance with the specific rules on public procurement suffices in order to be in conformity with Community law.

Solutions proposed

8. The Commission is prepared to help to make more information available for all parties concerned with the creation of infrastructure – the public authorities, transport companies, banks and private investors. This information must cover both the basic rules

applicable to the Member States and to companies and the procedures to be followed in order to be granted exemptions.

The Commission departments concerned therefore need to be involved as early as possible in the projects. Project promoters should therefore take the initiative to contact these departments as early as they can to obtain all necessary information and advice. The Commission guarantees total confidentiality in its examination of these projects. For any information about competition rules, project leaders can contact Directorate-General IV or the Commission's "One-Stop Help Desk" (Fax 32 2 295 65 04).

9. Project promoters should also contact their national competition authorities who will be able to provide them with all necessary information about competition rules

THE LENGTH OF THE PROCEDURES TO BE FOLLOWED

10 Outline of the problem

Project promoters would like to receive the Commission's formal position on the eligibility of their project within a reasonable period of time.

However, the fact is that there are certain procedures which have to be followed by the Commission before it can adopt a formal decision and that these take time.

11 Solutions proposed

There are two possible solutions:

12. It is extremely useful if the parties involved contact the Commission departments concerned before signing agreements. This is often done when the Commission is handling important business and should avoid difficulties arising after the notification of the agreements and thereby slowing down the processing of applications.

It will also ensure that the Commission departments concerned are fully informed about projects from the very start and are therefore able to process the applications more rapidly

13. It is also necessary for the parties involved to be able to predict, with a reasonable degree of certainty, when they can expect to receive a reply from the Commission. Following the notification of agreements on the funding of TENs, and provided the parties have contacted the Commission departments before finalizing the agreements, the Commission will do its utmost to take a final decision within a maximum period of six months. This presupposes that the Commission has all the necessary information available prior to notification of the agreements.

THE RELATIONSHIP BETWEEN FINANCIAL BALANCE AND THE RIGHT OF ACCESS TO INFRASTRUCTURE

14. Outline of the problem

The infrastructure in question requires a high level of investment, repayable over very long periods, and with a generally low level of profitability.

15. Project promoters must therefore obtain the maximum of guarantees as regards the utilization of the infrastructure and the payment of user charges. To do this, infrastructure operators can follow either of two approaches:

- either wait until the infrastructure is complete before offering capacity to transport companies wishing to provide services using the infrastructure,
- or reserve capacity, at the start of the project, for transport companies which for their part undertake to pay user charges.

16. None of the people met during the present study expressed the wish for all of the infrastructure capacity to be reserved for a single user. This kind of reservation would limit the sources of income from the infrastructure.

17. On the other hand, all of them stressed the fact that the infrastructure operator should be able, if he so wished, to reserve at least part of the capacity for transport companies which contribute to the financial balance of the project. There is also the question of the use of the transport equipment bought by companies which are also project promoters.

18. The project promoters are also aware of the fact that the reservation of capacity over a long period is contrary to the principles of freedom of access to infrastructure and competition.

19. Solutions proposed

20. Community legislation does not allow all infrastructure capacity to be reserved for a single company or group of companies but does not prevent an operator reserving capacity for a number of companies which are able to operate transport services in competition.

21. The specific features of each project have to be taken into consideration when assessing the lawfulness of the capacity reservation agreement. The following general criteria nevertheless apply:

- If an infrastructure operator wishes to give transport companies the opportunity of reserving capacity from the very start of the project, this opportunity should be proposed to all Community undertakings that may be interested.
- The capacity reserved for a company should be proportional to the direct or indirect financial commitments entered into by that company and should

correspond to the operational requirements planned over a reasonable period

- A new infrastructure is generally not congested as soon as it is put into service. A company, or a group of companies within the meaning of Article 3 of Directive 91/440/EEC, should therefore not have all of the capacity available reserved for it. Some of the capacity should remain available so as to allow competing services to be operated by other companies.
- The companies awarded user rights may not object to these rights being withdrawn if they are not used.
- The duration of capacity-reservation agreements must not exceed a reasonable period of time, to be agreed in each particular instance

Annex III

PUBLIC PROCUREMENT RULES FOR TRANSPORT TEN

(1) At Community level, existing public procurement rules lay down a framework for selecting, on a competitive basis, the contractors for the execution of a given piece of transport infrastructure. Either of two distinct sets of rules apply, Directives 93/37 for public authorities or 93/38 for the so-called utilities. The aim of the Directives is of course not to be an obstacle but to ensure value for money under the best possible conditions.

(2) In order to clarify the possibilities offered by the existing legal texts with regard to their application in TENs and public/private partnerships, the Commission examined the compatibility of existing public procurement rules with:

- i) the technique of *project financing (concessions)* that allows the participation of the private sector on a risk basis in building and operating infrastructure projects in partnership with the public sector;
- ii) the need to *associate the private sector as early as possible in studying the feasibility* of an infrastructure project and participating in its conception.

(3) The conclusion drawn is that the Directives do permit such activities and that consequently **no legal action is required**. The Commission view is that existing provisions on concessions under Directive 93/37 are an adequate framework for the participation of the private sector in the award of concessions by public authorities in the TENs priority projects. As for pre-tender discussions the Commission view is that, in so far as effective competition is guaranteed in the tender phase, the principles of Community law do allow such preliminary technical discussions.

(4) In order to inform all parties concerned about the possibilities for public/private sector co-operation offered by public procurement rules more detailed analysis of this issue is included in the Commission's Communication to the Council and to the European Parliament on Public Procurement in the European Union (reference to follow). The Commission will issue specific guidelines as appropriate in the course of 1996.

(5) In order to reduce any misunderstandings and delays in projects related to public procurement rules, it is recommended that for the priority projects Commission services are consulted before the publication of tender documents. For this purpose a "**One-Stop Help Desk**" (fax: 00 32 2 295 6504) has been established in the Commission to channel such requests.

Annex IV

PROJECT AUTHORITIES FOR TRANS-EUROPEAN NETWORK PROJECTS

1. The Christophersen Group and the Essen European Council agreed that European level legal vehicles would greatly facilitate the coordination and financing of complex trans-national infrastructure projects. Ideally, a company should be created to own the project - at least temporarily, and to implement and manage it.
2. The Project Authority for a cross-border infrastructure project should consist of four elements:
 - a project **Agreement** between the Member States involved
 - a project **Commission** consisting of delegates of the Member States
 - a project **Promoter**
 - a project **Company** which acts as infrastructure manager

The *project agreement* will normally be a memorandum of understanding during the promotion phase, but may need to be a treaty during construction. It should cover the project definition and details such as a description of the work to be undertaken, a timeschedule, and the financial and organisational arrangements.

The *project commission* makes the day-to-day decisions during the execution of the project, keeping in contact with the national administrations and delegates. It must be empowered to do the necessary for granting the concessions. It may be appropriate to delegate part of its power to the project promoter and to the project company at some stage.

The *project promoter*, could be an association or better a EEIG, involving at least all the public sector parties. Since large infrastructure projects are mostly carried out in the public domain, political backing is crucial for their successful implementation. During the promotion phase the project promoter will initiate first technical, economic and environmental studies, particularly on the economic viability and financial feasibility of the project. During the execution of the project it acts as moderator and facilitator for the project.

The *project company* is a business undertaking which acts as an infrastructure manager. For railway infrastructure such an entity is defined in Directive 91/440/EEC as "any **public**¹ body or undertaking responsible in particular for establishing and maintaining railway infrastructure, as well as for operating the control and safety system". The legal form of the project company may change at the different stages of a project, it may start as a EEIG, but for detailed design and construction it must be a public company limited by shares, a "société anonyme" or an equivalent form, such as that foreseen by the European Company Statute.

¹ The Commission believes that public private partnership entities can be considered as public bodies for this purpose, as they fulfil a public service by providing railway infrastructure

On the more familiar national level, the legal framework and the government fulfil the role of the *agreement* and the *commission*, while the railway companies could undertake the role of *project promoters* and *project management companies*.

3. In most cases the details of the priority projects are set out in a memorandum of understanding or in a treaty. Also, Intergovernmental Committees or working groups have been created for most projects, so the basic coordination mechanisms are in place. However, there are still problems with these arrangements as the delegates have to get endorsement from their respective administrations. The Committees or working groups do not have the power needed to effectively manage the projects.

4. The Commission notes with satisfaction the first signs of cross-border coordination in the creation of a series of EEIGs (European Economic Interest Groupings) for the promotion of some transnational projects (see main report, paragraph 15). Railway companies seem to have recognised the advantages of cross-border coordination and, together with regional authorities, are taking advantage of the possibilities provided by this particular legal vehicle for carrying out preliminary economic and technical feasibility studies.

5. The provisions of the EEIGs do not meet the requirements of the execution phase of large scale infrastructure investments because of the unlimited liability of the project owners in such structures. This is a serious drawback as no other legal vehicle exists at the Community level that could be used in the execution phase of trans-national investment projects. Therefore, investors have to seek solutions through national legal structures (as in the case of the Channel Tunnel) or rely on inter-governmental cooperation (PBKAL, Brenner, most HST projects). However, such structures are usually expensive to set up and do not meet all the essential criteria such as protection for shareholders, limited liability of founders and the legal security of the instrument.

To endow the Community with effective tools for undertaking cross-border investments and for attracting private investors in a public/private partnership. The Council should adopt, without further delay, the proposal on the European Company Statute. The benefits of such a statute would not only be felt in transport projects such as the high speed train and freight railway networks, but also in other TEN projects in the area of energy and telecommunications.

CONNECTING WITH CENTRAL AND EASTERN EUROPE AND THE MEDITERRANEAN BASIN

A. CONNECTING ENERGY NETWORKS TO THIRD COUNTRIES

The role of the Union

1. The energy sector has been recognised as a major area for economic cooperation with third countries, both for reasons of European integration and because the Member States are largely dependent on external energy sources, particularly of gas, and it is desirable to increase the number of such sources in the interests of the Union's security of energy supply. Development of Union and other European energy production and transmission capacities is, indeed, one of the principles of the European Energy Charter.
2. TEN energy priority projects and other common interest projects do take account of the need of the energy networks of the Union to be connected with those of third countries. There is specific provision in the TEN Energy Guidelines for the procedure to be followed in order for such projects to be recognised as "mutual interest projects" by the third countries concerned, within the framework of existing agreements between the Union and such countries.
3. In both the electricity and natural gas sectors, the studies supported under the PHARE and TACIS programmes, in conjunction with those that will be supported from 1995 under the Energy TEN programme where projects of common interest are concerned, will lead to the selection of priority network projects for the third countries concerned.

Electricity networks

4. The development of electricity interconnections with third countries is a priority for the Community Guidelines: there are projects for the interconnection of the Union with the Countries of Central and Eastern Europe including the Baltic Sea and the Balkan regions, the CIS, the EEA countries, Switzerland, the countries of North Africa and the Mediterranean.
5. In the wider European context, test connection of the Centrel (Poland, Czech Republic, Slovakia and Hungary) and (Western European) UCPTE electricity grids was successfully carried out in October 1995. This represents an important stage in the integration of the European electricity grids. Further extension of the UCPTE grid towards the Balkan countries and the interconnection of the extended UCPTE grid with the CIS countries are the subject of studies under the PHARE and TACIS programmes. In the Mediterranean area, a submarine electricity connection between Spain and Morocco is being established, and in the Eastern Mediterranean electricity connections between Greece and Turkey and between Turkey and Syria are also envisaged.

Natural gas networks

6. Where natural gas is concerned, interconnections have been or are being made with third country gas grids so as to allow either the transmission or the transit of gas to the Union. This is increasingly the case with Norway, the countries of Central and Eastern Europe and the CIS, and those of the Mediterranean, in particular North Africa, with pipelines from Algeria through Tunisia to Italy and from Algeria through Morocco to Spain and on to France. Studies of East-West gas interconnections in Europe and of regional projects of interest to Central and Eastern European and/or Union countries have been and are being made under the PHARE programme.

B. CONNECTING TRANSPORT NETWORKS TO THIRD COUNTRIES

(a) CENTRAL AND EASTERN EUROPEAN COUNTRIES

Infrastructure development

1. Connecting Trans-European Networks to the Countries of Central and Eastern Europe not only serves a short and medium term objective of stimulating economic growth and employment, but also helps to integrate their economies with that of the Union.
2. An essential element for the accelerated improvement of infrastructure is the gradual harmonisation of legislative and regulatory mechanisms which are applied in the region. The adoption by the CEC's of the "Acquis communautaire" is moreover essential for their integration into the Union. The Union is tackling this process of "legislative approximation" through three complementary processes:
 - the implementation of the Europe Agreements ;
 - the negotiation of sectoral market access agreements ;
 - the White Paper on the extension of the Internal Market legislation to the Central European countries.

The aim of these processes is to establish structures that prevent distortion of competition in emerging transport, telecommunication and energy markets and to promote international trade and cooperation.

3. The potential investment level in Trans-European Networks is enormous. The full development of main international road transport corridors¹ for Central and Eastern Europe is estimated to require funds between 30 to 45 billion ECU. Upgrading main international railway lines¹ to Western European standards is estimated to require a further

¹ Community support is geared to the nine "Crete Corridors" in line with the conclusions of the second Pan-European Transport Conference, Crete March 1994

25 to 30 billion ECU. Such a level of investment reaches not only beyond the absorptive financial and institutional capacities of the Central and Eastern European Countries themselves, but also beyond the availability of external finance.

4. Pressures on strained national budgets makes the financing of infrastructure increasingly problematic. While International Financial Institutions are undoubtedly called upon to provide a major share of the financial requirements for the modernisation and upgrading of transport systems, the sheer scope of the required financial resources is such that supplementary arrangements and non-conventional financing with private sector involvement will be required.

5. The Trans-European Network approach adds a particular dimension to this process as a significant part of the economic viability of individual projects stems from their integration into the overall network. Individual links need to be appraised from a network perspective, extending far beyond national borderlines. The network approach introduces considerable opportunities as the profitability of region-wide networks exceeds the profitability of the individual links constituting the network.

6. As different legal and regulatory frameworks have to co-exist and as a supplementary level of coordination between different countries arises, particularly for cross-border projects, additional difficulties arise. Thus transnational links often suffer from different national preferences and priorities on each side of the border.

Because of interrelations between projects belonging to the same network, delays in the realisation of certain key links have a significant impact on the revenues of already existing links through revenue shortfalls. A concerted, coordinated and accelerated build-up of the network, minimising leads and lags in the realisation of key links, is therefore bound to improve significantly the economic benefits for all parties concerned thus enhancing the possibilities for a fast realisation of the project.

7. Especially in the light of the economic situation in the Countries of Central and Eastern Europe it is essential that the planned infrastructure should be closely adapted to actual needs in order to use the scarce available resources in an optimal way. Development of Trans-European-Networks in Central and Eastern Europe must therefore be based on a realistic assessment of infrastructure demand.

8. Projects offering the highest rate of return would rather involve the maintenance, rehabilitation and upgrading of existing infrastructure than the construction of brand new motor ways and high-speed rail lines. There will of course always be justification for the need to construct some new infrastructure for instance the removal of bottle-necks such as urban by-passes, border crossing points, a few selected stretches of road where the traffic is particularly heavy and where existing infrastructure is dilapidated.

The role of the Union

9. The Treaty of European Union stipulates that in the field of Trans-European-Networks "the Community may decide to cooperate with third countries to promote projects of mutual interest and to ensure the inter-operability of networks." The Association Agreements with the countries of Central and Eastern Europe foresee that a priority area of cooperation shall be "construction and modernization, on major routes of common interest and trans-European links" of transport infrastructure.

10. The European Council in Copenhagen in June 1993 emphasised that the Community should support the development of infrastructure networks in Central and Eastern Europe mainly through the temporary lending facility of the European Investment Bank. At its meeting in Essen in December 1994, the European Council decided on a comprehensive strategy for preparing the associated Countries of Central and Eastern Europe for accession to the European Union. The Pre-accession Strategy highlighted that the integration of the associated countries into the Trans-European-Networks is a key element in strengthening their economic and political ties to the Union.

11. Community support is geared to the nine "Crete corridors" in line with the conclusions of the Pan-European Conference in 1994.

12. Within the framework of G24 coordination, Memoranda of Understanding between the various Governments and the Commission have been signed, to promote the coordinated development of the Berlin-Warsaw-Minsk-Moscow and Helsinki-St Petersburg-Moscow-Kiev-Bucharest-Plovdiv-Alexandroupolis corridors.

13. A structured dialogue between Transport Ministers from central and eastern European countries and the Council, initiated at a joint meeting on 28 September, will continue to assess needs and agree projects of mutual interest.

PHARE

14. The Council emphasised that Phare should offer technical assistance and authorised the Phare Programme within the existing budgetary limits to provide additional funds for capital expenditures for the development of infrastructure of community interest.

15. Following the Essen Council the Commission has developed Phare in the direction of a Multi-annual financial instrument and significantly increased the investment focus. Today up to 25 % of the total Phare appropriations can be made available for the co-financing of infrastructure projects notably related to the development of Trans-European-Networks. Multi-annual investment programmes for the development of Trans-European-Networks covering the period 1995 to 1999 have been negotiated with all the Partner Countries with the close involvement of the International Financial Institutions and notably the European Investment Bank.

16. The Phare contribution for the co-financing of infrastructure projects related to the Trans-European Transport Network is planned to increase to around 190 MECU in 1996. The corresponding figures in 1993, 1994 and 1995 were 30 MECU, 75 MECU and 119 MECU.

Balkan Region

17. The Union attaches great significance to improving the networks of the successor states to the former Yugoslavia in an integrated Trans-European framework taking into account Community priorities and to promoting cooperation between these states towards that end, as soon as political circumstances permit.

(b) THE EURO-MEDITERRANEAN PARTNERSHIP

18. . At the Essen and Cannes meetings, the European Council proposed a new approach to the Union's Mediterranean partners. The economic dimension of the Euro-Mediterranean partnership provides for the Mediterranean partners to be integrated into a Euro-Mediterranean economic area. The aim of opening up the Mediterranean countries economically and integrating them into the European (EU and non-EU) economy presupposes that these countries have efficient economic infrastructure systems, in particular in the transport, energy and telecommunications sectors. The linking of the trans-European networks in these areas to the corresponding infrastructure in the Mediterranean Basin (or their joint development) is therefore at the heart of the issue of the Euro-Mediterranean partnership.

19. The draft Declaration and work programme adopted at the Barcelona Conference (27-28 November) specifically refer to this in the sections on transport, telecommunications and energy. Although, because of the level of development, the high-speed train networks do not have any great potential in the Mediterranean region, the connection and extension of the road transport (motorway, ports), telecommunications and energy networks are nevertheless essential for the integration of the Mediterranean economies into the European economy.

JOINT ENVIRONMENTAL PROJECTS (JEPs)

AN ENVIRONMENTAL "NETWORK" APPROACH FOR WATER AND WASTE

1. At the Essen European Council the Heads of State or Government have taken note of the potential relevance of a network approach in selected sectors of environmental protection, have invited the Commission, the Council and Member States to examine the possibility of establishing guidelines for environmental network infrastructure and the obstacles to environmental infrastructure, stressing the use of existing financial instruments in support of possible future guidelines and priority projects.
2. To follow up the Essen mandate, the Commission established a High Level Working Group with representatives of the national environmental departments. The Group convened four times. In addition, the Commission organized in October a workshop on waste and one on water at which were attending public and private competent experts and authorities.
3. The network approach as it was envisaged in the White Paper on Growth, Competitiveness and Employment, was not the result of theoretical or conceptual considerations. It was conceived to solve problems in a practical manner. In fact, the network approach it is aimed at ensuring the realisation of certain infrastructure investments in which the economic benefits have an impact which is spread beyond their immediate geographic location. These are the type of investments which are essential in order that the potential of the internal market be attained, but which are hampered by administrative and financial constraints.
4. In the transport, energy and telecommunications sector, these investments aim at ensuring the interconnection of existing networks in order to fully develop their potential. In the case of the environment, such investments are aimed at ensuring an effective solution to the problem of resource management and/or pollution which because of its cross border dimension gives rise to frictions and constrains productive activities or risks being a direct or indirect obstacle to free exchange within the internal market.
5. In most of these cases, the difficulties which slow down or constrain investment result essentially from:
 - the difficulty of ensuring an equitable and balanced sharing of the costs and benefits in relation to the territorial impact of the problem
 - the difficulties in promoting an operational and effective partnership between the many public and private sector actors involved
 - the difficulty of taking action at the operational level in a context characterised by significant administrative, regulatory and cultural differences
 - the difficulty to overcome the decentralized nature of responsibilities for the design, financing and implementing of the relative small size environmental projects

6. On the basis of the analysis and deliberations on future prospects conducted by the high level group as well as the workshops, the Commission considers that environmental investment should benefit from a similar support as that which is given to investment in the transport, energy and telecommunications fields. In effect, environmental investment is important in order to fully exploit the potential of the internal market. As well, the modalities applied in a network approach are equally applicable in the environment as compared to the other sectors.
7. Taking into account the specific characteristics of the environmental sector, the high level group agreed to define initiatives in this context as "Joint Environmental Projects (JEPs) The latter is defined as "a course of actions by Member States acting jointly or in coordination to develop a project or prepare the development of a project of common interest for environmental protection and improvement within the Union". These projects should ensure or accelerate the realisation of investment which is necessary to fully exploit the potential of the internal market. In this perspective, the approach aims at ensuring a more efficient and effective use of both administrative and financial resources. In their implementation, JEPs will promote and enhance the development of new and clean technology.
8. The high level working group established selection criteria for JEPs. (see Annex B.2)
9. The two workshops came up with concrete project proposals, some of which are in an advanced stage of preparation and could be launched within a relative short delay (see annex B.2). Both the high level group and the workshops underlined that if the projects are to be successfully launched an administrative and financial incentive should be provided. It involves not only a more optimal use of existing financial instruments, but also the inclusion of JEPs in those which are up to now limited to infrastructure projects in the field of transport, energy and telecommunication.
10. In the opinion of the Commission the next step in this dossier implies selecting and implementing a certain number of pilot projects aimed at testing implementation modalities.

RESULTS OF THE ANALYSIS AND DELIBERATIONS ON FUTURE PROSPECTS

I. JUSTIFICATION OF ACTION

A. HORIZONTAL CONSIDERATIONS

11. A joint approach will optimize the cost effectiveness of the investments, increase the environmental benefits and thus the overall economic viability of the investment. Other advantages including acceleration of the investment, achievement of higher standards and capacity harmonisation can be availed of. It will create the conditions for increased employment and coherence at the Community level in the

implementation of certain environmental interests. Joint Environmental Projects are not per se aiming at the fulfilment of the obligations which derive from existing Community environmental legislation.

12. Promoting JEPs could give rise to the following more specific economic and financial benefits which could outweigh economic costs:
 - (a) Concertation of existing environmental technology would be encouraged and, therefore, **economies of scale** could be more rapidly available at the research and development/application stage, on the design of projects and on the suppliers side.
 - (b) **New environmental technologies** would be encouraged, leading to the creation of new domestic and export markets (market scale for the EU is expected 20 billion ECU/p.a, worldwide 200+ billion ECU/p.a. by the end of millennium)
 - (c) **Reduction of financial costs**, both capital and operating.
A coordinated and better planned investment reduces the risks of failures and delays. A meaningful packaging of relative small projects reduces the administration cost and hence the spread required from the financial institutions. Further cost reductions can be achieved by avoiding duplication, reducing logistical costs, developing markets for "quality" recycled materials (waste) etc.

B. WASTE.

13. A large and continually increasing quantity of the waste produced in the EU Member States (in total: 700 million tonnes of which industry 30% and municipal waste 17%) is still discharged without any form of recovery or environmentally friendly treatment. Only some Member States have developed some infrastructure to manage their waste. Many suffer from an overdependence on (older) landfills (70%) as a disposal route with its negative environmental impacts, like pollution of ground water and surface water, greenhouse effects (methane emissions). Contrary to the U.S.A., there is still limited experience in the EU in providing integrated waste management services. Alternatives, in particular recycling and incineration with energy recovery, will become crucial elements for a greater sustainability in an overall process of waste minimisation.
14. During the workshop on waste (Brussels, 19/20 October, 1995) the justification for acting jointly derived from the strong need to effectively remedy a **great information gap** on both waste management techniques and markets for the recovered products. Taking account of the different degrees of development in and demand for environmental infrastructure in the different regions of the European Union, the implementation of JEPS would contribute to a reduction of these differences and hence strengthen cohesion between the different areas.
15. Another justification for JEPs which is particularly relevant in the field of recycling is related to the desirability of **reaching critical volumes** of waste in order to make projects economic viable and to reduce logistics costs e.g. in waste collection by developing networks of installations. JEPs create an opportunity for developing projects involving both the private and public sector. Furthermore, JEPs will stimulate, on a voluntary basis, a better integration of environmental considerations in the various industrial sectors.

16. At the workshop four different categories of waste flows (plastic, electronic consumer goods, " end of life " vehicles and the issue of heavy metals) were selected for examination by participants representing experts from private and governmental bodies. The workshop identified some 30 projects within the different categories. The main conclusion of this workshop was that JEPs respond to a clear need. It is worthwhile to proceed with JEPS through bringing necessary partners/actors together and by creating the means for realization.

Annex I gives an overview of the most promising examples .

C. WATER:

17. To an ever increasing extent, different areas within the European Union are confronted with constraints in economic growth due to water shortages (Spain, Islands etc). Other areas face a quality problem derived from heavy use and discharges or have experienced the (repeated) problems of flooding. Other technological and institutional inefficiencies in water management like high levels of water wastage (leakage of treated (potable) water is estimated at around 15% or 3 billion ECU), relative low recycling rates in manufacturing industry or limited institutional capacity due to a high degree of fragmentation are demanding different and in some cases joint responses for a more efficient use, control and clean-up of water.
18. **Water policy** is an obvious area for international cooperation and therefore for Joint Environmental Projects. Rivers, lakes and ground water aquifers do not respect international boundaries and, indeed, rivers, lakes and seas often actually delineate such boundaries. Pollution from one Member State will often impact on another and water abstraction from one Member State might lower water levels in their neighbour's territory. International cooperation should therefore be the norm in this policy area and, increasingly, this is so. A number of international conventions and agreements cover the management of these joint resources. Additionally, the Commission is considering a more institutionalised approach to the question of river management which would require cooperation in water management (quality and quantity) on a river basin basis.
19. JEPs are mechanisms with a joint approach to common problems. In other words, rather than have each Member State work separately on the solution to a common problem in the design or construction of their physical infrastructure, they could cooperate in the exchange of ideas and share in the costs in developing appropriate technologies and monitoring and setting up pilot projects. A wide range of JEPs can be established dealing with infrastructure issues. They will not necessarily involve support for the actual construction of the physical infrastructure where there would appear to be little to be gained from a joint approach. Rather JEPs should facilitate that the Member States can undertake measures more quickly, more efficiently or reach more ambitious targets.
20. The Water workshop (Copenhagen, October 11/12, 1995) acknowledged the importance of a **River Basin Management (RBM)** as an overall guiding principle in water management. Covering more than two Member States River Basin Management falls naturally within the concept of JEPs. Coordinated planning and management (quality and quantity) of shared river basins is essential for environmental and economic reasons. The Rhine and the Elbe Commission have

produced considerable improvements in the water quality. As regards the quantity aspects new arrangements have to be made. The projects which were identified by the Workshop dealt with the different aspects of rehabilitation, maintenance and use of the larger shared river basins in Europe. Referring to the floods in the different Member States a European " flood alleviation and wetland restoration " project could be considered as a Joint Environmental Project. For the other shared European river basins it seems natural to learn from the existing bodies. The formation of an " umbrella network " of river basin commissions could be the cooperative structure under which relevant JEPs projects could be developed or implemented.

21. For the Water Workshop four different target areas were selected : 1) Water (supply) management including reduction of water demand; 2) Waste water treatment and sewage disposal; 3) Port waste facilities; and 4) River basin and surface water(resources) management.

The workshop identified series of projects distinguishing two categories of projects examples:

- a) Projects which include a distinct physical network;
- b) Projects which lead to (better, cost saving and/or faster) improvements in environmental infrastructure.

Annex II gives the most relevant project examples .

II CRITERIA TO BE RESPECTED

22. As mentioned above the ad-hoc Group has shaped and defined the "networking" approach into Joint Environmental Projects in order to better define the needs, the scope and the objectives of the possible environmental undertakings. A set of nine guiding criteria (See **annex III**) provides a framework, in which the various objectives of JEPs should be achieved. They cover in part descriptive, essential and desirable factors:
- strengthening joint and more coordinated actions between Member States (i.e. a minimum of two), possibly involving non-Union countries when significant benefits could be accrued within the territory of the Union , as an answer to important environmental problems in the water and waste sectors.
 - enhancing the relationship between environmental effectiveness and economic efficiency (added-value).
 - stimulating the development and the implementation of new technology under adequate conditions of scale
 - intensifying, where opportune, public/private partnerships in financing and implementing the projects and
 - Obviously, assisting in achieving in a more coherent way agreed Community policies and objectives .
23. The results of the two workshops made it clear that these guiding principles/criteria were an appropriate basis towards the realization of JEPs . It became evident that a clear need - in the waste workshop recognized from both the public and private sector - for JEPs and that a range of the environmental infrastructure investments , in view of cost-effectiveness considerations, should only be envisaged in a joint approach

III CONSTRAINTS TO BE ADDRESSED

24. There are some constraints to the further development of JEPs. In many of the instances there are linked to the specific **institutional and administrative situation** of the environmental sector. The main impediment which has been experienced is the decentralized nature of responsibilities for the design, financing and implementing of environmental infrastructure projects. In particular, the water sector which is very fragmented is more reluctant to cooperate
25. With so many different players involved, the following difficulties could be encountered:
- a lack of a focal point for JEPs further development and promotion.
 - a deficient structured flow of information (availability and quality of data for those potentially involved;
 - different levels of experience/sophistication of the local/regional authorities;
 - the organisational gap between the central and more regulatory oriented government bodies and the more implementation and operationally oriented local/regional authorities;
 - different approaches between Member States on the actual involvement and potential role of private operators and vice versa ;
 - a lack of will/incentive to act jointly.
26. Other constraints are of a more **regulatory nature** partly due to existing regulation but also in some instances due to a lack of regulation: e.g. different and sometimes

opportunistic interpretations of existing Community or national waste regulations ("proximity" principle) complicates transboundary transport. There is a need of certain (quality) standardization of waste treatment and recycled products. Harmonization in waste handling, standardization and certification will result in more homogeneous fractions, secondary raw materials and final products facilitating an increase in markets.

27. Further examination might be necessary into the question as to whether **price differences** between the Member States for water and waste disposal inhibits the cooperation or the joint undertakings between the Member States.
28. On the **financing of JEPs** the following can be said. JEPs are by definition (see criteria) more likely to yield higher benefits/profits than if the same problems were treated separately by different national operators. In these circumstances it will be difficult a priori to justify on economic grounds any element of continuing grant/subsidy per se. The existing sources of finance for environmental infrastructure (Community and national) are of course under heavy pressure from the demands of Member States implementing EU directives. With regard to investment finance from public sources there is always an opportunity cost to be reckoned with, whatever the nature of the investment.
29. The very organisation of JEPs involves inherent difficulties which must be faced and solved by the partners if the project is to get off the ground. As stated above, these involve the added complications of different standards, planning procedures, regulations and pricing etc. There is therefore a case to request some incentives to offset these **up-front constraints**.
30. It is clear that if the realization of JEPs producing significant economic and environmental benefits can be more rapidly mobilized by means of a financial incentive to prompt and accelerate the process, an **incentive financing** for (additional) up-front costs is justified i.e. by financing (pre-) feasibility studies, pilot projects, demonstration plants etc. Once the "added value" in terms of economic efficiency and environmental effectiveness of the projects can be determined in more precise terms, the necessary financial engineering at the subsequent realization stage will be much facilitated.
31. At EU level, several **existing financing instruments** could, in principle, kick-start the process. Most suited for the immediate necessities of JEPs incentive financing could be the financial instrument for the environment (LIFE), which already allows for demonstration projects, awareness raising projects and technical assistance projects. LIFE, though, imposes restrictions as to the financing of feasibility studies and "typical infrastructure projects". Besides, the overall amounts available and the ceilings for the different eligible activities would allow only for the financing of a few and very small projects.
32. Other possibilities consist of the Cohesion Fund and Structural Funds *inter alia* the Community Initiative programme INTERREG II and the so-called Art. 10 (innovative) actions within the framework of the European Regional Development Fund (ERDF). However, these possibilities are limited because most of the monies are already earmarked at the operational level for the coming years and furthermore, the functional and the geographic eligibility criteria do not allow for a horizontal application linked to the implementation of JEPs. There is also the European

Investment Fund (EIF). It could play a more active role as a leverage mechanism, either by extending its guarantees to JEPs or by facilitating equity participation. In this perspective, the environment would have to be integrated as a separate objective in the EIF Statute.

33. However, given the above-mentioned constraints, in particular the institutional/administrative ones, and the necessity of a visible acknowledgement incentive financing of JEPs should imply a financial support analogous to that provided for TENS.

X-X-X-X-X-X-X-X

ANNEX 1 - EXAMPLES

DESCRIPTION OF SOME SPECIFIC WASTE PROJECT

from the workshop on waste (Brussel, 19/20 October)

a. Plastic

Plastic is a material which can be found in most consumable products, therefore the results of the parallel session on plastic waste should be seen jointly with those of the other 3 parallel sessions.

The proposals which correspond best to JEPs, implying that they are not only "ideas" but have reached a more advanced maturity stage are:

1. Building of joint plants for the recycling of engineering plastics

This is very good example of waste for which the volumes reached at national level do not economically justify their recycling. Therefore such plastics are at present discarded, while, if a common strategy was developed, they could be recycled and put on the market again.

2. Development of joint facilities to treat PVC cables containing heavy metals

The presence of hazardous substances, such as heavy metals, in waste is one of the major concerns of the EU waste management policy.

This is an example of pilot project, already developed at laboratory scale in Denmark, which could be more effectively brought to full operational scale by a joint action between several Member States.

3. Extension to other waste streams of existing recycling schemes and technology. In particular: end-of-life vehicles and electrical/electronic waste

A recycling programme for the recycling of large quantities of discarded plastic equipment is already initiated, bringing together all the actors of the chain, from the producer, to the recycler. Such an experience could be transferred to other waste streams with the participation of several Member States.

4. Creation of EU wide or international data basis on recovery technologies and of market opportunities

One major obstacle for recycling in scarcely populated areas relates to the difficulty of obtaining the necessary information.

The possibility to advertise recycled products at large distances, in particular via *internet*, and to access to computerized information networks could help solving this problem.

5. Setting up of an integrated network for recycling PET bottles

The experience gained in the USA may be of help. It concerns in particular highly populated areas. New recycling technologies can be developed around this kind of waste.

b. Electronic Consumer goods

1. Recovery of Television-sets and Personal Computers-monitors

After collection of TV-sets and PC-monitors, appropriate dismantling and de-pollution are required in order to optimise both separation of parts and materials and recovery of these. Existing environmental and economy of scale problems for the recovery of television sets (screens and CRTs in particular) and PC-monitors, may be overcome by the networking of intermediate disassembly units and recovery installations in different Member States of the European Union.

The composition of CRTs and PC-screens varies greatly: the development of a data base for easing recovery processes is required.

2. Recycling of batteries from electrical and electronic equipment

Batteries, part of electrical and electronic devices and appliances vary in size and type. Despite the fact that they contain hazardous substances, batteries are mostly disposed of in landfills without precaution.

Networking of facilities which after an appropriate collection of old batteries, provide for their efficient separation (button cells, silver oxide, nickel-cadmium, etc) as well as recovery, would contribute to overcoming the problem's economy of scale as well as decreasing the environmental risk.

3. Monitoring of the electronic consumer goods waste stream and establishment of an information centre

The optimisation of existing or future infrastructures for the management of the electronic consumer goods waste stream requires an adequate knowledge of the quantities and types of products put into the market (per year), customer's behaviour, the flow of products and materials, information on refurbishing the level of recovery treatments.

A joint european network which could lead to an information centre (of network of centres) would cover the constant request for data of that nature and serve the needs of dismantlers and recyclers of those appliances.

c. End-of-life vehicles (ELV)

With a view to the arising quantity of waste from end of life vehicles (ELV) as well as its hazardous characteristics the JEPS workshop has given due attention to possible means to improve the situation of the treatment of ELV. Given that the metallic part of a car (70 - 75%, with a tendency to decrease) apparently does not pose major difficulties in terms of proper handling and recovery, the automotive group focused mainly on the remaining part, which are the shredder residues.

Four projects were proposed, based on an analysis of the automotive life cycle from the design phase until the treatment of the ELV as illustrated in the figure below.

LIFE CYCLE OF CARS	POSSIBLE JEPS	
Design	(A) Feedback of recyclers to: (1) car makers (2) material suppliers	
Consumption	No projects	
Dismantling	Parts trade	No projects
	Dismantling materials	(B) Larger scale European network for material trade. Life cycle analysis (e.g. what are the costs of transport ?) (C) Classification system of quality
Shredder	NFM	No projects
Fluff	(D) (1) Larger scale for incineration with energy recovery (2) Larger scale for further separation for material re-use	
FM	No projects	

FM = Ferrous metals

NFM = Non-ferrous metals

The projects can roughly described as follows:

- a) Infrastructure for exchange of information between car manufacturers, material suppliers and recovery industry.
- b) Establishment of a European network for recovery material from ELV.
- c) Classification system of the content of materials to be recovered which can not be traded as parts.
- d) Establishment of an infrastructure for the treatment and valorisation of shredder residue.

The proposals reflect the unsatisfactory situation at present where there is a lack of both an exchange of information between the different economic operators involved and, partly due to this, economies of scale .

The participants stressed the importance of approaching each project on its own merits and feasibility. The group clearly felt that the pursuit of the proposed projects would yield in considerable economies of scale and positive environmental impact.

Possible confidentiality of information was identified as an obstacle to open exchange of information. The administrative burden arising out of legislation on the shipment of waste was mentioned as another obstacle to the establishment of a European network for recovery material from ELV as well as of an infrastructure for the treatment and valorisation of shredder residue.

d. Heavy Metals

1. Treatment and management of residues from waste combustion

Waste incineration is an economic activity which is of importance in all EC Member States. The treatment and/or disposal of residues of such incineration raises considerable problems; optimal solutions have not yet been found. The project aims at developing processes for the treatment of such residues, the recovery of materials and the safe disposal of residues, including demonstration projects.

2. Treatment of mercury-containing wastes

Mercury-containing wastes are often small in volume, but are very hazardous and difficult to treat. This leads to very high treatment costs. The project aims at creating a joint plant for several Member States, which would be economically attractive for participating countries.

3. Decontamination of soil contaminated with heavy metals

The project aims at developing the technology for a cost-effective large-scale treatment of soil which is contaminated with heavy metals. Its environmental and economic interest is particularly great in urban agglomerations.

ANNEX 2

DESCRIPTION OF SOME SPECIFIC PROJECT EXAMPLES from the Water workshop (Copenhagen, 11/12 October 1995)

- a) Projects which include a distinct physical network;
- b) Projects which lead to (better, cost saving and/or faster) improvements in environmental infrastructure.

As regards the first category two groups of projects are mentioned:

1) Port reception facilities

This relates to a cluster of projects which if done jointly will improve the situation of dumping waste at sea and consists of three main components:

- Upgrading of current technology for reception and treatment of chemical port waste, i.e. ballast water, bilge water, etc. to improve the cost recovery
- Construction and extension of adequate port waste facilities particularly in the Mediterranean and the Eastern Baltic Sea.
- Setting up a tracking system monitoring the waste flow between the ports of Europe.

Development of a cost-effective surveillance satellite to detect accidental spills and illegal discharges enabling a better and quicker response from ground recovery equipment could be considered within this group of projects.

2) River monitoring systems

In order to enable a coordinated planning and management for a River Basin a river monitoring network is necessary. The monitoring system should both serve water resources management and contingency purposes facilitating the involved countries to predict and deal with current water shortages and water quality changes. The system should involve on-line monitoring and transboundary electronic interconnections between the stations along the river basins. Such a system could be a tool for planning common investments in other infrastructure installations like dams, specific treatment plants etc.

The second category of project examples include common parallel pilot/implementation projects in various Member States, addressing similar infrastructure problems with new or available technologies. A range of projects were discussed in the workshop of which some are mentioned here :

1) Use of alternative water resources in future urban water supply.

A project concerning development and implementation of a new concept of urban water management including specific projects on substitution of drinking water with secondary water sources of lower quality (rain water, slightly polluted ground water, treated waste water etc.) for specific purposes.

2) Sludge treatment and disposal.

Projects dealing with processes for treatment of waste water sludge in relation to the final means of disposal and the potential environmental problems this may cause. Processes for the removal of heavy metals from waste water sludge prior to its disposal on agriculture land is essential. In addition, the management of industrial discharges in relation to control of the input of harmful substances into the public sewer needs to be addressed.

3) Nitrogen removal at low temperatures.

Development and implementation of facility modifications and operational strategies for safe and stable performance of the temperature sensitive nitrification process in urban waste water treatment plants in cold and temperate climate.

4) Waste water treatment for specific areas.

The establishment of waste water treatment facilities in small communities with e.g. large seasonal invasions of tourists. Projects could include the implementation of small waste water treatment plants as well as larger central facilities, in which the space capacity out of the tourist season is used for treatment of septic sewage from the local population.

5) Storm water treatment and reuse.

The development and establishment of simple treatment facilities for storm water like sedimentation ponds. Because of the low content of pollutants typical for storm water, the possibility of reuse for agriculture or other purposes is obvious. Depending on the purpose for which the water is reused, monitoring of water quality and in some cases further treatment are factors of importance.

CRITERIA FOR JOINT ENVIRONMENTAL PROJECTS

DESCRIPTION

1. Member States acting jointly or in coordination to develop a project (or prepare the development of a project) of common interest for environmental protection and improvement within the Union. Projects involving non-Union countries may be treated as JEPS when the significant benefits therefrom accrue within the territory in the Union.
2. JEPS would provide opportunities for the development of new technology allowing for its implementation under economic viable conditions.
3. Any Community support for JEPS should not include support for a R&D and technology project for which funds are available.

CRITERIA

Essential:

4. As compared to purely national projects, a JEP- project shall yield significant "value added" in the sense of environmental effectiveness and capital and operational cost savings.
5. Major EU environmental priority policy areas e.g. in the water and waste sector shall be targeted and within those and other relevant sectors JEPS shall assist in achieving agreed Community policies and objectives.
6. The project will concern significant physical, including monitoring, infrastructure projects and objectives.

Desirable:

7. It should lead to the development of new and improved structures of administrative partnership between Member States.
8. Desirably, the project should promote the development and use of advanced environmental technology.
9. The project should, where appropriate, involve the private sector.

Annex 1: PROGRESS OF TEN LEGISLATIVE PROCEDURES

Field	COM. Prop.	ESC Opinion	Opinion of Committee Regions	EP: 1st reading	Common position	EP: 2nd reading	Counciliation	Adoption
Financial Regulation	2 March 1994	28 April 1994	9 May 1994	30 November 1994	31 March 1995	13 July 1995	n.a.	18 September 1995
TRANSPORT								
Multimodal	29 March 1994	23 November 1994	27 September 1994	18 May 1995	28 September 1995	pending	Spring 1996	mid-1996
HST interoperability	15 April 1994	23 November 1994	28 September 1994	19 January 1995	28 September 1995	pending	n.a.	end 95/ beginning 96
TELECOMS								
Global approach	31 May 1995	pending	pending	January 1996	? beginning 1996			? mid January 1996
ISDN Guidelines	12 March 1993	21 December 1993	17 May 1994	19 April 1994	22 December 1994	13 June 1995	n.a.	11 October 1995
Actions	12 March 1993	21 December 1993	17 May 1994	19 April 1994	(1)			
IDA (3)	12 March 1993	7 June 1993	17 May 1994	17 November 1994	21 December 1994	20 September 1995	n.a.	6 November 1995
TNA	12 March 1993	7 June 1993	17 May 1994	17 November 1994	(2)			
ENERGY								
Gas and electricity Guidelines	19 January 1994	27 April 1994	17 May 1994	18 May 1994	29 June 1995	26 October 1995	January 1996	? Jan 96
Connected measures	19 January 1994	27 April 1994	17 May 1994	18 May 1994	29 June 1995	26 October 1995	n.a.	? Jan 96

- (1) The Council has suspended discussion of the "Actions" proposal pending agreement on the financial regulation.
- (2) Change of legal basis resulting in deletion of TNA (Article 235 in place of 129(c))
- (3) The TEN Financial Assistance Regulation does not apply to IDA

Annex 2: EU FINANCING of TENS (MECU)

Field	Type of assistance	Instrument	1993-1994	1995	TOTAL
TRANSPORT	Loans	EIB (1) (2)	4 342	2 075	6 417
	Guarantees	EIF (2)	75.9	85.2	161.1
	Aids	Structural Fund (1) (3)	884.0	115.0	999.0
		Cohesion Fund	1 827.0	1 076.6	2 963.6
		TEN heading	385	240(4)	625
		(14 priority projects)	180	182.5	362.5
ENERGY	Loans	EIB (1) (2)	1 077	304	1381
	Guarantees	EIF (2)	207.7	0	207.7
	Aids	Structural Funds (1) (3)	675.7	87.8	763.5
		TEN heading	0	12 (4)	12
TELECOMM.	Loans	EIB (1) (2)	3 787.8	506.6	4 294.4
	Guarantees	EIF (4)	156.1	0	156.1
	Aids	Structural Funds (1) (3)	294.7	0	294.7
		TEN heading	21	22 (4)	43

(1) TEN and TEN-related projects

(2) Signed contracts

(3) Appropriations committed

(4) Proposals approved by the TEN Financial Assistance Committee at its meetings on 10, 11 and 12 October, 9 and 20 November last.

ISSN 0254-1475

COM(95) 571 final

DOCUMENTS

EN

07 15 11

Catalogue number : CB-CO-95-626-EN-C

ISBN 92-77-96467-7

Office for Official Publications of the European Communities

L-2985 Luxembourg

57