

Evaluation Report

Operations Evaluation Department (EV)

Evaluation of Transport Projects
in Central and Eastern Europe



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EXECUTIVE SUMMARY

INTRODUCTION

This Evaluation covers the European Investment Bank's (EIB's) portfolio of completed Transport¹ Projects in Central and Eastern Europe financed between 1990 and 1999, inclusive. During this period, the Bank financed 58 projects for a total disbursed amount of some EUR 4.9 billion. Of this, approximately 65% went to roads, 27% to railways, 6% to air transport and 2% to ports. The distribution between countries reflected their size, population and economic importance, with most funding going to the Czech Republic, Poland and Romania.

The work was carried out in two phases:

- A desk review of twenty-five completed transport projects in the four transport sub-sectors: roads, railways, air transport and maritime transport, in ten Central and Eastern European (CEE²) countries. This was based on available internal documentation and interviews with members of operational staff;
- A subsequent in-depth analysis phase, including field investigations, of ten of the original twenty-five projects.

BACKGROUND

The evaluation was carried out based on the Bank's standard evaluation criteria and levels of performance³. The projects were initiated at the earliest stage of the CEE transition process and the findings and recommendations should be seen in that context. The operating environment and institutional framework had particular characteristics of the time and place, including:

- Institutions and countries in a state of transition as they tried to re-orient themselves from centrally planned to market driven economies. This meant that many institutions were weak and had to be supported with external assistance. This was particularly true in the newly re-established Baltic States, where many senior officials and managers had left for Russia.
- The economies of the countries were subject to rapid changes, usually related to the transition process. This made it difficult to predict demand.
- Project Promoters often had little or no experience of IFI due-diligence procedures, FIDIC contracts, international competitive tendering, environmental impact assessments, etc.
- Guarantee arrangements, including documentation and the need for Parliamentary ratification of government guarantees, were untested.

FINDINGS: PROJECT PERFORMANCE

- All projects contributed significantly to the EU's key transport policy objectives, with a particular focus on infrastructure in urgent need of rehabilitation.
- Most of the ten projects examined in-depth were completed to specification, largely on time and on budget, with cost overruns of less than 15% of the original estimate. Only two projects suffered from much higher costs than forecast; attributable to a combination of inaccurate unit prices, latent road foundation problems and rampant domestic inflation.
- There were problems with bureaucratic and administrative delays in establishing guarantees, and procurement: delays of more than one year to the start of construction were not uncommon.

¹ Not including urban transport.

² Bulgaria, Czech Republic, Hungary, Poland, Romania, Slovak Republic, Slovenia, Estonia, Latvia, and Lithuania. Specifically excluded are Albania, Bosnia-Herzegovina and the Former Yugoslav Republic of Macedonia.

³ Evaluation criteria: Relevance, Efficacy, Efficiency, and Sustainability with the complementary criteria of Institutional Development and EIB performance. See Appendix I for definitions. Performance Ratings: Good, Satisfactory, Unsatisfactory and Poor.

- The works were generally carried out to a high standard and should have a full working life if properly maintained. However, there are concerns that available funds for maintenance from central government may not be adequate, which would affect the sustainability of seven out of the ten projects.
- Nine out of the ten projects benefited from Technical Assistance, which was an EIB funding condition, and which facilitated the implementation of the projects. Five of these Promoters, all in the roads sector, still rely on external assistance to implement EIB funded projects.
- Most of the projects were affected by significant changes in the pattern of transport demand during the transition. However, the Bank's projections were normally closer to the real situation than the Promoters'.

In terms of overall performance, out of the ten projects evaluated in-depth, seven were either "Good" or "Satisfactory", two were "Unsatisfactory" and one was "Poor". Projects performed best against the following criteria: relevance to EU policy, efficacy, and sustainability, with the reservation on maintenance funding noted above.

The evaluation had a specific remit to consider Environmental Aspects. All ten of the in-depth projects were rated as "Good". Most of these were rehabilitation projects which showed only positive environmental impacts, e.g. improved traffic conditions. Where there was new construction, the mitigation measures proposed by Environmental Impact Assessments were properly implemented. This performance may be attributed to the Bank's application of EU norms in countries with minimal environmental legal frameworks.

FINDINGS: EIB CONTRIBUTION, STRATEGIES, POLICIES AND PROCEDURES.

Considering the Bank's actions and Project Cycle Management (PCM):

- Initially, to develop the Bank's activities in these countries, the EIB relied heavily on the preparation work of other IFIs. Out of the twenty-five projects evaluated at the desk review, fourteen had been identified by third parties, e.g. the World Bank and EBRD, and the Bank was asked to participate at a later stage. Once relationships had been established, the Bank was able to develop projects directly with Promoters.
- The appraisal process was a useful mechanism for the transfer of technical and economic know-how, particularly in relation to the application of EU environmental and procurement standards. It also allowed the testing of the economic and financial efficiency of every project.
- The Bank's services were able to identify key project risks, e.g. cost uncertainties, lack of project management capacity, but measures were not always suggested to borrowers to mitigate them.
- Project objectives, as presented in project appraisal and approval documents, were defined in terms of physical assets, e.g. km of road rehabilitated, without explicitly stating the desired project outcomes which were the basis of the economic analysis.
- Contract conditions tended to focus on procedures and financial conditionalities, rather than risk mitigation and the achievement of project objectives.
- Promoters particularly welcomed the Bank's pragmatic approach to problem solving and the guidance it could give in resolving not just unforeseen technical and financial problems, but also relationship issues with other funding sources.

RECOMMENDATIONS

While most of the projects were successful, there are a number of measures which are recommended to increase the Bank's added value, improve project efficiency and sustainability, and maximise the contribution of projects to EU and National policy objectives.

The recommendations have been grouped into two categories. "General EV Recommendations" apply to all Bank projects and, in many cases, reflect the findings of other evaluations. "Specific EV

Recommendations" apply to projects which have a particular development role, or where the Bank is operating in the difficult environment of economies in transition.

GENERAL EV RECOMMENDATIONS	OP/PJ ACCEPT OR REJECT	OP/PJ COMMENTS OR REASONS FOR REJECTION
<p>As frequently recommended, and now supported by Ops A and PJ management, the Bank should be involved during the development phase of projects; taking an upstream, more proactive approach to project selection in order to maximise impact. Regular sector and policy briefing papers should be prepared for areas in which the Bank is particularly active. (3.1.2, 4.2, 5.)</p>	<p>Accept</p>	<p>Policy papers are regularly being prepared by PJ and Ops to provide input for the Operational Plans to be developed under the Community Support Frameworks. In addition, the Bank uses papers prepared by the Commission covering policies on specific sectors and countries</p> <p>The Bank was routinely consulted on an informal basis on a number of projects, although this is not necessarily documented.</p> <p>To comply with the mandate, which also contributes "to maximise impact and increase the EIB's added value", the Bank had to select the more advanced projects though others at earlier stages were accepted but are not in the sample since unfinished. In any event, involvement earlier than at present will require more staff resources.</p>
<p>Where the Bank is involved in programme-type operations, e.g. in Railways, the appraisal should further focus on institutional rather than individual investment components. (6.2)</p>	<p>Accept</p>	<p>Ops and PJ normally look carefully at the institutional capacity, strategies, procedures, processes, etc. during appraisal and monitor their effectiveness during project development for all projects, not only "programme type operations".</p> <p>In the frequent cases of cofinancing, these aspects were also closely followed by IBRD and EBRD.</p>
<p>The Bank should identify and agree appropriate performance indicators with the Promoter to ensure that there are appropriate measures of project success available at the RFT/Scorecard stage. (3.2)</p>	<p>Accept</p>	<p>Performance indicators should however be clearly specified. The information required to judge the success of a project should not be excessive and is not generally suitable to include as binding element in the contract.</p> <p>The indicators of economic rationale (time savings etc) can rarely be contractual conditions, but are used in the analytical framework of the economic and financial analyses.</p> <p>The performance indicators that refer to physical output targets are already included in the Technical Description.</p>

SPECIFIC EV RECOMMENDATIONS	OP/PJ ACCEPT OR REJECT	OP/PJ COMMENTS OR REASONS FOR REJECTION
Specific mitigation measures for significant risks identified by OP, CRD and PJ should be introduced into all finance contracts (3.2).	Accept	This is done routinely for project related risks under the coordination of Ops.
Monitoring and disbursement procedures should be tailored to the specific needs of individual projects (3.1.5).	Accept	This is relevant particularly in the context of future cofinancing with the Structural Funds in the region.
Finance contract conditions on repeat operations should be used to address weaknesses identified during monitoring and project completion reporting. Contractual conditions on maintenance to be reinforced and verified during repeat operations. (3.3)	Accept	This is frequently done but could be more systematic. Note that weaknesses may also be identified outside of formal monitoring or project completion reporting.
Where the Bank requires a project to have Technical Assistance, in order to address institutional weakness on the part of the Promoter, then its Terms of Reference should include a requirement for Institutional Development. (3.5)	Accept	This is desirable and should be implemented depending on the specific circumstances but may be unlikely to significantly change the situation (e.g. low wages in the public sector, do not necessarily attract the best qualified staff and thus TA is regularly required even for repeat operations).

1 INTRODUCTION

The ex-post evaluation of EIB financed projects presented here is to address Transport Projects in Central and Eastern Europe⁴ (CEE). In this context, "transport" includes roads, railways, port facilities and air travel, including the three sub-sectors of airports, air traffic control systems and aircraft, but excluding urban transport. Projects considered for evaluation were those financed between 1 January 1990 and 31 December 1999 and completed by the start of analysis.

A team of consultants from Dorsch Consult Ing.mbH. carried out the main work of the evaluation from end 2001 to mid 2002. The team comprised a specialist in CEE transport economics as project manager, three transport sub-sector specialists, all with experience of CEE operations, plus a dedicated environmental consultant. EV has prepared this synthesis report based on their contribution.

The focus of the evaluation is on the performance of the projects, their relevance and contribution to EU and EIB objectives, the efficiency of the Bank's project cycle management, its value added, and environmental issues relating to the projects.

The evaluation has two primary functions. Firstly, to increase transparency to the EIB's governing bodies and, secondly, to allow the Bank to learn from its experiences.

1.1 OUTLINE OF THE EVALUATION

1.1.1 Work Programme and Approach

The work programme was divided into two phases. The first comprised a desk review of the available internal documentation of twenty-five projects in four transport sub-sectors (road, rail, airports, sea ports) of ten CEE countries. The project sample was selected from the list of forty-six projects due for completion by the time the evaluation started, to cover all of the countries, with maximum sector coverage within each country. This was followed by an in-depth analysis, including field investigations, of ten projects in three transport sub-sectors (road, rail, airports) in eight CEE countries⁵. Projects selected for this stage had all been operational for at least two years by the time the in-depth evaluations were started and eight had been operational for more than three years.

The main evaluation criteria and their definitions are in line with the standards of the Bank, the European Commission (EC), and other International Financing Institutions (IFIs). The main evaluation criteria used are Relevance, Effectiveness (Efficacy), Efficiency, Sustainability, Institutional Development Impact, and the EIB's Performance. Individual projects were rated in four categories: "Good", "Satisfactory", "Unsatisfactory", and "Poor", in accordance with the Bank's evaluation procedures.

1.1.2 Limitations and Shortcomings of the Evaluation

The evaluation must be seen against the specific background of the projects reviewed: the economic transition in CEE, particularly in the transport sector during this period.

Most projects analysed passed the due-diligence procedures of the Bank in the period 1993 to 1998, i.e. in many cases only shortly after the beginning of transition. As to the specific conditions of the transport sector: it suffered from considerable uncertainties in traffic development and from a new, but as yet unclear, transition to a market economy. These specific problems and difficulties certainly had an impact on both the projects and their handling by the EIB.

4 Bulgaria, Czech Republic, Hungary, Poland, Romania, Slovak Republic, Slovenia, Estonia, Latvia, and Lithuania. Specifically excluded are Albania, Bosnia-Herzegovina and the Former Yugoslav Republic of Macedonia.

5 Bulgaria, Czech Republic, Hungary, Poland, Romania, Slovak Republic, Estonia, Lithuania

A number of limitations on information availability hampered the findings and conclusions:

- Full Project Completion Reports (PCRs) were available for six out of the twenty-five projects in the desk review sample. Simplified PCRs had been prepared for a further nine projects, but four of these did not include completion data from the Promoter.
- The files held in central archives do not include details of meetings and discussions which take place before a project is formally notified to the Management Committee, and projects which do not reach that stage are not documented or tracked.
- In the interests of efficiency, and to keep the files to manageable proportions, central archive files only record meetings, communications, etc. where a written document was prepared or received e.g. Minutes, Faxes, Letters and, occasionally, copies of important E-mails. They do not routinely include notes on telephone conversations, E-mails, etc.
- Many of the projects were initiated in the early 1990s and had long gestation and implementation period. Since then, many of the staff who worked on those projects have retired and their detailed knowledge of them has been lost.
- The central archive files and the Bank's IT project management system do not contain all the relevant documentation, or even references to some key documents, e.g. full Project Completion Reports (PCRs) and Progress Reports. These tend to be kept in personal files by the individuals concerned and do not appear on a central register.

1.2 1990s CEE TRANSPORT SECTOR DEVELOPMENT AND POLICY TRENDS⁶

The countries concerned showed wide variations in terms of traffic volumes and densities, as well as in the pace of economic reform and the rate of introduction of market mechanisms. Comparisons are made even more difficult by the limited statistical data available and the fact that each country's data is based on its own definitions and time periods.

However, there were a number of key issues which affected virtually all transport modes in CEE at the beginning of the 1990s:

- A large maintenance backlog due to shortage of funds for maintenance and previous unbalanced transport strategies: priority for new construction rather than maintenance of existing facilities.
- The deterioration of existing infrastructures due to the use of low quality materials (asphalt, cement, etc.) and poor quality control of works.
- Inefficient institutional framework and managerial structures, with a lack of know-how of financial and economic management tools, including inadequate procedures for investment selection and prioritisation.
- The limited introduction of market mechanisms in the transport sector, e.g. competition in the transport sectors, procurement procedures applied, etc.
- Non-existent or inadequate environmental standards.

There was an inevitable impact on freight transport from: economic restructuring, the sharp decline in output which followed the disappearance of the Soviet Union, and the Balkan unrest which affected neighbouring countries.

Freight sector traffic, in tonne-kilometres, declined by nearly 50 % from 1988 to 1992 alone. Some growth was seen from 1993 onwards, and the sector managed to show around 10 % growth in 1995, but this could not be sustained. Low or zero growth continued in the years which followed, with variations between countries, and confirms the transport sector's sensitivity to economic cycles. Not all transport modes were affected to the same extent by these trends. Road transport overcame the decline by as early as 1993, while the railways, which had been declining since 1989, had to wait until 1995 before demand stabilised. Rail transport lost the lead it had held until 1990 and, by 2000, roads

⁶ This sub-section draws on publications of the ECMT (Trends in the Transport Sector 1970-2000 and 1970-1997) and IBRD (Transition – The first Ten Years).

were transporting some 55 % of the total tonne-kilometres carried by road, rail and inland waterways. Inland waterway also saw its share decline, but not to the same extent as rail transport which has shrunk by almost half since 1990.

The lack of statistics makes it impossible to provide a comprehensive overview of passenger traffic in CEE countries: available data in most countries relate only to public transport. However, in 1997, railways carried just over 50% of the passengers carried in 1989, and the numbers continue to decline. A key factor is the increased competition from private cars. At over 200 cars per 1 000 inhabitants in several countries, much higher in major cities, car ownership has already reached 40% of the EU average.

2 EIB PORTFOLIO OF CEE TRANSPORT PROJECTS SINCE 1990

An analysis of the EIB's portfolio in the CEE transport sector shows that lending (signed loans) to the road sector constitutes more than half (53%) of the Bank's financing, followed by rail at 21%. Lending to the urban transport sector stood at 15% at the end of 2001, compared with air transport at 10%. Ports play a minor role with only 1%. All of the port, air transport and rail investments were for rehabilitation and upgrading, as were the large majority of road projects. This order, i.e. Roads, Rail, Air, Ports, applies to six of the ten recipient countries.

The major recipient countries are the Czech Republic at 25% of transport lending, Poland with 24%, and Romania with 18%. Slovenia, Slovakia, Hungary and others received much less. This reflects their relative size, population and length of infrastructure. All countries, except Estonia, received funding for roads which, with the exception of Slovakia, has accounted for 40% to 60% of all transport sector funding in the country. All countries apart from Bulgaria received railway funding, although the proportion was more variable than road, ranging from 8% in Slovenia to almost 60% in Latvia. With the exception of Latvia and Slovenia, all countries have received funding for the air transport sector.

There was a general increase in average loan size up to the year 2000. The ten year average project cost was EUR 246 million, of which the mean EIB loan was EUR 104 million or 42% of project cost. Lending in 2001 was slightly lower than 2000, but higher than 1999. Growth therefore appears to be continuing, although more slowly than before.

3 PERFORMANCE OF THE PROJECTS EVALUATED IN-DEPTH

3.1 IMPLEMENTATION PERFORMANCE

3.1.1 Promoter

When the projects were appraised, all the Promoters were public entities, e.g. national road administrations, although two projects were privatised shortly after completion. In both cases, the Bank provided funds to rehabilitate or modernise key revenue generating assets, without which the privatisations would either not have taken place, or would have generated much less revenue.

While the project implementation performance of the Promoters varied, all projects reached completion as defined by the Technical Description. However, in two cases, cost overruns meant that the scope of the Technical Description had to be reduced in comparison to the definition at appraisal. A special-case project is one involving the construction of a motorway along with new border crossing and customs facilities where the motorway and the border crossing were under the control of different responsible authorities. Despite a minimal increase in traffic volumes, the border crossing is failing to cope with freight traffic. There does not appear to be a problem with the physical infrastructure, but it is taking up to six hours on a normal day, and ten hours after a holiday weekend, for a truck to transit. This is against a target maximum of one hour. This would suggest that the problem is related to the management of the process by the responsible authority. However, there was no contractual condition requiring process change at the border, nor were performance targets set for the crossing. The effects of these delays are both direct: no savings from reduced transit times, and indirect: queues encourage trucks to take alternative, less suitable, routes into the country.

Most Promoters took particular care to apply EU compatible procurement rules. This was a contractual condition and the Bank helped Promoters to organise the process. During the in-depth analysis, only one inconsistent case was positively identified. A project which was originally intended as a Built Operate Transfer (BOT) scheme was re-tendered as a conventional construction contract; but only the BOT shortlisted contractors were invited to bid. This procedure was non-standard but accepted by EIB as there was transparent international competition, albeit on a restricted basis, and the final price proposals were reasonable.

3.1.2 Project Design

Project designs were prepared by the Promoters, supported in some cases by international consultants, and then submitted to the Bank. These were submitted to the EIB which critically reviewed them and proposed modifications, recommendations and conditions before approving the final design. However, although there were cases where the Bank was involved in establishing the Terms of Reference for consultants to carry out feasibility studies, etc., the Bank's services were typically not involved until after the key project decisions had been taken. There was therefore little opportunity to discuss whether the proposed solution was the most appropriate to the economic needs of the country or region.

In three out of the ten projects analysed, the Bank was able to make a significant contribution. Neither detailed designs nor accurate materials and labour cost breakdowns were available at appraisal, so potential project components were accepted post signature on a case-by case basis, after having been reviewed by the EIB. This flexible approach, which allowed a better prioritisation of the sections to be rehabilitated, and the monitoring of the project's progress, was a significant value added of the EIB's involvement. Conversely, the Motorway project referred to in 3.1.1. was virtually complete by the time it was appraised. This limited the Bank's ability to add technical value, although there had been some involvement in the development phase of the project.

On one of the road rehabilitation projects which were analysed in-depth, cost over-runs meant that the project specifications for some sub-sections had to be reduced. An examination of the files and discussions with Bank staff found no trace of these changes having been either notified to, or approved by, the EIB. The changes resulted in an inadequate design; reducing useful life, and increasing both pavement damage and maintenance costs. In contrast, the specifications of a railway project were also modified during implementation, following discussion and agreement with EIB staff. The result was higher safety standards and an increase in the length of the sections to be improved.

3.1.3 Timing of Project Implementation

Eight out of the ten in-depth projects were not completed within the original time schedule. This was almost exclusively due to delays in the start of physical construction, which were typically one year. This would not normally be acceptable, but allowance can be made for the operating environment and the inexperience of the Promoters. Delays were attributable to:

- Getting parliamentary ratification of state guarantees. This was time consuming and in at least one case delayed the project by a full year.
- Promoters' lack of experience in international tendering and signing and ratifying the legal documents required, despite assistance from the Bank.
- Unforeseen technical conditions, e.g. failure of road substructures and geological problems, requiring revised designs and technical specifications resulting in delays in contracts and implementation.
- Co-financing with other IFIs, producing delays due to doubling of documents, approvals etc. and particularly the different procurement procedures required by the various parties.

Only one project suffered a serious delay: three years. This was due to a specific problem involving a total change in the definition of the project and the end result was a project of much greater economic benefit than the original, with the Bank contributing to the successful outcome. Another exceptional

case was a project which started with a delay of two years, due to re-tendering required, but which finished on schedule.

3.1.4 Final Project Cost

Project costs faced several typical CEE problems of the period:-

- High inflation.
- Project costings, particularly on materials, in transition between administered and market-based prices.
- Increasing competition between international contractors and suppliers on domestic markets;
- Unstable exchange rates.
- Contingencies which did not cover technical risks and uncertainties, e.g. geological problems.

In spite of these difficulties, out-turn costs were acceptable for eight out of the ten projects analysed in-depth. Three of these were within the original budget, three had cost overruns of less than five percent and two had overruns of less than fifteen percent. However, there were significant cost overruns on the other two projects. In one case, there was an increase in project cost – plus a reduction in project scope. On completion, the unit cost, i.e. the cost per kilometre rehabilitated, showed an average overrun of 55%, reaching 70 % on some sections. The second case was a co-financed project which showed a cost overrun of 20% overall, although the cost overrun on the sections under EIB control were very low. However, it is believed that the real figure should be taken as being rather higher, because the thickness of the overlay on some sub-sections was reduced with the objective of maintaining the agreed budget, apparently without the consent or knowledge of the Bank (See also 3.1.2). This cost cutting has had negative consequences for useful life and maintenance costs, and demonstrates that the Bank should closely monitor projects where cost savings are being made at the expense of technical specifications.

There were three projects where clear evidence was found that international tendering produced cost savings. These savings were used to increase the scope of two of the projects and to offset cost overruns on sections of the third. These cases demonstrate a real added value from the EIB's involvement. It is unlikely that the Promoter would have applied international tendering procedures without the EIB's intervention. In future, in the accession countries of CEE, Promoters will employ international tendering by virtue of having to apply EU procurement directives, rather than to meet EIB contract conditions. However, it is expected that the added value of the technical support from EIB staff will continue for the foreseeable future.

3.1.5 Observations on implementation performance

Project monitoring needs to be maintained and improved in terms of both efficiency of the process and activities during the implementation, completion and post-completion phases. An improved system would include:-

- For the implementation phase, a set of key project implementation indicators, to be agreed at appraisal, along the lines of current practice.
- For completion and post-completion phases, a performance-related and results-oriented monitoring system with simple performance indicators, agreed at appraisal, to provide clear benchmarks for project completion and operation.
- Implementation and Performance indicators to be prepared and presented by the Promoter in the form of a structured Project Fiche for ease of use.
- Loan contract to include a requirement for reporting of implementation and performance indicators during monitoring and at RFT/Scorecard stage.
- Objectives and performance indicators to be updated periodically to reflect developments in the project and its operating environment.
- System to be self-monitoring, i.e. prompts for data at key stages, automatic warnings, and include maintenance reporting where appropriate.

Similarly, where cost-risk management is practicable, e.g. in the consideration of technical contingencies (rather than price contingencies in unstable economic environments), it should include quantification and risk mitigation at pre-contract and contract stages, plus tools to allow a prompt response to risks occurring during implementation. As part of the mitigation procedure, cost risks should be reduced to acceptable proportions before signing the Finance Contract. Provisions for contingencies must be consistent with the level of confidence and the cost risks identified and their bases should be clearly stated.

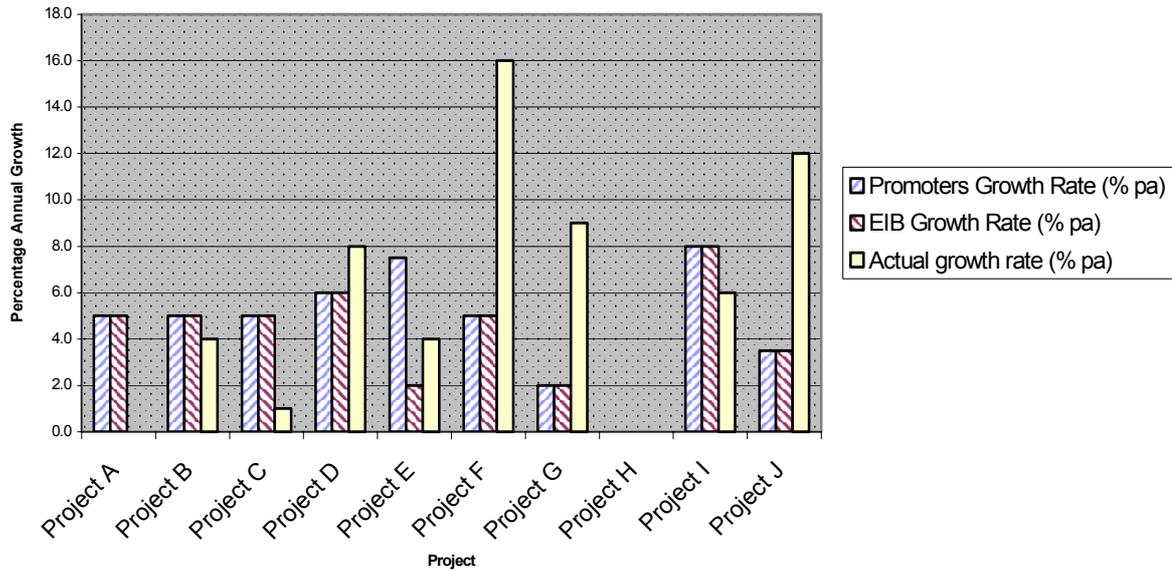
3.2 OPERATIONAL PERFORMANCE (EFFICIENCY)

Project objectives, i.e. desired project outputs and outcomes, and measures of the achievement of these objectives, were inadequately presented for all projects and stressed technical rather than economic measures, e.g. kilometres of road rehabilitated rather than time saved through improved travel conditions. These objectives should flow from the project justification, but were generally not defined in detail, particularly for road and rail projects. For eight of the in-depth projects, the objectives were defined purely in terms of the technical description i.e. physical assets to be constructed or rehabilitated, and then only in the form of standard indicators such as length of road or railway. By defining project objectives in terms of "bricks and mortar" rather than economic benefit, the EIB risks failing to identify and quantify the real benefits which its projects generate in terms of impact and added value; a potential weakness. In one case, failure to carry out the project would have resulted in an airport having its international operating license revoked. The project was wholly successful in keeping the airport open, but the project's objective was defined in terms of square metres of concrete and there was no requirement for the license situation to be notified to the EIB. In this case, the positive impact of the project went far beyond the simple laying of a concrete slab. There is a clear need for the Bank to develop results-oriented objectives and performance-related indicators to allow it to measure project success, rather than project completion.

A strength of the EIB's ex-ante analysis is that EIRRs were calculated for all projects, with the results showing a positive outcome and a rational use of resources. Conversely there appears to be a weakness in project completion reporting because only four ex-post EIRR estimates were available out of the twenty-five projects in the desk review. In the absence of better information, the economic performance could only be judged indirectly, using the main determinants of the EIRR, e.g. final costs and traffic demand. For four of the ten projects analysed in-depth, the results were classed as Poor, with another project classed as Unsatisfactory. These were projects which were suffering from the combined effect of overestimated traffic development and underestimated costs. The result is a fall in EIRR, with some of the EIRRs likely to have become marginal or even negative, certainly for some elements of the project.

The following graph shows that the Bank's projections for growth in demand were within 50 % of the actual figure for three (B, D and I) out of the nine projects for which meaningful data was available. Two of these were road projects while the third was an airport. In cases B and I, demand is overstated - but both of these projects also suffer from a very low capacity utilisation: in one case as low as 15%. In projects, E, G and J, the Bank's growth projections were less than 50 % of the actual. Two projects, A and C, both of which were for roads, achieved less than 50% of the forecast growth rate. The sample size is very small, but the graph would suggest that the Bank under-estimates demand on as many projects as it over-estimates.

Projected and Actual Demand Growth Rates



Of the three projects where the demand was under-estimated, one benefited from an unforeseeable market change. This project, and one of the others, was also appraised after the worst effects of the economic problems of the early 1990s were over. This may have led to unnecessary pessimism at a time when, in fact, the economic conditions in those particular countries were improving. The traffic data available for the third project was limited to bypasses and may or may not be representative of the project as a whole.

Reasons for overestimating demand include: the unforeseen length and depth of the "transition slump" in the first half of the 1990's, the negative impact of the wars in former Yugoslavia (Kosovo, Bosnia and Herzegovina), and underestimation of structural change in the transport sector - to the railways' detriment. These would apply to most of the CEE, while other reasons are project and/or country-specific e.g. the serious macro-economic crises in Bulgaria and Romania since the mid 1990s with the subsequent slow-down of structural reform in those countries. The economic difficulties and the Balkan wars could not realistically have been predicted and quantified at appraisal, and it is particularly important to bear in mind that the difficulties of demand forecasting were not unique to the EIB. All IFIs working in the region at this time experienced the same problems. However, it could be argued that working in a new and uncertain environment might have suggested a more cautious approach, involving more flexible designs, more risk analysis and the flexibility to adapt projects to changing circumstances. Where the projects are over dimensioned, the excess capacity still has to be maintained. This represents an additional burden for the maintenance budgets, and thus the sustainability of these projects. The costs of creating the excess capacity is also a financial burden on the state from a loan which is bigger than it need have been. Tools to maximise project efficiency and effectiveness should therefore be used routinely in project appraisals to develop both the design and the timing of projects.

Out of three projects with significantly overstated demand, two were among the very first projects appraised in the region and the country. However, two of the three projects with accurate projections were appraised at the same time. Two projects with a high level of over-capacity could both have had a phased implementation of capacity but in one case the Bank was involved too late to influence the project and in the other there was resistance from both the Promoter and the co-financing IFI.

3.3 PROJECT SUSTAINABILITY

There is no serious doubt about the sustainability of any of the ten projects analysed in-depth in the sense of the Promoters' technical and managerial capacity to adequately maintain the assets. Similarly, apart from the road rehabilitation project mentioned in 3.1.4, the technical implementation of the project was sound and the assets are in good condition.

The principal concern is the financial sustainability of the projects. Of the ten, three are dependent on their own revenue streams for their financial sustainability, including coverage of maintenance costs. The first of these is a fully privatised company with no recourse to government assistance. This project is profitable, but it is very exposed to a single client which could, in the longer term, use other routes or a pipeline, to transport its products. The sustainability of the other two projects is less certain. In the second case the project is showing a theoretical profit - but has a major debtor with a liquidity problem. The third project is grossly under-utilised. Revenues are substantially lower than projected but the project still has to carry the full maintenance costs and most of the operating costs. In a fourth project, part of the project was divested into two, new private companies after completion. These are now in financial difficulties due to competitive pressures. It is possible that only one of the two companies will be sustainable in the longer term. The remaining part of the project is now within a wholly owned, but operationally independent, subsidiary of the state rail authority. This company appears to be performing well and to be fully sustainable.

For the remaining projects, all of which are roads, sustainability is threatened by:-

- The partial or complete abolition of the road fund in two of the countries; maintenance budgets are under the control of the relevant Ministry.
- The decline, in real terms, of the available resources for maintenance funds.

The importance of the quality of construction for the sustainability of projects is seen in two extreme examples. In one case the maintenance costs for, say, the next ten years will probably be confined to the cost of routine maintenance. In a second case, costly repairs had to be undertaken soon after start of the operation to remedy design and construction faults. To strengthen sustainability of projects, it is necessary to ensure that there are adequate provisions for maintenance. The Finance Contract should therefore make specific provision for an adequate maintenance policy with adequate funding, rather than the vague undertaking included in current contracts. This provision should be monitored and enforced.

3.4 ENVIRONMENTAL IMPACT

The assessment of the environmental impact of the ten projects reviewed is influenced by the fact that eight of them were for the rehabilitation, upgrading or modernisation of existing transport facilities. A formal environmental impact assessment (EIA) was not required in any of the countries concerned, either based on the relevant national environmental legislation, or on the EU Directives valid at the time of project appraisal and implementation.

The Bank's preference for rehabilitation rather than new build projects, for economic reasons, has had a positive side effect on environmental issues. This type of project has minimal negative environmental impact as no, or no significant, additional natural resources, e.g. land, are employed. At the same time, the positive impacts can be significant:-

- The reduction of energy consumption of vehicles on road and railway projects.
- Lower noise emissions at airports as they become suitable for less noisy modern aircraft, and lower noise levels from rehabilitated roads, particularly in towns and villages.
- A reduction in accident rates on rehabilitated roads despite increase in speeds.
- The removal of toxic effluents.
- The reduction of vehicle emissions in urban thoroughfares due to the construction of road bypasses. The positive impacts of these bypasses are considered to exceed the negative impact significantly.

EIAs were carried out for a project to construct a new motorway and for three new bypasses which were parts of two separate projects. For two of these projects, the EIB recommended specific or additional mitigation measures to reduce negative environmental impacts i.e. noise protection walls, game crossings, modified design of a bridge. All recommended mitigation measures were executed. The presence of the EIB and its contract conditionalities therefore added value by contributing to a reduction of environmental impacts.

In two cases, the projects have continued to improve their environmental performance:-

- At an airport, a noise monitoring project is to be undertaken which will identify decibel noise contours for all areas surrounding the airport. This follows concerns expressed by the EIB at the original appraisal.
- In a rail project, 70 reconditioned locomotives are to be introduced which will reduce energy consumption, noise emissions and oil leakage on tracks. Although not part of the original project, the Promoter's awareness of environmental issues was increased by the Bank's involvement in the original project.

3.5 INSTITUTIONAL DEVELOPMENT IMPACT

Direct institutional reform was not a contractual condition in any of the projects reviewed. It was, on the other hand, one of the main activities of IBRD, EBRD and other IFIs in the countries concerned and the process was already ongoing when EIB entered the projects. However, although the EIB did not initiate reform itself, it often catalysed or indirectly supported established reform and strengthening initiatives. Although it created administrative problems at times in most of the organisations interviewed, the rigour of international procurement did infuse discipline in their management and organisation structures which went beyond the procurement department. The strongest indirect support for institutional change can be seen in one of the railways projects which was completely and successfully privatised in 2001, some two years after the completion of the EIB financed project. Without the Bank financed track rehabilitation, the infrastructure would probably have deteriorated to such an extent that no private, commercial bidder would have been prepared to bid for the assets. Similarly, in the other rail project, parts of the institutional set-up were privatised shortly after completion of the EIB funded investments. Although privatisation was not an objective of either of these projects, the projects did contribute to broader development of the organisation which, along with the assets funded, contributed to the creation of a viable commercial entity.

It was a specific EIB contract condition for nine out of the ten in-depth projects that technical assistance, or project implementation units (PIUs), should be set up. Generally, the PIUs had a positive institutional development impact, introducing efficient project management techniques and assisting the Promoters in the application of procurement procedures in line with EU standards. Although it was a contract condition, the support was very much appreciated by all Promoters. This was another clear strength of EIB involvement. On the other hand, these PIUs are still a contract condition for repeat road sector operations in four countries. This could be interpreted positively as the efficient outsourcing of specific skills. However, the alternative interpretation is that the relevant Roads Administrations have failed to develop some basic core competences. This failure of Institutional Development may have been due to Promoters failing to take advantage of the assistance offered, or to newly skilled staff leaving for higher paid posts in the private sector. However, as the transfer of know-how was not normally explicitly included in the consultants' Terms of Reference, there was no incentive for this type of development to take place. Although the institutional framework of projects is a key determinant of the sustainability of the projects, it does not form part of project completion reporting of the Bank.

The Bank should be analysing, at the project completion stage, whether institutional development objectives are being achieved and, if the EIB is financing the Technical Assistance, achievement of Institutional Development should be a contractual condition.

4 RELEVANCE OF THE EVALUATED PROJECTS

4.1 BACKGROUND OF EVALUATION

The role of the bank is to finance good projects which meet the policy goals of the European Union. Relevance should therefore be a key test for project identification and selection. The criterion could be tested for all twenty-five projects against EU policy objectives and priorities, EIB policies and statutory requirements, and the national transport policy objectives of the beneficiary countries. The relevance evaluation refers to contemporaneous circumstances, i.e. the policies which applied at appraisal and approval. Any change introduced in the project since loan approval should be taken into account separately.

An example of the importance of timeframe is shown by a project where the relevance rating is entirely dependent on the year. Originally, the key justification for the project was the need to maintain the country's energy supply and the project successfully achieved this objective during initial operations. It would therefore have scored highly on relevance during the evaluation. However, following the privatisation of the Promoter, another investment, by a different Promoter, made the project redundant – at least for the domestic energy sector. So, at the time of the evaluation, the project no longer met its original policy objective and was very weak when measured against the EU's priorities. Post- privatisation, the company has been developing satisfactorily due to increasing revenues from transport and handling charges paid by Russian exporters. This would suggest a sound EIRR, which is a typical policy objective. However, exporting Russian oil was not the original objective and the projected transport policy benefits have not been realised. This project therefore currently offers a sound economic profitability but low relevance. Notwithstanding the current situation, the project's performance has been rated Good because it was achieving its original policy objectives up until the point at which exogenous factors robbed it of its original relevance.

General EU policy objectives can be summarised as the promotion of economic cooperation and integration of CEE countries with the EU, assistance in the preparation for EU membership, and the adoption of the 'acquis communautaire'. Specific EU objectives for the transport sector cover the key areas of transport strategies, policies and development, and encompass more than a dozen detailed transport-specific objectives. The Bank's policy objectives include the rational use of funds, investing in projects which are in the interest of the EU and the backing up of EU's policies. In terms of relative importance, EU policies take precedence over those of the Bank. Finally, the national policies of each beneficiary country are required to be in line with pre-accession objectives and the most frequent common objectives were:

- To promote integration into the EU;
- To promote balanced regional development in the country;
- To promote balanced development of the transport modes;
- The development of effective and market-oriented transport regulations;
- To ensure safety of transport systems;
- Protection of the environment, and;
- The compliance and harmonisation of national regulations and procedures with relevant EU regulations.

4.2 CONTRIBUTION OF EVALUATED PROJECTS TO EU, EIB AND NATIONAL OBJECTIVES

4.2.1 EU Objectives

Most of the projects complied well with the EU objectives. However, the assessment was seriously hampered by the fact that wider policy objectives were only identified in broad terms at appraisal, although they were understood. Without explicit identification of the policy objectives, there is a risk that the Bank may not focus on the most relevant projects. Similarly, it was noticeable that the project rationale in relation to contribution to specific policy objectives was often not clearly defined or expressed, e.g. the rationale for upgrading roads was "being owned by the state", or that they were in "poor condition", etc. This led to project objectives which were generally defined only in engineering

terms. Objectives like improving transit times, enhancing demand, reducing accidents, etc. were often not mentioned in the project rationale, but had been analysed and measured in the economic analysis. A key issue, therefore, is “selection”. It should be noted at this point that the Corporate Operational Plan (COP) was introduced in 1999, at the very end of the period in question. It is expected that the targets included in the COP will tend to improve the overall relevance of Bank projects.

Port projects appear to comply more closely with relevance criteria than air projects. The two port projects in the sample are on the TEN and have good levels of demand, while three out of six air projects were ATC/ATS (air traffic control and services), where conformity to Eurocontrol Standards was the principal consideration, rather than EU policy *per se*.

4.2.2 EIB Objectives

Apart from project-specific problems noted in previous chapters, projects were in compliance with the Bank's policies and objectives. The worst performers were two railway projects from the desk study, where project viability and the rational use of funds cannot be shown.

4.2.3 National Policy Objectives

All of the individual projects evaluated complied with national policy objectives, which were consistent over time. Project Promoters were all either directly or indirectly controlled by central government and could only undertake projects which were in line with National policies and priorities. All of these National policies fell under the broad umbrella of the EU's policies. There was no conflict between the two sets of policies, although some were better aligned to the EU than others.

5 OVERALL PROJECT PERFORMANCE RATING

By overall results:

	Sector	Road	Rail	Airport
Good		1	1	1
Satisfactory		2	1	1
Unsatisfactory		2	-	-
Poor		1	-	-

By evaluation criterion:

	Good	Satis.	Unsatis.	Poor	Comments
Relevance	8	2	-	-	Sound overall performance
Efficacy	2	6	2	-	Unsatisfactory projects had large cost over-runs and were not fully implemented
Efficiency	5	-	1	4	Under-performing projects had two main problems: insufficient demand, and cost over-runs, leading to reduced economic benefit.
Sustainability	1	5	3	1	General problem with maintenance budgets and the Poor project is already showing signs of failure.
Institutional Development Impact (IDI)	3	4	2	1	A positive result overall, but the Bank continues to require Technical Assistance for repeat operations with many of these Promoters.

See also Appendix II for a complete breakdown of results by individual project. The common characteristics of the seven projects with an overall rating of “Good” and “Satisfactory” are that they are predominantly rehabilitation projects and generally small or medium-sized. However, this should

not be taken to imply that large and/or new-build projects should be avoided. It was a question of matching the project scope to the existing institutional capabilities, and the suitability of the project type for the transition period; rehabilitation projects are less sensitive to fluctuating traffic demand than new construction projects.

It should be noted that the "Satisfactory" rating is the result of taking all five criteria into account. In practice, two of the projects were significantly over-dimensioned. For the three "Unsatisfactory" or "Poor" projects, one was substantially over dimensioned, two had substantial cost over-runs, and one of those the inadequate design is leading to high maintenance costs when financial resources are very scarce.

6. EIB CONTRIBUTION TO THE EVALUATED PROJECTS

The Bank should, in theory, add value at all stages of the project cycle. However, it does not initiate projects and is usually not directly involved in policy formation or programming. The sample projects had already been identified by Promoters and/or had been developed by other IFIs and were often at the detail design or execution stages. So, at this stage, the Bank appeared to be accepting or rejecting projects presented for funding, rather than working with a Promoter in the early stages to develop a project which would make an optimal contribution to the policy objectives. This has the effect of limiting the Bank's value added to the appraisal and implementation stages.

In the appraisal phase, value can be added via co-operation with the promoter and potential co-financing IFIs and this was evident in the projects analysed in depth. However, once the "Permission to Appraise" has been given by the Comité de Direction (CD), there appears to be a certain pressure to complete the due-diligence procedures as quickly as possible. This will restrict the Bank's value added. While the design of the projects submitted by the promoters was usually critically reviewed, the modifications of the design requested by the Bank were mostly marginal, even where more important changes would have been justified if the intervention had been at an earlier stage. There appeared to have been a general agreement on design issues with the co-financing organisations. In a few cases the Bank recommended some modifications to the project implementation schedule e.g. postponement of parts of the projects, but these were often not significant.

A high value added element was the dissemination of EU procurement procedures, with which Promoters were having to become familiar in the 1990s. The Bank's guidance, plus its flexibility and pragmatic approach in approving and negotiating the projects, was very much appreciated by Promoters. Unprompted, they frequently mentioned that the Bank's performance in this area was in strong contrast to other IFIs which were felt to be dogmatic and inflexible. Related to this, is the co-ordination with other IFIs involved in co-financing. This often proved to be very time-consuming due to a lack of co-ordination of donor practices and led to significant delays in implementation in some cases. The results show that the Bank's approach was consistent across sectors and countries.

From the above, and sections 3.1.2, 4.2, the adoption of a more active business strategy is recommended, leading to optimal Bank performance in project cycle and portfolio management. This should be based on an active sector policy paper programme.

6.1 PROJECT IDENTIFICATION AND SELECTION

The lack of clearly stated policy objectives and target economic benefits can be seen from the First Reaction documents which did not address these issues, despite being the starting point for the appraisal process. This suggests that no, or no well-structured, relevance assessments were being carried out. However, it should be noted that the Bank's preference for rehabilitation projects at the project selection stage not only concerns environmental issues, as discussed in 3.4., it also influenced project selection decisions. By opting for rehabilitation projects, the Bank was not only selecting projects which had a higher EIRR, implying a better use of the Bank's financial resources, but also those projects where demand projections could be based on existing, historical data.

6.2 PROJECT APPRAISAL

Project appraisal was usually well structured, systematic and results-driven. Its positive characteristics were that it was demonstrably state-of-the-practice, of high quality, and fully in line with IFI norms. However, there were some areas where strengths were less obvious than others. Firstly, there were few attempts to maximise project effectiveness or efficiency: no economic evaluation of alternative implementation strategies. This approach carries the risk of building up overcapacities in the short to medium term and of sub-optimal use of funds. The maintenance budgets to ensure sustainability, implicitly assumed to be present in the analysis, in many cases are not available due to lack of funds.

Where major issues were raised at the early stages of the appraisal: problems, risks, recommendations etc., it was not always clear if they had been carried through in the appraisal stage to the final reporting. Where they did reach the contract, enforcement was not usually a problem. Conditions were typically in the form of “conditions precedent” i.e. satisfaction was required before funds were disbursed.

It was noted that while risks were identified, they were not quantified – although it is accepted that there are cases where risk cannot be quantified with any degree of accuracy. Developing this, there was often no clear distinction between the different types of risks, e.g. for economic performance and sustainability risks there was no quantification, and they were not always carried through to adequate mitigation measures. An example of this is project cost. There are few comments on the quality and origin of the cost data, e.g. industry norms, Promoter’s experience, budget quotations, tendered bids. The risk of cost overruns cannot therefore be analysed and suitable allowances made. Similarly, the project cost analysis frequently failed to state the assumptions made in arriving at the final figure, particularly in the areas of technical contingency, financial contingency and interest during construction.

6.3 PROJECT IMPLEMENTATION AND MONITORING

Procedures and forms are in place for the systematic and transparent monitoring of projects, defined as being up until project completion i.e. the end of works. However, while monitoring forms had been initiated for eighteen out of the twenty-five projects, some of them only had one entry, while half appeared to have been used as a monthly aide-memoire or document registration system, rather than as a monitoring mechanism *per se*. Considerable doubts remain as to whether the quality of the monitoring is high enough. Where there was a Project Implementation Unit (PIU), then there were normally periodic reports – although there is no track of these in the Bank's archives. Where PJ engineers were monitoring projects, they normally had these reports in their personal project files but it is not clear whether these reports were acted upon. There appears to be a significant gap between what the Bank does and what it records. It is known that the Loan officers were in regular contact with Promoters during implementation, often accompanied by PJ staff, and the high level of project effectiveness - completion on time and on specification - must be attributable, at least in part, to this monitoring by Bank staff and the PIU. However, it is difficult to track physical progress during implementation. Similarly, it was difficult to trace reporting on: physical achievements compared to plan targets (km built/rehabilitated etc.), expenditure to date against budget, implementation schedule (real versus planned), or of achievement of basic objectives. There seems to be a focus on controlling procurement compliance rather than ensuring the successful implementation of the project. The Bank's disbursement procedures are such that evidence of expenditure and progress of past disbursed amounts must be supplied before the next disbursement is approved. However, this is an implicit rather than explicit project implementation monitoring process.

An essential base for systematic monitoring of projects is the Finance Contract. However, it is rare for these to contain physical implementation conditions, in terms of progress. There is a risk, therefore, that the total loan can be disbursed without the full physical objectives defined in the Loan Contract being achieved.

The risks identified in the initial stages of PCM were seldom reviewed with the promoter during the implementation of the projects. Risk management in this critical phase of a project, such as costs risks

etc., was in most cases left to the responsibility of the Promoter. This is normal, but the Bank should supervise whether the Promoter is implementing them.

Although the Bank's sustainability analysis usually covers both the institutional and financial capabilities of the Promoter, there are no project-related instruments to monitor project sustainability. Post-completion follow-up is rare and only ever in the context of a repeat operation. Although all Finance Contracts incorporate clauses requiring the Borrower to maintain an EIB financed facility in 'good order' and to provide the respective maintenance funds, compliance with the condition is not routinely monitored. Although some appraisal reports referred to the need for a programme of routine maintenance, the project's actual maintenance needs, in terms of either works or budgets were not quantified nor made a specific contract condition. There does appear to be a certain ambivalence within the Bank. According to staff opinions obtained during the desk-review, project sustainability is seen as very important – but very little effort is put into actually monitoring and controlling sustainability.

As a worst case example, an investment in a rail project suffers from: being a very large loan based on optimistic traffic forecast, having a weak institutional and financial base, and a lack of monitoring despite of the size of the loan. The main concern was that procurement should be to EIB specifications. There has since been a separation of Promoter, Borrower and Revenues due to the ongoing restructuring process, i.e. the separation of infrastructure, freight and passenger businesses. The project remains incomplete eight years after appraisal, and it was considered that it should be reappraised with a view to deciding whether or not the Bank should exit the operation.

Some of the weaknesses identified above could be overcome by using performance-based monitoring at project completion and during the operational phase. The EC is promoting this type of performance indicator to measure the performance for the Trans-European Network, in order to improve their efficiency and ex-post monitoring. It would therefore be consistent with EC objectives if the EIB were to adopt a similar approach. Under the terms of the Finance Contract, the Borrower would have to provide base year values of a limited number of key performance indicators to allow project performance to be measured.

6.4 SUMMARY OF MAIN ISSUES RELATING TO THE PROJECT CYCLE

Considering the various stages of the project cycle, with references to the main analyses:

Project selection: Particularly in the early projects, the in-depth analyses showed that it was normal for the Bank either to be invited to join an existing project consortium of IFI and Promoter, or to accept a project which was already well developed (5.). This approach denies the Bank the opportunity to add value during project selection, and limits its scope to add value later in the project cycle. The later the Bank is involved, the more its ability to add value is constrained (3.1.2). In addition to any informal mechanism, an optional procedure does exist within the Bank to filter clearly unsuitable projects: the "Preliminary Opinion". However, it is not possible to link accepted projects with others which might have been refused, but which were addressing the same economic need. The existing procedure therefore appears to be primarily a filter to avoid clearly ineligible projects, rather than a means of maximising relevance.

The evaluation has shown that the Bank's procedures prevent ineligible projects from being appraised and, to this extent, all projects satisfy the relevance criterion (4.2). However, if the Bank wants to increase its added value by giving its projects a higher relevance rating, then more pre-definition input is required. If the Bank accepts pre-defined projects, then it must do so in the knowledge that their relevance cannot be improved.

Project Appraisal: There is scope to improve and develop the performance indicators used during implementation, completion, and post-completion (3.1.2, 3.2, 6.3).

The Bank's appraisal procedures were consistent, technically fully competent, and were applied to all of the projects in the full sample (3.2, 6.2). However there were three aspects which showed weakness in the in-depth analyses. Firstly, market projections were over-optimistic on 30% of the sample, attributable to the problems identified in 3.2, although demand projections used in the Bank's forecasts were normally lower than those proposed by the Promoter. They were also pessimistic on a similar

number of projects. Secondly, the appraisal, while identifying risks, did not quantify those risks, e.g. the impact of continuing economic instability, the accuracy of costing information. Finally, there was no pressure to maximise the economic impact of the project (3.2). Two of the projects would have benefited from a phased implementation. In one case this was clearly recognised by the Bank, but the project was still built, largely as originally designed.

Approval and Disbursement: The Bank has well-developed procedures and the only significant problems appear to have been with delays in completion of the necessary documentary conditions by the Promoter. This can be largely attributed to Promoters' lack of experience of loan documentation. It was noted that disbursement was linked to the awarding of contracts following an acceptable procurement procedure rather than either the financial needs of the project or its physical state of advancement. There was verification of the use of funds before disbursing new funds (6.3), but disbursements were ahead of actual need, to facilitate the implementation, rather directly linked to physical realisation.

Implementation and Monitoring: Promoters were complimentary about the Bank's pragmatic approach to project implementation and the assistance given by Bank staff to resolve problems either with the project, e.g. procurement issues, or with co-financing organisations. However, the Bank's activities in this phase appear to have concentrated on ensuring compliance with procurement and disbursement conditions. Monitoring of physical implementation was normally dependent on reports by the PIU, with no verification of the actual situation by Bank's services.

Completion and Post Completion: A key problem was incomplete reporting of project completion (6.3) on 40% of all the projects reviewed (desk and in-depth), with full information only being available on 24% of projects. A post completion Economic Internal Rate of Return (EIRR) had been estimated for 16% of the projects. Post-completion EIRR is a critical measure for establishing whether projects are meeting their original objectives. However, estimates of post-completion EIRR were only made where a full PCR was prepared. Simplified PCRs do not cover the EIRR and the projects reviewed were generally completed before the introduction in 2001 of Self Evaluation and the Project Scorecard, which does require an ex-post EIRR calculation.

Environmentally, the procedures and processes employed by the Bank were satisfactory. Similarly, all projects would have complied, ex-post and ex-ante, with the EU standards and Directives in force at the time (3.4).

With the exception of a limited number of sub-sections on two road rehabilitation projects (3.1.2), the quality of the completed projects was, again, wholly satisfactory. However, with one exception, there may not be adequate resources available to maintain the investments "in good order" as required by the finance contract (3.3). This could have a serious impact on the sustainability of the investments financed by the bank. A disappointing outcome was the continuing reliance on Project Implementation Units to assist in the implementation of repeat projects (3.5). While Promoters were found to be competent to prioritise and develop projects, and to maintain roads once completed, the knowledge and skills gap between the two phases does not appear to have been bridged by repeated technical assistance from the PIUs.

7 COLLABORATION AND CO-OPERATION WITH OTHER IFIs AND THE EUROPEAN COMMISSION (PHARE)

Out of the ten projects examined in-depth, eight were financed in partnership with other funding agencies, principally the World Bank (IBRD), the European Bank for Reconstruction and Development (EBRD) and the European Commission (EC) via the PHARE program. This partnership took a number of forms:

Co-financing where the project definition is common to all financing partners which take joint responsibility for monitoring and control.

Parallel financing: the project definition is common to all financing partners, each of which takes responsibility for the monitoring and control of specific components/sub-projects.

Project Grant from PHARE, which would be involved in some implementation activities but responsibility for monitoring and control remained with other financing partners.

Co-ordinated financing where the project definition of one financing partner is a subset of the project definition of the other(s). Financing partners take responsibility for monitoring and control of specific components/sub-projects. However, for the partner with the more limited project description, responsibility is limited to the components/sub-projects contained in its project description.

For the sake of simplicity, "co-financing" will be used as an umbrella term to cover all of the various models. A breakdown of the co-financing arrangements is presented in Appendix III.

In seven out of the eight cases, the Bank was invited to participate in projects which had already been identified and partly prepared by either EBRD or IBRD, although in one case the Bank had been participating in a high level committee to set the transport priorities in the country concerned. From the point that the Bank decided to become involved in a project, it was an active participant in refining the project definition through pre-appraisal and appraisal missions.

Co-financing was beneficial to both parties. For the Bank:

- The presence "on the ground" of the co-financing organisations meant that they could be more directly involved in developing project ideas and were able to bring workable investment projects to the Bank.
- The originating co-financier had usually been able to use grant funding to provide pre-appraisal technical assistance. This was either in the form of international consultants to carry out feasibility studies, or training in the use and application of standard analytical tools to justify and prioritise road investments. Both of these arrangements provided valuable data on which the Bank's analysis could be based.
- The co-financier had normally also identified sources of grant funding for technical assistance to assist in the planning and monitoring of the physical realisation of the projects.
- There were four cases where PHARE was able to enter or expand its involvement in a project to fill a funding gap which developed during the implementation phase and allow completion.

While for the co-financing partners:

- The Bank was able to provide a second opinion on project definition and appraisal and was an additional source of solutions to problems encountered during implementation.
- The significant additional funding the Bank could provide allowed finance plans to be completed without any single institution carrying too great an exposure.

Overall, the co-operation and collaboration had a positive impact on the projects, although there were differences between the relationships with the three main co-financiers:

7.1 PHARE

PHARE was involved in six co-financed projects. Five of these involved grants to the government for project implementation, while two projects benefited from technical assistance or studies financed by PHARE. As noted above, a highly positive aspect of the co-financing relationship was PHARE's willingness to fund projects at a late stage to allow project completion where there were insufficient

funds to meet cost overruns. The less positive aspects relate to PHARE's procedures, e.g. for approval and procurement, which were more time consuming than those of the Bank, and which may have been partly responsible for delays in the implementation of two projects.

7.2 IBRD

Two projects were co-financed with the IBRD, one of which also involved the EBRD. In both cases, the relationship was based on parallel financing. The project definition was common to all of the institutions involved and each one took responsibility for the monitoring and control of a number of the sub-projects, in line with their proportion of the funding. Apart from sharing the workload, this approach allows each co-financier to apply its own procurement procedures to the sections it is financing directly. The collaboration and co-operation on both projects, as reflected in the dossiers and discussions with available staff, was positive although the project initiative was always with the IBRD. One project was for the modernisation and restructuring of a railway network, with the Bank taking charge of one specific element which represented 11% of the project cost. Although the Bank's project definition as defined by the loan contract included the other 89%, the Bank had minimal involvement in the implementation of the rest of the project. The arrangement therefore appears to have been rather artificial.

7.3 EBRD

The Bank co-funded five projects with EBRD, one of which also involved the Nordic Investment Bank (NIB). Discussions took place with EBRD on one of the two in-depth projects where there was no co-financing but it was not possible to agree on the timing and scope of the project. The collaboration during implementation of the co-financed projects was generally good, but there were two documented cases of disagreements over programming and project description. In one of those cases, the Bank felt it could not support some of the project components which EBRD wanted to include. To resolve this, co-ordinated financing was used, as described above, rather than simple co-financing or parallel financing. In a third case, there was no evidence of disagreement over the acceptability of project components but the project comprised both road rehabilitation and new motorway construction. The Bank chose to be involved only in the road rehabilitation element which fitted well with the Bank's preference for rehabilitation over new construction. At the same time, the EBRD was happy to fund and supervise the new motorway section. However, as the approach was parallel financing, the motorway section still appeared in the Bank's project definition and Project Completion Report, although there had been minimal involvement. The result was that the overall project was less relevant in terms of EIB policies than the sections that the Bank was actually involved in.

7.4 OPPORTUNITIES FOR IMPROVEMENT

Co-financing offers many advantages, but it also creates problems which have to be managed. These are mainly due to the differences in policies, procurement procedures, etc. between the funding institutions. An example is parallel financing. The Bank accepts that procurement and environmental issues of part of its defined project will be handed over to a co-financier with different procedures and standards – and *vice versa*. This requires a certain level of trust and flexibility by both parties. They have to accept that not all of the investments listed in the project definition will be procured using their own in-house standards.

The problems of multiple IFIs being involved in single projects have been discussed, but it is clear that they have more in common than they have differences. Some of the problems relating to procurement and the need to create artificial contractual arrangements and definitions could be resolved if there were to be more co-ordination of procedures. This should be a matter of discussion between the IFIs and should not be neglected if co-financing is to play a role in future Bank operations.

8 RECOMMENDATIONS FOR THE PROJECT CYCLE MANAGEMENT AND THE STRATEGIES AND POLICIES OF THE BANK.

The basic recommendation is to optimise the current PCM, eliminating the weaknesses which have become apparent, and to develop its strengths. This should lead to:

- Improvements in the efficiency of the Bank's PCM;
- Improvements in the performance of the projects;
- Improvements in the satisfaction of all stakeholders.

Please refer to the Executive Summary for the list of Recommendations

These recommendations should have the following priorities:

- Clear definition of results-oriented objectives of projects;
- Application of optimisation tools in project appraisal;
- Application of more efficient instruments to strengthen the sustainability of projects;
- Application of more efficient monitoring practices.

APPENDIX I - EVALUATION CRITERIA

Core criteria

Project performance is assessed using the evaluation criteria as defined by the OECD, DAC Working Party on Aid Evaluation. These are also used in the Evaluations Cooperation Group, which brings together the evaluation units of the multilateral development banks. The criteria used in all evaluations are relevance / efficacy, efficiency and sustainability.

- Relevance is the extent to which the objectives of a project are consistent with the beneficiaries' requirements, country needs, global priorities and partners' policies.
- Efficacy relates to the extent to which the objectives of the project have been achieved, or are expected to be achieved, taking into account their relative importance, while recognising any change introduced in the project since loan approval.
- Efficiency is the measure to which project benefits/outputs are commensurate with resources/inputs (funds, expertise, time, etc.).
- Sustainability relates to the likelihood of continued long-term benefits and the resilience to risk over the intended useful projects life.

Complementary Criteria

The following criteria are used dependent on their relevance to the evaluation.

- 1. Institutional Development** – The extent to which a project improves or weakens the ability of a country or region to make more efficient, equitable, and sustainable use of its human, financial and natural resources, for example through: (a) better definition, stability, transparency, enforceability and predictability of institutional arrangements and/or (b) better alignment of the mission and capacity of an organization with its mandate, which derives from these institutional arrangements. Such impacts can include intended and unintended effects of a project.
- 2. Other Impacts** – This criterion can include other areas of special focus, including:
 - a. Poverty reduction - extent to which project achieved planned poverty reduction impact; unintended impact should also be considered.
 - b. Transition impact
 - c. Environmental impact
 - d. Other impacts
- 3. Borrower Performance** – Adequacy of Borrower's assumption of ownership and responsibilities during all phases. Main focus on effective measures taken by Borrower to establish basis for project sustainability, especially – and right from the identification stage – through fostering participation by the project's stakeholders, in addition to its own support.
- 4. EIB Performance** – Quality of services provided by the EIB during all project phases. Main focus is on EIBs' role in ensuring project quality at entry; that effective arrangements were made for satisfactory implementation and future operation of the project, as well as EIBs' financial additionality.

APPENDIX II – INDIVIDUAL PROJECT PERFORMANCE

Project	Relevance	Efficacy	Efficiency	Sustainability	Inst. Del. Impact	Rating
Project A – Roads	Good: For both National and EU policies.	Unsatisfactory: Substantial shortfall in roads to be rehabilitated.	Poor: Large cost overruns and traffic levels considerably lower than predicted	Satisfactory: Roads are in good condition but maintenance budget is currently inadequate	Poor: Continuing reliance on PIU. Frequent, politically motivated changes in Promoter's senior management.	Unsatisfactory
Project B – Roads	Good: For both National and EU policies.	Satisfactory: Physical objectives were completed on time and on budget but border transit objectives not achieved.	Poor: Actual traffic levels substantially lower than projected and border time savings have not been realised	Unsatisfactory: Road and all facilities are in excellent condition but maintenance budget is currently inadequate and over-dimensioned maintenance facilities represent a high fixed cost burden.	Unsatisfactory: Border procedures have failed to develop in line with the physical facilities.	Unsatisfactory
Project C – Roads	Good: For both National and EU policies – although the actual final project was not defined at appraisal.	Satisfactory: Although there were long delays, the original objectives were exceeded. Cost savings from the use of international tendering were used to fund equally desirable road improvements.	Good: Actual traffic forecasts are broadly in line with projections and, for the same project cost, the scope of the project was increased.	Unsatisfactory: The roads are in a reasonable condition, allowing for the time since the rehabilitation works were carried out but there is a significant risk from a lack of financial resources for maintenance	Satisfactory: Project was implemented without technical assistance.	Satisfactory

Project D – Roads	Good: For National and particularly for EU policy objectives.	Satisfactory: Full project was implemented on time but with some cost overruns in hard currency terms.	Good: Actual traffic development has been in line with projections with higher than expected freight traffic.	Satisfactory: Roads are in good condition but maintenance budget is currently inadequate	Satisfactory: There is a continuing reliance on the PIU for new works but the Roads Authority has developed its managerial and technical abilities.	Satisfactory.
Project E – Roads	Satisfactory: Original technical description would have been rated higher.	Unsatisfactory: Substantial delays in implementation, large cost overruns and lack of completion of the original technical description.	Poor: Traffic has failed to meet projected growth and has fallen on some sections. This and understated cost overruns (they don't take account of non-compliance with specification) have had a major impact on economic benefit.	Poor: Some sections of road have already had to have substantial repair works and other sections are deteriorating rapidly. Available maintenance budget will not be adequate.	Unsatisfactory: Project encouraged development of Roads Authority but this is incomplete and there is a continuing reliance on the PIU.	Poor
Project F – Roads	Good: For EU policy objectives, but particularly for National objectives	Good: Minimal delays; cost savings were used to fund additional works.	Good: Traffic in line with forecast and additional works increases the economic benefit.	Satisfactory: All works remain sound but there is a risk of inadequate maintenance resources in future.	Satisfactory: Increased technical and management capacity.	Good
Project G - Railways	Satisfactory: Project has low current relevance and was not originally relevant as a transport project per se. However, it did originally meet its policy objectives.	Good: All objectives realised	Good: although passenger numbers are much lower than projected, higher freight revenues offset this. Line is financially profitable.	Good: Fully adequate budget and appropriate procedures and skills.	Good: Promoter is now fully competent to manage its own development projects.	Good

<p>Project H - Railways (NB this evaluation relates only to the EIB funded elements of a much larger programme)</p>	<p>Good: First step in an essential restructuring. The EIB elements of the much larger IBRD project were particularly valid.</p>	<p>Satisfactory: EIB accepted a change of technical description during implementation to better reflect future needs. Freed funds were used for highly relevant additional investment. Some delays.</p>	<p>Unsatisfactory: The originally planned investment was over-dimensioned – even after being reduced. However, the additional investment was profitable.</p>	<p>Satisfactory: Original investments were privatised and are in good condition, although the companies are financially weak. Additional investments are sustainable</p>	<p>Satisfactory: Original investment prepared workshops for privatisation which was reasonably successful. Additional investment is a part of a separate corporate entity which is financially viable but not yet privatised.</p>	<p>Satisfactory (Applies to the specific EIB elements. Current traffic levels and the Rail Company's financial deficit would indicate that the wider project would be rated much lower)</p>
<p>Project I – Airports</p>	<p>Good: For both National and EU policies.</p>	<p>Satisfactory: Works completed but with some delays and cost overruns.</p>	<p>Poor: Cost over-runs and over-dimensioning plus lower passenger volumes than projected.</p>	<p>Unsatisfactory: Investments have been maintained adequately to date. However, high fixed costs and under-utilisation may be a risk in future.</p>	<p>Good: Sound development of management and corporate structure with increasing private sector involvement.</p>	<p>Satisfactory</p>
<p>Project J – Airports</p>	<p>Good: Project was essential for the country's airport system</p>	<p>Satisfactory: Full project completed on budget but with some delay.</p>	<p>Good: Economic benefits much higher than expected due to increased passenger numbers.</p>	<p>Satisfactory: Technical and managerial sustainability not in doubt but financial risk from liquidity of major debtor.</p>	<p>Good: Technical assistance fully effective.</p>	<p>Good</p>

	Project A	Project B	Project C	Project D	Project E	Project F	Project G	Project H	Project I	Project J
Co-funding?	YES	NO	YES	YES	YES	YES	NO	YES	YES	YES
Project Cost (M.EUR)	96.9	330.0	110.0	58.5	270.0	17.0	32.2	177.0	24.7	14.8
EIB	20.0	165.0	50.0	20.0	65.0	10.0	16.0	20.0	10.0	10.0
EBRD	35.0	-	-	16.5	65.0	15.07	-	-	7.4	-
IBRD	-	-	-	-	43.0/95.08	-	-	120.0	-	-
OTHER	-	-	-	5.3	-	-	-	-	-	-
PHARE GRANT	1.0	-	4.3	2.6	21.0	-	-	-	2.5	YES
Co-funding Type*	Parallel	N/A	Grant	Parallel	Parallel	Co-ordinated	N/A	Parallel	Co-financing	Grant

* Cofinancing

Parallel Project definition is common to all co-funders, which take joint responsibility for monitoring and control.

Grant Project definition is common to all co-funders, each of which takes responsibility for the monitoring and control of specific components/sub-projects.

Co-ordinated Provided by PHARE. PHARE involved in some activities but responsibility for monitoring and control remained with other co-funders. Project definition of one co-funder is a subset of the project definition of the other co-funder. Co-funders take responsibility for monitoring and control of specific components/sub-projects. However, for the co-funder with the more limited project description, responsibility is limited to the components/sub-projects contained in its project description.

⁷ Under coordinated lending, the EBRD made a loan of ECU 15.0m to a parallel project.

⁸ The IBRD loan of ECU 43.0m to the project was part of a wider loan of ECU 95.0m to the borrower.

THE EUROPEAN INVESTMENT BANK

The European Investment Bank (EIB) is owned by the fifteen European Union (EU) Member States and has its headquarters in Luxembourg. It supports EU policies on a self-financing basis, raising its resources on the world's capital markets for onlending to sound capital investment projects that promote the balanced development of the European Union.

Set up in 1958 by the Treaty of Rome, the EIB has its own administrative structure and decision-making and control bodies (Board of Governors - usually the Finance Ministers of the Member Countries - Board of Directors, Management Committee and Audit Committee).

As a major international borrower, which has always been awarded the highest "AAA" credit rating by the world's leading rating agencies, the EIB raises large volumes of funds on fine terms; it onlends the proceeds of its borrowings on a non-profit basis.

The volume of the EIB's operations has grown steadily and the Bank is today one of the largest financing institutions of its kind in the world. While the bulk of its loans are within the European Union, the Bank has also been called upon to participate in the implementation of the Union's development aid and cooperation policies through financing for the benefit of some 120 non-EU countries. It therefore supports:

- Economic growth in the African, Caribbean and Pacific States and the Overseas Countries and Territories, as well as in the Republic of South Africa;
- A stronger Euro - Mediterranean partnership;
- Preparations for the accession of the Central and Eastern European Countries and Cyprus;
- Industrial cooperation, including the transfer of technical know-how, with Asia and Latin America.

The EIB began carrying out ex-post evaluations in 1988, mainly for its operations in non-EU Member Countries. In 1995, the Bank established an Evaluation Unit to cover operations both inside and outside the Union. Ex-post evaluations take a thematic approach and are intended for publication. To-date the bank has published:

1. Performance of a Sample of Nine Sewage Treatment Plants in European Union Member Countries (1996 - available in English, French and German)
2. Evaluation of 10 Operations in the Telecommunications Sector in EU Member States (1998 - available in English, French and German)
3. Contribution of Large Rail and Road Infrastructure to Regional Development (1998 - available in English, French and German)
4. Evaluation of Industrial Projects Financed by the European Investment Bank under the Objective of Regional Development (1998 - available in English, French and German)
5. An Evaluation Study of 17 Water Projects located around the Mediterranean (1999 - available in English, French, German, Italian and Spanish).
6. The impact of EIB Borrowing Operations on the Integration of New Capital Markets. (1999 – available in English, French and German).
7. EIB Contribution to Regional Development A synthesis report on the regional development impact of EIB funding on 17 projects in Portugal and Italy (2001 – available in English (original version), French, German, Italian and Portuguese (translations from the original version)).
8. Evaluation of the risk capital operations carried out by the EIB in four ACP countries 1989-1999 (2001 - available in English (original version), French and German (translations from the original version)).
9. EIB financing of energy projects in the European Union and Central and Eastern Europe (2001- available in English (original version), French and German (translations from the original version))
10. Review of the Current Portfolio Approach for SME Global Loans (2002 – available in English (original version), French and German (translations from the original version)).
11. EIB Financing of Solid Waste Management Projects (2002 – available in English (original version), French and German (translations from the original version)).
12. Evaluation of the impact of EIB financing on Regional Development in Greece (2003 – available in English (original version) and French).

13. Evaluation of Transport Projects in Central and Eastern Europe (2003 – available in English (original version)).
14. EIB Financing of Urban Development Projects in the EU (2003 – available in English (original version), French and German).
15. Evaluation of the projects financed by the EIB under the Asia and Latin America mandates (2004 - available in English (original version), French, German and Spanish).
16. Evaluation of EIB financing of Airlines (2004 – available in English (original version)).

These reports are available from the EIB website: <http://www.eib.org/publications/eval/> or by e-mail: [EValuation@eib.org](mailto:Evaluation@eib.org)

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