1. Project Data:

<table>
<thead>
<tr>
<th>Description</th>
<th>Appraisal</th>
<th>Actual</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Costs (US$M)</td>
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<td>313.93</td>
</tr>
<tr>
<td>Loan/Credit (US$M)</td>
<td>156.50</td>
<td>188.00</td>
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</table>

Project Name: Rijeka Gateway Project

L/C Number: L4714; L4715; L4716

Sector Board: Transport

Cofinancing (US$M):

Cofinanciers: Board Approval Date: 04/07/2003

Closing Date: 09/30/2009 09/30/2012

Sector(s): Roads and highways (49%); Ports waterways and shipping (43%); Central government administration (8%)

Theme(s): Export development and competitiveness (33% - P); Infrastructure services for private sector development (33% - P); Improving labor markets (17% - S); Other public sector governance (17% - S)

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Reviewed by: Roy Gilbert
ICR Review Coordinator: Christopher David Nelson
Group: IEGFST

2. Project Objectives and Components:

a. Objectives:

In this complex project there were three loan agreements concluded in 2003. The main agreements were with the Port of Rijeka Authority (PRA), and Hrvatske Autoceste (HC - the State Road Authority), with a subsidiary agreement with Luka Rijeka (LR - the port operating company) in respect of a portion of the proceeds of the PRA loan. The loans were guaranteed by the Government of the Republic of Croatia.

The objectives of the project as expressed in the loan agreements with the PRA (page 16) and HC (page 13) were to: (a) increase efficiency, through private operators, and improve financial, social and environmental conditions at Port of Rijeka, rehabilitate infrastructure and replace heavy cargo equipment; (b) prepare redeveloping part of Port of Rijeka for urban purposes; and (c) improve international road connections linked to the Rijeka gateway, and the administration of the road sector. Additional finance was agreed for the PRA loan in 2007. In this case the reference to objective (c) was dropped (page 4) since the extra funding only applied to the port component. The overall project objectives though remained the same.

The overarching objective in the PAD (page 3) differed in that it was to increase Croatia’s trade competitiveness by improving the international transport chain through the Rijeka Gateway for both freight and passenger traffic by modernizing the port and road network connections, and privatizing port operations.

b. Were the project objectives/key associated outcome targets revised during implementation?

No

c. Components:
Component 1: Port Restructuring and Modernization (Appraisal US$ 75.10 million; After Additional Finance US$ 120.92 million; Completion US$ 66.72 million): Port of Rijeka Authority

For smoother operations, especially related to the handling of wood and timber, the component comprised (i) infrastructure rehabilitation works at the western port area: demolition of outdated warehouses restricting open storage space and port performance, with the exception of two to be rehabilitated for their historical value; (ii) construction of new light modular multi-functional warehouses designed to facilitate terminal leases and concessions; (iii) repaving at the Becko berth and repaving and rehabilitation of utility networks; and (iv) restoration and protection along the Zagrebacko berth, including construction of a berthing capacity with a minimum 250 m length to allow vessels of 15 m draft and more. New heavy mobile cranes were also included under the project. In addition various minor rehabilitation works would be undertaken to complement the above activities. To help develop traffic and improve safety, a Vessel Traffic Management System, (i.e., a radar based system coupled with a database to identify and monitor ship movements) was identified as an immediate need. Environmental anti pollution protection equipment was also included under the project.

A privatization advisor to be appointed to help implement the LR business plan, covering: (i) organization of operations, (ii) creation of profit and cost centers for each terminal operations and other activities, (iii) further transformation into daughter companies, (iv) privatization of the mother company and / or independent (sets of) subsidiaries, (v) a human resource strategy, (vi) analysis of the status of the accumulated debt, and (vii) concession of terminals to private operators. The advisor would also advise on issues connected with the envisaged concession: (i) review of general objectives and of contractual targets; (ii) respective responsibilities and commitments of the port authority and of the concessionaires regarding maintenance and development of infrastructure and superstructure, (iii) equipment, (iv) extension of the concessions to allow new investment plans, (v) port tariffs, light dues, and (vi) periodic review of performance. The project was also to finance management modernization consultants and consultants to prepare designs for civil works contracts and supervise their implementation, to assist in preparing a build operate and transfer contract for further expansion of Zagrebacko berth and for construction of the D 403 connector road. Since PRA project information unit was inexperienced with Bank financed projects, additional training in accounting, financial management and procurement was to be provided.

An Electronic Data Interchange system connecting the port administration and port users was to facilitate trade through improved efficiency and safety of the port operations. Based on LR’s Social Plan proposal, a severance program was also integral to the project. A well publicized voluntary program under a limited time offer would be followed by an involuntary program to be worked out with the unions. The project was further to finance provision of a suitable financial management system, and training for its use. In addition, a firm would be hired to audit the project.

Component 2: Port/City Interface Redevelopment (Appraisal US$ 43.20 million; Completion US$ 91.86 million)

The modernization of the passenger terminal includes the development of a waterfront area open to business and commercial activities. The project finances preparation works at the Delta and Porto Baros areas, as well as the construction of the passenger terminal along the breakwater. The four km long Draga-Braidica (D404) connector road will link the bypass to the port of Rijeka reducing heavy truck traffic through the congested center of the city.

Component 3: International Road Improvements (Appraisal US$ 144.8 million; Completion US$ 152.35 million)

The project finances HC management capacity improvements, such as TA and training and supervision services for civil works and equipment installation for both HC and HAC (Croatian Motorway Company) bridge works components. Implementation of the pavement and bridge management systems was initially supported under the Bank’s Highway Sector Project. Small equipment, software upgrades, and technical assistance/training to be financed to improve HC’s ability to administer the road network. Preparation of an axle load study to develop a strategy for enforcement and eventual adoption of EU standards; and prevention of excessive damage to the national roads network through pilot fixed scale installations will be also included under the project. The project will provide technical assistance in obtaining an ISO 9001 certificate for HAC.

The proposed eastern section of the Rijeka Bypass (Orehovicca - Sv. Kuzam; 6.5 km; 4 lanes) is expected to relieve traffic in a highly congested city which is squeezed between the mountains and sea. When the (separate) European Investment Bank (EIB) financed Zagreb-Rijeka motorway is completed in 2005, it will also provide a through link for tourist traffic traveling from Italy, Slovenia and Central Europe to the Dalmatian coast. Road accident rates are high in Croatia (about seven fatalities per 10,000 vehicles compared to two fatalities per 10,000 vehicles in Western Europe). As a follow-up on the recommendations of the Road Safety Study prepared under the Highway Sector Project, the loan will finance the improvement of 30 ‘black spot’ locations in the road network where there is a high incidence of traffic accidents. Krk bridge provides the only road, electricity, water
and oil (pipeline) connection from the mainland to the Island of Krk where the Rijeka Airport and Omisalj Oil Terminal are located. The project will finance rehabilitation of the two sections of this bridge.

Component 4: Reimbursement of Project Preparation Facility (Appraisal and Completion US$ 1.5 million)

Five preparatory studies for the port component were financed under the PPF: (i) preparation of detailed engineering and project design; (ii) study on port urban redevelopment; (iii) environmental assessment (for the entire project); (iv) business plan for LR and (v) preparation of social plan for LR. Training of the PRA Project Implementation Unit (PIU) staff has been also included.

The extension of the Brajdica container terminal was added later to ensure optimum use of available funds with the understanding that the terminal would be completed under a follow-up project. The European Bank for reconstruction and Development (EBRD) financed in parallel the Orehovica-Rupa section of the Rijeka Bypass which links up with the World Bank financed section. The EBRD section was not included in the project description because failure to implement those works would have affected the outcome.

d. Comments on Project Cost, Financing, Borrower Contribution, and Dates:

Project cost: The original IBRD loan was for US$ 156.50. In May, 2007 Additional Financing was approved for euros 35.3 million (US$ 48.0 million). This was to complete the main port component for the Zagreb Terminal and to cover the financing gap for the preparation of the of the concession agreement for the terminal. US$ 30.5 million was cancelled due to cost savings and some sub-components not proceeding (see section 5 - efficiency).

Financing:

The project was restructured (at level two) six times:

On September 19, 2007 a restructuring was approved for Loan 4714 HR, which was extended to HAC. An amount of €7 million (US$ 9.08 million) was cancelled because the awarded contract price was substantially lower than the estimate.

On February 24, 2010 a restructuring was approved for Loan 4714 HR, which was extended to HAC. An amount of €500,000 (US$ 649,000) was cancelled due to cost savings.

On July 12, 2010 a restructuring was approved for Loans 4715 HR and 4715-1 HR which were extended to the PRA. For all of the categories under the Loans, the percentages of expenditures to be financed under the Loans were amended to 100 percent.

On October 22, 2010 a restructuring was approved for Loan 4714 HR for HAC and for Loans 4715 HR, 4715-1 HR and 4716 HR for the PRA. This restructuring encompassed the following:

- A one-time waiver of financial covenants because the financial crisis in 2009 significantly impacted the financial conditions of the three implementing entities.
- Extension of the closing date for the Additional Loan for the PRA from December 31, 2010 to September 30, 2012.
- Financing: to ensure that the available financing for the PRA was fully utilized, the PRA would first draw on its loans under the original loan to finance the construction of the Brajdica and Zagreb Container Terminals, prior to drawing on the Additional Finance.

On November 26, 2010 a restructuring for Loan 4714 HR for HAC and for Loan 4715 HR for the PRA. This restructuring reallocated proceeds for the different categories for both loans and extended the closing date for Loan 4715 HR from December 31, 2010 to August 31, 2011.

On July 23, 2012 a restructuring for Loan 4716 HR for the PRA for the cancellation of €15 million (US$ 19.47 million) from the Additional Financing.

Borrower Contribution: The Borrower contribution at appraisal was estimated at US$ 116.80 million. At completion it was US$ 125.93. This was 18 percent more than estimated at appraisal and was primarily due to cost escalation during the three year project extension period.

Dates: The closing date was extended by three years from September 30, 2009 to September 30, 2012 to accommodate an additional loan for the PRA that was caused by cost overruns on the Zagreb Terminal and the financing of technical assistance for the process to concession the terminal. The implementation schedules were also extended for private sector participation in port operations and the selection of a developer for the urban redevelopment. The original targets were over-ambitious given the deteriorating global economic situation which made the private investments less attractive.
a. Relevance of Objectives:

**Substantial**

The objective of increasing Croatia’s transport efficiency by improving the international transport logistics chain through the Rijeka Gateway using private operators was even more relevant at closure (September 2012) than at appraisal (May 2003) because the accession to the European Union (EU) had become imminent and the project was urgently needed in preparation for this event. (The accession took place on July 1, 2013 when Croatia became the 28th member of the EU). In line with this strategy of the Government of Croatia reflected in their Policy Agenda for Reform and Growth, (February 14, 2000), the project aimed to enable Rijeka Port to compete on a more equal footing with the ports in Italy and Slovenia. One of the pillars of the current country partnership strategy (CPS) FY2009 - FY2013 was strengthening private sector-led growth and accelerating convergence with the EU through enhanced public sector governance. These activities were expected to improve the investment climate, and align the provision of infrastructure and related services with demand.

b. Relevance of Design:

**Substantial**

The design anticipated the need for a transport logistics solution combining road infrastructure development with the port requirements, while the planned activities were strongly consistent with the development objectives. The project’s results framework correctly linked the outputs to the outcomes that the project sought to achieve. For example, the improvement in port efficiency was to be achieved through port restructuring and modernization activities including rehabilitation of port infrastructure, and commencement of the privatization reform process by restructuring steps that included reducing the work force and introducing modern equipment and systems. For the urban development objective, the steps identified were appropriate, even though the project was unable to make headway because of political and land ownership issues. For the international road connections objective, the component was designed correctly to enable truck traffic to bypass Rijeka and connect up with the international motorway. Nevertheless, the results framework, though highly detailed, set some target indicator levels that were over ambitious, such as that for passenger traffic using the ferry terminal.

4. Achievement of Objectives (Efficacy):

**Objective 1) Increase efficiency through private operators and improve financial, social and environmental conditions at the Port of Rijeka, including rehabilitation of infrastructure and replacement of heavy cargo equipment:** Modest

*Increased efficiency through private operators:*

Prior to the project the port operator could not meet the demand for performance, quality and competitiveness due to limited resources and overstaffing. The laws on concessions in the Maritime Domain and Seaports Act were thus modified to enable changes to take place, following which the port operating company was restructured and the staffing level reduced by 479 persons, compensated by means of the project loan. Port security now complies with the International Maritime Organization and EU standards, but potential reductions in theft due to improved security were not provided. There is evidence, nonetheless, that the operational performance of the private operators did improve substantially. For the handling of steel products crane movements exceeded the 2008 target by five percent. For dry goods, tons per gang per shift met or exceeded targets. For containers the target was 22 moves per crane hour by 2011 and 32 moves per crane hour was recorded. However, the target percentage of 80 percent private sector participation in the operation of Rijeka port was not achieved. Only in 2012 with the privatization of the Brajdica container terminal was the 35 percent level reached. The economic downturn has partially discouraged private sector interest.

*Improved financial conditions:*

There has been a progressive reduction in government subsidies to the port. The current level of subsidy is 19 percent lower than the target benchmark. Port dry cargo and container traffic were targeted to increase by seven percent a year between 2004 and 2009. IEG confirms this was achieved, although the growth flattened off in 2011 due to the global economic crisis. The number of passengers from ferries and cruise ships on the other hand was expected to increase by five percent per annum, but passenger traffic has been decreasing since 2008 due to the opening of a new coastal motorway and the ending of subsidies on ferry tickets. This likelihood should have been identified in preparation. The ratio of total operating expenses (including asset depreciation) of the PRA to total operating revenues (excluding subsidies) was expected to decline from a target of 240 percent to 150 percent. The target was not achieved - although some progress was made so that by 2011 the percentage had reached 171.

*Social and environmental aspects:*

When the port operating company was restructured with Bank guidance this was carried out in a socially acceptable way. The Social Program offered three main package options: (i) early retirement with associated benefits; (ii) early voluntary separation including increased subsistence; and (iii) severance payments out of the
Collective Contract. A well publicized voluntary program with a cash incentive for each year of service to a maximum of 25 years for eligible workers was to be followed by involuntary severance with details to be worked out with the unions. However, in the event, the involuntary option was not needed. Only 12 families had to be relocated and they were satisfied with their new housing.

The planned demolition of some warehouses could not take place as they were designated to be preserved as part of Croatia’s cultural heritage. Environmental issues, including disposal of asbestos waste and the reclamation of land adjacent to the Zagreb Pier, were handled in accordance with Bank guidelines. Anti pollution and vessel traffic safety equipment were installed and are operational; a comprehensive port environmental plan is under phased implementation. (see section 11 for more details).

**Rehabilitation of infrastructure and replacement of heavy cargo equipment**

The Becko berth was rehabilitated, the Brajdica Container Terminal was constructed, heavy cranes were installed and various equipment and software systems were procured. However, unanticipated difficult soil conditions prevented the construction of a multipurpose terminal at the Zagreb pier. This design and build contract was deferred to be constructed under a follow-on project, but as a container terminal.

Taken together, IEG's assessment is that this objective was modestly achieved.

**Objective 2) Prepare for redevelopment of part of the Port of Rijeka for urban purposes:** **Modest**

The new Bradjika passenger terminal with waterfront facilities was completed ahead of schedule and is operational. It has become a popular social venue encouraged by better access from the city. A new vehicular bridge, connecting roads to the passenger terminal was constructed, and the breakwater rehabilitated. The improved access to the waterfront enabled the reopening of the breakwater and provided a new amenity for the citizens of Rijeka. The passenger terminal has a picturesque view of the harbor and has become a popular social venue. However, the number of actual users of the ferries using the terminal declined following the removal of subsidies on the ferry services. Selection of a developer in cooperation with the municipality for the redevelopment of the Delta and Port Baros areas has not yet taken place and the target date has been extended as a result. There are political issues constraining progress and the land ownership rights of the Porto Baros remain unresolved, although the associated technical studies have been completed. IEG considers that modest progress has been made in the achievement of this objective.

**Objective 3) Improve international road connections linked to the Rijeka gateway, and the administration of the road sector:** **Substantial**

**Improved connections:**

The construction of the D 404 connector road has allowed vehicles - especially freight traffic to and from the port - to bypass Rijeka City center and connect directly to the Zagreb motorway in about six minutes compared to a baseline figure of 60 minutes, relieving traffic congestion in the City of Rijeka that has been transiting through the city center. The construction of the Rijeka Bypass has allowed the diversion of transit traffic between the port of Rijeka and Istria, Slovenia, Italy and the rest of Croatia. The Krk Bridge linking the city to its international airport was also rehabilitated. This airport is used by several low cost carriers flying tourists to the northern part of the Croatian coast. In IEG's view the road connections have been substantially achieved.

**Improved road administration:**

In IEG's view there have been substantial improvements in road administration. ISO 9001 (Quality Management System) certificates have been granted for motorway services, while HAC has achieved ISO 14001 (Environmental Management Systems) certification and OHSAS 18001 (Management System for Health and Safety). Some 72 HAC employees have received auditor certifications and in all 110 employees have benefited from various other types of training. The pavement and bridge management systems (PMS/BMS) have been enhanced through procurement of a critical upgrade in systems software, but the BMS at project closing was not yet operational. IEG notes that the PMS is the more important of the two systems. The borrower chose to fund the technical assistance and training for these systems from its own funds, but the work has been satisfactory.

5. Efficiency:

**Modest**

At appraisal the ERR was estimated to be 27.3 percent based on an analysis of 91 percent of the project costs. However, this included a sub-component for warehouse demolition and construction as well as another sub-component for the western port area, both of which were not carried out. To make the comparison between appraisal and completion ERR estimates even more difficult a new sub-component was added and evaluated after appraisal. This was the Bradjica Container Terminal extension that was not included in the original project description and ERR calculations. The overall project ex-post ERR analyzed in the ICR was 15.9 percent, which is higher than the 12.0 percent hurdle discount rate normally expected as a minimum for transport projects. Nonetheless, although both the appraisal and ex post calculations include the sub-component for the redundancy program it is unclear whether the same assumptions were used for the estimate of it. The ex post
calculation mentions aspects not discussed in the PAD such as the economic costs of severance payments, redeployment and outsourced labor, as well as marginal productivity value of labor savings and marginal productivity of workers who found employment outside LR. This could partly explain why there is a large difference between the estimates (appraisal 20.1 percent; ex post 79.0 percent).

Furthermore, the PAD (Annex 5, pages 43-61) provided extensive coverage of financial efficiency, concluding that the port component has an expected financial rate of return (FRR) of 30 percent. The PAD indicates (page 47) that the PRA would gradually be transformed into a self-financing port system. There is no mention of the FRR in the ICR under efficiency, and the efficiency rating for the PDO is given as "satisfactory" - a rating that does not exist on the four point measurement scale. IEG's communication with the TTL about this indicates that the FRR was not estimated at completion because the authors of the complex model used at appraisal were no longer with the Bank and the methodology they used was not on file. The ICR (page 19) advises that the indicator for measuring improvement in the operating ratio has not been met in the last few years because of the economic crisis which resulted in lower than expected port traffic. There has been progress in a reduction in government subsidies of the port, but in 2011 it was still 19 percent short of the target, pointing the likelihood of an FRR with substantially lower than expected had it indeed been calculated.

It is also important to mention that funds were unnecessarily tied up in this project and not utilized efficiently. Additional financing equivalent to US$48 million was approved, but by the end of the project some US$30.5 million was cancelled due to unanticipated cost savings and lack of progress or cancellation of some sub-components.

### a. If available, enter the Economic Rate of Return (ERR)/Financial Rate of Return (FRR) at appraisal and the re-estimated value at evaluation:

<table>
<thead>
<tr>
<th>Rate Available?</th>
<th>Point Value</th>
<th>Coverage/Scope*</th>
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*Refers to percent of total project cost for which ERR/FRR was calculated.

### 6. Outcome:

With substantial relevance of the objectives and design, modest efficiency, and modest efficacy of two of the development objectives and substantial for the third, the overall outcome rating is moderately unsatisfactory. This takes into account the fact that four of the seven PDO outcome indicators were not met even after nine years, and that there were cost overruns, delays and unfinished activities. The last implementation status and results report (ISR) also rated the project as moderately unsatisfactory.

**a. Outcome Rating:** Moderately Unsatisfactory

### 7. Rationale for Risk to Development Outcome Rating:

Risk to development outcome is rated as moderate. Croatia is a middle income country and its road investments are expected to be properly maintained since the HC and HAC road authorities have well managed systems that collect sufficient revenues from fuel taxes, tolls, and other user charges to cover operational costs. The institutional development in the road sector has been incorporated into regular operations. In order to conform with EU accession requirements Croatia is actively encouraging progress towards EU norms. Recently HAC achieved certification of the ISO 9001 (quality management system), ISO 14001 (environmental management systems) and OHSAS 18001 (management system for health and safety). Axle load regulations and weighing stations reduce overloading requiring excessive road maintenance. The road database is actively used and the bridge management system will be activated shortly.

The port rehabilitation and construction activities once completed are expected to be well maintained and the modernization of the port operations is continuing under a Bank follow-on project. On the other hand, although there is less dependence on government subsidies and more reliance on the private sector to ensure that future revenues cover costs, there is still a moderate element of risk, since the target of 80 percent privatization was not met (35 percent was achieved). Although this is at least in part due to the Croatian economy not yet recovering from the 2008 recession and experiencing lower than expected traffic, six years have now elapsed
demonstrating that some risk remains. The urban redevelopment has not proceeded far enough to be assessed, but there is a risk that progress will continue to be slow. According to the TTL, there has been recent renewed interest, in the form of an architectural competition and a revision of the bidding documents, but there is a moderate risk that further developments will continue to stall.

a. Risk to Development Outcome Rating: Moderate

8. Assessment of Bank Performance:

a. Quality at entry:

Project preparation was supported over an extended period by the Japan Policy and Human resources Fund (PHRD) and studies financed through a project preparation facility (PFF). The analysis of the sector issues was consequently sound and resulted in a logistics/corridor approach to transport development, anticipating future development needs in the port hinterland. The urban redevelopment sub-component was reasonably innovative in that it looked at best practice in other ports for redeveloping buildings and for establishing a popular waterfront area. However, it emerged that there were many issues related to the redevelopment and that the dialogue between the City and the Port was not the most straightforward. The preparation team, according to the ICR (page 13) could have been more selective in its effort and limited its attention to the transport related activities. The multi disciplined and experienced project team nevertheless established good dialogue with the labor unions and engendered a sound working relationship from project inception onwards, which contributed to the successful implementation of the social program. On the other hand, significant shortcomings were that the project team underestimated the difficulties associated with amending existing laws and the capacity of the clients (especially PRA and LR) to manage complex contracts. The target levels to be achieved under the various indicators were in hindsight too ambitious. While there were in-depth reviews, no one seriously examined whether there should have been two projects instead of one (ICR page 22). It is likely that there was no attempt to do this because the Bank lacked the budget to prepare two projects, in which case there was still the option of deferring some activities to a later follow on project.

Technically, the engineering aspects proved difficult involving deep water marine construction, road tunnels and steep and mountainous terrain, yet the potential risks associated with this were not highlighted in the PAD risk analysis. In the event, poor soil conditions at the Zagreb Pier and landslides due to unstable ground in the vicinity of the road tunnels led to additional geotechnical investigations and revision of designs. During project preparation reviews, no one challenged whether this complex project (which was originally two separate projects - ICR page 8) should be combined into one, especially since this was expected to reduce preparation and ultimately supervision expenses. However, IEG is of the view that this was a mistake because of the limited experience of the implementing agencies in managing large multi modal projects.

Quality-at-Entry Rating: Moderately Unsatisfactory

b. Quality of supervision:

There were regular supervision missions that resulted in comprehensive aide memoires. The local implementation team provided hands-on and timely support. The project experienced vexing technical issues due to unstable soil conditions, but the team worked closely with the counterparts to solve them as they arose. The PRA and LR were also unfamiliar with the Bank processes, which made supervision quite challenging and necessitated on-the-job mentoring by the supervision team. For example, the Krk bridge rehabilitation had to adopt best international practice for keeping the bridge operational while the rehabilitation works proceeded. The inclusion of the Brajdica Container Port, and the modification of Zagreb Pier from a multipurpose function to a container terminal were pragmatic solutions that strengthened the project. The privatization of the Brajdica Container Terminal resulted in improved efficiency through private participation - and according to the ICR (page 23) it is likely that this would not have happened without support and encouragement from the Bank. Appropriate due diligence was shown in ensuring compliance with environmental and social safeguards and any unanticipated issues were suitably mitigated in accordance with Bank guidelines. This was especially important as this was a Category A project and the environmental risk was significant due to deep water marine construction. In addition, anti pollution and vessel traffic safety equipment were installed, while a comprehensive port environmental plan has been introduced.
However, the team did not adjust the project’s objectives, indicators and target levels based on implementation realities when the opportunity was presented at restructuring, although it added two new intermediate indicators covering the container terminals. Overall the quality of supervision was moderately satisfactory.

Quality of Supervision Rating : Moderately Satisfactory
Overall Bank Performance Rating : Moderately Unsatisfactory

9. Assessment of Borrower Performance:

a. Government Performance:

In a Project Policy Letter, the Government agreed to implement a number of measures in order to achieve the project objectives. These included: (i) legislative changes (to authorize the concession and maritime domain), (ii) financial support for the PRA, (iii) privatization of port operations, (iv) reduction of light dues (for the maintenance of lighthouses) for ships calling at Rijeka and (v) funding of the road maintenance budget for HC and HAC. The Government made a good faith effort to implement all of the measures as agreed upon. The financial support to the PRA and the funding of maintenance were never issues. The legislative change permitting the PRA to offer 25-year leases or concessions to private terminal operations on its own authority was eventually enacted. The light dues were for a time too high by international standards, and were not reduced as per the Policy Letter. For example, when a new light dues tariff became effective in 2006, it further increased the dues on ships calling at the Port of Rijeka. The Bank alerted the Government to this matter via this project’s Mid-Term Review report and, after discussions with the Ministry of Sea, Transport, Tourism and Development, in 2009 the light dues were reduced by 31 percent, which although an improvement was still less than the 60 percent reduction specified in the Letter. The target for 80 percent private sector participation in the operation of Rijeka port was not achieved. Although the head of the PRA is appointed by the Government and a deputy Minister is on the LR board of directors, commitment to privatization alone is insufficient to make the progress envisaged. The economic downturn also played a role in the slow progress. There were amendments to the Maritime Domain, but the multiplicity of issues related to the redevelopment of the Delta and Porto Baros areas including architectural and land use plans, building density, and the location of a waste water treatment plant have still not all been resolved. Many of the measures in the Policy Letter were implemented, and the Government made good faith efforts to follow through on the remainder. Overall, the Government performance was rated as “Moderately Satisfactory”.

Government Performance Rating : Moderately Satisfactory

b. Implementing Agency Performance:

There were three implementing entities: HC, HAC and the PRA/LR. The performances of HC and HAC were satisfactory. HC and the personnel of HAC had experience working with international financial institutions and implementing large-scale civil works projects. The institutional modernization elements related to HC and HAC financing were modest and easily achievable. The road related activities and technical assistance were completed. The performance of the PRA/LR was moderately unsatisfactory, notwithstanding that fact that the implementation of the social program was a success. The geotechnical issue related to the Zagreb Pier, the historic designation of the warehouses, and the delay in the amendment of the Maritime Domain law were all beyond their control. However, after the amendment to the concession law, privatization could have proceeded at a faster pace. The delays in many of the civil works were due to the PRA’s inexperience in contract management even though it had the responsibility to ensure technical issues were quickly resolved, necessary contract amendments were timely, and procurement proceeded with due speed. The failure of LR to provide the operating performance data was a problem for the supervision team. Given the importance attached to these performance data during project preparation and in the early phase of project implementation, the collection and reporting of the data should have continued without prompting from the Bank.

Implementing Agency Performance Rating : Moderately Satisfactory
10. M&E Design, Implementation, & Utilization:

a. M&E Design:

Overall, the M&E design appropriately measured outcomes for the PDO. For the port, the measurements were: (i) efficiency - through port operating performance (cargo to increase by seven percent a year, passengers by five percent a year, 22 moves of containers per crane hour) and private sector participation (80 percent of port operations to be handled by the private sector by 2012); (ii) financial - through operating ratios (operating expenses to operating revenues to decline from 240 to 150 percent); (iii) social and environmental conditions - through implementation of project activities in terms of staff redundancy (479 staff) and environment investments in anti pollution and vessel safety equipment. For the port/city interface, the measurement was the selection of a developer for the Delta and Porto Baros areas. For international road connections the measurement was truck transit time through the city of Rijeka and quantity of traffic using the Rijeka By-pass to connect to the Zagreb motorway. For administration of the road sector, the measurement was through intermediate indicators for ISO 9001 quality management certification and implementation of pavement and bridge maintenance systems. The linkages between the PDO and the indicators were strong.

b. M&E Implementation:

The Aide Memoires reported the use of the detailed results framework. They reflected the performance of most indicators, as well as the financial ratios achieved as part of the loan covenants, and actions agreed upon in a Policy Letter. However, the implementation of M&E as reflected in the ISRs had room for improvement since it did not fully match the indicators in PAD. In the October 2010 restructuring, the intermediate indicators for construction progress for the Brajdica and the Zagreb Container Terminals were added. These new indicators were not added to the ISR. Thus not only did the ISRs then have missing indicators, but some of the reported indicators were not the ones originally agreed upon. The reporting of the results of the implementation of the Social Program was comprehensive, because the project included a tracer study. Otherwise, the implementation of the M&E was acceptable when data were easily available - such as the financial data (ICR page 16). The milestones for some indicators such as privatization and the selection of a developer were adjusted based on implementation progress. The reporting on M&E was sometimes relatively optimistic as some of the targets were challenging to achieve in a timely fashion. In IEG’s view the mid-term review could have taken a hard look at the targets originally set, and proposed that formal restructuring should cover the revision of intended outcomes that were clearly no longer feasible to achieve.

c. M&E Utilization:

This is not reported under the M&E section of the ICR, but from the post completion section of that report (ICR page 17) it is evident that the port M&E system has been continued in the follow up project and is used as a tool by the implementing agencies. The road system is relatively advanced in Croatia and the pavement management and other road management systems are being fully utilized.

M&E Quality Rating: Substantial

11. Other Issues

a. Safeguards:

The environment category for the project was “A” (full assessment). Four safeguard policies were triggered (Environment BP 4.01, Cultural property OP 11.03, Involuntary resettlement BP 4.12 and Projects in disputed areas BP 7.60). The modernization of the Rijeka Port was not expected to involve dredging or major works in the water. The following were expected to raise environmental concerns: (i) the demolition of old warehouses that might contain asbestos; (ii) the disposal of hazardous polychlorinated biphenyls in oils in a transformer within the Zagreb Berth; and (iii) reclamation of land along the Zagreb Pier. Environmental assessments of the Rijeka
Bypass, the D-404, the rehabilitation of Krk Bridge were prepared in conformity with Croatian legislation that was satisfactory to the Bank. The cultural aspects of the warehouses to be demolished were not identified, however, early on in the project.

During implementation, some environmental issues not anticipated during project preparation arose. Demolition of some old warehouses had to be abandoned when it was found (the ICR is not explicit on the details) that they should be preserved as part of Croatia's cultural heritage. The asbestos waste generated from the works performed on the passenger terminal was transported to an authorized landfill for disposal. A concise environmental management plan was developed for the rehabilitation of the large arch of the Krk Bridge, after the rehabilitation was found to be more extensive than originally anticipated. Environment safeguards were complied with when further soil investigations were needed for the Zagreb Pier, but the compliance of the Brajdica Pier extension with environmental safeguards was straightforward. The implementation of the port related component required the resettlement of 12 families. The families were satisfied with the replacement housing provided. During the implementation period, the project instituted a resettlement action plan for the land acquisition related to the construction of Road 403 which was not financed by the Bank. However, it was regarded as functionally linked from a safeguards perspective. The project team proactively ensured that the land acquisition process fully complied with the Bank social safeguards policies.

b. Fiduciary Compliance:

There were no significant procurement issues, but there were several contractual management issues, the most significant affecting the termination of the construction contract for the first Zagreb Terminal after geotechnical issues delayed implementation. This appears to have been handled effectively. While client capacity in the PRA was sometimes challenged during implementation, compliance with World Bank financial guidelines was satisfactory during the whole project life and, as far as can be ascertained from the project documentation, any difficult contract management issues were resolved appropriately. Financial management by HC and HAC was also satisfactory. Initial lapses when the financial supervision for these entities became marginally satisfactory, and - in one case - marginally unsatisfactory were remedied by installing new accounting software, keeping a better paper trail of reconciliations and preparing an accounting and internal control manual. The audited and unaudited financial reports were submitted on time and were acceptable to the Bank (ICR page 52). Neither the ICR nor the project team reported any qualifications by the project auditors. An independent auditor's report in 2008 reviewed the severance payments to port operator staff, for example, and concluded that payments were made to all 479 affected staff in a transparent and accountable manner (ICR page 11).

c. Unintended Impacts (positive or negative):

None

d. Other:

<table>
<thead>
<tr>
<th>12. Ratings:</th>
<th>ICR</th>
<th>IEG Review</th>
<th>Reason for Disagreement / Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Outcome:</strong></td>
<td>Moderately Unsatisfactory</td>
<td>Moderately Unsatisfactory</td>
<td>The target of 80 percent privatization was not met (35 percent was achieved) and the urban redevelopment has not proceeded far enough to be assessed,</td>
</tr>
<tr>
<td><strong>Risk to Development Outcome:</strong></td>
<td>Negligible to Low</td>
<td>Moderate</td>
<td>The design was overly complex and there were quality of entry issues. During supervision the weaknesses were not addressed at restructuring when there was an opportunity to do so. The project should have been adjusted for the realities of unexpected soil conditions and the economic downturn.</td>
</tr>
<tr>
<td><strong>Bank Performance:</strong></td>
<td>Moderately Satisfactory</td>
<td>Moderately Unsatisfactory</td>
<td></td>
</tr>
<tr>
<td><strong>Borrower Performance:</strong></td>
<td>Moderately Satisfactory</td>
<td>Moderately Satisfactory</td>
<td></td>
</tr>
<tr>
<td><strong>Quality of ICR:</strong></td>
<td>Satisfactory</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
NOTES:
- When insufficient information is provided by the Bank for IEG to arrive at a clear rating, IEG will downgrade the relevant ratings as warranted beginning July 1, 2006.
- The "Reason for Disagreement/Comments" column could cross-reference other sections of the ICR Review, as appropriate.

13. Lessons:

Project complexity, especially requiring inter-agency cooperation, increases implementation risk. This multi-faceted project, not only involved large civil works in difficult terrain for the roads and the port, but also the encouragement of private sector participation, a staff redundancy program and the resolution of institutional issues at the interface between the port and the city. The urban component could easily have been dropped without materially compromising the project development objectives and the road component (dealing with different implementing agencies) could, if necessary, have been a separate project to simplify coordination.

The results framework should link the project actions with outputs and the achievement of objectives. In this context the framework should be relatively uncomplicated and data collection should be within the implementing agencies' capacity's to collect and manage the data. This also means that the time frame to deliver on the targets set should be realistic. If during implementation, it becomes clear that the framework needs revision this should be done formally as soon as possible.

The implementation of project activities that depend on legislative changes increases project risk. Legislative hurdles are sometimes beyond the control of the implementing agencies and a specific investment loan may not be the best financial instrument to make progress in such an environment.

Institutional reform requires commitment from the Government and built-in incentives in the project design, since it is natural for an enterprise to resist relinquishing its business through privatization. Although it had a Project Policy Letter and the agreed upon targets, the Bank had limited leverage in moving privatization along. In retrospect, better sequencing of activities with conditions on or incentives for privatization progress might have prompted faster and deeper institutional reform.

(From the Borrower ICR). A realistic assessment of the future needs, priorities and capacities is essential in making future commitments. Any potential risks should be identified in project preparation stage and dealt with proactively.

14. Assessment Recommended? ☐ Yes ☺ No

15. Comments on Quality of ICR:

The ICR was candid in its approach and was highly informative. Ratings were fair and backed with extensive relevant evidence. However, there were shortcomings in the ICR's relevance of design and efficiency sections. In the former a proper discussion of the relationship between the project actions and outputs, and how they would achieve the objectives. In the efficiency section there was no ex post calculation of the FRR of the PRA investments, and the ERR methodology was unclear. Only common sub-components in the appraisal and completion calculations should have been compared and the methodology adopted should have been identical in both cases. The ICR reports that the method of estimating the ERR of the redundancy program at appraisal was less sophisticated than the one used at completion. That being the case, the appraisal calculation could have been reworked at completion based upon the same assumptions used at completion. (Admittedly, this was made difficult by the loss of the file used at appraisal). The ICR's efficiency rating was also wrongly denominated as "satisfactory" - a rating that does not exist for this category. On the other hand there were some useful lessons and insights into the operational pressures faced by the project team and some good comments on the need for a flexible approach in implementation. The ICR also contains unusually extensive and analytical material within the borrower ICR.
| Quality of ICR Rating | Satisfactory |