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R2015-0079/1

April 13, 2015

**Closing Date: Thursday, April 30, 2015  
at 6 p.m.**

FROM: The Corporate Secretary

**Croatia - Sustainable Croatian Railways in Europe Project**

**Project Appraisal Document**

Attached is the Project Appraisal Document regarding proposed loans to HZ Passenger Transport (HPT), HZ Cargo (HZC), and HZ Infrastructure (HZI), with the sovereign guarantee of Croatia, for a Sustainable Croatian Railways in Europe Project. (R2015-0079), which is being processed on an absence-of-objection basis.

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Report No: PAD966

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

PROJECT APPRAISAL DOCUMENT

ON

PROPOSED INVESTMENT PROJECT FINANCING LOANS

IN THE AMOUNT OF EUR 163.5 MILLION  
(US \$183.4 MILLION EQUIVALENT)

TO  
HZ PASSENGER TRANSPORT  
HZ CARGO  
HZ INFRASTRUCTURE

FOR A

SUSTAINABLE CROATIAN RAILWAYS IN EUROPE PROJECT

April 9, 2015

Transport and ICT Global Practice  
Central Europe and Baltic States Country Unit  
Europe and Central Asia Region

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## CURRENCY EQUIVALENTS

(Exchange Rate Effective February 28, 2015)

Currency Unit = Euro (EUR) and Croatian Kuna (HRK)  
1 Euro = US \$1.122  
1 Euro = HRK 7.7

## FISCAL YEAR OF THE BORROWER

January 1 – December 31

## ABBREVIATIONS AND ACRONYMS

BP	Bank Procedures
CAS	Country Assistance Strategy
CEF	Connecting Europe Facility
CPS	Country Partnership Strategy
CQS	Consultant Qualification Selection
DA	Designated Account
DC	Direct Contracting
DMU	Diesel Motorized Unit
DO	Development Objective
EA	Environmental Assessment
EBRD	European Bank for Reconstruction and Development
EBITDA	Earnings Before Interest, Tax, Depreciation and Amortization
EC	European Commission
ECCHR	WB Croatia Office
ECCU5	WB's Central Management Unit for Central/South Europe and Baltics
EDP	Excessive Deficit Procedure
EIA	Environmental Impact Assessment
EIRR	Economic Internal Rate of Return
EMF	Environmental Management Framework
EMP	Environmental Management Plan
EMU	Electricity-Motored Unit
ENPV	Economic Net Present Value
ERR	Economic Rate of Return
ESI	European Structural and Investment Funds
ESMFP	Environmental and Social Management Framework
ESMP	Environmental and Social Management Plan
EU	European Union
FA	Framework Agreement
FBS	Fixed Budget Selection
FM	Financial Management
FY	Fiscal Year

GDP	Gross Domestic Product
GENDR	WB's Environment & Natural Resources Global Practice
GGODR	WB's Governance Global Practice
GoC	Government of Croatia
GRS	Grievance Redress Service
GSURR	WB's Urban, Rural & Social Development Global Practice
GTIDR	WB's Transport & ICT Global Practice
GWADR	WB's Water Global Practice
HBOR	Croatian Bank for Reconstruction and Development
HRK	Croatian Kuna
HZ	Croatian Railways
HZC	HZ Cargo
HZI	HZ Infrastructure
IBRD	International Bank for Reconstruction and Development
ICR	Implementation Completion Report
ICT	Information and Communication Technologies
IDA	International Development Association
IEG	Independent Evaluation Group
IFI	International Financial Institutions
IFR	Interim Un-audited Financial Report
IPF	Investment Project Financing
IRR	Internal Rate of Return
IT	Information Technology
LCS	Least Cost Selection
LEGLE	Legal Assignments and Clearances
MAIC	Multi-Annual Infrastructure Contract
M/E	Monitoring and Evaluation
MMATI	Ministry of Maritime Affairs, Transport and Infrastructure
MoF	Ministry of Finance
MTR	Mid-term Review
NCB	National Competitive Bidding
NPV	Net Present Value
OP	(WB's) Operational Policy
PDO	Project Development Objective
PIU	Project Implementation Unit
PPA	Public Procurement Act
PPL	Public Procurement Law
PSC	Public Service Contract
PSIA	Poverty and Social Impact Assessment
PSO	Passenger Service Obligation
QCBS	Quality and Cost Based Selection
REOI	Request for Expressions of Interest
RFP	Request for Proposal
RPF	Resettlement Policy Framework
SBD	Sample Bidding Documents

SOE	Statement of Expenditures
SSS	Single Source Selection
TACs	Track Access Charges
TEN-T	Trans-European Transport Network
TOR	Terms of Reference
UNDB	United Nations Development Business
VAT	Value Added Tax
VOT	Value of Time Unit Price
WB	World Bank

Regional Vice President:	Laura Tuck
Country Director:	Mamta Murthi
Senior Global Practice Director:	Pierre Guislain
Practice Manager:	Juan Gaviria
Task Team Leader:	Jean-Francois Marteau



CROATIA  
Sustainable Croatian Railways in Europe

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**PAD DATA SHEET***Croatia**Sustainable Croatian Railways in Europe (P147499)***PROJECT APPRAISAL DOCUMENT***EUROPE AND CENTRAL ASIA**0000009080*

Report No.: PAD966

<b>Basic Information</b>			
Project ID P147499	EA Category B – Partial Assessment	Team Leader(s) Jean-Francois Marteau	
Lending Instrument Investment Project Financing	Fragile and/or Capacity Constraints [ ]		
	Financial Intermediaries [ ]		
	Series of Projects [ ]		
Project Implementation Start Date 30-Apr-2015	Project Implementation End Date 31 May 2020		
Expected Effectiveness Date 30-Sep-2015	Expected Closing Date 31-May-2020		
Joint IFC No			
Practice Manager/Manager Juan Gaviria	Senior Global Practice Director Pierre Guislain	Country Director Mamta Murthi	Regional Vice President Laura Tuck
Borrower: HZ Infrastructure, HZ Cargo, HZ Passenger Transport			
Responsible Agency: Ministry of Maritime Affairs, Transport and Infrastructure			
Contact: Telephone No.:	H.E. Sinisa Hajdas Doncic 385-1-3784520	Title: Email:	Minister ministar@mppi.hr
Responsible Agency: Republic of Croatia			
Contact: Telephone No.:	H.E. Boris Lalovac 385-1-4591333	Title: Email:	Minister ministar@mfin.hr
<b>Project Financing Data(in USD Million)</b>			
[ X ] Loan	[ ] IDA Grant	[ ] Guarantee	
[ ] Credit	[ ] Grant	[ ] Other	
Total Project Cost:	200.80	Total Bank Financing:	183.40

Financing Gap:	0.00					
<b>Financing Source</b>						<b>Amount</b>
Borrower						17.40
International Bank for Reconstruction and Development						183.40
Total						200.80
<b>Expected Disbursements (in USD Million)</b>						
Fiscal Year	2016	2017	2018	2019	2020	
Annual	30.00	50.00	50.00	39.10	14.30	
Cumulative	30.00	80.00	130.00	169.10	183.40	
<b>Institutional Data</b>						
<b>Practice Area (Lead)</b>						
Transport & ICT						
<b>Contributing Practice Areas</b>						
<b>Cross Cutting Topics</b>						
[ X ] Climate Change						
[ ] Fragile, Conflict & Violence						
[ ] Gender						
[ X ] Jobs						
[ ] Public Private Partnership						
<b>Sectors / Climate Change</b>						
Sector (Maximum 5 and total % must equal 100)						
Major Sector	Sector	%	Adaptation Co-benefits %	Mitigation Co-benefits %		
Transportation	Railways	80				
Public Administration, Law, and Justice	Public administration-Transportation	15				
Information and communications	Information technology	5				
Total		100				
<input checked="" type="checkbox"/> I certify that there is no Adaptation and Mitigation Climate Change Co-benefits information applicable to this project.						
<b>Themes</b>						
Theme (Maximum 5 and total % must equal 100)						
Major theme	Theme	%				

Trade and integration	Regional integration	35
Public sector governance	Other public sector governance	25
Economic management	Debt management and fiscal sustainability	20
Social dev/gender/inclusion	Other social development	10
Trade and integration	Trade facilitation and market access	10
Total		100

### Proposed Development Objective(s)

The Project Development Objective (PDO) is to improve the operational efficiency and the financial sustainability of the public railway sector in Croatia.

### Components

Component Name	Cost (USD Millions)
Project Coordination and Sector Policy Support	2.90
Support to HZ Passenger Transport Restructuring	58.70
Support to HZ Cargo Restructuring	53.40
Support to HZ Infrastructure Restructuring and Enabling Investment to Increase the System Efficiency	85.80

### Systematic Operations Risk- Rating Tool (SORT)

Risk Category	Rating
1. Political and Governance	Substantial
2. Macroeconomic	Substantial
3. Sector Strategies and Policies	Moderate
4. Technical Design of Project or Program	Moderate
5. Institutional Capacity for Implementation and Sustainability	Substantial
6. Fiduciary	Moderate
7. Environment and Social	Substantial
8. Stakeholders	Substantial
9. Other	Moderate
<b>OVERALL</b>	Substantial

### Compliance

#### Policy

Does the project depart from the CAS in content or in other significant respects?	Yes [ ]	No [ X ]
Does the project require any waivers of Bank policies?	Yes [ X ]	No [ ]
Have these been approved by Bank management?	Yes [ X ]	No [ ]

Is approval for any policy waiver sought from the Board?		Yes [ ]	No [ X ]
Explanation: Retroactive financing in excess of twenty percent of the loan amount was authorized by Management for the loan to HZ Cargo			
Does the project meet the Regional criteria for readiness for implementation?		Yes [ X ]	No [ ]
<b>Safeguard Policies Triggered by the Project</b>			
	<b>Yes</b>	<b>No</b>	
Environmental Assessment OP/BP 4.01	<b>X</b>		
Natural Habitats OP/BP 4.04		<b>X</b>	
Forests OP/BP 4.36		<b>X</b>	
Pest Management OP 4.09		<b>X</b>	
Physical Cultural Resources OP/BP 4.11		<b>X</b>	
Indigenous Peoples OP/BP 4.10		<b>X</b>	
Involuntary Resettlement OP/BP 4.12	<b>X</b>		
Safety of Dams OP/BP 4.37		<b>X</b>	
Projects on International Waterways OP/BP 7.50		<b>X</b>	
Projects in Disputed Areas OP/BP 7.60		<b>X</b>	
<b>Legal Covenants</b>			
<b>Name</b>	<b>Recurrent</b>	<b>Due Date</b>	<b>Frequency</b>
Debt Service Coverage Ratio for HZ Infrastructure equal or above 1.0	<b>X</b>		Yearly
<b>Description of Covenant</b>			
Debt Service Coverage Ratio is defined as the net revenues (related to operations and non-operating activities but excluding depreciation, other non-cash operating charges, interest and charges related to debt) compared to the debt service requirements (including capital repayments, interest and charges of debt including also new debt to be incurred) – value to be above 1.1 after loan closing date			
<b>Name</b>	<b>Recurrent</b>	<b>Due Date</b>	<b>Frequency</b>
Debt Service Coverage Ratio for HZ Passenger equal or above 1.0	<b>X</b>		Yearly
<b>Description of Covenant</b>			
Debt Service Coverage Ratio is defined as the net revenues (related to operations and non-operating activities but excluding depreciation, other non-cash operating charges, interest and charges related to debt) compared to the debt service requirements (including capital repayments, interest and charges of debt including also new debt to be incurred) – value to be above 1.1 after loan closing date			

Name	Recurrent	Due Date	Frequency
Debt Service Coverage Ratio for HZ Cargo equal or above 1.0	X		Yearly
<b>Description of Covenant</b>			
Debt Service Coverage Ratio is defined as the net revenues (related to operations and non-operating activities but excluding depreciation, other non-cash operating charges, interest and charges related to debt) compared to the debt service requirements (including capital repayments, interest and charges of debt including also new debt to be incurred) – value to be above 1.1 after loan closing date			
<b>Conditions</b>			
Source Of Fund	Name	Type	
<b>Description of Condition</b>			
<b>Team Composition</b>			
<b>Bank Staff</b>			
Name	Role	Title	Unit
Jean-Francois Marteau	Team Leader (ADM Responsible)	Program Leader	ECCU5
Antonia G. Viyachka	Procurement Specialist	Procurement Specialist	GGODR
Iwona Warzecha	Financial Management Specialist	Senior Financial Management Specialist	GGODR
Adam Shayne	Counsel	Lead Counsel	LEGLE
Antoine Avedis Kunth	Team Member	Senior Railway Specialist	GTIDR
Blanka Babic	Team Member	E T Consultant	GTIDR
Bogdanka Krtinic	Team Member	Program Assistant	ECCHR
Tamara Mihaljeic	Team Member	Team Assistant	ECCHR
Daniel P. Owen	Safeguards Specialist	Senior Social Development Specialist	GSURR
Emre Eser	Team Member	Infrastructure Specialist	GTIDR
Giang Thanh Huong Le	Team Member	Program Assistant	GTIDR
Jasna Mestnik	Team Member	Finance Officer	WFALA
Jorge E. Villegas	Safeguards Advisor	Senior Social Development Specialist	GSURR
Ljiljana Boranic	Team Member	Team Assistant	ECCHR
Natasa Vetma	Environmental Specialist	Senior Environmental Specialist	GENDR

Vanja Frajtic	Team Member	Communications Asst.	ECCHR		
Vera Dugandzic	Safeguards Specialist	Senior Operations Officer	GSURR		
<b>Extended Team</b>					
<b>Name</b>	<b>Title</b>	<b>Office Phone</b>	<b>Location</b>		
Vasile Nicolae Olievschi	Railway Consultant				
<b>Locations</b>					
<b>Country</b>	<b>First Administrative Division</b>	<b>Location</b>	<b>Planned</b>	<b>Actual</b>	<b>Comments</b>
Croatia	Varazdinska	Varazdin	X		Rehabilitation of the Varazdin-Cakovec line
Croatia	Primorsko-Goranska	Rijeka	X		Signaling upgrade between Moravice and Rijeka - part of the Zagreb-Rijeka section of the corridor Vb
Croatia	Karlovacka	Ogulin	X		Ogulin-Moravice section part of the Zagreb-Rijeka section of the corridor Vb
Croatia	Medimurska	Cakovec	X		Rehabilitation of the Varazdin-Cakovec line
Croatia	Grad Zagreb	Grad Zagreb	X		Construction of a new stop at Borongaj university campus (Zagreb's suburb)
Croatia	Primorsko-Goranska	Brajdica	X		Cargo handling capacity expansion at station Rijeka-Brajdica
<b>Consultants (Will be disclosed in the Monthly Operational Summary)</b>					
Consultants will be required					
Private capital mobilized				Yes [ ]	No [ X ]
<b>Gender Tag</b>					
Gender analysis and/or consultation on gender related issues				Yes [ X ]	No [ ]
Specific actions to address distinct needs, or positive impact on gender gaps				Yes [ X ]	No [ ]
Mechanisms to facilitate monitoring and/or evaluation of gender impacts				Yes [ X ]	No [ ]

## I. STRATEGIC CONTEXT

### A. COUNTRY CONTEXT

1. **Croatia became the 28th European Union (EU) member state in July 2013 after six years of demanding negotiations.** The EU accession presented a unique opportunity to address the country's needs by providing an incentive to adopt reforms, harmonize legislation with the EU *Acquis Communautaire* and access EU Structural and Cohesion Funds amounting to more than 3 percent of GDP per year. The Government's 2013 Economic Program commits to Europe 2020 "smart, sustainable and inclusive" growth strategy and emphasizes reforms which promote macroeconomic stability and competitiveness as the basis for accelerated recovery. To achieve this goal, it will be critical to improve connectivity, affordability and service quality, particularly to the centers where jobs, markets, and social facilities are located.

2. **The global economic crisis exposed Croatia's macroeconomic vulnerabilities.** Croatia experienced six consecutive years in recession through 2014. Prior to the crisis, large, relatively cheap capital inflows circulated into the economy, creating credit, consumption, and real estate booms that subsequently reversed. Such capital inflows are not expected to return, due to Croatia's weak growth outlook and the more competitive, risk averse international environment. Unemployment rose to 17 percent in 2013, much higher than the Eurozone average (12 percent). Public debt has doubled since 2008 and remains on an upward trajectory, and the private sector has continued deleveraging. Credit agencies took note, reducing Croatia's sovereign debt to speculative status in 2013.<sup>1</sup> In January 2014, the European Commission (EC) opened an Excessive Deficit Procedure (EDP) for Croatia and recommended corrective measures by 2016. A modest reduction in the relative poverty in the 2010-2013 period (from 21.3 percent to 19.5 percent), also led to some improvements from the shared prosperity point of view. Although the consumption of the average population and of the bottom 40 percent contracted in the 2008-2012 period (by 4.6 percent and 3.5 percent respectively), retaining real pensions largely unchanged and an increase in poverty benefits led to a smaller reduction of the consumption of bottom 40 percent.

3. **Despite slight recovery towards the end of 2014, the economy remained in recession in 2014 (falling by 0.4 percent).** Domestic demand is still suppressed amid weak labor market developments, household deleveraging, delayed investment decisions and negative market expectations. The EC reviewed Croatia's effective actions to comply with the EDP, but the fiscal consolidation target (of 4.6 percent of GDP) for 2014 was breached. Fiscal deficit in 2014 remained high at above 5.5 percent of GDP, with 2015 likely high as well. European Quantitative Easing will help keep the refinancing costs manageable in 2015, despite Croatia's non-investment credit rating. By October 2014, public debt reached 79 percent of GDP. The Government successfully issued EUR 1.5 billion Eurobond in February 2015 ahead of the April redemption of EUR 1 billion. S&P confirmed current BB rating with a positive outlook ahead of the issue. A mild recovery, estimated at 0.5 percent of GDP increase, is now forecasted for 2015, spurred by EU-funded investments.<sup>2</sup>

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<sup>1</sup> The WB: Croatia; Public Finance Review; Restructuring Spending for Stability and Growth, October 2014.

<sup>2</sup> Croatia: Macro Monitoring Note Q1-2015, World Bank.

## B. SECTORAL AND INSTITUTIONAL CONTEXT

4. **Government investments in the transport sector over the past fifteen years have mostly targeted the development of the motorway network**, which is now almost completed. There have been notable changes in nearly all transport modes. Significant investments were launched in the main passenger and commercial ports (including with the World Bank (WB) support in Rijeka and Ploče); the biggest international airport in Zagreb was concessioned out to a private consortium and the national air carrier completed a restructuring program approved by the EC.

5. **The Government is currently formulating strategic documents for the whole transport sector as part of the overall EU 2014-2020 programming perspective.** An interim transport strategy was adopted in October 2014<sup>3</sup>, while the full transport strategy based on a comprehensive traffic model needs to be completed by the end of 2016. Finalization of this strategy, consistent with EU objectives is a condition for disbursement of EU funds in the sector. The emphasis of the interim strategy is on safe and sustainable transport, and on the completion of the Croatian part of the Trans-European network of corridors (TEN-T). A national program for the railway sector expired in 2012. The general EU 2020 objectives and the interim strategy however all give a very strong orientation in favor of railway compared to other modes.

6. **Railway still represents a significant share of traffic and has a strong potential, in spite of a recent decline.** Traffic has gone down since 2007 continuously but Croatia's railway share of both cargo and passenger traffic remains above EU average with 12 percent of goods traffic in 2013 (74 percent for roads) and 31 percent of public transport of passengers (see Annex 5 for more details). Arresting the decline in market share for passenger transport and tapping into the solid transit freight flow potential is essential. Railway freight transport in Croatia is predominantly transit: the country benefits from its strategic location at the junction of two main European transport corridors, Corridor X and Corridor Vb.<sup>4</sup>

7. **In parallel with the sector dialogue with the WB through the Croatia Railway Policy Note<sup>5</sup>, the Government has implemented a major railway sector reform in 2012, compliant with the EU Directives.** Initial reform steps had been taken already in the mid-2000s, with the formation of Croatian Railways as a holding company with four lines of business. This process included a breaking of the historical public monopoly by separating infrastructure management from operations, and separating core business activities (freight and passenger services). This complex process required the establishment of an effective regulatory framework to regulate access for new operators and the ensuing competition. Two regulatory bodies, respectively overseeing traffic safety and standards, and the fair access to the market, were later established in

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<sup>3</sup> National Transport Strategy 2014-2030, October 2014.

<sup>4</sup> Corridor X connects Salzburg, Austria and Thessaloniki, Greece via Zagreb, while Corridor Vb connects the port of Rijeka with Budapest, Hungary via Zagreb. The new EU infrastructure policy establishes a core transport network on nine major corridors. The Mediterranean Corridor links the Iberian Peninsula with the Hungarian-Ukrainian border and in Croatia follows the route of the former Corridor Vb; while the Rhine-Danube Corridor includes the Danube branch in Croatia.

<sup>5</sup> Croatia Railway Policy Note, WB, Report 78689-HR, June 2013.

line with EU regulations<sup>6</sup>. In June 2012, the Ministry of Maritime Affairs, Transport and Infrastructure (MMATI) adopted a five year restructuring plan for Croatian Railways Holding. Croatian Railways Holding was split into three independent entities - HZ Infrastructure (HZI), HZ Cargo (HZA) and HZ Passenger Transport (HZP), limited liability companies owned by the Republic of Croatia, and the holding company was dissolved.

**8. The Croatian railway sector still faces numerous operational and organizational issues** (these are benchmarked and analyzed in depth in the Croatia Railway Policy Note):

- **MMATI's control of the sector policy is challenging** because of the small number of dedicated staff. The contracts that regulate the relations between the State and both passenger and infrastructure companies<sup>7</sup> have not allowed a better allocation of resources, or a prioritization of both investment and services on the areas with higher demand potential. MMATI also had to prepare for the EU entry from a policy standpoint, including preparation of the EU programs amongst many other emergencies. This has strained MMATI's capacity to organize the sector reform implementation. As a result, the HZ companies had to implement their restructuring plans mostly by themselves, and the weaknesses highlighted in the Policy Note in terms of high cost structure and difficulty to size services according to resources materialized.
- **Stopping the decreasing traffic trend requires stronger historical operators.** Traffic declined due to the domestic crisis, but this should have been offset (at least for freight) by the growth of transit traffic. New entrants in this market are expected to emerge in the coming months (to date, several operators received licenses but are not yet operating), but international experience shows this will first occur in niches and very gradually. HZA's market is, however, more vulnerable because more than 70 percent of its traffic consists of transit flows, and it could be an easy target for private competitors. Hence, substantial improvements in quality of the infrastructure and services are needed at the level of the current operators.
- **The infrastructure condition has been deteriorating due to delayed investments in rehabilitation and maintenance.** More than half of the network is operating significantly below its design capacity, including on the main international corridors and some of the most trafficked passenger lines. Prospective investments funded by the EU relate to upgrading, and will span over several decades to put the international corridors to appropriate standards. In the meantime, almost no funds are available for emergency rehabilitation on the network to keep it competitive vis-a-vis competing corridors.
- **Operational performance remains an issue in labor and assets condition.** Labor productivity at the sector level has been constantly falling between 2008 and 2012. The sector wage bill remains very high. Before its split, the Croatian Railways system used more than 75 percent of its operating revenues to cover labor costs, while most European railway operated with a wage bill of around 40 percent. The Restructuring Plan prepared by HZ Holding in 2012 proposed significant staff retrenchment plans which were mostly implemented in all companies.

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<sup>6</sup> Similar reforms, implemented following various levels of separation in all EU countries since the early 1990s, aim to encourage efficiency and free market operations over time, while focusing state subsidies on infrastructure investments and on the provision of public service contracts for passenger services.

<sup>7</sup> Passenger Service Obligation Contract and Multi-annual Infrastructure Contract.

However, strong actions<sup>8</sup> are needed to bring the companies on a sustainable path. Companies' rolling stock and systems require improvement. Finally, adjustments following the separation between companies are still needed, not only from an operational standpoint but also in terms of asset management. In HZI, insufficient focus has been given on the preparation of EU funded investment, and the implementation was reduced to a few select rehabilitation programs from 2012-2014 following years of under investment.

- **Financial performance of the companies remains extremely weak.** With the dissolution of Croatian Railways holding, HZ Holding debt was split among the three companies, without taking into account their ability to service such debt. This has since been partially solved by takeover from the state of most of the debt predating the EU accession. Yet, as predicted in the Policy Note, the financial performance declined due to difficulties in subsidiaries, traffic loss and perennial high costs, while HZI's situation was weakened by very low revenue and a deteriorating infrastructure. As a result the three companies still need to undertake short term financial consolidation to change their debt profiles, while facing short term investment needs to be able to continue their operations. Both HZC and HZP need to obtain authorization from the EC to get the public support needed given the state aid rules applicable to railway operators. Financial sustainability also requires that operational improvements mentioned in the previous paragraph materialize.
- **The railway sector is a major user of budget support and has been heavily reliant on it in the last decade. Budget support amounted to 0.6 to 1.2 percent of GDP annually.** Overall, the strategy underlying the government support to the sector is geared towards the provision of operating subsidies, both for infrastructure and passenger services. Very few direct investments were recently provided to the sector apart from the state guarantees given in 2013 and 2014 for commercial loans to finance investments as a transitory solution (in infrastructure), rolling stock purchase (HZP) and short term liabilities (HZC).

9. **The European Structural and Investment (ESI) funds<sup>9</sup> will boost the sector in the medium term, but the system needs to improve to survive:** It is forecasted that close to EUR 1.1 billion of ESI funds would be allocated to the Croatian railway sector between 2014 and 2020, essentially to upgrade and develop the international corridors in the TEN-T network. The financial needs to fully upgrade the corridors would probably require two EU funds programming periods at least (e.g. until 2027). Short term impact on the network condition is limited, while HZI needs to proceed with urgent rehabilitation, and operators need a functioning network to survive.

10. **Looking forward, the Government of Croatia and the railway sector face two apparently contradictory obligations:**

- Respect the government's commitments vis-a-vis the EU: it needs to contribute to sustainable growth supporting safe, inclusive and sustainable transport systems. This requires implementing EU funded programs to develop infrastructure along European Corridors, and to sustain or develop cleaner transport services. The bankruptcy of historic railway operators would seriously

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<sup>8</sup> Cf. Croatia Railway Policy Note for the full set of recommendations.

<sup>9</sup> Funds provided by the European Union to member states to finance regions which have a revenue below 90% of the EU average. They represent the largest source of public investment in new EU member states.

compromise these commitments and objectives, but EU directives on railway strictly limit the support that can be provided as part of State aid. The condition of the system is such that both HZC and HZP need such aid to survive; and

- Given Croatia's current fiscal constraints, there is a strong incentive toward limiting or decreasing subsidies to the railways which still represent one of the largest expenditures of the Government. This means that subsidies are likely to diminish, in a context where the current level of spending has not managed to put the sector on a sustainable path. The Policy Note highlighted that productivity gains by European standards seem achievable and the State should increase cost cutting incentives to get to these levels.

11. **Following the reform of 2012, the focus of the Government is now on implementing companies' restructuring and rationalizing public support.** The institutional reforms are mostly complete. But in the recent years, the companies' managements have mostly focused on implementation of the separation and solving immediate financial difficulties or bankruptcy (HZC, and subsidiaries of HZI and HZP) with much less emphasis on reorganization of services and operations, commercial policy or medium term planning. Experience in Europe also shows that operational restructuring takes a lot of time. This has now started, HZP and HZC are currently finalizing their reform plans for submission to the European Commission, while a new business plan of HZI is taking into account a smaller level of investment financing available from the EU and domestic sources. Each company's restructuring plan now spans until 2018-2019, which is consistent with the duration of reform of railway companies in other countries. The companies have also continued to focus on labor and staffing. Under the leadership of the Ministry of Finance, subsidies are evaluated under a spending review which will set targets for 2015-2017.

12. **In this context, the WB Group can play a key role in helping the Government reach its objectives while complementing the actions and financing of European Institutions.** The Croatian railway sector needs public funding to survive including its public transport operators, but the State aid needed will be useful only if it is linked to modifications of the companies' operations, and to investment in the network. The WB Group is well equipped to support the companies' restructuring over the course of an investment project and can tailor financing to the short to medium term rehabilitation needs, while EU funds focus on the country's corridors development. The Bank's involvement in parallel to the support provided by EU institutions to manage their large development projects will improve the overall system's efficiency and can also help rationalize future investment.

### **C. HIGHER LEVEL OBJECTIVES TO WHICH THE PROJECT CONTRIBUTES**

13. **The project contributes to the Interim Transport Development Strategy of Croatia for 2014-2030 embodied in five sector specific goals:** (i) strategic planning for mobility, (ii) definition of functional regions based on transport demand, regardless of county administrative boundaries or the international borders, (iii) development of a national traffic model as a basis for planning and justified investments, (iv) focus not only on infrastructure, but also on the organization and operations, and (v) focus on transport safety and environmental strategy.

14. **The project is consistent with the EU's priorities for transport.** The "White paper, EU 2020" forecasts a future Europe where, inter alia, oil scarcity together with fast developing

transport market will shape mobility trends. The first aim of the future national transport strategy is to promote a modal shift to environmentally friendly modes as well as improving accessibility and quality of services. Member States will have to focus on investments that promote sustainable transport and target a reduction in emissions by 60 percent through four main components: vehicles, logistics, energy efficiency and standardization of information systems. During the period 2014-2020, Member States are expected to develop multimodal transport intercity networks, long-distance cleaner freight transport and high quality and interoperable rail system. Countries are also requested to enhance safety, security and innovation in transport.

15. **The project is also consistent with, and included in, the Country Partnership Strategy (CPS) for FY14-17<sup>10</sup>.** The CPS aims to assist Croatia's convergence with the EU through an engagement that is focused on key reform-based outcomes, supporting the Europe 2020's smart, sustainable and inclusive growth' strategy and the government's reform agenda. In particular, the project will support the competitiveness CPS pillar, by promoting restructuring of public enterprises to enable their faster convergence to operational and financial performance of EU28 countries, and support the EU membership pillar, including inclusion into Europe, as the sector should be one of the main absorbers of EU funds.

16. **The project contributes to the WB goal of reducing poverty and boosting shared prosperity.** Well-managed railway are a key part of a country's transport network, providing efficient and low cost transport of goods and people in high density transport corridors and suburban lines around main population centers. In many cases, transport shifted to road at a higher cost in road infrastructure and operations and resulting in more traffic congestion, vehicle emissions, and traffic accidents. The improvement of passenger railway services envisioned under this project will benefit all users. Lower income population and women, who face distinctive disadvantages in their mobility and access to transport services are the primary users. Elderly, youth and unemployed already benefit from discounted travel fares. In addition, vulnerable and low income population will benefit at several levels from the overall railway program of the Government through employment of skilled and unskilled labor. Indirectly, benefits from more rationale public resources allocations would allow to shift resources from operational subsidies allocated to suboptimal railway services, towards infrastructure investments. This will promote the country's economic diversification and innovation, whilst allowing the state to carry out some of its core social responsibilities, such as in health and education.

## **II. PROJECT DEVELOPMENT OBJECTIVES**

### **A. PDO**

17. The Project Development Objective (PDO) is to improve the operational efficiency and the financial sustainability of the public railway sector in Croatia.

### **B. PROJECT BENEFICIARIES**

18. **Railway passenger services are used daily by around 100,000 users who depend on its timeliness and reliability mostly for professional and education purposes.** More than 65

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<sup>10</sup> Report 77630-HR, June 2013.

percent of passengers are student and employees, while elderly represent a third critical category of users. Based on qualitative evidence the services are mostly used by the bottom 40 percent of the population, though no statistical study has been carried out in Croatia in relation to revenue. Railway represents the only public transport access in some areas in Northern Croatia and to reach Zagreb from some suburban zones.

19. **Railway cargo services are crucial to the country's competitiveness which is placed along a logistics transit route connecting Central and South East Europe, and are currently used by major heavy industries in the country.** From the experience of other member states, despite EU accession or liberalization of the cargo market, the historical operator usually retains a large share of traffic after market opening. The attempt of the Government to concession a second container terminal in Rijeka confirmed that global logistics operators require at minimum good railway connectivity to ports and logistic centers to carry out key investment. In that respect, reinforcing the railway system in Croatia helps secure supply of Southern European countries (Serbia and Bosnia and Herzegovina for example), which have fewer alternatives than Hungary or other Central European countries for their external trade routing by railway. As a result most of the population and industries of these countries can be considered as project's indirect beneficiaries.

20. **The staff in MMATI, HZI, HZC and HZP are also direct beneficiaries of the project activities.** The three companies together without subsidiaries employ more than 9,000 employees as of Dec 31, 2014. The project may finance retrenchment and restructuring, but should contribute to maintain the companies in operations and improve skills. The departments in the MMATI overseeing the sector represent 20-25 people who would directly benefit from capacity building under the project. Around 15 percent of these staff are women.

21. **The project finally benefits the overall population given its indirect benefits on the state's treasury as it limits the financial risk for the Government.** The support to sector reform should in the long term ensure more sustainable sector investment planning and management, based on a thorough investment prioritization, combination of financing from different sources. Moreover, the reform supported by the project should improve or limit operating subsidies.

### C. PDO LEVEL RESULTS INDICATORS

22. The PDO level results indicators are the following<sup>11</sup>:

- Prioritized railway sector development and infrastructure maintenance program developed

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<sup>11</sup> The first indicator – the main indicator - measures efficiency in the use of Public Resources, sustainability of sector investment, financial sustainability of the sector. The remaining indicators measures changes in efficiency of operations, productivity and financial situation, confirming the full implementation of each company's restructuring. Financial sustainability is normally measured by making financial projections over several years, but as they rely on hypothesis, financial projections cannot be considered as a reliable indicator. This objective is therefore measured by the four indicators above (the first one supporting the setting of long term investment and resource planning, and the three others the efficiency of the companies, which will contribute to the financial strengthening. The evolution of the debt service coverage ratio, which is a legal covenant for each company, is also contributing to measure the financial situation of the companies.

- HZP operating expenses per train-km (in HRK)
- HZC working ratio
- Number of annual train-km per HZI employee

23. Legal covenants are also established to confirm the sound financial situation of each of the three companies. They have to be considered as well as part of the results monitoring framework of the project, with the objective for the companies to achieve financial sustainability.

### III. PROJECT DESCRIPTION

#### A. PROJECT COMPONENTS

24. The project comprises four components:

#### **Component 1: Project Coordination and Sector Policy Support (EUR 2.6 million, including IBRD financing of 100 percent)**

25. The objective of this component is to assist the MMATI to enhance its institutional capacity as coordinator of the railway sector to improve governance and overall management of the sector. This would contribute to improving the efficiency in the use of public resources and sustainability of the sector investment. It will also ensure resources to improve its performance in its coordinating role for the project, in the sector reform monitoring. The project would aim at that through the following activities:

- **Asset Management Support (EUR 1 million).** Support to MMATI and the companies in finalizing asset management separation between the companies and clarifying the legal status of the main assets.
- **Assistance to the MMATI in project coordination and sector policy (EUR 1.6 million),** including sector reform monitoring and definition of railway services obligations with HZP (PSO contract) and HZI, and the preparation of the railway sector development and infrastructure maintenance plan once the national transport strategy is completed in 2016. This may also include support to oversight of operations improvements in HZI and HZP<sup>12</sup>.

#### **Component 2: Support to HZ Passenger Transport Restructuring (EUR 52.4 million, including IBRD financing of EUR 43 million)**

26. The objective of this component is to support HZP in improving its operational efficiency and financial situation in order to deliver better services in a financially sustainable way. This would include actions on the cost structure (labor, fleet condition) and on its organization. It would include the following subcomponents:

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<sup>12</sup> The prioritized railway sector development and infrastructure maintenance plan will require the prior submission of restructuring plans of HZC and HZP to EC and adoption of the national transport strategy that is based on modeling data allowing the definition of railway services on solid basis.

- **Retrenchment (EUR 16.1 million, including EUR 4.6 million of retroactive financing).** Work force would be rationalized through retroactive financing of eligible severance payments, and financing of the implementation of HZP’s retrenchment plan for 2015-2018 for a total of EUR 16.1 million. This would include financing retrenchment in some of HZP’s subsidiaries which are undergoing restructuring. Support services for retraining and enhancing opportunities for finding alternative employment, including counseling and advisory support could also be financed under the project.
- **Contribution to Restructuring Plan Implementation (EUR 36.3 million).** This comprises three main categories of investment:
  - (i) **Rehabilitation of rolling stock to improve efficiency of the fleet (EUR 23.3 million).** The condition and availability of HZP rolling stock would be improved by rehabilitating and maintaining rolling stock. The State also subsidizes this activity, and the financing of the company’s periodic maintenance program would be coordinated between the State and the project;
  - (ii) **IT modernization and integration (EUR 10.1 million).** Operational and financial management in HZP would be improved through IT investment covering the whole company including the fleet management system, ticketing and the commercial management system;
  - (iii) **Studies and implementation of measures (EUR 2.8 million)** recommended to adapt business processes to reorganized operations and to improve energy efficiency, and for capacity building in management and restructuring.

**Component 3: Support to HZ Cargo Restructuring (EUR 47.6 million, including IBRD financing of EUR 41.5 million)**

27. The objective of this component is to support HZC in increasing its operational efficiency and financial situation in order to deliver better services in a financially sustainable way. This would include actions on the cost structure (labor, fleet condition) and on its organization (IT improvements):

- **Retrenchment (EUR 23.1 million, including EUR 11 million of retroactive financing).** Work force would be rationalized through retroactive financing of eligible severance payments, and financing of the implementation of HZC’s retrenchment plan for 2015-2017 for a total of EUR 23.1 million. Support services for retraining and for finding alternative employment, including counseling and advisory support could also be financed under the project.
- **Contribution to Restructuring Plan Implementation (EUR 24.5 million).** This comprises three main activities:
  - (i) **Periodic maintenance of rolling stock.** The condition, availability, and efficiency of the fleet would be improved by periodic maintenance and rehabilitation of rolling stock **(EUR 21.6 million)**;
  - (ii) **IT modernization and integration (EUR 2.8 million).** Operational and financial management in HZC would be improved through IT investment covering the whole

company, including the fleet management system, and the commercial management system.

**(iii) Capacity building in management and restructuring (EUR 0.1 million).**

**Component 4: Support to HZ Infrastructure Restructuring and Enabling Investment to Increase the System Efficiency (EUR 76.4 million, including IBRD financing of 100 percent).**

28. The objective of this component is twofold: (i) to support HZI in improving its operational efficiency and financial sustainability through restructuring, and (ii) to contribute to restoring the physical infrastructure's condition including safety and improving its clients operating conditions. This would include actions on the cost structure (labor) and financing (including retroactive financing) of emergency rehabilitations or safety measures, as well as studies to improve network and operations efficiency. It would include the following subcomponents:

- **Retrenchment (EUR 13.7 million).** Workforce would be rationalized by financing the implementation of HZI's retrenchment plan for 2015-2019<sup>13</sup>. Support services for retraining and enhancing opportunities for finding alternative employment, including counseling and advisory support could also be financed under the project.
- **Railway Safety Crossings Program (EUR 10.7 million, including EUR 1 million of retroactive financing).** The first tranche of the HZI 10-year plan for the installation of railway safety crossings is based on a prioritization criteria prepared with support from the Bank. This would include financing of a EUR 2 million existing contract (including retroactive financing of EUR 1 million) and a new contract for 2015-2016.
- **Other Railway Safety Investment (EUR 6.8 million).** The project would finance improvement of structures which currently represent a safety risk and the reinforcement of areas prone to landslides or rock falls. The safety improvements will also result in faster and more reliable train operations.
  - (i) Cuts and slope reinforcement on the corridor Vb around Rijeka (EUR 4.6 million). The reinforcement will reduce the track maintenance costs.
  - (ii) Emergency bridges reconstruction on corridor Vb (EUR 2.2 million). Due to their deteriorated condition, these bridges represent a safety threat.
- **Emergency infrastructure investments to bring back some lines to acceptable operating standards and small capacity improvements (EUR 45.1 million).** The component consists in financing emergency rehabilitation works along sections which are not going to receive EU funds under the 2014-2020 programming period, yet are prioritized based on their levels of traffic and status (priority is given to international corridors). It mostly consists of rehabilitation of track and electrical systems along international corridors.

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<sup>13</sup> The retrenchment program from end of 2013 to late 2015 benefits from an EBRD loan, and the project would finance the retrenchment program once the EBRD funding envelope is disbursed.

- (i) **Track rehabilitation along the Ogulin-Moravice section (corridor Vb) (EUR 7.3 million, including EUR 5 million of retroactive financing).** The rehabilitation started in 2014 and is expected to be completed in 2015. The works are located along the Zagreb-Rijeka section of the corridor Vb;
  - (ii) **Rehabilitation of the Varazdin-Cakovec line,** which is one of the high priority regional lines (EUR 13.2 million);
  - (iii) **Replacement of switches, electrical, and support systems (for safety and signaling) on international and national corridors (EUR 18.2 million, including EUR 7.2 million of retroactive financing);**
  - (iv) **Construction/improvement at stations and stops (EUR 6.4 million, including EUR 2.5 million of retroactive financing).** One particular project under this component is cargo handling capacity expansion at the station Rijeka-Brajdica. It will help increase the railway share in cargo traffic coming to Rijeka port. This will complement to the investment prepared under the Second Rijeka Gateway Project. The construction of a new stop at the Borongaj university campus (Zagreb) aims at supporting daily access to students. It will also help reduce congestions on roads within Zagreb greater area.
- **Capacity building in management and restructuring (EUR 0.1 million).**

29. Annex 2 details the components and describes the linkage between components, objectives, activities, intermediate indicators and outcome indicators.

## **B. PROJECT COST AND FINANCING**

30. **The project will be implemented over five years and through three Investment Project Financing (IPF) loans in the total amount of EUR 163.5 million (USD 183.4 million equivalent and HRK 1.26 billion equivalent).** The total project cost includes contributions of HZP and HZC to the rehabilitation of their respective rolling stock components. These contributions are provided in parallel to the WB funding and for separate activities linked to the same objectives. An EBRD loan finances most of the retrenchment costs of HZI for 2014 and 2015. It is not listed in the financing plan but contributes to the restructuring<sup>14</sup>. The total project cost is the following (in USD – see Annex 2 for a complete financing plan in Euro and HRK):

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<sup>14</sup> The results framework in Annex 1 records only the impact of WB financed retrenchment.

**Table 1: Project cost and financing**

<b>Components</b>	<b>Project Cost (in USD)</b>	<b>IBRD Financing (in USD)</b>	<b>Borrower Financing (in USD)</b>	<b>% of IBRD Financing in Total Project Cost</b>
Component 1: Project Coordination and Sector Policy Support	2.9	2.9	0.0	100%
Component 2: Support to HZ Passenger Transport Restructuring	58.7	48.2	10.5	82%
Component 3: Support to HZ Cargo Restructuring	53.4	46.5	6.9	87%
Component 4: Support to HZ Infrastructure Restructuring	85.8	85.8	0.0	100%
<b>TOTAL</b>	<b>200.8</b>	<b>183.4</b>	<b>17.4</b>	<b>91%</b>

31. The project will include retroactive financing of activities carried out by the three companies (see Annex 2). This relates mostly to the retrenchment carried out by HZC and HZP in 2014 which was done as part of the implementation of the restructuring plans carried out during the project preparation. It also includes the financing of investment activities of HZI consistent with the project components especially in emergency and safety investment in infrastructure. This retroactive financing contributes to the financial sustainability of the companies, the financial situation of which has been very fragile over the last years.

### **C. LESSONS LEARNED AND REFLECTED IN THE PROJECT DESIGN**

32. There are numerous lessons learned from previous projects supported by the Bank in the railway sector in Croatia. The implementation of far reaching railway restructuring, particularly when staff retrenchment and reduction in passenger services is required, is a complex and time consuming process. It requires a significant amount of policy dialogue but also political capital, and can be greatly affected by political instability<sup>15</sup>. Staff retrenchment remains a difficult and sensitive activity due to the associated social impact and necessary political coordination with labor unions. In this respect, the Government's and companies' ability to drive this process constitutes a key vector towards successful implementation. As part of its sector engagement in Croatia, the Bank undertook a detailed assessment of the sector in close coordination with relevant government counterparts to reach agreement on the overall strategy, including for staffing. This is reflected in the project design which included a long preparation to allow consultation and in programming further actions on services once evidence-based data are supplied by the traffic model developed by MMATI as part of the transport sector strategy.

<sup>15</sup> Implementation Completion Report Review (Report no. ICRR13248) for the Croatia Programmatic Adjustment Loan 2 (PAL2); Implementation Completion Report (Report no. ICR1052) for the First and Second Programmatic Adjustment Loan Projects.

33. **The WB Independent Evaluation Group (IEG) highlights the need to prioritize investments in railways as it is considered as more energy-efficient, more economically and environmentally sustainable mode compared to roads, particularly with regard to freight.** IEG also highlights weak asset management systems in the sector as an issue.<sup>16</sup> The project will directly address this concern by supporting institutional and organizational capacity, and helping clarify the railway asset management system and allow each company to better manage its assets.

34. **Several operations supported by the Bank indicate that the use of instruments involving preconditions to investment components may not leave the Bank with enough leverage to link the progress of physical components with reform milestones.** This is particularly the case for projects which frontloaded railway reform prior to project implementation. Because the reform itself is delayed, implementation halts and this jeopardizes the achievement of the PDO. Instead, the project preparation capitalized over recent Bank's interventions (especially the Croatia Railway Policy Note) which show that a sustained sector dialogue can sometimes be more influential than including all technical assistance inside the project.

35. **Railway sector reform remains a complex, ambitious and time consuming activity.** Several railways projects financed by the Bank highlighted that the implementation structure of the client should be well assessed at the time of project preparation. The Bank carried out a comprehensive due diligence of the companies' organization to assimilate the structural changes, and to implement realistic objectives, including through risk assessment and mitigation measures. Each company appointed technically qualified staff. MMATI will also receive coordination support.

36. **The current retrenchment component builds on the lessons learned from the previous Bank-supported restructuring project completed in 2005.**<sup>17</sup> It is governed by a robust set of local labor regulations and Collective Agreements, which result from comprehensive and periodic negotiations with the unions, in an environment where the framework reform has mostly been achieved (separation of companies and limited number of subsidiaries for each main company).

37. **Coordination with other IFIs and the EC remains essential.** EU funding is available in many areas related to investment, sector efficiency, and project management, but it mostly targets HZI. The project funding is therefore more geared toward HZC and HZP in helping implement their restructuring plans. Coordination will be sought especially during the adoption of the final sector strategy, and investments proposed under the project in infrastructure are complementary to what is funded by EU Funds and EBRD.

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<sup>16</sup> Improving Institutional Capability and Financial Viability to Sustain Transport, March 2013.

<sup>17</sup> Implementation Completion Report Review (Report no. ICRR12343) for the Railway Modernization and Restructuring Project.

## IV. IMPLEMENTATION

### A. INSTITUTIONAL AND IMPLEMENTATION ARRANGEMENTS

38. **The project will be implemented by HZI, HZP, HZC, and coordinated by MMATI.** The project would comprise three loans- one to each of the three companies, all with a state guarantee. The project includes, under component 1, support to the MMATI. The cost is not large enough to justify a separate loan to the State, but it will be technically managed by the State as part of its ownership and policy role. The fiduciary responsibility for this component is under the HZI loan. Part of the loan to HZI also finances expenditures that are de facto the financial responsibility of the State according to EU railway directives<sup>18</sup>.

39. **Implementation arrangements for the project would be based on project implementation units (PIUs) in each company.** HZI, HZP and HZC have confirmed teams of qualified staff who will be involved in the Project, including overall coordinators, and persons responsible for technical investment (one per each main area in the case of HZP and HZC, and the director in charge of investment planning in the case of HZI), retrenchment and human resources aspects, safeguards, procurement and financial management. These experts are current staff of the companies and would perform the project-related work together with their regular responsibilities. A project coordination team will be set up in MMATI and include a project coordinator from each company to undertake project coordination and lead the sector reform, and may be reinforced by local and international consultants.

40. A high level steering committee, including representatives of the Ministers of Transport, Finance, and Regional Development, as well as EU Funds (MRDEUF) and the heads of management boards of each company, would review the project performance, sector reform communication and progress in sector reform at least once a year.

41. The project will use existing financial management systems, as HZI, HZP, and HZC are revenue earning entities with acceptable financial management arrangements in place for project fiduciary purposes. During the project implementation the Bank will monitor actions taken by companies to resolve financial reporting issues in order to ensure fully reliable financial performance information in the audit reports.

42. In terms of procurement the project will mostly use national competitive bidding procedures. The teams in HZC, HZP, and HZI will receive appropriate support for the few contracts that will be procured using other methods in the WB guidelines. Most of the contracts under the project have been routinely procured by the companies over the past years and their capacity to implement them is sufficient. The exception relates to IT contracts which will require (i) hiring supervision consultants for the most complex ones, and (ii) capacity to translate the companies' strategy into an IT strategy.

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<sup>18</sup> According to EU rail directives infrastructure managers should charge to operators no more than the marginal operating cost of infrastructure.

43. For each company, the implementation of the retrenchment process will follow Croatian Law, the Collective Agreements with the Unions, and the Retrenchment Plans agreed upon during the project preparation. These plans build upon, and enhance, the retrenchment process conducted by the companies from 2012 to date. The process will be subject to specific reporting procedures at project effectiveness, for retrenchment carried out before the loans signing date, and as part of the semi-annual project progress report and the annual project audits for each company.

## **B. RESULTS MONITORING AND EVALUATION**

44. **Each company will submit semi-annual reports in an appropriate agreed format to the MMATI, MOF and the WB.** They will be based on the semi-annual Interim Financial Report (IFR) and would cover, inter alia, the progress and expected completion date for civil works, goods and services contracts (both physical and financial progress), progress and expected completion date for key consultancies, compliance towards environment and social safeguards, progress on the retrenchment process, progress towards indicators given in the results framework. A mid-term review of the Project would be undertaken by early 2017. An Implementation Completion Report (ICR) will be submitted to the Bank no later than six months after the closing date. Annex 3 provides further details on these arrangements.

45. **Each company will appoint a staff in charge of Monitoring and Evaluation (M&E) and consolidation of the progress report.** A dedicated survey will be carried out in 2017 to reflect on the implementation of the retrenchment component and on the changes in services provided, based on a methodology similar to the Poverty and Social Impact Assessment (PSIA) carried out during the project preparation.

46. A communication strategy on the sector reform and the project's achievements will be elaborated during the first semester after the project start by the coordination team with the WB's support and will be followed as part of the project's monitoring and evaluation. Its implementation will also be an opportunity for future citizen engagement.

## **C. SUSTAINABILITY**

47. **The sustainability of the project is reinforced by the need for Croatia to comply with its obligations vis-a-vis the EU in terms of commitment to the EU2020 objectives and with its fiscal obligations under the Excessive Deficit Procedures.** The first will help secure resources while the second will ensure that the efficiency of expenditures is watched carefully. The sustainability of the companies depends on the implementation of strong restructuring and performance improvement plans that will benefit from the project's support. Fiscal discipline should prevent the companies from taking expensive commercial loans, adapting their borrowing to their resources.

48. **Component 1 of the project and the transport strategy being prepared with EU support will help improve investment and public funds planning.** The latter will allow the sector to have a clear investment plan while activities under component 1 will help MMATI and MOF design more efficient service contracts with HZI and HZP.

49. **If restructuring plans are not undertaken at the company level, the future of railway freight and passenger operations could be jeopardized, particularly in the context of growing competition with roads.** Consistent with the GoC’s assessment, the project will primarily focus on the financial, operational, and social sustainability of the provision of railway services in Croatia. The project was designed following a thorough policy and financial assessment of the railway companies, which guided the inclusion of activities on asset management, maintenance, public service obligation, and freight operations on top of more classical investment.

## V. KEY RISKS AND MITIGATION MEASURES

### A. OVERALL RISK AND EXPLANATION OF THE KEY RISKS

50. **The key risks related to the project are not linked to each individual activity but derive from each company’s capacity to implement its restructuring and from their interactions within the railway sector.** They also depend on the government’s capacity to ensure the sector coordination. The project risk is assessed as substantial. Risk derives essentially from the political and governance sensitivity of the railway sector, the complexity of restructuring three companies concomitantly in a very constrained fiscal environment, and from the willingness of the stakeholders to reform. The table below summarizes the key risks and mitigation measures.

**Table 2: Risks and Mitigation Measures**

Key Risks	Mitigation Measures
Political and Governance (Rating: S)	<p>Success of actions to be implemented for improving sector and corporate governance, management and performance of the railway operators, are contingent on the government’s capacity to manage the sector based on informed decisions. Governance is foreseen as the primary project risk (risk of spending too much for not enough reforms). It is mitigated by MOF controlling spending and subsidies. The WB is assisting the Government in spending reviews and their implementation.</p> <p>Changes in political environment may impact the policy direction and the ownership of the project, both at the level of the GoC and the railway companies. This risk is however limited as the sector policy is mainly dependent on the orientations agreed with the EC. It may be higher in terms of turnover in the management of state owned companies.</p>
Macroeconomic (Rating: S)	<p>The prolonged recession and unstable macroeconomic situation have made long-term planning difficult, especially in terms of sector funding and level of investments. This depressed economic environment threatens the sustainability of all railway companies. This risk is hard to mitigate.</p>

Key Risks	Mitigation Measures
Institutional Capacity for Implementation and Sustainability (Rating: S)	Project management capacity will need to be monitored in HZI, as this company will face multiple challenges in implementing EU funded projects which have priority given their size. This is partially mitigated by technical assistances funded by the EC. MMATI has limited staff available to coordinate the sector. Implementation arrangements should ensure that a core number of technical staff are available.
Environment and Social (Rating: S)	This rating is S because of the Social Aspects associated to retrenchment (environmental rating would be M), which could trigger opposition and legal claims resulting in implementation delays. It is expected that this risk is mitigated by a robust set of labor regulations and Collective Agreements negotiated with the unions. The Companies will prepare, with assistance from the Bank, Retrenchment Plans based on relevant regulations and agreements, good practices and lessons from previous processes. Additionally, a PSIA will identify potential adverse social impacts and corresponding mitigation measures. Finally, most companies have already been implementing a retrenchment process since 2012, which has gone smoothly.
Stakeholders (Rating: S)	The main risk is linked to the multiplicity of stakeholders and to the resistance to change possible in the companies. Mitigation requires constant engagement by management with the companies' staff and constant coordination between stakeholders through the project coordination.
Other : EU State Aid (Rating: M)	HZP and HZC restructuring plans need to be notified to the EC to comply with state aid rules. Rulings from the EC can take time and can lead to cancellation of the state aid proposed, after instruction processes which can take several years. This risk is mitigated by consultations with the EC and with experts having interpreted state aid.
Overall (Rating: S)	

**VI. APPRAISAL SUMMARY**

**A. ECONOMIC AND FINANCIAL ANALYSES**

**Economic Analysis**

51. The **economic evaluation** covers the main physical investments<sup>19</sup> in emergency repairs and rehabilitation as part of HZI restructuring, and the three companies' retrenchment programs.

<sup>19</sup> This includes (i) the rehabilitation of the Ogulin-Moravice section of Zagreb-Rijeka line, (ii) signaling upgrade between Moravice and Rijeka on Zagreb-Rijeka line, (iii) replacement of worn-out switches, electromechanical and support structures, (iv) construction of a new stop at Borongaj, (v) reconstruction of station-Rijeka Brajdica and (vi) the rehabilitation of Varazdin-Cakovec section.

52. The quantified benefits of the investments are fourfold: (i) reduction in track maintenance, (ii) time savings for passengers, (iii) reduction in freight and passenger train operating costs, and (vi) other external benefits. Maintenance costs will decrease with the infrastructure renewals, and the main part of costs reductions will derive from time benefits (increased commercial speed) allowed by the physical improvements. External benefits (reduced pollution and congestion, support to industrial production etc.) only apply for the construction of a new stop at Borongaj, where a modal shift from road to railway is envisaged.

53. The combined investment package presents a Base Case EIRR of 12.4 percent, with an NPV (discounted at 12 percent p.a. to 2014) of about EUR 980,000. Typical EIRR for railway projects normally are at 10 percent EIRR. In this case, for the most part, the proposed investments remain robust to change in costs and benefits.

54. An analysis of the retrenchment program was performed for each company and then combined. The total cost reflects the amount of severance payment of the program, which has started in 2014. Two types of economic benefits are anticipated: (i) from a reduction in economic resource costs to supply office space, computers, equipment, uniforms, etc. to the staff; (ii) from the redeployment of retrenched staff to more productive entities, which are expected to be observed with one year lag once some portion of the retrenched employee will be able to find new jobs on the market.

55. Whilst conservative, the results of the analysis indicate a robust EIRR for the retrenchment activities of the three companies, even in the scenario where no staff redeployment will occur. The EIRR for HZI, HZC and HZP are 26.2 percent, 26.4 percent, and 20.9 percent, respectively. The sensitivity analysis shows that without any redeployment, the EIRR of HZI, HZC and HZP would be 15.6 percent, 12.7 percent, and 15.3 percent, respectively. Annex 6 provides a full description of the expected results.

56. The economic analysis would be revisited at mid-term review because a large share of the investment will have been completed.

57. **Rationale for public sector financing.** Capital investment in rail infrastructure is the responsibility of the State according to EU directives. In the areas of rail transport services, public sector financing is authorized by the EU as part of financing of public service obligations for passenger services. This support can take the form of mostly compensation for cost of service, and can also be in the form of capital subsidies for rolling stock. The restructuring of companies on the other hand is considered as a form of state aid, and is allowed only on a “one time-last time” basis and needs to be notified to the European Commission, which will assess the acceptability of the government proposal. The notification will present the restructuring plans that have been used as the basis for the companies’ analysis and which comprise external and state contributions. The World Bank loans would be considered as part of the state aid and have focused in majority on labor restructuring for the companies and on some key enabling investment.

58. **The Bank’s value added** is to support the restructuring program of the companies, while providing analytical underpinnings for the GoC’s decision in public policy and subsidies allocation. It brings international experience of rail reforms, improvement of sector governance

and restructuring including in other EU countries. It complements the approach of the EC in relation to funding international corridors and implementing the EU directives.

## **Financial Analysis**

### ***HZ Passenger Transport***

59. **Overall financial situation.** From 2009 to 2013, HZP has accumulated losses up to HRK 778 million which resulted in negative equity of HRK 209 million at the end of 2013. To restore the capital deficit, GoC increased the share capital by HRK 278 million through conversion of the loan related liabilities, and thus the equity amounted to HRK 76 million at the end of 2014. In 2014, HZP was able to change this negative trend and report a small profit of HRK 0.4 million (based on unaudited information) in spite of the further decrease transport sales by 10 percent. This was possible mainly due to the increased PSO from HRK 355 million to HRK 505 million, and cost reduction measures mainly related to staff, energy, and track access charges.

60. **Restructuring plan and financial forecasting model.** HZP prepared its restructuring plan covering the period up to 2017 with two scenarios. The Bank developed a financial forecasting model for the period up to 2023 from these. The strategic goals of HZP include achieving financial viability through decrease of expenditures and revenues increase, improvement of the internal structure of the company, and upgrade of the quality of the business operations. The plans show a positive evolution of the operating profit mainly due to the optimistic assumption of systematic increase in sales (by 4.2 percent, 6.4 percent, and 5.4 percent in 2015-2017), which is dependent on the successful outcomes of internal and external actions. These actions include an agreement with City of Zagreb on integrated transport tickets, adjusted timetables, timely launching of comfortable unit trains, modernized infrastructure, intensified marketing efforts, introduction of new pricing policy and sales channel through IT ticketing system, further cost cutting. The safety margin is relatively low to absorb potential lower than expected transport sales. This implies that HZP should further seek for cost reduction and optimization of the passenger network as there is still room for efficiency improvements.

61. HZP has been able to operate without major cash flow disruption as it was heavily supported by different types of government financial assistance including capital increase through loan takeover, cancellation of payables to HZI, PSO, and loans supported by state guarantees. Planned operating cash flow is positive mainly thanks to PSO and transport revenues. The forecast envisages loans in 2015 and 2016 to cover the debt servicing obligations, while in the remaining years the debt service coverage ratio is close to or below 1. This implies the need for further cash inflows for example from sale of assets, e.g. real estate which were not included in the projections due to uncertainty but are planned within the restructuring plan. Otherwise, in order to meet debt servicing, HZP will be forced to use the guarantees.

### ***HZ Cargo***

62. **Overall financial situation.** HZC revenues were closely related to volume of freight transport; and after Croatia's EU accession and cancellation of subsidies, they remain the main source of the company's revenue. A long-term decline was slowed down in 2014, but negative

trends are anticipated to continue throughout the period with the opening of the market for competition, thus affecting the company's financial situation. Based on unaudited financial information in 2014 the company managed to decrease its operating expenses, primarily staff, TAC, and amortization to partially offset the lower income. Operating losses declined to HRK 66 million in 2014 from HRK 172 million in 2012 and HRK 105 million in 2013.

63. **The financial forecast** of HZC relies on a comprehensive reform agenda put forward in the company's restructuring plan, the implementation of which has partially started in 2014: cost reduction generated by retrenchment, reduced cost of energy, maintenance, service, and TAC, well organized asset management plans, etc. With these steps, a positive operating profit of HRK 22 million is forecasted for the year 2018. Implementation of restructuring measures is expected to improve the transport revenues, to as much as HRK 657 million in 2018 supported by other revenues from rent and sale of assets of HRK 59 million, and progressively decrease of operating expenses, forecasted to decline from HRK 980 million in 2013 to HRK 697 million in 2018.

64. Although HZC is unprofitable in the short term, it will operate positively at the end of the restructuring period in 2018, with net income of HRK 10 million in 2018. This will heavily rely on controlling depreciation through divestment of obsolete and unnecessary assets and operational efficiency which is expected to improve in spite of unstable revenues. Reflecting this target, EBITDA is expected to surge from HRK 121 million in 2013 to HRK 223 million in 2018.

### ***HZ Infrastructure***

65. A financial model was developed for the period 2013-2023, based on the Audited Financial Statements for 2014 and the company's Controlling Reports (unaudited reports) for 2014.

66. **Overall financial situation:** HZI reported improvements in financial performance in 2014. The railway infrastructure manager reduced its operating losses from HRK 763 million in 2013 to less than HRK 220 million despite a decline in income from infrastructure charges and fees. With the planned reduction in operating costs and clearance of receivables from HZC and HZP following the financial restructuring of the companies, the forecast shows HZI will have an operating profit starting in 2015. A positive trend in operating profit is forecasted to be sustained in the medium-term.

67. The financial autonomy of HZI remains limited and is forecasted to slightly improve during 2015-2023 due to a combination of factors, such as: maintained subsidies, decrease in operating costs and market opening. However, very low level of TAC revenue and unclear investment planning threaten the financial stability of the company. For HZI to become financially sustainable it is necessary to implement operational and labor restructuring measures, including staff reduction, further rationalization of network size and a predictable investment plan.

## **B. TECHNICAL**

68. The sector restructuring has been ongoing since mid-2012 (see Section I B above and Annex 5 for more details) and each company has since produced restructuring plans and business plans. The sector restructuring process has been influenced by two factors: (i) the EU entry, which raised a lot of hopes for significant funds to upgrade the network and put railway as the preferred

transport option for land transport, and (ii) the financial situation of the State linked to the prolonged recession, which limits its support to the sector. The technical content of the project to support the sector restructuring as a whole is modest but crucial. The proposed consultancy services will allow the MMATI to help the companies finalize the asset separation and formalize property titles, which is a prerequisite to having unqualified audits, secure the companies balance sheets and divest the non-core assets. They will also assist MMATI in operationalizing the railway sector strategy.

69. Regarding **HZC**, one question that can be asked in relation to the project is why the project is not directly advocating the privatization of the company or its liquidation. HZC as a group still employs more than 2,000 staff and the privatization of the company failed once at the end of 2013. No takeover of public railway cargo freight operator has occurred recently in Eastern Europe<sup>20</sup>, while these operators retain a significant share of freight after accession or after liberalization in most EU countries. The Bank would support a new privatization process or the search of a new strategic partner, especially if the physical conditions of the infrastructure, and the competitive environment improve. The restructuring plan for the company presented to the EC is not very ambitious but factors in the forthcoming entry of newcomers. This risk on future demand is high and explains that the company does not immediately expect to return on profits.

70. In terms of activities the project mostly aims at securing the financial conditions of the company as part of a one time-last time State aid package. The financial relief that the project brings is as important as the eligible expenditures that it supports. The expenses have been selected to secure the companies' key assets (rolling stock) and the Information and Communication Technology tools which are needed for its modernization of operations (fleet, commercial management). The support to rolling stock modernization aims to maintain and rehabilitate its productive assets, knowing that part of the remaining fleet is expected to be scrapped. This is preferred by HZC in comparison to buying new rolling stock as it gives more flexibility to serve the demand. Also, the company's financial situation has not yet recovered sufficiently to afford leasing higher quality materials with appropriate guarantees.

71. Regarding **HZP**, the proposed restructuring plan rationalizes the management of subsidiaries, but it could be more ambitious in terms of cost cutting and revenue generation. A joint effort will be required by the company's management and the Government to improve this situation. Project activities in support of MMATI may help, as may the IT financing.

72. Like for HZC, the project mostly aims at securing the financial conditions of the company as part of a one last time State aid package. The expenses have been chosen because they can secure the companies key assets (rolling stock, energy efficiency) and the ICT tools which are needed for its modernization of operations (fleet, commercial management). The rolling stock support is based on maintaining or rehabilitating assets, complemented by the purchase of a modern fleet by HZP. The rest of the old fleet would largely be scrapped. The next three years are the last in which such a large rehabilitation program is needed. The program is co-financed by the State.

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<sup>20</sup> With the exception of Poland, where it was done in 2014 as an IPO after more than 10 years of restructuring and where the main shareholder remains the public rail holding.

73. **HZI** investment program for 2015-2019 follows a financial principle which consists of balancing revenues and expenses. Major investments would cover emergency network rehabilitation. Construction of new infrastructure depends on the ability for HZI to absorb EU funds. HZI acknowledges the challenging physical condition of the infrastructure. However, the investments' priorities currently do not follow a traffic based rationale, and the restructuring plan still relies on more optimistic traffic forecasts than HZP and HZC. The WB and HZI agreed on the project activities based on a specific prioritization to compensate this weakness. Beyond 2019, HZI's plan indicates that about half of the network will require speed restrictions, including along major international corridors. The current HZI plan aims to ensure a minimal survival of the network - however it remains unclear whether the assessment of the infrastructure condition is norm or evidence based. In any case, this conservative scenario will require HZI to deploy a revised maintenance strategy.

### **C. FINANCIAL MANAGEMENT**

74. An assessment of the financial management capacity of the three companies was carried out by the Bank in 2014 and finalized in January 2015. The assessment concluded that the project financial management arrangements are acceptable to the Bank and that the overall financial management risk is moderate before and with the application of the mitigation measures. All three railway companies - HZI, HZP and HZC - have existing and operational financial management systems in place which will be used for the project implementation.

75. **Oversight and accountability:** The project financial statements, including Statement of Expenditures (SOE) and Designated Account (DA) Statements will be audited by independent auditors acceptable to the Bank and on terms of reference acceptable to the Bank. The annual audited project financial statements and the audit report will be provided to the Bank within six months of the end of each fiscal year. An interim audit of the retroactive retrenchment payments will also be requested by the Bank before reimbursement. As financial performance of the railway companies is vital to the project and sustainability of the railway the Bank will also require annual audit of each separate entity and each group to be submitted. As the previous entity audit reports of the companies have been modified (qualified) due to the issues in valuation of fixed assets, inventories, receivables and payables with related parties, the Bank will monitor actions taken by companies to resolve financial reporting issues in order to ensure that fully reliable financial performance information is included in the audit reports.

### **D. PROCUREMENT**

76. The project will be implemented by three separate implementing agencies HZI, HZP and HZC, and will be coordinated by the MMATI. Overall, there is sufficient capacity for procurement in all agencies.

77. It is envisaged that the project will finance contracts of various nature, scope and value. There are no major risks established with regard to procurement process and contract management. A few areas in the process were enhanced and they are elaborated in Annex 3. The Bank's procurement framework will remain the default procurement mechanism for the operation. All goods, works, non-consulting services and consulting services required for the activities of the

project and included for financing from the Loan proceeds shall be procured in accordance with the World Bank's "Guidelines: Procurement of Goods, Works, and Non-Consulting Services under IBRD Loans and IDA Credits & Grants by the World Bank Borrowers" dated January 2011, revised July 2014 and "Guidelines: Selection and Employment of Consultants under IBRD Loans and IDA Credits & Grants by the World Bank Borrowers" also dated January 2011, revised July 2014; and the provisions stipulated in the Loan Agreement.

78. National Competitive Bidding (NCB) contracts for goods, works and non-consulting services estimated to cost below the International Competitive Bidding (ICB) thresholds, shall be procured in accordance with the applicable Procurement Guidelines and the additional provision, stipulated in the Loan Agreement. In addition, the bidding documents and contracts, financed from the loan proceeds shall contain provisions on fraud and corruption, conflict of interest and eligibility in accordance with the bank's policies and procedures. The relevant form of the bidding documents to be used for NCB shall be acceptable to the Bank, for example the Bank's Europe and Central Asia Sample Bidding Documents (SBD) for procurement of Goods and Works through NCB may be used by all three agencies. For all contracts to be procured through ICB, the Bank's most recent bidding documents will be used. Consultants shall be selected in accordance with the applicable Consultant Guidelines, and the Bank's standard documents shall be used, including standard Request for Proposal (RFP), contract forms, evaluation report and sample Request for Expressions of Interest (REOI).

79. All three implementing agencies will have separate procurement plan for their relevant project component. During project appraisal summary procurement plans, covering at least the first 18 months of the project for all three implementing agencies were prepared. Their final version was agreed at project negotiations. The procurement plans provide the basis for procurement methods, as well as the procurement review arrangements. All contracts shall be grouped in packages, to the extent possible, to encourage broader competition. The summary procurement plans shall include as a minimum (i) a brief description of the goods, works, non-consulting services and consulting services required for the project ; (ii) the proposed method of procurement; (iii) the Bank's review requirements; (iv) timeline for initiation of procurement, contract commencement and completion. The agreed initial procurement plans of the three agencies for 18 months was disclosed, and all subsequent updates will also be disclosed after the Bank's review.

80. Contracts not subject to prior review by the Bank, will be post reviewed by the Bank's procurement specialist, assigned to the project. Post review of contracts shall be carried out once a year. At a minimum 1 out of 10 contracts will be randomly selected for post review.

#### **E. SOCIAL (INCLUDING SAFEGUARDS)**

81. **Retrenchment:** The most significant social issue relates to the reduction of the workforce in all three companies (HZI, HZP and HZC) and some of their subsidiaries. As of January 2015, the three companies together employed more than 12,000 people, including subsidiaries. The target is to reduce the total workforce by approximately 16 percent between 2015 and 2019. The project will also finance eligible severance payments made by HZP and HZC since May 2014.

82. The table below summarizes the magnitude and expected costs of the retrenchment process by company. The number of retrenched employees for the period 2015-2019 may be subject to changes during project implementation:

**Table 3: Magnitude and expected costs of the retrenchment process by company**

Retrenchment HZs*								
Year	HZ Infra	% of Workforce	HZ Cargo	% of Workforce	HZ PP	% of Workforce	Total	% Total Workforce
2014	391	7.2	422	15.7	247	12.27	1,060	10.4
2015	260	5.1	507	22.3	8	0.47	775	8.4
2016	210	4.4	10	0.6	73	4.01	293	3.5
2017	200	4.2	10	0.6	77	4.33	287	3.5
2018	110	2.3	10	0.6	57	3.38	177	2.2
<b>Total 2014-2018</b>	<b>1,171</b>	<b>21.5</b>	<b>959</b>	<b>35.7</b>	<b>462</b>	<b>23.26</b>	<b>2592</b>	<b>25.53</b>
<b>EUR mln (WB loan)</b>	<b>13.4</b>		<b>22.8</b>		<b>15.8</b>		<b>52.0</b>	

*\*Not including subsidiaries and employees opting for the Railway Fund*

83. Since 2012, the majority of the retrenchment has been conducted on a voluntary basis, through early retirement packages or transfers to the Railway Fund. At the Fund, employees listed for potential redundancy can spend up to three years receiving partial salary. Some can receive requalification training and, if opportunities arise, they are reintegrated into the companies; otherwise they have to leave. In the upcoming wave of retrenchment, the number of involuntary process through redundancies are likely to increase. In any case, the companies will continue prioritizing the use of voluntary alternatives where possible.

84. The current retrenchment process builds on the lessons learned from the previous Bank-supported restructuring project completed in 2005, and it is governed by a robust set of local labor regulations and Collective Agreements, which result from comprehensive and periodic negotiations with the unions. During preparation, companies prepared Retrenchment Plans based on the aforementioned regulations and agreements, as well as good international practices aimed at ensuring a transparent process and adequate mitigation measures. The companies agreed upon additional support to enhance the opportunities of dismissed workers of finding alternative employment, including retraining, counseling and advisory support. These efforts could be financed under the project.

85. A **PSIA** study is underway with the following objectives: (i) capture the social, economic and distributional impacts of the planned retrenchment process on workers and identify corresponding mitigation measures; and (ii) gauge the perceptions of users of railway transport on

closed lines and the observed impact of replacement transport services. An update of the PSIA would be carried out at the project mid-term in 2017.

86. **Gender, including information, design and monitoring:** In terms of the retrenchment process, potential disproportionate impact or targeting of women for dismissal is being assessed as part of the PSIA and relevant data is disaggregated by gender. The focus groups being interviewed include a representation of women in proportion to their participation in the companies' workforce. The early findings of the PSIA have not identified any disproportionate impact or gender-based targeting for dismissal. In any case, the Retrenchment Plans include gender disaggregated information and clear criteria for non-discriminatory process for identifying redundancies and corresponding grievance redress mechanisms, such as access to the Croatian Ombudsperson for Gender Equality in case a worker feels that they are being treated unfairly or discriminated against based on gender. The monitoring and evaluation processes associated with the implementation of the Retrenchment Plans will also include gender-specific indicators. The component of the PSIA looking into social impacts of line closures and replacement of transport services will also assess gender specific risks.

87. **Citizen Engagement:** In terms of citizen engagement, there is an active program of engagement with citizens/passengers and grievance redress for HZP through their website. Email and phone of the information centers are also available to local and international passengers. Citizen engagement will be monitored through a specific indicator part of the project report, reviewing the evolution of the customers' satisfaction through an annual customers satisfaction surveys carried out by HZP and by social assessments.

88. **Safeguards:** All rehabilitation works already identified will remain within the railway corridor and will not require any land acquisition. The same is true for rehabilitation works to be carried out on tunnels, bridges, drainage and replacement of sleepers, railway tracks, etc. However, the WB Operational Policy 4.12 on Involuntary Resettlement is triggered as a precaution measure. Land requirements are expected to be minor as the works will be carried out mainly on State owned land. However, there is a possibility that the works might require some temporary acquisition of private land for securing the right-of-way, so a Resettlement Policy Framework (RPF) was prepared as a precautionary measure to mitigate any potential resettlement impacts. The works carried out before project approval and subject to retroactive financing have not triggered any land acquisition or resettlement.

89. The RPF, as a guiding resettlement instrument, has been developed in accordance with the relevant Croatian laws and regulations and provisions of the Bank OP 4.12 and provides fundamental principles and standards to be applied. The RPF both in Croatian and English version was disclosed on the web sites of the MMATI and InfoShop on March 13, 2015. Public consultation meeting was held on March 17, 2015.

## **F. ENVIRONMENT (INCLUDING SAFEGUARDS)**

90. As the project will finance periodic maintenance of rolling stock and the emergency rehabilitation including cuts and slope reinforcement, rehabilitation and various emergency electromechanical and structure works, rehabilitation of the Ogulin-Moravice line, railway

crossing installation and similar, the project has been classified as an environmental Category B. This implies that the project will possibly have some adverse environmental impacts; however these would be site specific and would not be significant nor long-term.

91. **The Project triggers Environmental Assessment (OP/BP 4.01). To comply the Borrowers prepared an Environmental Management Framework (EMF) for the overall project satisfactory to the Bank,** mainly dealing with Components 2 to 4. The EMF provides guidance for preparation of site specific EMPs, which in the majority of cases would be simple EMP Checklists (e.g. rolling stock overhaul, repair of small tunnels, crossroads, slopes, etc.). The EMF was disclosed in country on March 5, 2015, on Infoshop on March 12, 2015 and a hard copy was available for commenting at the borrowers' reception as well as on the web site of MMATI, HZI, HZC and HZP, for two weeks. Public consultation meeting was held on March 17, 2015.

92. Periodic maintenance (overhaul) of HZC (locomotives) and HZP rolling stock (locomotives, EMU, DMU and passenger cars) is considered as Category B - subcomponent. The works carried out under this component are repetitive, short-term and not site specific. The EMP checklists templates are part of the EMF. Emergency rehabilitation subprojects under "railway crossing program", "other safety investment" and "emergency investment" can include cuts and slopes reinforcements, rehabilitation of tunnels and bridges, rehabilitation or installation of crossings, rehabilitation of railway tracks, and other. Site specific EMPs will be prepared as soon as designs are finished, and for simpler construction works EMP checklists template were prepared under the EMF. The investment at the Rijeka Brajdica station under the "stations" subcomponent already benefits from an EMP disclosed under the Rijeka Gateway II Project in July, 2014. Each individual checklist for specific sites and activities will be part of the bidding documentation and publicly disclosed prior to the commencement of works.

93. **For the works under subcomponent 4.3 contracted in 2014 (currently being carried out or finalized) an Environmental Audit will be carried out for each site using the EMP checklists prepared and a template defined in the EMF as auditing instruments, and resulting in audit reports. These audits are subject to the Bank's Non-Objection.** Each individual site would be visited by the Bank's Project Team and inspected to note any significant issues. For each site an Audit Report would be issued. Any subproject might be refused for financing if the audit shows incompliance. Audit Reports will be publicly disclosed on the website of HZI and will be consulted in the form of a public meeting.

94. **Physical Cultural Resources (OP/BP 4.11) policy is not triggered. However,** due to possible earth works comprised in the Component 4, subcomponents 4.3, EMPs and EMP Checklists will include chance finds clauses. **International Waterways OP/BP 7.50 policy is not triggered.** However, water use and management condition will be included in the due diligence documents requesting rehabilitation works and washing of rolling stock to only use existing water supply and wastewater networks, not extract water directly from or pass water into surface or ground water bodies.

95. **EMPs and EMP checklists for all sub-components will be part of the contractors' and supervising engineer's contracts when applicable.** Clearly defined mitigation measures and monitoring from EMPs will be included in bill of quantities to the extent possible and EMP and

EMP checklist will constitute integral parts of the bidding documentation. Therefore, the responsibility of implementing the mitigation measures and monitoring, as indicated in the environmental due diligence documents, will fall under the works contractor. The contract of the supervising engineer will include clauses for monitoring the contractors environmental performance according to the EMP and the national legislation.

#### **G. WORLD BANK GRIEVANCE REDRESS**

96. Communities and individuals who believe that they are adversely affected by a World Bank (WB) supported project may submit complaints to existing project-level grievance redress mechanisms or the WB's Grievance Redress Service (GRS). The GRS ensures that complaints received are promptly reviewed in order to address project-related concerns. Project affected communities and individuals may submit their complaint to the WB's independent Inspection Panel which determines whether harm occurred, or could occur, as a result of WB non-compliance with its policies and procedures. Complaints may be submitted at any time after concerns have been brought directly to the World Bank's attention, and Bank Management has been given an opportunity to respond. For information on how to submit complaints to the World Bank's corporate GRS, please visit <http://www.worldbank.org/GRS>. For information on how to submit complaints to the World Bank Inspection Panel, please visit [www.inspectionpanel.org](http://www.inspectionpanel.org).

## Annex 1: Results Framework and Monitoring

**Country: Croatia**

**Project Name: Sustainable Croatian Railway in Europe (P147499)**

### Results Framework

#### Project Development Objectives

PDO Statement

The Project Development Objective (PDO) is to improve the operational efficiency and the financial sustainability of the public rail sector in Croatia.

**These results are at** | Project Level

#### Project Development Objective Indicators

Indicator Name	Baseline	Cumulative Target Values									
		YR1	YR2	YR3	YR4	YR5	YR6	YR7	YR8	YR9	End Target
Prioritized railway sector development and infrastructure maintenance program developed (Yes/No)	No		Yes								Yes
HZP operating expenses per train-km (in HRK) (Number)	45.00	44.60	45.60	44.00	42.50	41.00					41.00

HZC working ratio (Number)	0.26	0.67	0.74	0.85	0.94	1.00					1.00
Number of annual train-km operated per HZI employee (Number)	4032.00	4150.00	4232.00	4460.00	4757.00	5015.00					5015.00

### Intermediate Results Indicators

Indicator Name	Baseline	Cumulative Target Values										
		YR1	YR2	YR3	YR4	YR5	YR6	YR7	YR8	YR9	End Target	
Number of project beneficiaries, including women beneficiaries (Text)	110 000, including 50% women											110 000, including 50% women
Percentage of assets with resolved legal titles (Percentage)	0.00											0.00
Number of HZP staff retrenched (Number)	0.00	398.00	518.00	620.00	690.00	690.00						690.00
Number of HZP rolling stock rehabilitated (Number)	0.00	28.00	42.00	88.00	105.00	105.00						105.00

DMUs and diesel locomotives (Number - Sub-Type: Breakdown)	0.00	5.00	6.00	11.00	17.00	17.00					17.00
EMUs and electric locomotives (Number - Sub-Type: Breakdown)	0.00	3.00	4.00	5.00	6.00	6.00					6.00
Passenger wagons (Number - Sub-Type: Breakdown)	0.00	20.00	32.00	72.00	82.00	82.00					82.00
HZP commercial revenues per employee (in HRK) (Number)	0.26	0.25	0.24	0.26	0.27	0.30					0.30
Number of HZC staff retrenched (Number)	0.00	500.00	500.00	500.00	500.00	500.00					500.00
Number of HZC rolling stock rehabilitated (Number)	0.00	711.00	1220.00	1718.00	2269.00	2820.00					2820.00
Wagons	0.00	694.00	1194.00	1678.00	2225.00	2772.00					2772.00

(Number - Sub-Type: Breakdown)											
Locomotives (Number - Sub-Type: Breakdown)	0.00	17.00	26.00	40.00	44.00	48.00					48.00
Number of HZI staff retrenched (Number)	0.00	260.00	470.00	470.00	470.00	470.00					470.00
Cumulated Number of kms of line sections rehabilitated or improved (Kilometers)	0.00	20	179	338	338						338
Fatalities per 10 million train-km (Number)	10.00	10.00	9.00	9.00	8.00	7.00					7.00
Million train-km per track-km (Number)	9965.00	9938.00	9830.00	9829.00	10049.00	10049.00	10170.00				10170.00
Project-supported organization(s) publish reports on inputs and effect of consultation on project including gender disaggregated impact (Y-N)	No	No		Yes							Yes

## Indicator Description

### Project Development Objective Indicators

Indicator Name	Description (indicator definition etc.)	Frequency	Data Source / Methodology	Responsibility for Data Collection
Prioritized railway sector development and infrastructure maintenance program developed	This indicator measures how well railways investments are prioritized and how the sector policy for service purchase influences positively the sector and public funding policy. The Program will be finalized after completion of the Transport Strategy, which includes a comprehensive traffic model, and will include a prioritized network and a revised maintenance and investment strategy (beyond new construction of EU funded corridor lines). The Program would also include a strategy for development of passenger transport rail services.	Once	Online disclosure after public consultation	Ministry of Maritime Affairs, Transport and Infrastructure
HZP operating expenses per train-km (in HRK)	This indicator measures railway efficiency by showing how well costs are managed per train-km travelled. The indicator will be measured by dividing operating expenses (excluding amortization and financial expenses) by the total number of train-km operated annually.	Annual	Project progress reports	HZ Passenger Transport
HZC working ratio	This indicator measures railway efficiency by dividing HZC revenue by total operating costs (excluding amortization and financial costs).	Annual	Project progress reports	HZ Cargo
Number of annual train-km operated per HZI employee	This indicator measures number of train-km operated annually per employee of HZI (excluding subsidiaries).	Annual	Project progress reports	HZ Infrastructure

### Intermediate Results Indicators

Indicator Name	Description (indicator definition etc.)	Frequency	Data Source / Methodology	Responsibility for Data Collection
Number of project beneficiaries, including women beneficiaries	Number of project beneficiaries, including percentage of women that are project beneficiaries	Once	HZP surveys and companies report	Companies
Percentage of assets with resolved legal titles	This indicator measures the improvement in number of railway sector assets (HZP, HZC and HZI) with resolved legal titles. Target data will be provided once baseline is established through the project activity on Asset Management. The corresponding study will be procured by mid-2015 and start in the second half of 2015.	Annual	Asset Management Study	Ministry of Maritime Affairs, Transport and Infrastructure
Number of HZP staff retrenched	This indicator measures cumulative reduction in HZP's workforce (including reduction in subsidiaries). Baseline date is December 31, 2014 when HZP had a total of 2890 staff as a group.	Semi-annual	Project progress reports	HZ Passenger Transport
Number of HZP rolling stock rehabilitated	This indicator measures how many rolling stock units are rehabilitated and thus made part of the active rolling stock fleet. The indicator relates only to rolling stock units rehabilitated under the project (it does not include 44 new train units of HZP) and is measured cumulatively.	Semi-annual	Project progress reports	HZ Passenger Transport
DMUs and diesel locomotives	Number of DMUs and diesel locomotives rehabilitated	Semi-annual	Project progress reports	HZ Passenger Transport
EMUs and electric locomotives	Number of EMUs rehabilitated	Semi-annual	Project progress reports	HZ Passenger Transport
Passenger wagons	Number of passenger wagons rehabilitated	Semi-annual	Project progress reports	HZ Passenger Transport

HZP commercial revenues per employee (in HRK)	This indicator measures year-to-date total commercial revenues (annualized and excluding state subsidies) divided by the number of employees (excluding subsidiaries).	Semi-annual	Project progress reports	HZ Passenger Transport
Number of HZC staff retrenched	This indicator measures cumulative reduction in HZC's workforce (including reduction in subsidiaries). Baseline date is December 31, 2014 when HZC had a total of 2872 staff as a group.	Semi-annual	Project progress reports	HZ Cargo
Number of HZC rolling stock rehabilitated	This indicator measures how many rolling stock units are rehabilitated and thus made part of the active rolling stock fleet. The indicator relates only to rolling stock units rehabilitated under the project and is measured cumulatively.	Semi-annual	Project progress reports	HZ Cargo
Wagons	Number of wagons rehabilitated	Semi-annual	Project progress reports	HZ Cargo
Locomotives	Number of locomotives rehabilitated	Semi-annual	Project progress reports	HZ Cargo
Number of HZI staff retrenched	This indicator measures cumulative reduction in HZI's workforce (excluding subsidiaries). Baseline date is December 31, 2014 when HZI had a total of 5094 staff.	Semi-annual	Project progress reports	HZ Infrastructure
Number of km of line sections rehabilitated or improved	This indicator measures the number of km of sections rehabilitated, either in terms of track or electrical equipment or in terms of securitization of structure (bridge, tunnel).	Annual	Project progress reports	HZ Infrastructure
Fatalities per 10 million train-km	This indicator measures the average number of fatalities due to railway accidents on HZI network calculated as the total number of victims on HZI network per 10 million train-km. Section specific data would not be meaningful.	Annual	Project progress reports	HZ Infrastructure

Million train-km per track-km	This indicator measures improvement in traffic intensity in infrastructure, which leads to a better utilization of infrastructure assets. The indicator is measured by dividing the annual train-km operated by the total length of track in km	Annual	Project Progress Reports	HZ Infrastructure
Project-supported organization(s) publish reports on inputs and effect of consultation on project including gender disaggregated impacts	This indicator shows whether consultation on project impact from retrenchment standpoint has been done. The baseline is the consultation made during the preparation of the Poverty and Social Impact Assessment Study. Three years into project implementation, project-supported organizations (railway companies, transport ministry, and involved NGOs) would be required to publish update of the Study. The PSIA will include gender disaggregated data and the update of the PSIA will follow up on the evolution of these data.	Once	Focus groups, surveys, etc.	Ministry of Maritime Affairs, Transport and Infrastructure; HZ Passenger Transport; HZ Cargo; HZ Infrastructure

## **Annex 2: Detailed Project Description**

1. The project comprises four components. Component 1 supports MMATI in implementing the overall sector reform and in coordinating the implementation of project activities. Components 2-4 support the implementation of restructuring programs in HZ Passenger Transport, HZ Cargo and HZ Infrastructure, and include funding for expenses that are critical for the implementation of each restructuring program, such as severances, IT upgrades and rolling stock and infrastructure rehabilitation. For each company the project funding would help the companies allocate part of their cash flow to reimburse short term debt instead of using it for emergency investment, contributing to their sustainability. This will allow companies to save on their financial expenses and improves their debt profile. In the case of HZP and HZC the financing would be part of the State Aid package notified to the European Commission. In the case of HZ Infrastructure the proposed funding addresses safety and emergency infrastructure investment in weak points of the network which are not part of EU funded projects under the 2014-2020 programming period.

### **A. Description**

#### **Component 1: Project Coordination and Sector Policy Support (EUR 2.6 million, including IBRD financing of 100 percent)**

2. The objective of this component would be to assist the MMATI to enhance its institutional capacity as coordinator of the railway sector in Croatia to provide it with tools to improve the use of public funds and determine adequate sustainable financing of the sector. This component is fundamental to ensure the achievement of the project objectives. This is because many issues still require arbitration between companies following the dismantling of HZ Holding, but also because improving capacity in the MMATI to oversee the railway company, and providing it with data to analyze the companies will help improve the government's subsidization strategy and the choice. One of the critical element will be for MMATI to be ready to analyze how to reshape both the infrastructure network and the train services while the full transport model financed with the EU funds as part of the transport strategy is available in 2016. This should result in the reduction of the operated network and of services on the least trafficked areas. This component will also support project coordination.

- **Asset Management Support (EUR 1 million):** Support to MMATI and the companies in finalizing asset management separation between all companies and clarifying legal status of the main assets through technical assistance and several ancillary services to facilitate assets transfers (mapping, valuation). This is needed in order for each company to have unqualified audits and have a realistic balance sheet, as the status of several assets is still unclear.
- **Assistance to the MMATI in project coordination and sector policy (EUR 1.6 million),** including sector reform monitoring and definition of railway services obligations with HZP (Public Service Obligation) and HZI, and the review of the railway sector development strategy once the national transport strategy prepared with EU Funds is completed in 2016. This would allow to have a fully updated contractual framework with operators in 2017.

This may be done through individual consultants and firms. The overall goal of this component will also be to ensure that service definition corresponds to the government's resources. It may also include an assessment of the project impact at project end and an update of the Poverty and Social Impact Assessment at the project's mid-term.

**Component 2: Support to HZ Passenger Transport Restructuring (EUR 52.4 million, including IBRD financing of EUR 43 million)**

3. Support to HZP restructuring aims above all at securing its medium term financial sustainability while increasing its efficiency. The project finances retrenchment including efforts to finalize the consolidation of the subsidiaries (which involves divestiture, privatization and merging within the companies) as well as support to the activities which are most critical to the company's modernization in ICT and to secure the fleet. The company is purchasing in parallel new EMUs and DMUs and will be able to divest from part of the older fleet.

- **Retrenchment (EUR 16.1 million, including retroactive financing of EUR 4.6 million):** This subcomponent envisages retroactive financing of severance payments made after May 12, 2014, and financing of the implementation of HZP's retrenchment plan for 2015-2018. This would include financing retrenchment in those of HZP's subsidiaries which are still to be restructured. Support services, including job outplacement and retraining services, counseling and advisory support could also be financed under the project.
- **Contribution to restructuring plan implementation (EUR 36.3 million, including IBRD financing of EUR 26.9 million).** This comprises three main categories of investment.
  - (i) **Rehabilitation of rolling stock to improve efficiency of the fleet (EUR 23.3 million).** The state also subsidizes this activity and the financing of the company's periodic maintenance/rehabilitation program would be coordinated between the state and the project especially for the activities for which the use of subsidiaries may be required such as wagons and diesel locomotive rehabilitation. In these cases the state would finance the works of HZP's subsidiaries while the IBRD loan would finance either supply of goods used for rehabilitation, or finance companies competitively selected to carry out these rehabilitations. The program factors in and complements the purchase by HZP of new sets of EMUs and DMUs in 2015-2019.
  - (ii) **IT modernization and integration (EUR 10.1 million):** fleet management system, ticketing and commercial management system, finalization of separation from the HZI IT platform which inherited the systems previously managed by HZ Holding ltd.
  - (iii) **Studies and implementation of measures (EUR 2.8 million)** recommended to adapt business processes to reorganized operations (logistics center) and improve energy efficiency of operations, and capacity building in management and restructuring.

**Component 3: Support to HZ Cargo Restructuring (EUR 47.6 million, including IBRD financing of EUR 41.5 million)**

4. HZ Cargo does not receive state subsidies and the IBRD financing mainly aims at ensuring the company's financial sustainability in the medium term as part of the one time last time state aid package presented to the European Commission. It will enable the finalization of the substantial retrenchment plan carried out by the company since the end of 2013 and contribute to the stabilization of the fleet. The company will carry out in parallel evaluation of its commercial policy and undertake an improvement of its operations.

- **Retrenchment (EUR 23.1 million, including EUR 11 million of retroactive financing):** This subcomponent envisages retroactive financing of severance payments made after May 12, 2014, and financing of the implementation of HZC's retrenchment plan for 2015-2017. Support services, including job outplacement and retraining services, counselling and advisory support could also be financed under the project.
- **Contribution to restructuring plan implementation (EUR 24.5 million).**
  - (i) **Periodic maintenance of rolling stock to improve efficiency of the fleet (EUR 21.6 million).** For some activities the use of subsidiaries or specific companies may be required and procurement methods would need to be adjusted and minor retroactive financing may be included;
  - (ii) **IT modernization and integration (EUR 2.8 million).** Including fleet management system, commercial management system, and finalization of separation from the HZ Infrastructure IT platform.
  - (iii) **Capacity building in management and restructuring (EUR 0.1 million).**

**Component 4: Support to HZ Infrastructure Restructuring and Enabling Investment to Increase the System Efficiency (EUR 76.4 million, including IBRD financing of 100 percent)**

5. The objective of this component is twofold: (i) to support HZI in improving its efficiency and financial sustainability through restructuring, and (ii) to contribute to restore the physical infrastructure's condition including safety, improving its clients operating conditions. This would include actions on the cost structure (labor) and financing (including retroactive financing from May 8, 2014) of emergency rehabilitations or safety measures, as well as studies to improve network and operations efficiency. It would include the following subcomponents:

- **Retrenchment (EUR 13.7 million).** This subcomponent consists of financing the implementation of HZI's retrenchment plan for 2015-2019. Support services for retraining and enhancing opportunities for finding alternative employment, including counselling and advisory support could also be financed under the project. .
- **Railway Safety Crossings Program (EUR 10.7 million).** The first tranche of the HZI 10-year plan for the installation of railway safety crossings is based on a prioritization criteria

prepared with support from the Bank. The criteria for prioritization included railway and road traffic as well as past records of serious accidents. This would include financing of a EUR 2 million existing contract (including retroactive financing of EUR 1 million) and a new contract of EUR 8.7 million for the 2015-2016 program.

- **Other Railway Safety Investment (EUR 6.8 million).** The project would finance improvement of structures which currently represent a safety risk and the reinforcement of areas prone to landslides or rock falls. The safety improvements will also result in faster and more reliable train operations along the network. These investment are located on the international network and impacting freight transport of transit cargo to and from Rijeka.
  - (i) **Cuts and slope reinforcement** on the corridor Vb around Rijeka, which were identified following serious incidents and are required urgently and before the completion of the TEN-T network upgrading (which is beyond 2021). The reinforcement will reduce the track maintenance costs deriving from regular inspection missions, ballast and drainage cleaning. The total cost of the subcomponent is EUR 4.6 million;
  - (ii) **Emergency bridges reconstruction** on corridor Vb, which not only pose significant safety threat, but also restrict the operational speed and capacity of trains due to poor condition of steel structures and beds. These rehabilitations are urgently required and they cannot wait until 2021, which is the likely date for upgrading as part of the TEN-T network. The total cost of the subcomponent is EUR 2.2 million.
- **Emergency infrastructure investments to bring back some lines to acceptable operating standards and small capacity improvements (EUR 45.1 million).** The component consists in financing emergency rehabilitation works along sections which are not going to receive EU funds under the 2014-2020 programming period, but have been prioritized based on their levels of traffic, status (priority is given to international corridors) and the condition of the infrastructure. It will mostly consist of rehabilitation of track and electrical systems along international corridors. It will include retroactive financing for part of electrical systems renewed in 2014-2015. Those limited investments are however expected to substantially increase the network capacity and operations speed.
  - (i) **Track rehabilitation along Ogulin-Moravice section.** The rehabilitation started in 2014 and is expected to be completed in 2015. The works are located along the Zagreb-Rijeka section of the corridor Vb. The total cost of this subcomponent is EUR 7.3 million, including EUR 5 million retroactive financing.
  - (ii) **Rehabilitation of the Varazdin-Cakovec line (EUR 13.2 million),** which is one of the high priority regional lines having significant passenger traffic as many as 45 trains per day. Rehabilitation will improve the current speed restriction at Varazdin station on the line and secure Cakovec station from closure (as the condition is close to complete deterioration).
  - (iii) **Replacement of switches, electrical, and support systems (for safety and signaling) on international and national corridors (EUR 18.2 million, including EUR 7.2**

**million of retroactive financing).** This includes the immediate replacement of worn-out structures, where either economic life has passed over (their ages are between 30 and 40 year old) or spare parts have become unavailable, such as for IT and telecommunication systems.

(iv) **Construction/improvement at Stations/Stops (EUR 6.4 million, including EUR 2.5 million of retroactive financing).** One particular project under this component is cargo handling capacity expansion at station Rijeka-Brajdica. It will help increase the railway share in cargo traffic coming to Rijeka port and transiting beyond the borders. This complements to the investment prepared under the Rijeka II Gateway Project. Another project, construction of a new stop at Borongaj university campus (Zagreb’s suburb) aims at increasing the usage of railway and support daily access to students. It will also help reduce congestions on roads within Zagreb greater area. This subcomponent also includes other improvements at select stations.

- **Capacity building in management and restructuring (EUR 0.1 million).**

6. The detailed cost table and financing plan for the project is presented below in Euros and Croatian Kuna. Parts which may be subject to retroactive financing, are also included:

**Table 4: Cost table and financing plan for the project**

<i>All amounts in HRK million or EUR million.</i>	<b>Total (EUR)</b>	<b>Total (HRK)</b>	<b>IBRD( EUR)</b>	<b>Borr. (EUR)</b>	<b>Retroactive (estimate, EUR)</b>
	<b>179.0</b>	<b>1359.9</b>	<b>163.5</b>	<b>15.5</b>	<b>28.5</b>
<b>Component 1: Project Coordination and Sector Policy Support</b>	<b>2.6</b>	<b>19.5</b>	<b>2.6</b>	<b>0.0</b>	<b>0.0</b>
(1) Asset Management Support	<b>1.0</b>	<b>7.5</b>	<b>1.0</b>		
(2) Assistance to the MMATI in project coordination and sector policy (PSO, MAIC, sector development, sector and companies monitoring)	<b>1.6</b>	<b>12.0</b>	<b>1.6</b>		
<b>Component 2: Support to HZ Passenger Transport Restructuring</b>	<b>52.4</b>	<b>397.9</b>	<b>43</b>	<b>9.4</b>	<b>4.6</b>
(1) Retrenchment including supporting measures	<b>16.1</b>	<b>122.3</b>	<b>16.1</b>	<b>0.0</b>	<b>4.6</b>
(2) Contribution to Restructuring Plan Implementation	<b>36.3</b>	<b>275.6</b>	<b>26.9</b>	<b>9.4</b>	<b>0.0</b>

<i>All amounts in HRK million or EUR million.</i>	<b>Total (EUR)</b>	<b>Total (HRK)</b>	<b>IBRD( EUR)</b>	<b>Borr. (EUR)</b>	<b>Retroact ive (estimate , EUR)</b>
<i>(2.1.) Periodic maintenance of Rolling Stock /EMUs (Electric)</i>	<b>2.6</b>	<b>19.5</b>	<b>2.6</b>		
<i>(2.2.) Periodic maintenance of Rolling Stock /DMUs (Diesel)</i>	<b>9.5</b>	<b>72.5</b>	<b>5.7</b>	<b>3.8</b>	
<i>(2.3.) Rehabilitation of Rolling Stock /Wagons</i>	<b>11.2</b>	<b>85.0</b>	<b>5.6</b>	<b>5.6</b>	
<i>(2.4.) Fleet management (IT)</i>	<b>4.6</b>	<b>35.0</b>	<b>4.6</b>		
<i>(2.5.) Commercial management and ticketing (IT)</i>	<b>4.6</b>	<b>35.0</b>	<b>4.6</b>		<b>0.0</b>
<i>(2.6.) Finalization of IT integration and separation from HZI IT systems</i>	<b>0.9</b>	<b>7.0</b>	<b>0.9</b>		
<i>(2.7.) Energy Efficiency of rolling stock</i>	<b>1.4</b>	<b>10.8</b>	<b>1.4</b>		
<i>(2.8.) Logistic center study (hosting of newly purchased rolling stock)</i>	<b>1.3</b>	<b>10.0</b>	<b>1.3</b>		
<i>(2.9) Capacity building in management and restructuring</i>	<b>0.1</b>	<b>0.8</b>	<b>0.1</b>		
<b>Component 3: Support to HZ Cargo Restructuring</b>	<b>47.6</b>	<b>362</b>	<b>41.5</b>	<b>6.1</b>	<b>11</b>
<b>(1) Retrenchment</b>	<b>23.1</b>	<b>175.6</b>	<b>23.1</b>		<b>11</b>
<b>(2) Contribution to Restructuring Plan implementation</b>	<b>24.5</b>	<b>186.4</b>	<b>18.4</b>	<b>6.1</b>	<b>0.0</b>
<i>(2.1.) Periodic maintenance of Rolling Stock /Electric and diesel Locomotives</i>	<b>11.4</b>	<b>87</b>	<b>11.4</b>		
<i>(2.2.) Rehabilitation of Rolling Stock /Wagons</i>	<b>10.1</b>	<b>77.1</b>	<b>4.1</b>	<b>6.1</b>	
<i>(2.3.) IT upgrade and modernization</i>	<b>1.9</b>	<b>14.4</b>	<b>1.9</b>		
<i>(2.4.) Finalization of IT integration and separation from HZI IT systems</i>	<b>0.9</b>	<b>7</b>	<b>0.9</b>		
<i>(2.5.) Capacity building in management and restructuring</i>	<b>0.1</b>	<b>0.8</b>	<b>0.1</b>		

<i>All amounts in HRK million or EUR million.</i>	<b>Total (EUR)</b>	<b>Total (HRK)</b>	<b>IBRD( EUR)</b>	<b>Borr. (EUR)</b>	<b>Retroact ive (estimate , EUR)</b>
<b>Component 4: Support to HZ Infrastructure Restructuring and Enabling Investment to increase the System Efficiency</b>	<b>76.4</b>	<b>580.5</b>	<b>76.4</b>	<b>0.0</b>	<b>15.7</b>
<b>(1) Retrenchment</b>	<b>13.7</b>	<b>104.0</b>	<b>13.7</b>		
<b>(2) Railways Safety Crossing Program</b>	<b>10.7</b>	<b>81.0</b>	<b>10.7</b>		<b>1.0</b>
<b>(3) Other Railway Safety Investment</b>	<b>6.8</b>	<b>52.0</b>	<b>6.8</b>	<b>0.0</b>	<b>0.0</b>
<i>(3.1.) Cuts/Slopes Rijeka Sapjane and Rijeka Zagreb</i>	<b>4.6</b>	<b>35.0</b>	<b>4.6</b>		
<i>(3.2) Replacement and rehabilitation of bridges on corridor Vb</i>	<b>2.2</b>	<b>17.0</b>	<b>2.2</b>		
<b>(4) Emergency rehabilitation and improvements along corridors and small capacity improvements</b>	<b>45.1</b>	<b>342.7</b>	<b>45.1</b>		<b>14.7</b>
<i>(4.1.) Rehabilitation of Ogulin-Moravice (corridor Vb)</i>	<b>7.3</b>	<b>55.5</b>	<b>7.3</b>		<b>5.0</b>
<i>(4.2) Rehabilitation of the Varazdin Cakovec line</i>	<b>13.2</b>	<b>100.2</b>	<b>13.2</b>		<b>0.0</b>
<i>(4.3.) Replacement of switches, electrical and support systems on the international and national corridors</i>	<b>18.2</b>	<b>138.3</b>	<b>18.2</b>		<b>7.2</b>
<i>(4.4.) Constructions and improvements at stations and stops</i>	<b>6.4</b>	<b>48.7</b>	<b>6.4</b>		<b>2.5</b>
<b>(5) Capacity building in management and restructuring</b>	<b>0.1</b>	<b>0.8</b>	<b>0.1</b>		

**B. Link between components, activities, intermediate indicators, PDO and PDO indicators (see table below).**

*Intermediate outcome indicators mentioned in italic between brackets in the activities description.*

<b>Component</b>	<b>Overall Project Activities</b>	<b>Outcomes/Indicators</b>
Project coordination and sector policy support	<ul style="list-style-type: none"> <li>- Improving asset management in HZP , HZC and HZI (<i>percentage of assets with resolved legal titles</i>)</li> <li>- Improved sector governance and overall management of the sector (<i>DO indicator 1</i>)</li> </ul>	<p><b>Improved efficiency in the use of Public Resources, and sustainability of sector investment</b></p> <ul style="list-style-type: none"> <li>▪ <i>Prioritized railway sector development program developed.</i></li> </ul> <p><b>Improved financial sustainability of the sector through rationalization of assets ownership</b> (impacting financial sustainability of companies and DO indicators 2 to 4)</p>
Support to HZ Passenger Transport restructuring	<ul style="list-style-type: none"> <li>- Rationalization of HZP workforce (<i>number of HZP staff retrenched and HZP commercial revenue per employee</i>)</li> <li>- Improving condition and availability of HZP rolling stock (<i>DO indicator 2 and Number of HZP Rolling stock rehabilitated</i>)</li> <li>- Improving operational and financial management in HZP through IT investment ( <i>DO indicator 2 and HZP commercial revenue per employee</i>)</li> </ul>	<p><b>Improved operations and improved financial situation of HZP</b></p> <ul style="list-style-type: none"> <li>▪ <i>HZP operating expenses per train-km.</i></li> </ul>
Support to HZ Cargo restructuring	<ul style="list-style-type: none"> <li>- Rationalization of HZC workforce (<i>number of HZC staff retrenched</i>)</li> <li>- Improving condition and availability of HZC rolling stock (<i>Number of HZC rolling stock rehabilitated</i>)</li> <li>- Improving operational and financial management in HZC through IT investment (<i>DO indicator 3</i>)</li> </ul>	<p><b>Improved operations and financial situation of HZC</b></p> <ul style="list-style-type: none"> <li>▪ <i>HZC working ratio</i></li> </ul>
Support to HZ Infrastructure restructuring	<ul style="list-style-type: none"> <li>- Rationalization of HZI workforce (<i>number of HZI staff retrenched, million train km per track km</i>)</li> <li>- Safety investment (crossing, others (<i>Number of km of sections</i></li> </ul>	<p><b>Increased productivity, improving financial situation of HZI</b></p> <ul style="list-style-type: none"> <li>▪ <i>Number of annual train-km operated per HZI employee.</i></li> </ul>

Component	Overall Project Activities	Outcomes/Indicators
	<i>rehabilitated or improved, number of fatalities)</i> - Emergency rehabilitation works <i>(Number of km of sections rehabilitated or improved, million train km per track km).</i>	

7. Project activities related to citizen engagement are carried out as part of the components financing severance, and the project monitoring and evaluation coordinated by the MMATI will also include the consolidation of such activities as well as reporting on client surveys done by HZP. Therefore the project results framework includes a citizen engagement indicators but it was not linked directly to individual activities under the project.

## **Annex 3: Implementation Arrangements**

### **Project Institutional and Implementation Arrangements**

#### *Project administration mechanisms*

1. The project will be implemented by the HZ Infrastructure (HZI), HZ Passenger Transport (HWP), HZ Cargo (HZC) and coordinated by the Ministry of Maritime Affairs Transport and Infrastructure (MMATI). The project would comprise one loan to each of the three companies, all with a state guarantee. The project includes under component 1 support to the MMATI for asset management coordination, sector reform and project coordination. These activities are not large enough to justify a specific loan to the state, but should financially be borne by the state as part of its ownership and policy role. Part of the loan to HZ Infrastructure would already finance expenditures that are de facto the responsibility of the state according to EU railway directives<sup>21</sup>. As a result a repayment mechanism by the state for these expenditures would need to be put in place. It was therefore proposed and agreed that HZI would be assigned with the fiduciary management of the component benefiting the MMATI.

2. Implementation arrangements for the project would be based on project implementation units (PIUs) in each company. HZI, HWP and HZC have confirmed the teams of qualified staff who will be involved in the project, including overall coordinators, and persons responsible for technical investment (one per main area in the case of HWP and HZC, the director in charge of investment planning in the case of HZI), retrenchment and human resources aspects, safeguards, procurement and financial management. These experts would perform the project-related work together with their regular responsibilities. A project coordination team will be set up in MMATI which will include project coordinators from each company to oversee the project coordination and the sector reform.

3. Upon request a high level steering committee including representatives of the Ministers of Transport, Finance, and Regional Development, as well as representatives of EU funds and the heads of management boards of each company would review the project performance and progress in sector reform.

#### *Retrenchment Programs in the three companies*

4. For each company, the implementation of the retrenchment process will follow Croatian Law, the Collective Agreements with the Unions and the Retrenchment Plans for future process agreed upon during the project preparation. These plans build upon, and enhance, the process conducted by the Companies since 2012 to date. The process will be subject to specific reporting procedures at project effectiveness, for retrenchment carried out before the loans signing date, and as part of the semi-annual project progress report and the annual project audits for each company.

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<sup>21</sup> According to EU rail directives infrastructure managers should not charge to operators more than the marginal operating cost of the infrastructure.

5. The key people responsible for the implementation of the Retrenchment Plans in each company are the respective Human Resources Units, which in coordination with their management must engage with the unions of ongoing basis.

## **Financial Management, Disbursements and Procurement**

### *Financial Management*

6. Overall the project financial management risk before mitigation measures is assessed to be Moderate and the residual risk remains Moderate.

(i) **Use of country systems.** The project will use existing elements of country systems as all three Borrowers are revenue earning entities with acceptable financial management arrangements in place for project fiduciary purposes.

(ii) **Budgeting and Counterpart Funding Arrangements.** The Project will finance items included in the procurement plan or related to severance in each company. Each company is preparing its business plan on a yearly basis and rolling restructuring plans for the next 5-6 years including also investment plans which are provided to MMATI for approval.

(iii) **Accounting and Maintenance of Accounting Records.** The accounting books and records of railway companies are maintained on accrual basis of accounting. Each railway company will record transactions in its own accounting system (SAP) in accordance with the Croatian Accounting Act applicable for commercial entities. For preparation of statutory financial statements railway companies are applying International Financial Reporting Standards endorsed by the EU. Each entity has written procedures including Accounting Policy and Chart of Accounts, Instruction related to flow of documents. Accounting policies to be applied to the project include the following major assumptions: (i) Cash accounting to report project expenditures; (ii) Reporting done in HRK for expenditures including all project funds i.e. the WB loan and other co-financing, if any; and EUR for Designated Account Statement.

(iv) **Internal Controls and Internal Audit.** The PIUs have adequate internal controls for the project, including regular reconciliation of bank accounts, adequate segregation of duties, proper accounting policies and procedures. The project will finance predefined activities included in the procurement plan or agreed retrenchment payments. Therefore only payments for contracts included in the procurement plan will be eligible. Each incoming invoice is first reviewed by the procurement staff for conformity with the contract specification, amount and entered into SAP system contract monitoring. Subsequently invoices are checked and approved by the technical unit in terms of quality, quantity, and timeliness of deliverables. Thereafter invoices are submitted to controlling department for verification and cost center assignment. Then financial accounting department is checking the supplier data, address, VAT calculation and after such verifications invoices are processed for payment by another accountant. Contract monitoring is effectively performed by procurement and technical units supported by use of SAP module.

(v) **Internal audit departments exist in each company.** However in HZP and HZC such function is performed by one internal auditor. The WB is not able to solely rely on internal audit for its fiduciary purposes.

(vi) **Periodic Financial Reporting.** All three railway companies HZI, HZP, and HZC shall prepare and furnish to the Bank not later than forty five (45) days after the end of each calendar semester, interim unaudited financial reports (IFRs) for the project covering the semester, in form and substance satisfactory to the Bank. The IFRs will be prepared in excel on the basis of accounting records kept in SAP.

(vii) **External Audit.** Each railway company will be responsible for the timely preparation of the annual project financial statements for the independent external audit. Project financial statements (including SOE and DA activities) will be audited by an independent auditor acceptable to the Bank. Each audit of the Financial Statements shall cover the period of one (1) fiscal year of the Borrower, commencing with the fiscal year in which the first withdrawal was made under the Loan. The terms of reference for the audit have been agreed with the Bank, and will be attached to the Minutes of Negotiation. In addition, the auditors are expected to deliver management letters in relation to the project. Each management letter will identify internal control deficiencies and accounting issues, if any. The audit reports, audited financial statements and management letter will be delivered to the Bank within six months of the end of each fiscal year.

(viii) **For the purpose of the reimbursement retroactive retrenchment expenditures** the Bank can request agreed upon audit which is further described in the Disbursement section. Furthermore as financial performance of the railway companies is vital to the project and sustainability of the railway the Bank will also require annual audit of each separate entity and each group to be submitted on annual basis together with management letters. The separate entity financial statements audit report shall be submitted to the Bank within 6 month after the end of the fiscal year and consolidated financial statement audit report – within 9 months after the end of the fiscal year. The Audited Financial Statements of the project and the railway companies will be made publicly available in a timely fashion on the Borrowers website and by the Bank. As the previous entity and consolidated audit reports of the companies have been modified (qualified) due to the issues in valuation of fixed assets, inventories, receivables and payables with related parties, the Bank will monitor actions taken by companies to resolve financial reporting issues in order to ensure that fully reliable financial performance information is included in the audit reports. Progress report and the annual project audits for each company.

**Table 5: Audit Reporting**

<i><b>Audit Report</b></i>	<i><b>Due Date</b></i>
Financial/operational audit (agreed upon procedures) of the retroactive retrenchment expenditures – HZP, HZC.	Before reimbursement.
Audit report on project financial statements together with the Management Letter.	Within six months of the end of each fiscal year and also at the closing of the project. First report due June 30, 2015.
Entity audit reports of financial statements of HZI, HZP and HZC together with English translation and Management Letter.	Within six months of the end of each fiscal year and also at the closing of the project. First report due June 30, 2015.
Consolidated audit reports of financial statements of HZI, HZP and HZC group together with English translation and the Management Letter.	Within nine months of the end of each fiscal year and also at the closing of the project. First report due September 30, 2015.

*Disbursements**(i) Flow of funds & Disbursements*

7. Each railway company will open one Designated Account (DA) for the loan proceeds. The DA will be opened in a commercial bank acceptable to the WB. Loan funds will flow from the WB to the Designated Account and then from the Designated Account to contractors on the basis of the approved invoices. There will also be a possibility to use direct payments methods from WB to contractors for larger payments as indicated in the Disbursement Letter. Each railway company will prepare the application for withdrawals to be submitted to the Bank and the payment orders for suppliers.

8. Disbursement from the Loan Account will follow the traditional method, either through reimbursement, direct payment to suppliers, payments from and replenishment of the DA with the use of SOEs or with full documentation. Withdrawal applications for the replenishments of the DA will be sent to the Bank directly by each railway company based on need for loan funds. Supporting documents for SOEs, including completion reports and certificates, will be retained by each railway company and made available to the Bank during project supervision. Disbursements for expenditures above the SOE threshold levels will be made against presentation of full documentation relating to the expenditures. The reimbursement of expenditures from the DA may be made on the basis of certified SOEs, based on the SOE thresholds defined in detail in the Disbursement Letter. The ceiling and authorized allocation for the IBRD DA will be defined in the project Disbursement Letter. The DA will be denominated in the currency of the loan as selected by each Borrower (EUR).

*(ii) Retroactive Financing*

9. The project will finance retroactively expenditures already paid by the railway entities which will include retrenchment payments and selected contracts which are within the scope of the project, procured in line with the WB Procurement Guidelines, or which procurement process have been assessed as consistent with WB Guidelines. Retrenchment payments can include one off voluntary severance payments, monthly payment of Railway Leaves through the Railway Fund, and involuntary notice payments. As the severance payments include high volume of payments which took place in 2014 the Bank will require specific audit of the reimbursement application. The audit will include agreed upon procedures to obtain reasonable assurance on inter alia: the eligibility, existence, correct amounts of paid retrenchment obligations. Ongoing retrenchment payments will be subject to the regular annual audit.

10. For each company Payments may be made up to an aggregate amount not to exceed (i) EUR 4.6 million for HZP, (ii) EUR 11 million for HZC, (iii) EUR 15.7 million for HZI, for Eligible Expenditures made prior to the Loan Agreement signing date but on or after May 12, 2014 (HZC and HZP) and May 8, 2014 (HZI). This provision applies to all components of the project.

**Table 6: Withdrawal of the Proceeds of the Loans**

<b>Category</b>	<b>Amount of the Loan Allocated (expressed in Euro)</b>	<b>Percentage of Expenditures to be financed (inclusive of Taxes)</b>
(1) Goods, works, non-consulting services, and consultants' services and training for Part A of the Project	2,600,000	100%
(2) HZP Retrenchment Payments under Part B of the Project	16,100,000	100%
(3) Goods, works, non-consulting services, and consultants' services and training for Part B of the Project	26,792,500	100%
(4) HZC Retrenchment Payments under Part C of the Project	23,100,000	100%
(5) Goods, works, non-consulting services, and consultants' services and training for Part C of the Project	18,296,250	100%
(6) HZI Retrenchment Payments under Part D of the Project	13,700,000	100%

(7) Goods, works, non-consulting services, and consultants' services and training for Part D of the Project	62,502,500	100%
(8) Front-end Fees	107,500 (HZP) 103,750 (HZC) 197,500 (HZI)	Amount payable pursuant to Section 2.03 of this Agreement in accordance with Section 2.07(b) of the General Conditions
(9) Interest Rate Cap or Interest Rate Collar premium		Amount due pursuant to Section 2.08(c) of this Agreement
<b>TOTAL AMOUNT</b>	<b>163,500,000</b>	

*Procurement*

11. **Overall public procurement environment in the country.** The public procurement environment in the Republic of Croatia is defined by the Public Procurement Act (PPA) as of January 1, 2012 and amended in June and November 2013. The PPA regulates the procedures for award of public contracts and framework agreements for the procurement of supplies, works or services, legal protection in relation to those procedures and the competences of the state central administration body competent for the public procurement system. The public procurement legislation is aligned with EU *acquis communautaire*, and the Government of Croatia is working further to aligning it with the new EU Directive 2014/24/EU on public procurement. Pursuant to the above referenced PPA, the Government has adopted several subordinate regulations with regard to drafting tender documents, issuing procurement notices, use of common procurement vocabulary, and control over implementation of the PPA. The State Commission for the Supervision of Public Procurement Procedures is the autonomous and independent government body, responsible for considering appeals in connection with public procurement procedures, concession award procedures and procedures for selection of private partners in public private partnership projects.

12. All three entities have procurement units with certified procurement staff. There is a procurement staff in HZI that is familiar with the World Bank procurement rules and procedures. Usually, the technical specifications for the various procurements are prepared within the entities, therefore there is a technical capacity for that. Overall, the relevant staff has experience with procurement and contract management.

13. It is envisaged that the project will finance contracts of various nature, scope and value including and not limited to rehabilitation of rolling stock to improve efficiency of the fleet (such as wagons and diesel locomotives), IT modernization and integration, rehabilitation, upgrade, electrification of lines, critical railway crossing installation, consulting services/technical assistance for asset management in support to MMATI, technical assistance to the MMATI for project coordination, sector reform monitoring and definition of railway services obligations with

HZI and HZP etc. Majority of the above mentioned contracts shall be procured through National Competitive Bidding (NCB).

14. The Bank’s procurement framework will remain the default procurement mechanism for the operation.

15. National Competitive Bidding (NCB) for goods, works and non-consulting services contracts estimated to cost below the International Competitive Bidding (ICB) thresholds, shall be procured in accordance with the applicable Procurement Guidelines and the additional provisions, stipulated in the Loan Agreement. In addition, the bidding documents and contracts, financed from the loan proceeds shall contain provisions on fraud and corruption, conflict of interest and eligibility in accordance with the Bank’s policies and procedures. The relevant form of the bidding documents to be used for NCB shall be acceptable to the Bank, for example the Bank’s s ECA Sample Bidding Documents (SBD) for procurement of Goods and Works through NCB may be used by all three entities. The relevant procurement and review thresholds, as well as the form of the bidding documents to be used for NCB shall be in accordance with the provision in the procurement plan. For all contracts to be procured through ICB, the Bank’s most recent bidding documents will be used.

16. Consultants shall be selected in accordance with the applicable Consultant Guidelines and in accordance with the selection methods stipulated in the Loan Agreement, and the Bank’s standard documents shall be used, including standard Request for Proposal (RFP), contract forms, evaluation report and sample Request for Expressions of Interest (REOI).

17. **Procurement risk assessment and proposed mitigation measures.** Based on the assessment of capacity of the three implementing entities to carry out and manage procurement, the Bank determines that the overall risk for procurement, after mitigation, is moderate. Except for the goods contracts threshold, procurement thresholds and the ceiling for short lists comprising only national consultants are set in accordance with the maximum current ECA regional thresholds effective January 2, 2014 , and revised on February 10, 2015. The goods contracts threshold was increased due to the fact that by nature majority of these contracts are (i) a mix of supply and installation, (ii) limited to national manufacturers/suppliers; and (iii) published on the website Tender Electronic Daily (TED) an international website of free access (<http://ted.europa.eu/TED/misc/chooseLanguage.do>).

18. In addition, the prior review threshold for the goods contracts is set to Euro 1,000,000.

#### Summary Risk Assessment

Description of risk	Rating of risk	Mitigation measures	Rating of residual risk
Lack of experience with World Bank procurement policy and procedures, in particular HZ Cargo and HZ Passengers	<b>S</b>	Coordinated implementation support by the World Bank’s team, including procurement training in	<b>M</b>

		selected areas and contract management.	
Awarding contracts to subsidiary companies	<b>S</b>	To separate goods from works in contracts, requiring involvement of subsidiary companies and Borrower finance the relevant works contract with subsidiary with own recourses, and eligible goods contracts are financed from the loan proceeds.	<b>M</b>
HZ Cargo not obliged to follow the PPL	<b>S</b>	For contracts to be procured through NCB to follow the procedure in accordance with the World Bank guidelines and the ECA sample bidding documents for procurement of goods and for works	<b>M</b>
NCB for goods, works and non-consulting services contracts estimated to cost below the ICB threshold, shall be procured in accordance with the applicable Procurement Guidelines.	<b>S</b>	(i) To apply strictly the provisions in the applicable Procurement Guidelines and the additional provision, stipulated in the Loan Agreement.  (ii) To use the Bank's ECA SBD for procurement of Goods and Works through NCB.	<b>M</b>
Time and cost overruns for major, complex ICT contracts procured by HZ Passenger	<b>S</b>	<ul style="list-style-type: none"> <li>• Use of appropriate standard bidding document and proper implementation support by Bank's team.</li> <li>• Contract management training for ICT implementations</li> </ul>	<b>M</b>

19. **Advance Contracting and Retroactive Financing.** Once approved in principle advance contracting and retroactive financing of selected project activities, proposed to be included in the project scope were reviewed. It was noted that the entities may proceed as relevant with the initial steps of procurement of some of the contracts before signing the related Bank loan<sup>22</sup>. According

<sup>22</sup> Retrenchment and severance are not activities that are procured (they are defined by legal texts applicable to the company) so this paragraph does not apply to retrenchment payments.

to the Bank's procurement policies and procedures, the initiation of a procurement or selection process before signing the related Bank loan agreement, is at Borrower's own risk, and the procurement and/or selection process shall be in accordance with the Procurement and Consultant Guidelines applicable to the project<sup>23</sup>. In such cases, the eventual contracts may be eligible for Bank financing only, if the borrower uses procurement procedures that meet the requirements of the applicable Procurement and Consultant Guidelines. In addition, reimbursement by the Bank of any payments made by the Borrower under contracts signed prior to loan signing is considered retroactive financing and it is subject to the limits specified in the loan agreement. It is also important to note that the signed contracts to be eligible for Bank financing would also need to include fraud and corruption and right to audit clause. Depending on the stage of implementation, the contracts would need to be modified to include fraud and corruption and right to audit provisions.

20. The specific contracts, subject to retroactive financing, are included in the procurement plans of the respective implementing entity. The Bank carried out a post review of these contracts and determined that in principle they were procured according to the applicable Procurement Guidelines.

21. **Applicable Guidelines.** All goods, works, non-consulting services and consulting services required for the activities of the project and included for financing from the Loan proceeds shall be procured in accordance with the World Bank's "Guidelines: Procurement of Goods, Works, and Non-Consulting Services under IBRD Loans and IDA Credits & Grants by the World Bank Borrowers" dated January 2011, revised July 2014 and "Guidelines: Selection and Employment of Consultants under IBRD Loans and IDA Credits & Grants by the World Bank Borrowers" also dated January 2011, revised July 2014; and the provisions stipulated in the Loan Agreement. A summary of the various items under the different expenditure categories are summarized further in this Annex.

22. A General Procurement Notice (GPN) is published in United Nations Development Business (UNDB), the World Bank's external website, in Narodne novine and on the implementing entities' websites. The Bank will assist with its publication in UNDB and on the Bank's external website.

23. **Anti-corruption measures.** Each implementing entity through its Project Implementation Unit (PIU) will follow the World Bank's anti-corruption measures and will not engage services of firms and individuals debarred by the Bank. The list of such debarred firms and individuals is located at <http://www.worldbank.org/html/opr/procure/debarr.html>.

24. **Procurement Plan:** All three implementing entities will have separate procurement plans for their relevant project component. During project appraisal summary procurement plans, covering at least the first 18 months of the project for all three implementing entities were prepared.

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<sup>23</sup> Guidelines Procurement of Goods, Works, and non-Consulting Services under IBRD Loans and IDA Credits & Grants by World Bank Borrowers, January 2011, revised July 2014; and Guidelines Selection and Employment of Consultants under IBRD Loans and IDA Credits & Grants by World Bank Borrowers, January 2011, revised July 2014.

Their final version was agreed at project negotiations. The procurement plans provide the basis for procurement methods, as well as the procurement review arrangements. All contracts shall be grouped in packages, to the extent possible, to encourage broader competition. The summary procurement plans shall include as a minimum (i) a brief description of the goods, works, non-consulting services and consulting services required for the project ; (ii) the proposed method of procurement; (iii) the Bank’s review requirements; (iv) timeline for initiation of procurement, contract commencement and completion. The agreed initial procurement plans of the three entities were published on the Bank’s external website and all subsequent updates will be processed similarly after Bank’s review.

25. **Review Arrangements.** The procurement plan will indicate the specific review arrangement for each contract. Contracts not subject to prior review by the Bank, will be post reviewed by the Bank’s procurement specialist, assigned to the project. Post review of contracts shall be carried out once a year. At a minimum 1 out of 10 contracts will be randomly selected for post review. The specific procurement and review thresholds, applicable for the project are defined in the tables below:

26. The thresholds for procurement decisions subject to Prior Review by the Bank as stated in Appendix 1 of the applicable Procurement Guidelines are as follows:

No.	Procurement Method	Procurement threshold (in Euro)	Prior review threshold (in Euro)
1.	ICB (Goods)	> 5 000 000	All
2.	NCB (Goods)	< 5 000 000	First package and all above 1 000 000 and the Technical Specifications as indicated in the procurement plan
3.	ICB (Works)	> 20 000 000	All
4.	NCB (Works)	< 20 000 000	First package and all above 10 000 000 and the Technical Specifications as indicated in the procurement plan
5.	NCB IT Systems and Non-Consulting Services)	< 2 000 000	First package for each contract and all contracts above 1 000 000, , and the Technical Specifications as indicated in the procurement plan
6.	Framework Agreement (FA)	< 5 000 000	First package and the Technical Specifications as indicated in the procurement plan
7.	Shopping (goods)	< 100 000	First package
8.	Shopping (works)	< 300 000	First package
9.	Direct Contracting (DC)	NA	All > 80 000. Borrower would still need to meet the requirements for DC as outlined in par 3.7 of the Procurement Guidelines

The thresholds for selection decisions subject to Prior Review by the Bank as stated in Appendix 1 of the applicable Consultant Guidelines are as follows:

No.	Selection Method	Procurement threshold (in Euro)	Prior review threshold (in Euro)
1.	QCBS	N/A	First contract, all contracts above 300 000 and all TORs
2.	FBS	N/A	First contract, all contracts above 300 000 and all TORs
3.	LCS	N/A	First contract, and all TORs
4.	CQS	<300 000	First contract and all TORs
5.	IC	N/A	All TORs, long term consultants in accordance with the procurement plan, procurement and legal consultants.
6.	Single Source (Firms)	N/A	All > 10 000. Borrower would still need to meet the requirements for SSS as outlined in Consultant Guidelines (par. 3.8 – 3.11)
7.	Single Source (Individuals)	N/A	Prior Review of long term consultants in accordance with the procurement plan. Borrower will still need to meet the requirements for Single Source as outlined in Consultant Guidelines par. 5.6

Short lists may consist of only national consultants for contracts below Euro 500 000.

27. Training: Depending on the nature of the training, it will be procured either as consulting or non-consulting services in accordance with the relevant Guidelines.

### **Environmental and Social (including safeguards)**

28. A single Environmental Management Framework (EMF) has been prepared collectively by the HZI, HZP and HZC. It defines arrangements for the implementation of EMF and site specific EMPs, in addition to guidance on environmental screening of sub-projects, environmental due diligence and documents preparation for contractors.

29. Implementation of the EMF and due diligence documents delivery within Component 2 (Support to HZ Passenger Transport Restructuring) is the responsibility of HZP. There is no separate environmental department established in HZP, however, a person responsible for environmental matters has been identified in the Logistics Department. For Component 3 (Support to HZ Cargo Restructuring), a responsible person for environmental matters has been identified in the Office for Technology of Traction and Locomotive Maintenance. In HZI, the Department for Environmental and Fire Protection together with the Department for Development are responsible for the implementation of EMF and delivery of due diligence documents under Component 4 (Support to HZ Infrastructure Restructuring and Enabling Investment to Increase the System Efficiency).

30. Depending on the result of the screening, the responsible person in each company will prepare either simple EMP checklists based on template provided in EMF or EMPs. All due diligence documents will be disclosed on the HZI, HZC and HZP websites respectively, and hardcopy will be available at their premises for at least two weeks. The relevant EMP checklists will be made part of the bidding documentation for the rolling stock rehabilitation (for Components 2 and 3) and the works (for Component 4). The responsibility for implementation of EMP checklist will lie on the Contractors. The monitoring of the Contractor's safeguards due diligence will be the responsibility of State Inspectors and the Supervising Site Engineer (which in the case of most contracts will be an employee of the Borrowers as most contracts will not require external supervision). An acceptable monitoring report from the Supervising Site Engineer would be a condition for full payment of the contractually agreed remuneration, the same as technical quality criteria or quality surveys. To ensure leverage on the Contractor's environmental performance an appropriate clause will be introduced in the contracts, specifying penalties in the case of noncompliance with the contractual environmental provisions. The WB environmental specialist will provide support to the various borrowers' teams in site visits, review of due diligence documents and other support on a needs basis. In addition, the WB environmental specialist will organize training on WB safeguards for environmental personnel, or identify possibilities for such in the region.

31. Activities under the subcomponent 4.4 Financing of Emergency Rehabilitation partially include retroactive financing of already finalized or ongoing projects. For these activities, site visits and environmental audits will be conducted by respective environmental personnel in each company and reviewed by a WB environmental specialist. A subproject might be refused for financing if the audit shows noncompliance with good environmental practice, national or WB policies. The audits will be the subject of WB No Objection. The environmental audit reports are prepared and disclosed as a condition of payment for the respective contracts. In terms of citizen engagement, there is an active program of engagement with citizens/passengers and grievance redress for HZP through website. Email and phone numbers of the information centers are also available to local and international passengers.

### **Citizen engagement**

32. Citizen engagement will be monitored through a specific indicator reviewing the evolution of the customers' satisfaction through an annual customers satisfaction surveys carried out by HZP and by social assessments.

33. Through customer satisfaction surveys HZP seeks feedback on services provided. The most recent survey carried out during 2014 showed that the biggest problem is failure to provide timely information on train delays. Often, HZP does not receive information about obstacles or reasons for delay from HZI (responsible for this segment of railway operations) so they are unable to inform the passengers about the reasons and possible duration of the delays. To monitor the satisfaction of the users HZP has started to implement a comprehensive modernization of its communication system with the users/passengers, which should be completed by the end of 2015. The modernization effort will among others include: (i) a new website with modern communication tools (to be completed by end of April 2015), (ii) a Central Reservations System (CRS) which will track complaints electronically, (iii) upgrade of the call/contact centers etc.

34. To establish a baseline and help monitor the progress of these efforts, HZP will conduct a market research survey during 2015 which will include: (i) Focus groups – public and customers/passengers, (ii) Survey – face to face, (iii) ticket sales, (iv) sales on trains; (v) calls to contact center; and (vi) Phone surveys – public and users/passengers.

35. HZP with the help and coordination from counties also engages with the citizens in the development of annual train schedules and assessments of potential reduction and closure of train lines. At the beginning of each year, HZP requests third counties to propose new schedules.

### **Monitoring & Evaluation**

36. Each company will submit semi-annual reports in an appropriate agreed format to the MMATI, MOF and the Bank no later than 45 days after the end of each calendar semester. The reports would cover, inter alia, the progress and expected completion date for civil works, goods and services contracts (both physical and financial progress), progress and expected completion date for key consultancies, compliance towards environment and social safeguards, progress on the retrenchment programs and progress towards indicators given in the results framework. The reports would also cover detailed financial and procurement information, including (a) comparison of actual physical and financial outputs with forecasts, and updated six-month project forecasts; (b) project financial statements, including sources and application of funds, expenditures by category statement, and special accounts reconciliation statement; and (c) procurement management report, showing status and contract commitments. MMATI would review this report and complement by a specific report on progress related to sector reform (strategy, status of contract with HZI and contract with HZP), and to the asset management issues resolution between the companies. The resulting consolidated report would be sent to the steering committee of the project. A mid-term review of the Project would be undertaken by early 2017. An Implementation Completion Report (ICR) will be submitted to the Bank no later than six months after the closing date. Each company will appoint a staff in charge of M&E and consolidation of the progress report.

37. An update of the PSIA will be conducted during the project implementation. The detailed definition of the indicators that will be used in the monitoring and evaluation of the project results is in Annex 1.

38. A communication Strategy on the sector reform and the project's achievements will be elaborated during the first semester of the project by the coordination team with the Bank's support and will be followed as part of the project's monitoring and evaluation.

### **Role of Partners (if applicable)**

39. HZI benefits from a loan from EBRD which finances the retrenchment program of HZI for 2014 and most of 2015. The loan to HZI under the Project will fund retrenchment once the EBRD loan envelope for that purpose is exhausted and may fund a small share of retrenchment for 2015 not eligible for EBRD funding (part of the difference between net and gross retrenchment cost). The two loans are therefore complementary.

## **Annex 4: Implementation Support Plan**

### **Strategy and Approach for Implementation Support**

1. The project includes a large volume of retroactive financing, and implementation by three main entities involving complex procurement. It also requires a significant policy/reform follow up which will require technical expertise, but also to be mindful of the political economy aspect of railway reform. The intensity of implementation support and sector dialogue on these aspects will therefore need to be adjusted depending on circumstances.

### **Implementation Support Plan**

2. The Bank team will hold a project-launch workshop after signing and probably before project effectiveness. Afterwards, the Bank will field main semi-annual implementation support missions, but will mostly rely on daily follow up by the TTL and the Zagreb WB office. A Mid-term Review (MTR) mission will be fielded in early 2017 as many activities under the project need to be completed in 2015-2016, with the time depending on the progress in implementation and the possible emergence of structural implementation challenges, the resolution of which would require an in-depth analysis and restructuring.

3. The project procurement, FM and safeguards missions could be undertaken as part of the periodic fiduciary support done concurrently across operations of all Bank sectors in Croatia (the PS, Environmental Specialist and Social Safeguards Specialist are based in the country office, and the FMS in Europe). The Social Development Specialists overseeing the retrenchment program are based in Europe and DC. They will have a focal point in the Zagreb office and will combine missions on a needs basis. An exception to the principle of autonomous supervision by the safeguards and fiduciary specialists would be the project-launch workshop, MTR and Implementation Completion Report (ICR) missions, where it is likely that the entire task team will participate. Procurement prior reviews will be ongoing whereas post reviews will be semi-annual during the first year. Given that a significant part of the project expenses are being done in anticipation before signing, reviews have been done during preparation and will continue before effectiveness.

4. Importantly, the main semi-annual missions will be determined, and carried out, in close consultation with the EC (DG Regional Development) and the country economist in order to tackle the main sector investment issues and the sector's impact on public finance.

5. *FM Supervision.* As part of project implementation support the Bank will conduct risk-based financial management implementation support within a year from the Project effectiveness, and then at appropriate intervals. During the Project implementation, the Bank will support the Project's financial management arrangements in the following ways: (a) review the Project's semi-annual IFRs and the Project's annual audited financial statements and auditor's management letters and remedial actions recommended in the auditor's management letters; and (b) during the Bank's on-site missions, review the following key areas (i) project accounting and internal control systems; (ii) budgeting and financial planning arrangements; (iii) disbursement arrangements and financial flows, including counterpart funds, as applicable; and (iv) any incidences of corrupt

practices involving project resources. As required, a Bank-accredited Financial Management Specialist will participate in the implementation support and supervision process.

6. Bank team guidance is not essentially needed, due to the relative ease of applying the Results Framework shown in Annex 1. However, the Bank team will assist the MMATI and the companies on putting in place the reporting mechanisms and in drafting the first format of consolidated semi-annual project report. As for safeguards, the Client will closely follow implementation of the EMFs, EMPs, RPFs (if applicable) through the following:

- (i) Ensure that the EMP checklists have been prepared on time for all new locations, in line with the EMF and RPF.
- (ii) All EMP checklists will be included in respective bidding documents both for new civil works contracts. These will include provisions binding the hired party to implement the EMP measures and/or to supervise them, with adequate reporting submitted to the Client and therefore to the WB.
- (iii) The WB environmental and social specialists will conduct regular implementation support of EMF and RPF implementation providing comments and inputs directly to the Client, including site visits and on-the-spot checks with both the contractor and supervisor during ongoing works.
- (iv) The WB social development specialists overseeing the retrenchment aspect of the project will carry out semi-annual progress check, and consultations and surveys carried out during project preparation will be repeated after the mid-term review of the project to monitor the project impact.
- (v) The WB’s communication associate from the Zagreb office will contribute to the oversight of the social aspects of the project, will provide a communications watch of the sector reform given its political and reputational implications, and will also contribute to the preparation and implementation of the communication strategy related to the project.

**Table 7: Main focus in terms of implementation support**

<i>Time</i>	<i>Focus</i>	<i>Skills Needed</i>	<i>Resource Estimate</i>	<i>Partner Role</i>
First 2 years	Start of implementation of first contracts for the three companies M&E establishment	Project management Operational skills Railway Engineering skills IT skills FM Procurement Environmental/ social safeguard M&E	\$90,000	
First 2 years	Implementation of the retrenchment programs.	Social Development Specialist (retrenchment)	\$ 40,000	

	Implementation of the railway reform and support to preparation of sector strategy (including financing and service contracting)	Railway specialist (institutional and financial aspect) Economist		
After year 2	Aggregate	All above, at different junctures	\$ 100,000	

**Table 8: Skills Mix Required**

<i>Skills Needed</i>	<i>Number of Staff Weeks</i>	<i>Number of Trips</i>	<i>Comments</i>
TTL	7/year	Regional trips	HQ staff/based in Europe
Railway Specialist	4/year	2	HQ staff
Railway Institutional Consultant	4/year	2	STC (retired Bank staff)
Social Development Specialist (retrenchment)	3/year	2	HQ/local staff/based in Europe
Operational Analyst/Specialist	10/year	Local trips	Local staff
Procurement Specialist	4/year	Local trips	Local staff
Financial Management specialist	4/year	Regional trips	Local staff
Environmental Specialist	3/year	Local trips	Local staff
Social Development Specialist	1/year	Local trips	Local staff
Communication Associate	2/year	Local trips	Local staff

***Trainings organized for the benefit of the implementing agencies:***

Trainings will be organized in the area of safeguards for HZ Infrastructure. First two day training of the environmental staff in the two departments in HZI as well as of the environmental specialist in PIU in organized regional safeguards workshop.

- (i) Half day training of environmental staff in the two departments as well as environmental specialist in the PIU by WB environmental specialist on how to supervise the EMP implementation and other project specific requirements (this will be joined by Environmental Monitoring PIU members from HZP and HZC).
- (ii) Half day training of contractors and supervising engineers organized by environmental specialist in PIU and WB environmental specialist, once the first civil works contracts are signed and starting implementation.

## Annex 5: Sector Context and Sector Reform

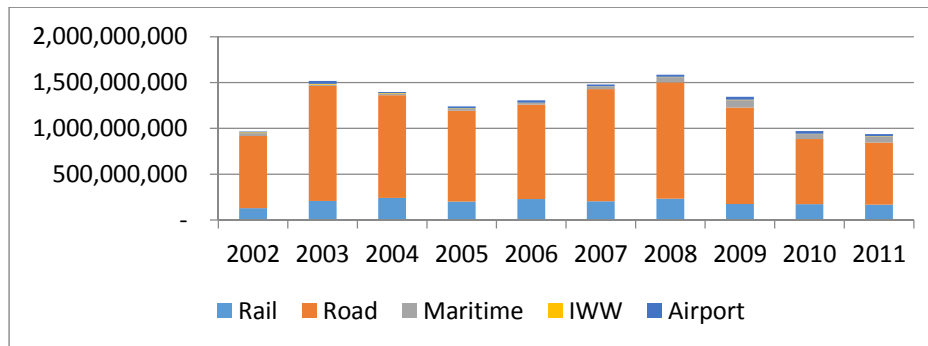
### A. SECTOR CONTEXT

#### (a) General transport and economic trends

1. **Railway infrastructure was not a priority over the past years.** Government investments in the transport sector over the past decade have focused on developing the motorway network<sup>24</sup>, which is now almost completed. The Croatian transport sector is currently undergoing a profound reform, which includes: highway monetization, Croatia Airlines restructuring, airports liberalization<sup>25</sup>, trade competitiveness increase (with the WB support in Rijeka<sup>26</sup> and Ploce<sup>27</sup>) throughout significant investments launched in the main passenger and commercial ports, and railway sector restructuring. The railway sector restructuring aims to bring to full and satisfactory completion the establishment of separated and distinct railway entities into infrastructure, passenger and cargo operators in order to bring competitiveness to the sector.

2. Since 2002, the total annual investment in the transport infrastructure in Croatia amounted to EUR 1,200 million annually, on average. The chart (see Figure 1) depicting investments in transport shows that the road sub-sector has received the majority of public investment in transport in period 2002-2011 with, on average, around 79 percent of total spending per year.

**Figure 1: Maintenance spending and investment into transport in Croatia (Euro)<sup>28</sup>**



3. By contrast, over the 2002-2011 period, the railway sub-sector received 15.5 percent of total spending. The amounts aimed to cover the routine maintenance needs and some minor infrastructure upgrade, however no major investments have been undertaken during this period. As a result, by European standards Croatia now compares very favorably in roads but is one of the lagging countries in infrastructure quality:

<sup>24</sup> The motorways, with a total length of 1,254 km in 2012, have been built along the Pan-European transport corridors and their side roads, X, Xa, Vb, Vc, core network of the South-East Europe.

<sup>25</sup> The Zagreb international airport has recently been concessioned out to a private operator.

<sup>26</sup> Rijeka Gateway project had a specific WB investment loan of \$165 million.

<sup>27</sup> Ploce Port development and trade and transport integration project had a specific WB investment loan of \$107 million.

<sup>28</sup> Source: OECD.

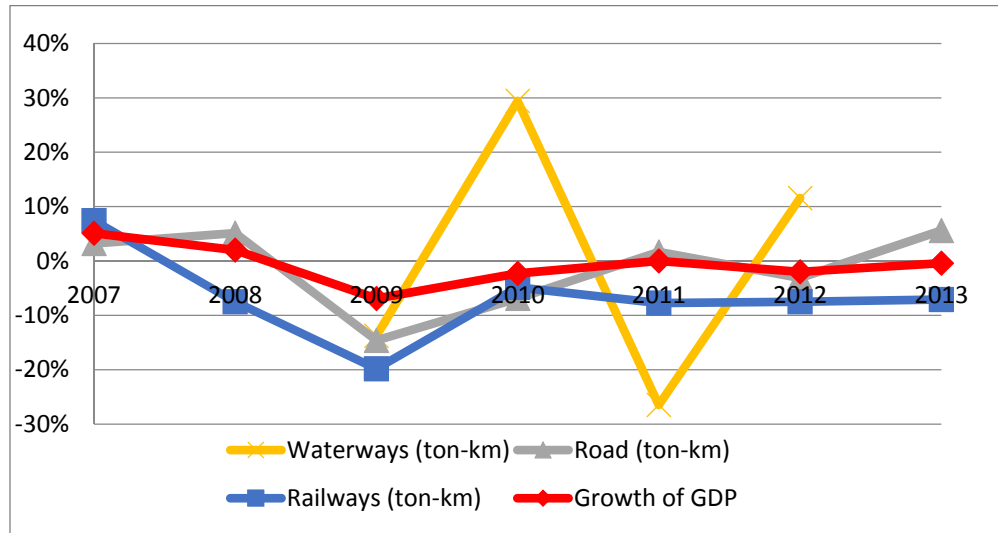
**Table 9: Indicators of infrastructure quality<sup>29</sup>**

	Road - Infrastructure	Railway - Infrastructure	Maritime - Infrastructure	Air - Infrastructure
Belgium	158.9	4.96	6.28	5.97
Bulgaria	62.5	3.05	3.92	4.19
Czech Republic	70.9	4.59	4.42	5.76
Denmark	204.8	4.47	5.68	5.64
Germany	159.9	5.72	5.85	6.08
Estonia	86.2	3.56	5.6	4.14
Ireland	196.4	4.05	5.19	5.55
Greece	107.1	2.73	4.49	5.26
Spain	310.9	5.88	5.78	6.04
France	180	6.29	5.41	6.06
Croatia	293.3	3.1	4.3	4.37
Italy	112.3	4.24	4.28	4.35
Cyprus	298.1	n.a.	4.84	5.28
Latvia	n.a.	4.18	5.1	5.39
Lithuania	102.9	4.67	5.13	4.32
Luxemburg	289.6	5.03	5.4	5.59
Hungary	152.6	3.56	3.92	3.94
Malta	n.a.	n.a.	5.77	5.75
Netherlands	158.9	5.48	6.79	6.46
Austria	204.4	5.22	4.72	5.4
Poland	27.8	2.56	3.68	3.91
Portugal	259.6	4.44	5.18	5.62
Romania	17.4	2.33	3	3.36
Slovenia	373.6	3.24	5.09	4.33
Slovakia	77.6	4.35	3.69	3.23
Finland	146.3	5.87	6.38	6.22
Sweden	202.5	4.57	5.82	5.73
United Kingdom	58	5.01	5.68	5.61
EU	141.5	4.35	5.05	5.13

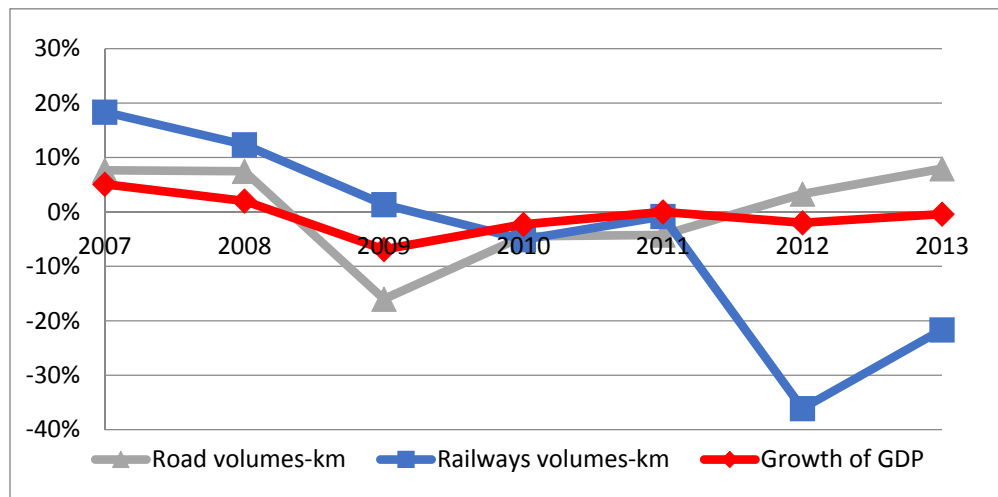
4. Croatia has a specific geographical position because it is situated both on major Pan-European transport corridors and on the Adriatic Sea. Due to this particular location, the development of transport and its supporting activities has a great potential for being a strong economic growth driver. Contributing for about 4 percent of GDP in 2010, transport is an important economic sector in Croatia. It facilitates trade and transportation that is enhanced with the EU accession. Until 2008, freight and passenger volumes remained steady. Since then, while road transport has more or less followed or exceeded GDP evolution, railway has continuously decreased (see 3 following figures and table below).

<sup>29</sup>Source: EU transport scoreboard, a comparative transport scoreboard for the EU Member States consisting of 22 categories, in most of which the five Member States with the best results and the five weakest are identified. The quality of rail transport infrastructures is measured against the yardstick recommended by the World Economic Forum (executive opinion survey), awarding points from 1 (very primitive) to 7 (rail transport infrastructure meeting international standards in terms of size and efficiency).

**Figure 2: Freight transport market evolution (% of previous year) compared to the country's economic development**



**Figure 3: Passengers transport market evolution (% of previous year) compared to economic development of the country**

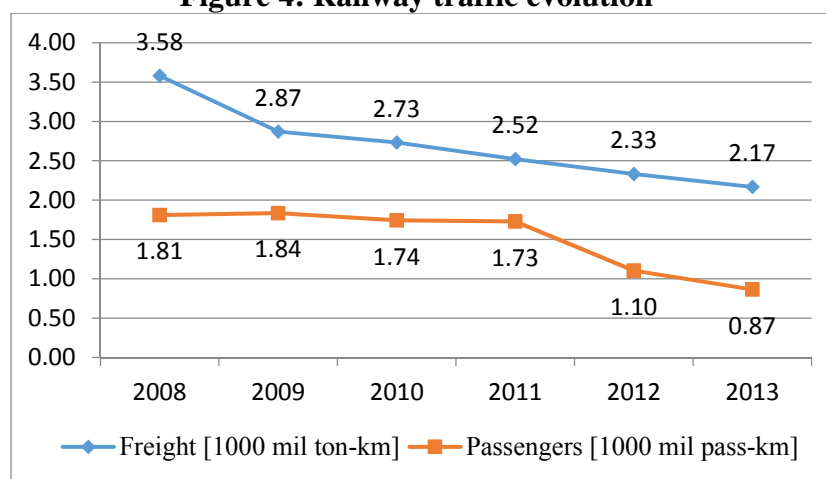


5. As part of its accession to the EU in July 2013, Croatia has integrated the national transport market into the European transport network. The EU is pursuing an active policy to promote railway transportation as an energy efficient, reliable, safe and environmentally friendly mode. This EU support will allow Croatia to use around EUR 1.1 billion<sup>30</sup> during the period 2014-2020 to modernize its transport sector. The majority of this financing plan is planned for investments located along international railway corridors. The transport sector accounts for about 4 percent of

<sup>30</sup> According to the draft Partnership Agreement of the Republic of Croatia for 2014-2020, the allocation to transport sector investments amounts to around EUR 1.1 billion, among which ERDF allocation is EUR 260 million, and around EUR 600 million are bound for the railway sector. In addition, Croatia is eligible for EUR 465 million allocation from the CEF (see subsequent sections).

total employment in Croatia in 2012, with the largest proportion of transport employment in railway (more than 12,000 persons including subsidiary companies).

**Figure 4: Railway traffic evolution<sup>31</sup>**



**Table 10: Evolution of cargo and passenger traffic 2007-2014**

	Unit of measure	2007	2008	2009	2010	2011	2012	2013	Plan 2014
<b>Passenger transport</b>									
<b>Passengers carried</b>	<b>000 p</b>	<b>63,131</b>	<b>70,961</b>	<b>73,545</b>	<b>69,564</b>	<b>49,983</b>	<b>27,668</b>	<b>24,265</b>	<b>21,839</b>
Domestic transport	000 p	62,367	70,170	72,846	68,898	49,330	27,068	23,810	21,429
International transport	000 p	764	791	699	666	653	600	455	410
<b>Passenger kilometers</b>	<b>mln.pkm</b>	<b>1611</b>	<b>1810</b>	<b>1835</b>	<b>1742</b>	<b>1486</b>	<b>1103</b>	<b>858</b>	<b>774</b>
Domestic transport	in mln.pkm	1508	1703	1745	1660	1405	1029	809	729
International transport	in mln.pkm	103	107	90	82	81	74	49	45
<b>Freight transport</b>									
<b>Tons transported</b>	<b>000 t</b>	<b>17,231</b>	<b>16,184</b>	<b>12,756</b>	<b>12,609</b>	<b>12,094</b>	<b>11,400</b>	<b>10,897</b>	<b>9000</b>
Domestic transport	000 t	3000	3046	2825	2369	2459	2355	2631	2500
International transport	000 t	14,231	13,138	9931	10,240	9635	9045	8266	6500
<b>Ton-kilometers</b>	<b>mln.tkm</b>	<b>3870</b>	<b>3580</b>	<b>2871</b>	<b>2732</b>	<b>2521</b>	<b>2422</b>	<b>2148</b>	<b>1870</b>
Domestic transport	in mln.tkm	763	783	724	683	654	594	575	560
International transport	in mln.tkm	3107	2797	2147	2049	1867	1828	1573	1310

Source: HZ Infrastructure Business Plan 2015-2019

<sup>31</sup> Source: HŽ Holding

6. Croatia has undertaken a major railway sector reform, compliant with EU directives. The MMATI adopted a five year restructuring plan for Croatian Railways in June 2012. Croatian Railways holding was dissolved and split into three independent companies - HZ Infrastructure (HZI), HZ Cargo and HZ Passenger Transport (HZZP), which are limited liability companies owned by the Republic of Croatia. For each company, the reform program provides an assessment of the current situation and defined strategic goals, an investment program, financing needs, and annual targets for asset management and staff reduction.

7. Reforms aim to encourage efficiency and free market operations over time, while focusing state subsidies on infrastructure investments and on the provision of public service contracts for passenger services. It is a complex process as it requires the establishment of an effective regulatory framework to regulate access for new operators and the ensuing competition: gradual transformation to a business-oriented industry, independent from the state intervention.

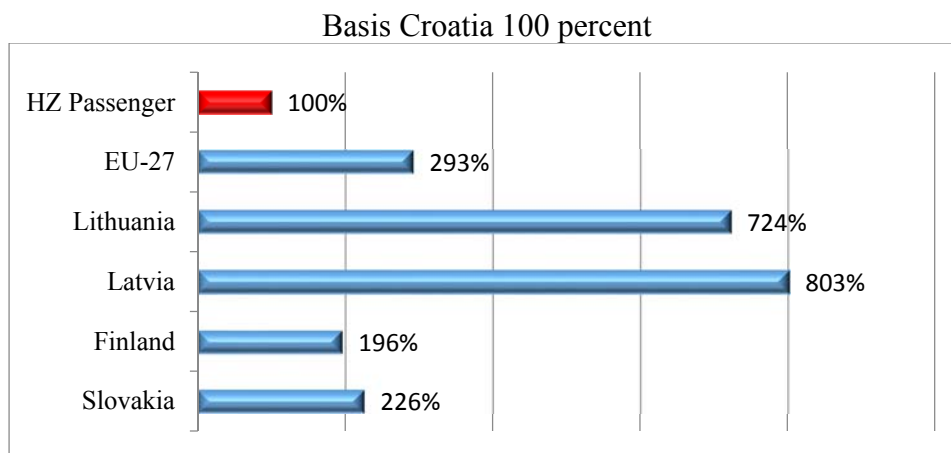
8. It is expected that over the medium term, HZC and HZZP will be the most exposed to competition. The railway freight transport market is open to competition in the EU, and Croatia's transit market will be attractive for many freight operators. Transit traffic along Corridor X and the shipments to/from Rijeka will likely become the most attractive market segments for the new operators. Another source of competition may occur from the highly decentralized, deregulated and entrepreneurial trucking industry which enjoys minimal entry barriers. If HZ Cargo does not quickly improve its ability to respond to the needs of its existing and potential customers, private freight operators and road freight transport may take all of the most profitable freight business in Croatia and leave HZ Cargo with the least profitable or unprofitable segments. This future competition combined with the prohibition of State aid to the railway freight operations in the EU context has already put HZ Cargo in serious financial difficulties. Its current opportunity to survive consists of a one last time state aid combined with drastic change in cost structure and commercial policy.

### ***(b) Railway sector performance by EU benchmarks and trends***

#### **Traffic intensity**

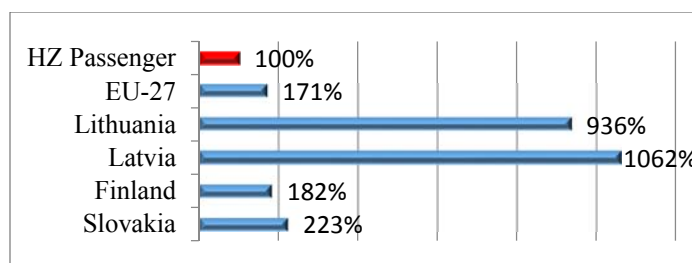
9. With 1,113,887 traffic units operated in 2013, the traffic intensity on the railway network in Croatia is low in comparison with EU standards. As illustrated in Figure 12, the traffic intensity is about 33 percent the EU-27 average, about 45 percent of that in Slovakia and Finland, and about 13 percent of that in Latvia and Lithuania.

**Figure 5: Traffic intensity compared to the EU, 2012<sup>32</sup>**



10. With regard to the freight traffic intensity along Croatia railway network, the country performs below the EU average. As illustrated in **Figure 6**, traffic intensity is about 59 percent the EU-27 average, about 50 percent of that of Slovakia and Finland, and about 10 percent of that of Latvia and Lithuania. In 2013, the share of international traffic in the total business of HZ Cargo represented 75 percent. HZ Cargo must be able to offer highly competitive tariffs and quality of services to preserve these volumes in an open transport market and to consolidate the important transit flows of freight in the most attractive market segments (Corridor X and shipments to/from Rijeka). Private sector may gain new markets and as a result overall cargo traffic may raise, but international experience shows this will first occur in niches. Hence this may be insufficient to reverse the trend unless there are some substantial improvements in quality of infrastructure and freight services.

**Figure 6: Freight traffic intensity compared to the EU, 2012**

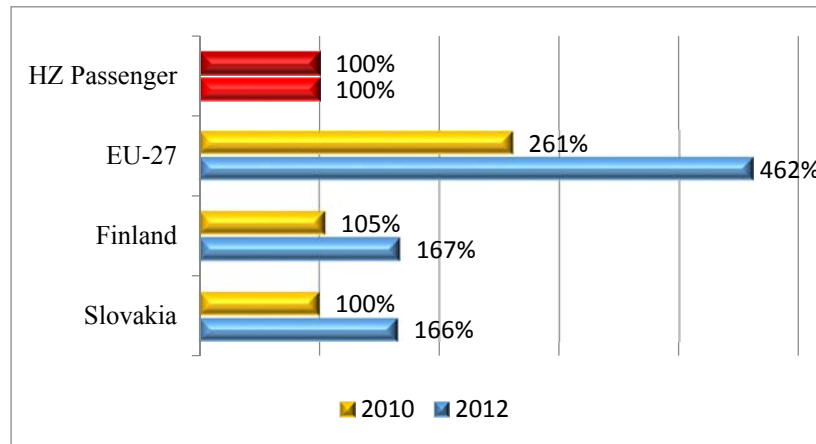


11. The average EU passenger traffic intensity has been more than four times higher than that of Croatia in 2012. Besides, passenger traffic intensity in 2012 is low in comparison with countries selected for benchmarking<sup>33</sup> while in 2010 passenger traffic intensity was similar (see Figure 7). HZ Passenger Transport has not been exposed to additional market pressure after the accession to the EU in most domestic segments but has become more vulnerable as its traffic continued to diminish.

<sup>32</sup> Source: HZ Holding / UIC, WB calculations.

<sup>33</sup> Latvia and Lithuania are not included in the chart, because they are mostly freight railways with insignificant volumes of passenger traffic.

**Figure 7: Passenger traffic intensity compared to the EU, 2010 and 2012**



12. Considering the high fixed costs of infrastructure—estimated at 70 percent of the total costs of the system—lower traffic intensity translates into higher unit costs for the maintenance and operation of infrastructure. The costs of railway infrastructure are vastly subsidized in Croatia. The annual State contribution for Public Service Contracts (PSC) is rather significant in sustaining the operating costs and the investments of passenger transport (it has been raised back to a level of HRK 500 million per year since 2014 vs HRK 350 million in 2012 and 2013). Very low passenger traffic intensity, together with weak freight traffic intensity clearly signals that HZ Passenger Transport and HZ Cargo need to find ways to attract more traffic, or to reduce the size of the network. More traffic would lower the unit costs of the railway network, and would hence reduce the amount of State financial support required. The governmental policy of allocating a large amount of public funds to keep Track Access Charges (TAC) at low levels generally helps attracting traffic to railway. However, that short-medium term approach is not sufficient, and may not produce the desired results in terms of traffic growth—especially if the TACs are not harmonized with other countries, or if access to other transport modes remains very cheap.

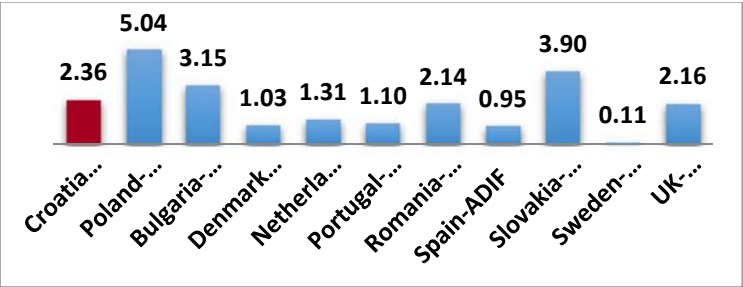
### **Labor productivity**

13. Labor productivity at sector level has been constantly falling since 2008. With 269,528 traffic units operated per staff in 2012, labor productivity is below the EU average and 5 times lower than labor productivity in Lithuania, Latvia and Finland. The sector wage bill remains very high: in 2011, the Croatian Railway system used more than 75 percent of its operating revenues to cover labor costs, while most European railway operate with a wage bill of around 40 percent.

14. The Restructuring Plan prepared by HZ Holding in 2012 proposed significant staff retrenchment over five years. For the period 2012-2016, the combined staff size of the three companies was planned to decrease by 35 percent, which according to projections should result in HRK 520-760 million (0.23 percent of GDP) in savings. Given the low labor productivity and poor financial position these measures are probably not ambitious enough. A staff downsizing of 48 percent, from 2011 levels, probably represents the cost cutting needed to bring staff productivity to EU-27 levels by 2016-2017. As of end of 2014, this downsizing compared to 2012 was around 15 percent.

15. The productivity of HZ Infrastructure operations, including maintenance is low in comparison with the EU standards. The analysis of staff productivity—measured in the number of staff per km of track—shows small variations in productivity over the course of the past six years. In 2014, the productivity of HZ Infrastructure was 1.95 staff per track-km—a good value for South East Europe, but higher than most EU-27 infrastructure managers (see Figure 8 with data from 2012). Decreasing other cost centers beyond staffing and/or modifying the level of services provided can be a source of savings for HZI, as well as the restructuring of its subsidiaries: the current strategy seems to keep profitable business activities within a single company for track maintenance and adjust its size to the needs, while privatizing, liquidating or transferring others to the State.

**Figure 8: Infrastructure Managers in the EU in 2012 – Number of staff per track-km<sup>34</sup>**

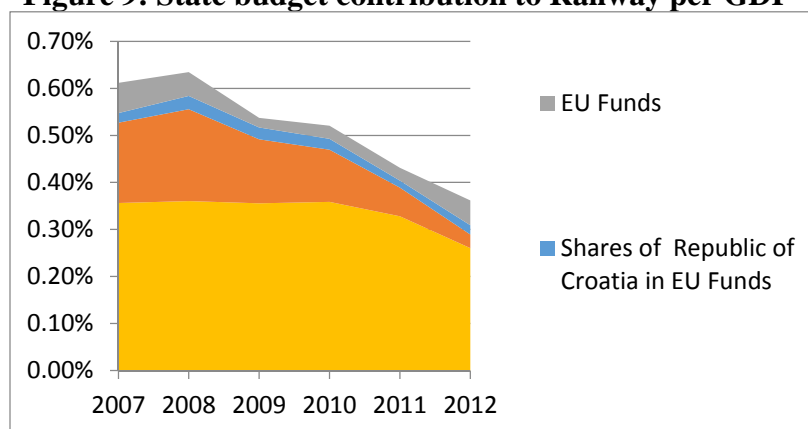


**Past funding strategy for infrastructure**

16. Railway budget support in the past years for infrastructure amounted to 0.5 percent of GDP annually. EU funding is expected to replace State subsidies as the major source of financing for the modernization of Croatian railway infrastructure, though EU funds will be limited to international corridors. In 2012, public transfers to railway amounted to about 0.3 percent of the GDP (about EUR 1,015 million). In essence, these costs will not be covered by the upcoming EU funds. Therefore, the long-term financial and technical sustainability of HZ Infrastructure will require major cost cutting measures—and must include a significant increase in staff and asset productivity—through a combination of traffic growth and rightsizing of staff and network. HZ Infrastructure must adopt policies aimed at increasing the network’s traffic intensity, which has been decreasing since 2007.

<sup>34</sup> Source: UIC, WB calculations – figures for HZI exclude subsidiaries including subsidiaries in charge of some of the maintenance works.

**Figure 9: State budget contribution to Railway per GDP<sup>35</sup>**



*(c) 2012 restructuring plan and fiscal impact*

17. **The Restructuring Plan** for HZ Holding, which was prepared by HZ Holding itself, was adopted by HZ Holding's Assembly (headed by the Minister of Transport) on June 30, 2012. The most important outcome of this program was the dissolution of the railway holding into three independent companies: HZ Infrastructure, HZ Cargo, and HZ Passenger Transport. For each company, the Restructuring Plan outlined a detailed program which is being implemented over the period of 2012-2016. In addition to the analysis of current business, it laid out strategic goals, and an assessment of infrastructure and human resources, investment needs, and financial plans. Each subsidiary was reviewed and proposed for (partial) privatization, liquidation or absorption. The subsidiaries that are or will be absorbed are fully incorporated into calculations made for the Restructuring Program of each railway undertaking.

18. **Fiscal importance:** Rail fiscal impact has oscillated between 0.6 and 1.2 percent of GDP over the last years. In 2008, budgetary support to railway (excluding guarantees, debt takeovers, and EU funded programs) amounted to HRK 2.8 billion (over 1 percent of GDP) and until 2014 had a decreasing trend. Following the 2012 reform, budget support amounted to only HRK 1 billion in 2013. However, in the same period around HRK 2 billion in new guarantees were issued, reaching over HRK 4.4 billion in total guarantees to railway, and about HRK 1.7 billion of debt was taken over from the railway companies. State support increased to HRK 1.5 billion in 2014, a level at which it is expected to remain in 2015, which makes the railway sector the biggest recipient of state support in Croatia. In addition, some loans due would be covered by the State in 2015, and this amount is expected to progressively increase. Although the EU funded support to new railway constructions will progressively increase, the direct state operational financial support is bound to be constrained in the coming years given the dire macroeconomic situation. Overall, the strategy underlying the government support to the sector is geared towards the provision of operating subsidies, both for infrastructure and passenger services. Very few direct investments were provided to the sector apart from the state guarantees given in 2013 and 2014 for commercial loans to finance investments as a transitory solution (in infrastructure), rolling stock purchase (HZP) and short term liabilities (HZC).

<sup>35</sup> Source: Annual report summary of HZ Infrastructure and Eurostat database, WB calculations.

*(d) New strategic context*

19. The Government has formulated strategic documents for the whole transport sector as a part of the overall preparation for the EU 2014-2020 programming perspective. An interim transport strategy adopted in October 2014 is a first step in preparation of a full transport strategy that needs to be completed by 2016. The emphasis is on safe and sustainable transport, and on the completion of the Croatian part of the Trans-European (TEN-T) network of corridors. A national program for the Croatian railway sector is under preparation, while there is no specific railway sector strategy currently in place. Most of the recent actions were, however, guided by the general EU 2020 objectives, and by the sector restructuring program of 2012.

20. Both the current interim strategy and the restructuring plans have not included a real market analysis. In the case of the restructuring plan of 2012 efforts were focused on decreasing costs considering both the market and working methods as static as developed in house. The strategy considered demand elements but mostly from a qualitative standpoint. As a result, what is now missing both at strategic and sector level are a thorough analysis of demand and of the market opportunities to properly inform the strategy. For the overall transport demand the Government is undertaking a modeling exercise which will span 2016. Without these elements, the current strategic context remains general.

21. Croatia's transport development strategy has identified some key issues to deal with in priority. The railway network is particularly deteriorated when compared with other modes of transport. Obsolete rolling stock for freight and passengers, obsolete signaling and interlocking systems combined with poor condition of a too large railway infrastructure and a bad level of service, results in low passenger and freight traffic intensity<sup>36</sup>. The railway cannot provide higher quality of services to customers, but also remains unable to play its role within the development of intermodal and multimodal opportunities. If railway transport was functioning more efficiently the overall country's logistic costs would be reduced.

22. The strategy that will help improve railway network is described through 6 objectives that are very close to the EU White Paper's goal. While depicting the main objectives there isn't enough emphasis on the need of reducing the size of the infrastructure and the need for financial sustainability of railway network.

**Table 11: Comparison between Transport White Paper's goals<sup>37</sup> and transport development strategy of Croatia**

White Paper		Croatia	
3 levels of action for future competitive and sustainable transport development	more efficient vehicles		
	More efficient logistics	Objective 6: Improvement of the Transport System Organizational and Operational setup to ensure the	Ensure efficiency

<sup>36</sup> Source: Transport development Strategy of the Republic of Croatia (2014-2030), Release n°8.

<sup>37</sup> Source: White Paper. Roadmap to a Single European Transport Area towards a competitive and resource efficient transport system

		efficiency and sustainability of the system	
	More standardized information systems		Ensure interoperability of the system.
Multimodal transport intercity		Objective 2 Improvement of passengers long distance accessibility inside Croatia Objective 3: Improvement of the passenger regional connectivity in Croatia enhancing territorial cohesion Objective 4: Improvement of the passengers accessibility to and within the main urban agglomerations	
Long-distance cleaner freight transport		Objective 5: Improvement of freight accessibility inside Croatia	
Cleaner urban mobility		Improve modal split in favor of public transport, environmental friendly and soft modes (pedestrians and bicycle),	
Sustainable development	60% emissions reductions	Ensure environmental and social sustainability	
Single European transport Area	Single European Sky, 4th Railway Package, and Blue Belt	Objective 1: Improvement of transport connectivity and coordination with neighboring countries	
	Quality, accessibility and reliability of transport services	Improve accessibility and social inclusion,	Increase level of service, Ensure quality of service
Safety and security		Ensure safety and security	
Innovation - smart cities			
		Ensure financial sustainability	

***(e) Investment program to be funded by EU funds and other sources as part of the strategy implementation***

23. EU transport objectives for the next programming period focus on sustainability and market unions. A single European Transport Area is promoted by accelerating Single European Sky, improving key transport connections and reducing unnecessary customs checks (Blue Belt proposal). Funding for transport aims to reduce its side-effects such as road deaths and CO2 emissions through investments in transport research and innovation.

24. Railway efficiency is among the EU transport objectives. The Fourth railway package is a European strategy that will help deliver better quality and more choice in railway services in Europe. Railway is critical for the effective functioning of the European economy. It is considered to play a key role in addressing rising traffic demand, congestion, fuel security and decarbonisation. The Commission is proposing to stimulate innovation in the railway sector by opening markets up to new entrants and cutting red tape for railway companies. The railway market in Croatia needs to prepare for the entrance of competitors by means of privatization and deregulation.

25. The Connecting Europe Facility (CEF) is also a key tool to support the implementation of the Transport White Paper and the EU transport objectives mentioned above. First, the CEF will finance studies and works of the Core network focusing on 9 strategic European core corridors through railway and road connections to ports and airports and 15,000 km of new High Speed lines and standardization of European infrastructure. Second, it will finance studies and works of the Comprehensive network to ensure accessibility to all regions. Concerning Croatia, country specific allocation will be EUR 550 million that is to be committed within 3 years, after which the funds will become available for other Member States. Insufficiently developed multi-modal and interoperable corridors and nodes along the Trans-European Transport Network is a challenge Croatia's transport is facing in supporting the overall objective of TEN-T. The focus will be on modernization and interoperability of railway, intermodal infrastructure and inland waterways projects along the Mediterranean corridor and the Rhine-Danube corridor.

**Table 12: Transport projects that are likely to be financed by CEF funding**

<b>Mediterranean corridor</b>		
Rijeka – Zagreb – Budapest	<b>Railway</b>	Studies and works (including construction of new track and second track between Rijeka and HU border )
Rijeka	Port	Infrastructure upgrading and development, development of multimodal platforms and interconnections
Ljubljana – Zagreb	<b>Railway</b>	Studies and works
<b>Rhine – Danube corridor</b>		
Slavonski Brod	Port	Studies and works
Danube (Kehlheim - Constanța/Midia/Sulina) Sava	IWW	Studies and works on several sections and bottlenecks and on inland waterway ports (multimodal interconnections) in Danube Canal and cross-border bridge in Sava.
Dubrovnik – HR/ME border	Road	Cross-border works
Zagreb – SR border	<b>Railway</b>	Bottleneck studies and works

**Figure 10: CEF corridors in Croatia<sup>38</sup>**



## **B. Current Sector Reform Program and Proposed Orientations of Public Policy.**

### ***(a) Sector general governance (level of service required, network size)***

26. The railway sector of Croatia is not viable under the current conditions. All efforts to address the problems in railway transport sector which focus on specific issues related to Croatian Railway Companies will not succeed unless the main issues – mainly financial and definition of appropriate service and infrastructure provisions requirements– are addressed by the Government itself. In this context, the MMATI has a critical role to play in managing the implementation of the sector restructuring focusing on two main areas: (i) the definition of services to be provided by the sector to the public (e.g. network and passenger services) and (ii) defining the main elements of the sector financial and asset restructuring. Both are interlinked as the level of service to be provided has to be affordable.

### ***(b) Fiscal objectives***

27. The sector still faces numerous institutional and organizational issues and challenges which may not be entirely addressed by the restructuring plan. In order to attain fiscal consolidation objectives, government reforms will comprise (i) enhancement of fiscal sustainability through expenditure consolidation; and (ii) fostering private sector growth. The WB Public Finance Review<sup>39</sup> is exploring the fiscal consolidation challenges in light of the macroeconomic environment and fiscal pressure coming from the EU funds absorption. As Croatia has entered the Excessive Deficit Procedure in 2014, the Ministry of Finance has been set objectives to decrease overall subsidies by 10 percent in 2015 and maintain the subsidies flat in 2016-2017. It is expected that such constraint apply to the operational subsidies for the railway sector.

<sup>38</sup> Source: TEN-T corridor map 2013.

<sup>39</sup> The WB: Croatia; Public Finance Review; Restructuring Spending for Stability and Growth, October 2014.

28. During 2014, the railway companies covered the operating costs from their own revenues in the following percentage: HZI – 14.7 percent (2014), HZC – 79 percent (2013) and HZP – 48 percent (2014). These figures illustrate the following issues concerning the railway sector:

- (i) Level of the current financial support of the state is not sustainable on medium and long term and the sector must be restructured for implementing solutions for gradual reduction of the total public financing support.
- (ii) The current public financing support includes two types of financing:
  - Funds received according to the provisions of the public services contracts and the multi-annual contracts for infrastructure, in line with the EU practice, which must gradually decrease in parallel with the implementation of the adequate actions of the restructuring process.
  - Funds received as less-transparent support, including subsidies for investments in rolling stock of other equipment, loans and guarantees, which must be totally eliminated as non-compatible with the EU rules.

29. The public funding of the railway sector in Croatia is characterized by additional negative aspects which need to be replaced by increasing the accountability of the management of the railway companies and by achieving full transparency of public funds' allocation and utilization:

- (i) The allocation of public funds for railway infrastructure is not clearly dedicated for capital and operating expenditures and the HZI can use the funds depending on their needs without distinct separation of funds by destination;
- (ii) The public funds allocated for passenger services includes not only funds assigned under the public service contract according with the EU regulations, but also funds allocated for the payment of interest rates or installment for loans guaranteed by the state and funds for new loans;
- (iii) The public funds are allocated for the HZC as support for capital expenditure in the conditions when this is not allowed by the EU regulations; and
- (iv) The public funds allocated for the railway companies includes the guarantees for the loans taken from the private banks.

### **(c) Policy orientations for the sector in order to limit the sector's financial burden**

30. The restructuring of the railway transport system is a complex process and will require the definition of a precise roadmap for implementation of reforms. Strong and constant efforts of the railway companies are necessary for tuning their activities to the real needs of the market, in parallel with cutting their operating costs, under the strict coordination of the MMATI as the representative of the Government.

31. **Enhancing the institutional capacity of the MMATI for the supervision of the railway system.** The MMATI as representative of the Government of Croatia regarding the transport sector has a critical role to play in managing the implementation of the restructuring of the railway with the scope of introducing a business oriented approach, commercial culture, reduction of the operating costs and more accurate allocation of public funding for the investments

in railway infrastructure. In achieving these goals, the MMATI needs to put in place a competent structure, able to supervise the realization of the following precise objectives supporting the control of public financing in the railway sector:

- (i) Develop and implement a financially sustainable core railway network (e.g. investment policy in railway infrastructure, characteristics and size of infrastructure),
- (ii) Define essential services necessary to be provided by the railway sector to the public (e.g. public passenger services, management of railway infrastructure) and,
- (iii) Enhance the corporate governance practices at state-owned railway companies (e.g. management board appointment, audit of railway companies, cost control, commercial approach of activities).

32. Improvement of the Restructuring and Business Plans by the HZI, HZP, HZC and approval of the agreed form of the documents by the Government. The main directions of the reform and the goals targeted by each company must be defined in Restructuring and Business Plans elaborated by the three companies on a rolling approach (annually updated), under the coordination of the MMATI. These documents must be focused on achieving precise goals related with the cost reduction and better control of the public financing of the sector. The major tasks to be followed for this scope are the following:

- (i) **Implementation of an integrated approach for the realization of Restructuring and Business Plans** by HZI, HZC and HZP under the supervision of the MMATI based on commonly agreed assumptions on common elements like the level of track access charge, the volume of train-km for freight and passenger trains, the level of annual allocation of public funds, the priorities of investments in infrastructure and rolling stock.
- (ii) **Verification by the MMATI of the provisions of the restructuring and business plans** of HZC and HZP and guidance of the companies to finalize the documents according with the following principles:
  - Sound assessment of the evolution of the transport market for railway based on the identification of the strategic lines of business for each company and on main customers;
  - Assessment of the assets necessary for the predicted market (based on clear identification of customers) and plans for solving the problem of the surplus assets;
  - Assessment of the non-core activities, evaluate if they are self-sustainable, preserving in the company only those activities having the capacity to generate profit and plans for outsourcing the rest of non-core activities; and
  - Identification of precise cost control targets for each company and the permanent control of their achievement.

33. Assessment of the railway network size in Croatia. The transport market conditions have been altered in Croatia during the last decades as the structure of the economy has changed and many traditional customers disappeared. At the same time, the rapid modernization of the road infrastructure created better opportunities for the road transport in many regions of the country. It is vital for the MMATI to put in place a reliable methodology for the evaluation of the needs of railway infrastructure in order to better decide on the needs of public funds for this scope. The

process of evaluation of utility of secondary railway lines already started, but the process must continue, attracting local authorities in decision process of closing or continuing to finance part of railway infrastructure, as follows:

34. Guide HZI to carry out the analytical work required to assess the optimal network needed to operate the transport services identified by the market assessment for the next years and proposals for replacement of loss generating feeder lines by busses as already experienced successfully in numerous EU countries;

35. Coordinate the preparation of the strategic plan for the development of the railway network in Croatia with the participation of HZI, HZP, HZC and the consultation of the major stakeholders from local and central authorities or from the business environment and define sound policy for financing the investments in railway infrastructure by using with priority the EU funds for projects of modernization and IFI's funds for rehabilitation works. This task should be developed in coordination with the finalization of the transport model and strategy financed by the EU.

36. Monitor programs of the railway companies in implementing best practice methods for cutting the operating costs, reduce the volume of public subsidies and increase the operation and financial efficiency. This activity requires strong supervision from the MMATI for imposing clear annual targets for the reduction of all categories of operating costs of HZI, HZC and HZP, including their subsidiaries. The appointment of the appropriate management for each of the three railway companies, based on professional and managerial competences, fully committed for the railway restructuring process are vital for the effective implementation of the set of cost cutting actions. The realization of this essential task for achieving the goal of cutting the subsidies, imposes the following activities developed by the management of HZI, HZP and HZC and monitored by the MMATI:

- (i) Comprehensive **review of all form of financial support of the state** for the railway sector (direct and indirect) and proposals for:
  - Setting up the volume of public funding for the operating costs HZI and HZP based on the annually decreasing unit cost of operations,
  - Setting up the volume of public funding for capital expenditures for HZI and HZP in line with the national strategy for the development of the railway transport in Croatia;
  - Elimination of any form of subsidy for HZI and HZP;
  - Elimination of any form of public financing for the HZC;
  - Allocation of public funds with precise destination and interdiction of usage of funds for different scope.
- (ii) Review the **proposals for reorganization of HZC and HZP** and provide guidance to the companies to center the new structures on the customer needs (setting up lines of business for the main types of services / strategic customers);
- (iii) Review of the **organization of track maintenance activities** at HZI and proposals for improvement;

- (iv) Review of the **organization of traffic management** activities at railway companies and proposals for improvement;
- (v) Review of the **working methods for the locomotives and crew allocation** for freight and passenger trains and proposals for improvement;
- (vi) Review of the **interfaces of the HZC with their customers** and proposals for improvement (customer centers, tariff flexibility, long term agreements, etc.);
- (vii) Review of **methods of control in the railway company** for fuel consumption, energy, materials and acquisition of spare parts and proposals for cost cutting;
- (viii) **Elaboration of an improved human resources planning** based on the existent achievements in staff resizing and evaluation of necessary employment based on the volume of business of each company.

37. Enhancement of the supervision of the performance of the railway companies by the MMATI. The realization of this activity is entirely under the responsibility of the MMATI which shall collaborate with other governmental entities (mainly with the MoF) for this scope. This includes the development of the contractual relationships with the railway companies which are eligible for public funding according with the EU rules (HZI and HZP). New structure and new provisions of these contracts must increase the accountability of the managers of HZI and HZP concerning the utilization of the allocated public funds and establish clear rules for the periodical disbursement of the funds exclusively based on the evidence that the contracted services have been provided by the relevant railway company. The realization of this action requires the following activities:

- (i) Develop a comprehensive basis for the renew of the Public Service Contract (PSC) with the HZP and the Multi-Annual Infrastructure Contract (MAIC) with the HZI, and propose solutions to enhance the structure and provisions of the two documents to allow the Government to implement its major goals for the sector:
  - Using the available funds to support services most valued by citizens and creating incentives in the contracts for good quality service;
  - Creating incentives in the contract for cost efficiency;
  - Ensuring that the services purchased under the contracts are fully funded.
- (ii) Propose **methodology for calculating reference annual unit costs** for main activities beneficiary of public funding (e.g. HRK per km of track for the maintenance of railway infrastructure, HRK per train-km for public passenger services) with a clear scope of controlling the progressive decrease of the annual public funds allocated.
- (iii) Elaborate **benchmark tool for key performance indicators** allowing the evaluation of the operational and financial results of the HZI and HZP and the release of the periodical allocation of the public funds to the relevant railway company according with the provisions of the contracts.
- (iv) Review and enhance the **National Program of Railway Infrastructure**, with a focus on clear identification of list of investment priorities and optimization of funding sources.

## **Annex 6: Economic Analysis**

### **I. BACKGROUND**

1. The economic evaluation includes two components: the investments in emergency repairs and rehabilitation as part of HZI restructuring and the retrenchment program for the three companies.
2. For the HZ Passenger Transport and HZ Cargo components, the analysis mostly focuses on severance payments.
3. The 5-year HZI program of rehabilitation investments, free of time and budget constraints, is diverse and scattered. It includes investments changing in size (from EUR 0.05 million to EUR 80 million) changing in characteristics (from simple safety crossings to mid-size electrification removal to large track rehabilitation) or in location (from short local passenger lines with low traffic demand, to European corridors carrying significant transit traffic). While 91 percent of freight traffic is achieved on 56 percent of the railway network (international lines), about 20 percent of network (local lines) produces less than 2 percent of freight traffic and less than 10 percent of passenger traffic. The financing options for investments are also various.
4. The selection of the project physical investments has followed a principle of prioritization with a view to maximize the impact on traffic. The prioritization has been adopted by HZI and serves as a basis for guiding the discussions with the State on the program of investments. While the project will target emergency rehabilitations, the selection of components favors international lines with higher levels of traffic.
5. The project includes the rehabilitation of track, restoration of safety, including: (i) the rehabilitation of the Ogulin-Moravice section of Zagreb-Rijeka line, (ii) signaling upgrade between Moravice and Rijeka on Zagreb-Rijeka line, (iii) replacement of worn-out switches, electromechanical and support structures, (iv) construction of a new stop at Borongaj (one of the main Zagreb stations), (v) reconstruction of station-Rijeka Brajdica (port-railway interface) and (vi) rehabilitation of Varazdin-Cakovec section. The economic evaluation also includes HZI severance payments.

### **II. PROJECT ECONOMIC BENEFITS**

6. With track rehabilitation and ancillary safety restoration or upgrades, three types of benefits can potentially accrue:
  - (i) The infrastructure operator (HZI), will benefit from reduced maintenance costs as a result of the rehabilitation, particularly through reduced costs of labor;
  - (ii) The train operators (currently HZ Passenger and HZ Cargo) will benefit from reduced operating costs (rolling stock maintenance and energy consumption);
  - (iii) Users of the infrastructure will benefit from improved operations and services. Whilst the freight users will mostly benefit from safety and reliability improvements, the passenger users will mostly benefit from reduced travel times.

- (iv) Non-users will benefit from direct benefits deriving from a shift of traffic from road to railway, and from indirect benefits with the overall economic impacts of the railway services (reduced pollution and congestion, support to the industrial production etc...). For simplicity purpose and except for the passenger station improvement component where a sharp modal shift from road to railway is expected, this category of benefits has not been factored in this evaluation.

## **A. Track rehabilitation**

7. The economic evaluation of track rehabilitation investments depends on the levels of traffic and the associated pace of deterioration if the proposed investment does not materialize. The deterioration of a railway line exponentially increases when tracks are 15 years old and traffic density reaches 3 million tons per year. In the case of the proposed lines to be rehabilitated, it can be anticipated that without necessary rehabilitation, the operation costs will increase due to increase in transit times (about 50km/h for a typical freight trains and a bit less for passenger trains). An increase in unit maintenance costs and rolling stock maintenance costs is also anticipated. An abundant literature indicates that an absence of necessary rehabilitation works during a period of 15-20 years can lead to 50 percent or more in total cost increases. This situation has been reached along some number of line sections in Croatia where the majority of lines have reached the end of their life cycle (25 percent of the network is 30-40 years old, and another 25 percent is 40 years old and more<sup>40</sup>). The rehabilitation works will allow a direct reduction in maintenance costs, which encompass the costs for maintaining the track in good shape, and the costs of the train operations. The track maintenance costs will be reduced due to the reduction in track inspections, repairs and spare parts replacement.

## **B. Operational benefits**

### B.1. Time savings

8. When a bridge or a given portion of line begins presenting a safety risk for operations, the infrastructure manager enforces speed restrictions. Trains are required to brake over a certain distance prior to reaching the black spots. In the case of railway transport the braking distance is more important than of road. For example, on a flat terrain, it is expected in an average that a standard train moving at 100km/h will need about 1 km to stop. With a difficult topography requiring train operations to pass steep gradients and considering the braking systems present standard performance, the distance for decelerating and then re-accelerating along the lines proposed for rehabilitation is assumed to be higher. Some operational extra-caution is also applied for single track lines and depending on the number of steep curves.

9. Therefore the major operating benefit is the increase in technical speed and associated costs savings. Rehabilitation works will allow an elimination of the speed restrictions, thereby shortening the average travel time along the sections concerned. The rehabilitation works and safety upgrading are expected to increase the services for passenger trains through time savings

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<sup>40</sup> The situation along a number of lines in Serbia or Bulgaria reveals the same.

and reliability. The value of time savings is calculated as saved hours multiplied with a value of time unit price (VOT).

## B.2 Operating costs

10. Train operating costs will decrease due to a change in the stress applied to the rolling stock utilization. Rolling stock spare parts (essentially wheels and bogies) will decrease. The operational costs will typically reduce by 5-10 percent.

11. For the purpose of the evaluation, train operating costs per km and per hour used have been based on 'normalized' unit costs. The evaluation has assumed the following unit costs: EUR 30 per train-hour and EUR 0.90 per train-km for freight, and EUR 50 per train-hour and Euro 0.40 per train-km for passenger. Rolling-stock capital costs are estimated at EUR 70 per train-hour and EUR 93 per train-hour for freight and passenger respectively.

## **C. Safety and reliability**

12. Experience indicates that when no upgrading of level crossings are made, the reduction in speeds generally gets reduced to a speed comprised between 10 percent and 40 percent, depending on the road traffic and the physical environment (density of surrounding population etc). Whilst speed reductions reduce the probability of accidents there is also an associated increase in operating costs. This however has not been quantified as part of this analysis. For simplicity purpose, the ancillary safety improvements (electrical, switches) have not been included in the analysis.

## **D. External benefits**

13. As indicated above, by increasing the efficiency (no more speed restrictions) and reliability (less failures) of the railway services, the rehabilitated lines will be in a position to attract traffic from roads. The lines will generate external benefits deriving from a reduction in environmental, congestion, noise and accidents costs. In this evaluation this external benefit has only been applied to the assessment of the railway passenger station component. The applied unit costs are based on the EU comprehensive cost study<sup>41</sup> of 2011 which estimated the differential external costs of road compared to railway for freight traffic in each EU country – in this case the data for Slovenia and Slovakia were adapted to the evaluation.

## **E. Retrenchment**

14. The economic evaluation of the severance payments covers the three companies. The proposed financing to be made under the project retrenchment component of the project is EUR 47 million. Severance payments will allow redundant staff to be redeployed to other activities. The retrenched staff are full time employees of the railway companies though are not assessed as productive, therefore upon retrenchment, the companies will save the entire labor cost.

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<sup>41</sup> External Costs of Transport in Europe, CE Delft.

15. The analysis is based on the assumption that if they do not take the severance payment, the retrenched staff would presumably remain in HZ companies. The average of the targeted staff selected for the retrenchment program is around 45 years old, which corresponds to the companies' average age of the staff. The evaluation considers that the staff would have stayed in the companies until they apply for their pension benefits, i.e. at 65 years old and would have received a 2 percent annual salary increase.

16. The economic benefits of the severance payments are linked to the ability for the retrenched staff to be re-employed. It is anticipated that some staff may not work again - in this case the benefits will be reduced to the labor related supervision and service costs, which is estimated for HZ companies at about 25 percent of labor costs. These costs are to be saved by the companies. It is however expected that the staff who can be re-employed, sometimes after a period of time, will make a contribution to the economy which can be assumed equal to their employment cost. This evaluation has opted for a conservative scenario where it is considered that only 20 percent of the personnel will be re-employed.

**III. RESULTS**

17. Whilst conservative, the results of the analysis indicate a robust EIRR for the retrenchment activities of the three companies, even in the scenario where no staff redeployment will occur. The summary of the evaluation is as follows.

**Table 13: Economic Analysis for Retrenchment**

	Base Case		ERR if no redeployment
	NPV (mil Euro)	ERR (@ 12 %)	
HZI	15.2	26.2	15.6
HZ Cargo	18.2	26.4	12.7
HZPAX	8.7	20.9	15.3
TOTAL	42.1	24.7	14.6

18. The costs and benefits results are presented in Table 14. The project has a Base Case IRR of 12.4 percent, with an NPV (discounted at 12 percent p.a. to 2014) of about EUR 980,000. Typical EIRR for railway projects normally present 10 percent EIRR. In this case, for the most part, the proposed investments remain robust to change in costs and benefits.

**Table 14: Physical Investments**

	Base Case		IRR, if	
	NPV (k Euro)	IRR	Costs +20%	Benefits -20%
Cuts and Slopes Emergency Safety Rehabilitation	435.6	13.2%	11.1%	10.6%
Emergency bridges reconstruction	99.6	12.7%	10.6%	10.2%
Rehabilitation of the Ogulin-Moravice section of Zagreb-Rijeka line	-375.1	11.3%	9.3%	8.9%
Rehabilitation of Varazdin-Cakovec section	1,639.8	13.7%	11.5%	11.0%
Signaling upgrade between Moravice and Rijeka on Zagreb-Rijeka line	-669.1	10.4%	8.6%	8.2%
Construction of a passenger stop at Borongaj	338.2	16.0%	13.4%	12.9%
<b>TOTAL</b>	<b>979.6</b>	<b>12.4%</b>	<b>10.4%</b>	<b>10.0%</b>

## Annex 7: Financial Analysis

### A. HZP

1. HZP prepared its restructuring plan which extends to 2017. The forecast until 2023 has been prepared by the World Bank based on HZP restructuring plan but also includes the Bank's considerations.

**Table 15: HZP Forecast Assumptions**

Key Assumptions	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Inflation Rate	2.2%	-0.2%	0.5%	1.7%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
Network in track-km	2,722	2,603	2,603	2,603	2,603	2,603	2,603	2,603	2,603	2,603	2,603
Passenger-km in million	858	774	810	875	927	980	1,036	1,046	1,046	1,046	1,046
HZP entity staff	2,087	1,910	1,897	1,824	1,747	1,690	1,658	1,658	1,658	1,658	1,658
Transport revenues HRK million	309	275	287	305	320	323	340	349	349	349	349
PSO in HRK million	505	505	505	505	500	495	485	485	485	485	485
Average tariff -domestic/PKM	0.33	0.32	0.31	0.31	0.31	0.29	0.29	0.29	0.29	0.29	0.29
Average tariff -suburban/PKM	0.40	0.41	0.40	0.40	0.39	0.39	0.39	0.39	0.39	0.39	0.39
Average tariff -internat/PKM	0.80	0.88	0.95	0.95	0.95	0.93	0.93	0.93	0.93	0.93	0.93
Track access charges HRK million	91	69	74	75	78	79	80	80	80	80	80
Staff cost HRK million	303	269	268	262	256	253	253	258	263	269	274
Train-km in ths	16,651	15,368	15,300	15,300	15,198	15,198	15,198	15,198	15,198	15,198	15,198
Operating Expenses w/o depreciation in HRK million	955	717	691	690	667	662	666	681	694	708	722
Operating Expenses/Train-km	57	47	45	45	44	44	44	45	46	47	48

### Traffic and revenues

2. The traffic forecast is based on the assumption of gradual increase of passenger/km by 4-8 percent per annum until 2019 when the railway passenger transport will be liberalized in Croatia. The base case scenario includes increase of transport direct revenue by 4.2 percent in 2015, 6.4 percent in 2016, and 5 percent in 2017, up to HRK 287 – 320 million which seems very optimistic and would require no delays in receiving new rolling stock, ticketing system and improved pricing policy accompanied by marketing efforts to attract new customers. The major source of HZP revenue is still the PSO, which increased from HRK 355 million in 2013 to HRK 504.5 in 2014 - 500 million annually in the plan in line with planned train kilometers 15,300 -15,200 thousand. The PSO could be further revised and linked to the actual train-kilometers parameters as incentive for further rationalization of cost and increase of ticket sales. Other operating revenues (HRK 184 million) include auxiliary revenues and amortization of capital investment subsidies (HRK 152 million). The high level of PSO and subsidized assets reflects heavy reliance on budget support.

## **Expenses**

3. In 2014, HZP successfully reduced its operating expenditures by HRK 240 million mainly in staff costs, energy, services, and maintenance. Financial costs also dropped in relation to loan takeovers by the state. However the key planned expenditures in 2015-2017 are stable, therefore an assumption can be made that no further cost reductions are envisaged. This should be revised during network optimization. Financial result is marginally positive but without further reduction of low patronage trains and significant cost reductions the realization of the restructuring plan bears high risk of failure. This is due to low margin for variation from the plan both on the revenue and expenditure sides. Additionally hard budget constraints measures under the excessive deficit procedure might also force additional cost reductions and tighter cost control.

4. The major cost item is staff constituting almost 29 percent of the operating costs (including depreciation) which will be moderately decreased by 2019 to HRK 253 million as a result of retrenchment of 623 employees. However with the decrease of other operating costs the share of labor in the operating costs will increase to 35 percent in 2023. The second largest cost item is depreciation with 22 percent share, and will significantly decrease from 2020 when old rolling stock would become fully depreciated. However HZP was planning a continued use of the old rolling stock and change of its accounting policy to lower depreciation rates and smooth out the cost and profit profiles which shows volatile changes in the forecast. The cost reduction measures taken by HZP management include also: introduction of cost efficient motor-engine trains (HRK 86 million per annum), rationalization of timetables and closure of some lines. Overall the operating expenses (without depreciation) will decrease by 30 percent from HRK 955 million in 2013 to HRK 662 million in 2018, and thereafter will increase by 9 percent to HRK 722 million in 2023.

## **Profits**

5. Over the period 2009-2013 HZP operations have been loss making with the record loss of HRK 362 million in 2013 and cumulative losses of HRK 778 million. The unaudited financial statement for 2014 showed change to the negative trend with a symbolic profit of HRK 0.4 million. While 2014 still shows declining trend of passenger number and fares sales reflecting poor quality of infrastructure, rolling stock, client service and timeliness - the upcoming delivery of the new rolling stock, launch of the ticket sale system and improvements in the network, if successful and on time, can provide solid basis for HZP to become financially sustainable in a medium term subject to continuation of restructuring efforts and corrective measures necessary in a changing business environment and competitive transport market.

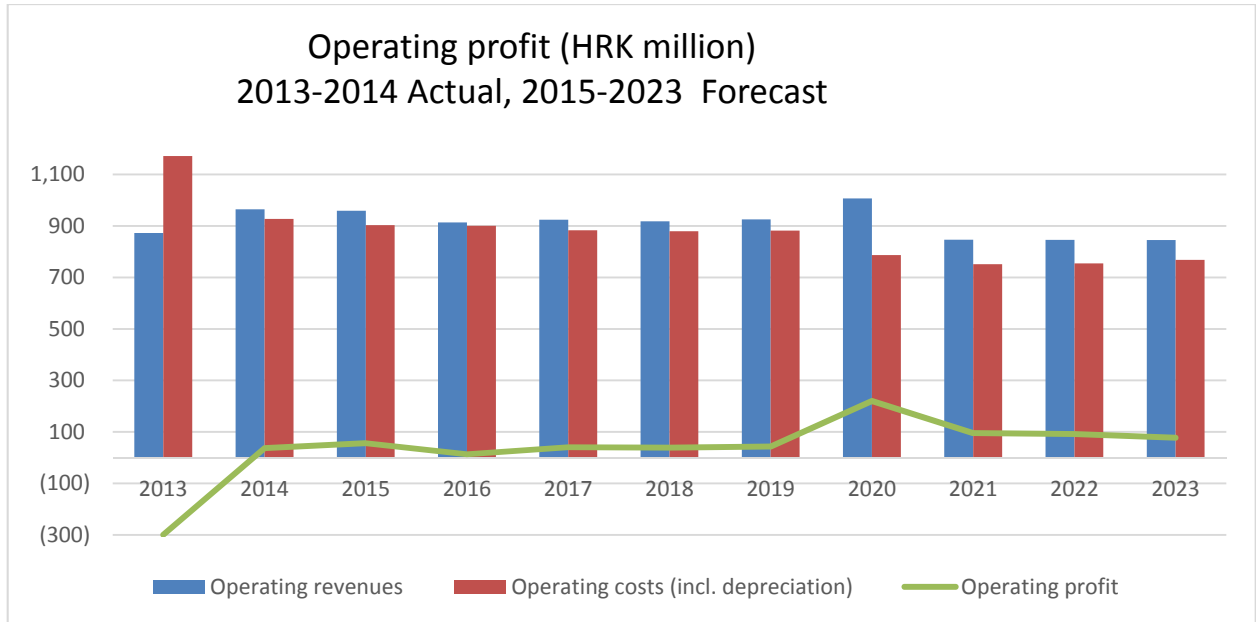
6. The HZP restructuring plan envisaged modest profits in 2015-2017. However this positive outturn was a result of lower depreciation rates starting in 2016 due to the changes in accounting policy. The World Bank forecast did not make such adjustments, thus in 2015 there is a profit of HRK 7 million, net losses in the range of HRK 32-64 million during 2017-2019, relatively huge profit of HRK 136 million in 2020, and HRK 20-30 million profits during 2021-2023.

**Table 16: Income Statement – 2013-2014 actuals, 2015-2023 Forecast**

<b>REVENUES in HRK million</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>
Passenger fares	309	275	287	305	320	323	340	349	349	349	349
Operating subsidy	355	505	505	505	500	495	485	485	485	485	485
Other (incl. subsidy amortization)	208	184	167	104	104	100	100	172	12	11	11
<b>Total revenues</b>	<b>872</b>	<b>964</b>	<b>959</b>	<b>914</b>	<b>924</b>	<b>918</b>	<b>925</b>	<b>1,007</b>	<b>847</b>	<b>846</b>	<b>845</b>
<b>OPERATING EXPENSES</b>											
Track access charge	91	69	74	75	78	79	80	80	80	80	80
Staff	303	269	268	262	256	253	253	258	263	269	274
Materials	41	35	15	17	16	17	18	18	19	19	19
Maintenance	152	142	142	142	127	130	137	143	147	151	156
Energy	146	129	124	129	124	119	114	117	119	121	124
External services	66	55	55	51	53	52	51	52	53	54	55
Other	156	20	13	13	12	12	12	13	13	13	13
<b>Total operating expenses</b>	<b>955</b>	<b>717</b>	<b>691</b>	<b>690</b>	<b>667</b>	<b>662</b>	<b>666</b>	<b>681</b>	<b>694</b>	<b>708</b>	<b>722</b>
<b>OPERATING PROFIT/(LOSS)</b>	<b>(83)</b>	<b>248</b>	<b>268</b>	<b>224</b>	<b>257</b>	<b>256</b>	<b>259</b>	<b>326</b>	<b>152</b>	<b>138</b>	<b>123</b>
<b>NON-OPERATING ADJUSTMENTS</b>											
<b>Total non-operating adjustments</b>	<b>(35)</b>	<b>(22)</b>	<b>(14)</b>	<b>(8)</b>	<b>(8)</b>	<b>(8)</b>	<b>(8)</b>	<b>(9)</b>	<b>(9)</b>	<b>(9)</b>	<b>(9)</b>
<b>EBITDA</b>	<b>(118)</b>	<b>226</b>	<b>254</b>	<b>216</b>	<b>249</b>	<b>248</b>	<b>251</b>	<b>317</b>	<b>143</b>	<b>129</b>	<b>114</b>
Depreciation*	216	211	212	211	216	217	216	106	57	46	46
<b>EBIT</b>	<b>(334)</b>	<b>15</b>	<b>42</b>	<b>5</b>	<b>33</b>	<b>30</b>	<b>35</b>	<b>212</b>	<b>86</b>	<b>83</b>	<b>68</b>
Net finance expenses	28	15	35	40	64	94	87	76	62	50	37
Income tax	-	-	-	-	-	-	-	-	-	-	-
<b>NET INCOME</b>	<b>(362)</b>	<b>(0)</b>	<b>7</b>	<b>(35)</b>	<b>(32)</b>	<b>(64)</b>	<b>(53)</b>	<b>136</b>	<b>24</b>	<b>33</b>	<b>30</b>

\*HZP plan included lower depreciation from 2016 as a result of the extension of the useful life of the old rolling stock. This Financial Plan does not take into account this change in the accounting policy.

**Figure 11: Evolution of HZ Passenger Operating Financial Figures**



## Debt

7. **HZP has been heavily supported by the different type of government financial assistance which on one side enabled HZP to service loan repayment and interest, and on the other side resulted in full reliance on state subsidies and postponement of needed reforms.** Financial restructuring started in 2014 with the conversion of HRK 278.4 million loan related liabilities into equity. In 2016, the restructuring plan envisages another capital increase in the form of a contribution in kind of a land worth HRK 186 million (workshop for the maintenance of HZP wagons – currently in public domain), and take over of a HRK 250 million loan with a state guarantee. After these injections of capital, the share capital will increase to HRK 511.9 million providing stronger balance sheet position and lower debt obligations. At the end of 2014, the long term liabilities amounted to HRK 683 million and with the planned investment loans, they will be increased to HRK 1,998 million at the end of 2017.

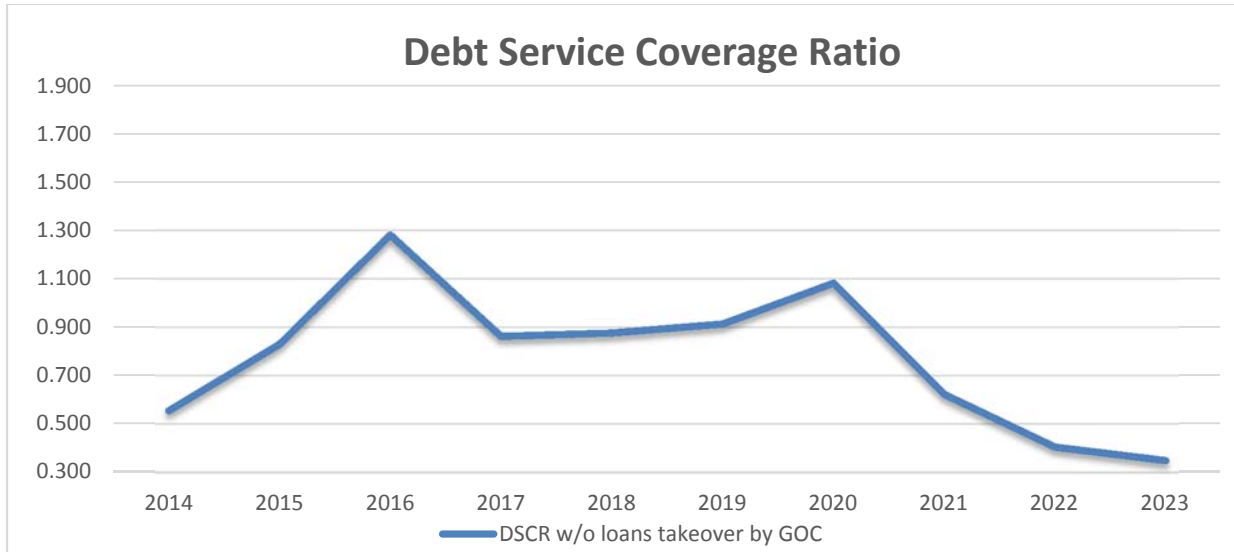
## Cash Flow

8. **In the past, HZP has been able to operate without major cash flow disruption** as it was heavily supported by different types of government financial assistance including capital increase through loan assumption, cancellation of payables to HZI, PSO and loans supported by state guarantees. Planned operating cash flow is positive mainly thanks to PSO and transport revenues. The forecast envisages loan assumption in 2015 and 2016 to cover the debt servicing obligations, while in the remaining years debt service coverage ratio is close or below 1. Overall net cash flow is positive only in 2015 and thereafter is negative. This implies the need for further cash inflows for example from sale of assets e.g. real estate which were not included in the projections due to uncertainty but are planned within the restructuring plan. Otherwise in order to meet debt servicing HZP will be forced to use the state guarantees or accumulate liabilities.

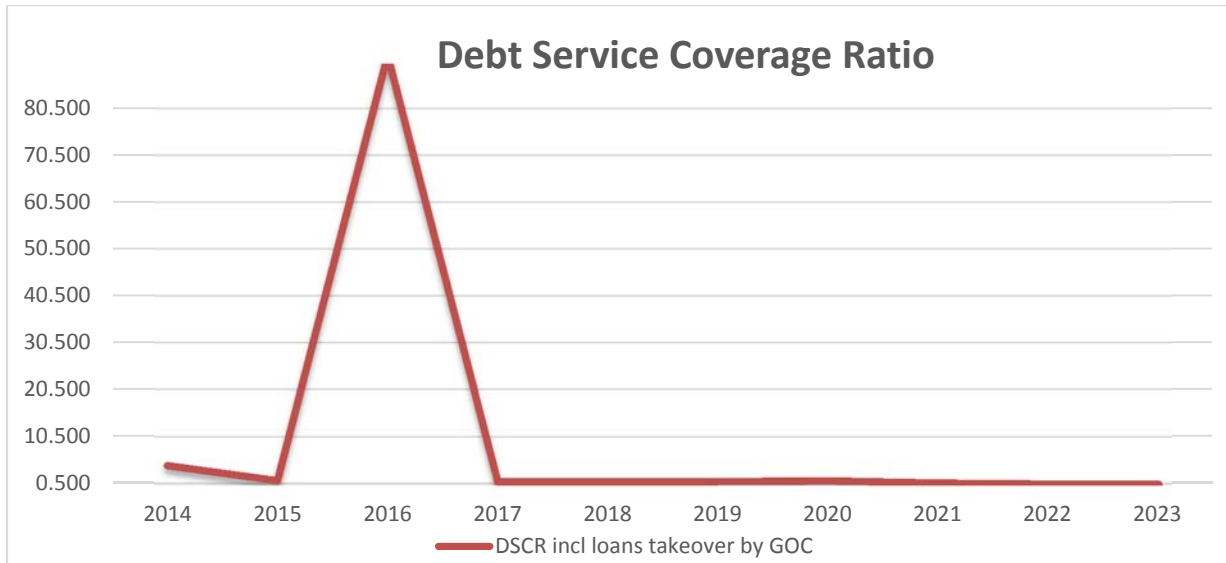
**Table 17: HZP Cash Flow forecast**

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
<b>OPERATING ACTIVITIES</b>											
Net income	(0)	7	(35)	(32)	(64)	(53)	136	24	33	30	28
Add interest and finance expenses	16	34	40	67	95	83	71	58	43	29	13
Realized foreign exchange gains and losses	(0)	(0)	-	-	-	-	-	-	-	-	-
<b>Adjustment for non-cash costs</b>											
Depreciation	211	212	211	216	217	216	106	57	46	46	46
Amortization of capital subsidy	-	-	-	-	-	-	-	-	-	-	-
<b>Change in working capital</b>											
Accounts receivable	15	2	2	1	(0)	1	1	-	-	-	-
Inventory	(5)	(6)	1	(4)	1	2	2	1	1	1	1
Other receivables	(3)	(2)	(8)	0	(0)	0	9	(21)	(0)	(0)	(0)
Accounts payable	(42)	(5)	(0)	(4)	(1)	1	3	2	2	2	3
Other payables	(21)	(11)	(10)	0	0	0	0	0	0	0	0
	<b>(70)</b>	<b>(9)</b>	<b>(5)</b>	<b>(1)</b>	<b>(1)</b>	<b>(2)</b>	<b>(9)</b>	<b>22</b>	<b>1</b>	<b>1</b>	<b>1</b>
<b>NET CASH FROM OPERATING ACTIVITIES</b>	<b>156</b>	<b>244</b>	<b>211</b>	<b>251</b>	<b>248</b>	<b>245</b>	<b>303</b>	<b>161</b>	<b>124</b>	<b>107</b>	<b>89</b>
<b>INVESTING ACTIVITIES</b>											
Acquisition of property, plant and equipment	334	413	759	686	27	18	-	-	-	-	-
Sale of property, plant and equipment	3	16	23	12	10	22	29	30	-	-	-
Other long-term assets	5	-	-	-	-	-	-	-	-	-	-
	<b>(336)</b>	<b>(397)</b>	<b>(737)</b>	<b>(673)</b>	<b>(17)</b>	<b>4</b>	<b>29</b>	<b>30</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>NET CASH FROM INVESTING ACTIVITIES</b>	<b>(336)</b>	<b>(397)</b>	<b>(737)</b>	<b>(673)</b>	<b>(17)</b>	<b>4</b>	<b>29</b>	<b>30</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>FINANCING ACTIVITIES</b>											
Repayment of loans	271	280	143	238	199	208	236	249	262	277	160
Proceeds from loans	260	541	571	672	-	-	-	-	-	-	-
Capital subsidy	-	-	186	-	-	-	-	-	-	-	-
Change in other long-term liabilities	(130)	(133)	(65)	(101)	(303)	(42)	-	-	(0)	(0)	0
Change in paid-in capital (incl. Loan assumption)	285	81	250	-	-	-	-	-	-	-	-
Interest and finance expenses	16	34	40	67	95	83	71	58	43	29	13
Dividends paid	-	-	-	-	-	-	-	-	-	-	-
	<b>128</b>	<b>175</b>	<b>760</b>	<b>266</b>	<b>(597)</b>	<b>(333)</b>	<b>(307)</b>	<b>(306)</b>	<b>(306)</b>	<b>(305)</b>	<b>(173)</b>
<b>NET CASH FROM FINANCING ACTIVITIES</b>	<b>128</b>	<b>175</b>	<b>760</b>	<b>266</b>	<b>(597)</b>	<b>(333)</b>	<b>(307)</b>	<b>(306)</b>	<b>(306)</b>	<b>(305)</b>	<b>(173)</b>
	<b>(52)</b>	<b>22</b>	<b>235</b>	<b>(156)</b>	<b>(367)</b>	<b>(85)</b>	<b>25</b>	<b>(116)</b>	<b>(182)</b>	<b>(199)</b>	<b>(84)</b>
<b>NET CHANGE IN CASH</b>	<b>(52)</b>	<b>22</b>	<b>235</b>	<b>(156)</b>	<b>(367)</b>	<b>(85)</b>	<b>25</b>	<b>(116)</b>	<b>(182)</b>	<b>(199)</b>	<b>(84)</b>
<i>Cash balance at beginning of year</i>	9	(42)	(20)	215	58	(308)	(393)	(368)	(484)	(666)	(865)
<i>Cash balance at end of year</i>	(42)	(20)	215	58	(308)	(393)	(368)	(484)	(666)	(865)	(949)
DSCR w/o loans takeover by GOC	0.55	0.83	1.28	0.86	0.88	0.91	1.08	0.62	0.41	0.35	0.51
DSCR incl loans takeover by GOC	4.34	1.12	91.83	0.86	0.88	0.91	1.08	0.62	0.41	0.35	0.51

**Figure 12: Debt Service Coverage Ratio without loans takeover by GoC**



**Figure 13: Debt Service Coverage Ratio without loans takeover by GoC**



**Conclusions**

9. The increased level of PSO provides some comfort and safety net for HZP to survive during the restructuring process showing net profit during the forecasted period. Both positive operational profits and accumulated retained earnings at the end of 2023 provide good basis to achieve some levels of financial stability. However the current restructuring measures must be intensified with additional actions in order to limit the risk on cash flow. This could for example include proactive marketing efforts on the revenue side, sale of non-core or redundant assets, further cost savings measures.

## B. HZC

10. In 2014 HZ Cargo started to develop a restructuring plan covering periods 2014-2018 which is still in the process of finalization. The analysis here uses the financial and operational figures given in this plan.

### Traffic and Revenue

11. Traffic forecast has been shaped around the expected competition due to liberalization of the market in 2015, which would result in a decrease of 7 percent in HZI ton-km figure for this year. Yet the company expects to adapt this new situation by slow but gradual ton-km growths as much as 1-4 percent per annum for 2016-2018 as well as unit revenue increase from 0.261 mil HRK per ton-km in 2014 to 0.306 mil HRK per ton-km in 2018 thanks to increased average transport routes from 197 km in 2013 to 239.2 km in 2018. This optimistic scenario would require enhanced infrastructure conditions, and pro-active marketing strategy to attract transit traffic.

**Table 18: Key Assumptions**

	2014	2015	2016	2017	2018
<b>Freight (thousand ton)</b>	10,656	9,000	9,000	9,000	9,000
<b>Freight (million ton-km)</b>	2,120	1,970	1,996	2,058	2,144
<b>Average Transport route (km)</b>	198.9	218.9	221.8	228.7	238.2
<b>Transport Revenue (million HRK)</b>	554.9	529.6	559.4	600.4	657.7
<b>Average Tariff per TKM</b>	0.26	0.27	0.28	0.29	0.31
<b>Track Access Charges (million HRK)</b>	59.0	54.0	58.5	54.5	51.8
<b>HZ Cargo Entity Staff</b>	1,912	1,418	1,418	1,418	1,418
<b>Staff Cost (million HRK)</b>	326.2	235.5	223.4	200.8	200.2

12. The major source of HZC revenue will come from goods transportation, increasing from its lowest point of 529.6 mil HRK in 2015 to 657.6 mil HRK in 2018 in line with traffic forecast. In 2014 the majority i.e. 73 percent of transport revenues was generated from international routes, which is forecasted to decrease to 70 percent in 2018. Other income items such as sales of various services and assets, wagon rentals etc. do not differ significantly compared to that of previous years. Until 2015 the other revenues in the magnitude of HRK 190 million include also income from amortization of capital investment subsidies which will be fully depreciated in 2015. Hence without this allocation in 2016 both operating result and net profit will significantly decrease.

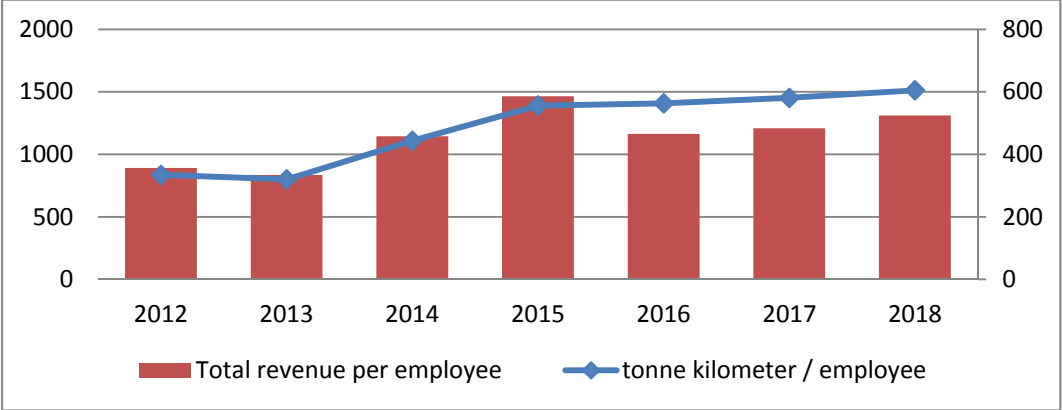
### Expenses

13. In 2013, the operating expenses of HZ Cargo amounted to HRK 980 million. By 2018, it is planned to be around HRK 697 million, a total of 41 percent decrease. Payroll is the largest component of operating expenses, accounting for approximately 36 percent in 2013. It should represent 26 percent by the end of the plan. This will mostly be achieved on two conditions: (i)

retrenchment strategy envisioning halving the employee number (ii) smaller salary increases. This plan has so far been implemented, HZC has reduced the employee number by 212 in 2013 and by 774 in 2014. After implementing the final phase of retrenchment in amount of further 494 employee reduction in 2015, HZC plans to have 1,418 employees for 2016 onwards.

14. Depreciation is the second largest operating expense, accounting for 23 percent of operating expenses in 2013. Amortization will be decreasing during the forecast period. HZ Cargo has currently a fleet large in size, but low in efficiency. Reduced traffic should trigger implementation of a well-organized divestment plan to keep depreciation at the projected levels. Aggressive decrease in transport assets, starting from 2014, also confirms HZ Cargo’s intention on scrapping or selling excess capacity in the fleet while rehabilitating useful assets. This resulted in significant write-offs of assets of HRK 163 million in 2014 adding to the increased net loss in 2014. A further issue is the spare parts and other materials that are out of use, but counted in the inventory and the aggregated transport assets figures in balance sheet do not show if this issue will also be tackled. Energy and material costs are the other worth mentioning cost components, accounting for 14 percent and 6 percent in 2013.

**Figure 14: Evolution of Staff Productivity**



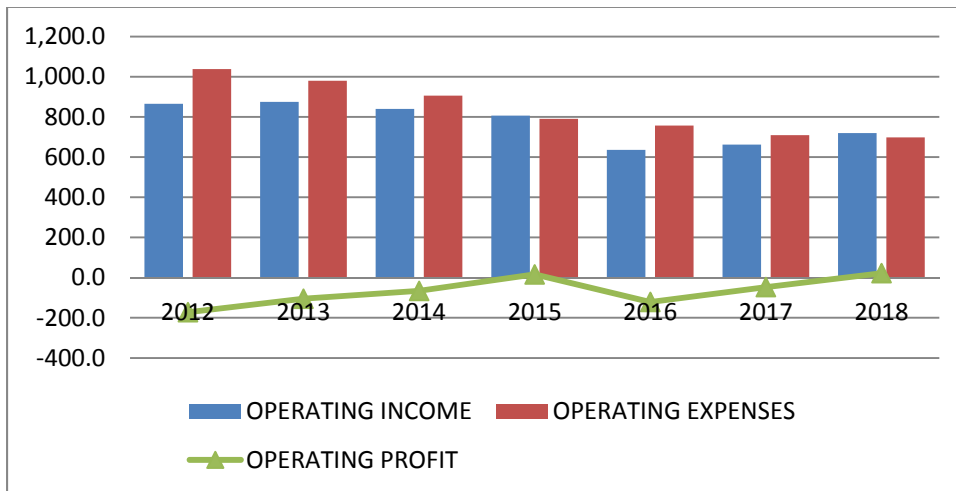
**Profit**

15. HZC has been loss making since 2012 with huge accumulated loss of HRK 734.8 million until 2014. The negative figures is forecasted to continue but with progressive improvements until 2018 where a positive net profit of HRK 10.8 million will finally be achieved. This heavily relies on two factors: (i) improved operational efficiency, resulting from constantly declining operating expenses in spite of fluctuating operating income, (ii) controlling depreciation through divestment of obsolete and unnecessary assets. Reflecting this target, EBITDA is expected to surge from HRK 121 million in 2013 to HRK 223 million in 2018.

**Table 19: Evolution of HZ Cargo Profits (mil HRK)**

	2013	2014	2015	2016	2017	2018
<b>Operating income</b>	874.8	839.7	806.4	635.8	661.8	719.8
<b>Operating expenses</b>	979.9	905.7	790.3	757.1	709.0	697.8
<b>Depreciation</b>	226.4	221.0	216.0	211.0	206.0	201.0
<b>EBITDA</b>	121.3	155.0	232.1	89.7	158.8	223.0
<b>Operating profit</b>	-105.1	-66.0	16.1	-121.3	-47.2	22.0
<b>Total income</b>	897.5	875.5	830.4	659.8	685.8	743.8
<b>Total expense</b>	1095.7	1163.6	845.5	792.4	744.3	733.0
<b>Debt service</b>	158.5	12.0	21.3	27.3	105.3	115.3
<b>Net profit</b>	-198.2	-288.1	-15.1	-132.6	-58.5	10.8
<b>Working ratio</b>	0.9	1.0	0.7	0.9	0.8	0.7

**Figure 15: Evolution of HZ Cargo Operation Related Financial Figures (1,000 HRK)**



## Debt

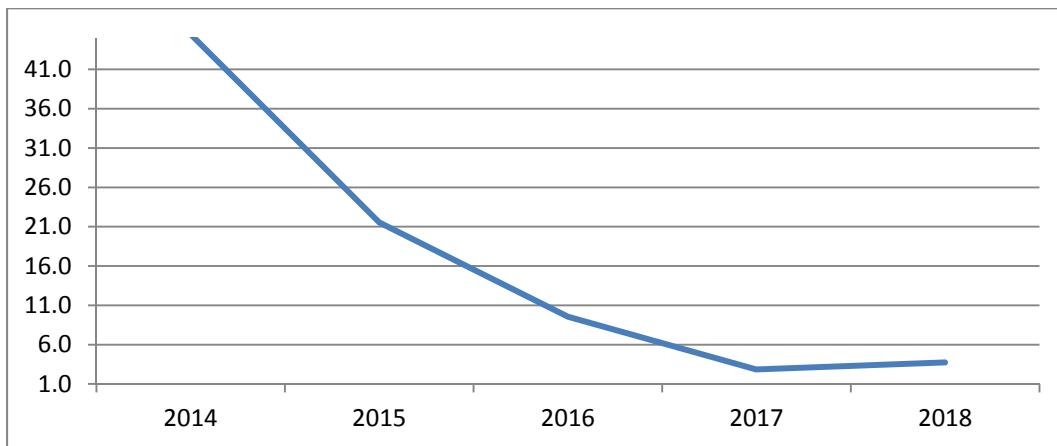
16. The accelerated losses in 2012-2013 together with the huge debt obligations obliged the Government of Croatia to financially support HZC in 2014. Taking over six long-term and one short term loans amounting to HRK 954.6 million, the government's share capital increased to HRK 744.4 million in this year. This capital injection let the company survive, improving its balance sheet and almost totally clearing its debts and accumulated losses. However, for the second phase of restructuring, HZC has withdrawn new loans, primarily for severance payments as a result of new retrenchment, smoothing of accounts payable and minor investments. Envisioning no new external finance, HZC forecasts to service the debt on its own and reduce long term liabilities from HRK 400 million in 2015 to HRK 305 million at the end of 2018.

## Cash Flow

17. In the past (2012-2014), HZC significantly struggled in generating liquidity for its operations (also due to poor collection of trade receivables) and heavily used borrowings to secure

necessary funds. This hardship is expected to continue in the restructuring period from 2015 to 2017, as HZC forecasts to have a positive increase in cash flow of HRK 73.4 million only in 2018. During the transition period, the company plans to raise cash from sale of assets (RZV Cakovec), a new loan in 2015 and better collection of trade receivables. Additional cash inflows would also be possible through further sale of assets or receivables or excessive inventory. Thanks to the grace period of loans during the forecast period, debt servicing, covering only small short term loans, would not be expected to disrupt the cash flow. Starting from 2018, smoother cash flow should allow sufficient debt servicing ratios

**Figure 16: Debt-service coverage ratio**



### **Conclusion**

18. The financial forecast of HZ Cargo, prepared as part of company's business plan implies ambitious and significant financial changes compared to the current situation. It relies on radical reforms: serious cost-cutting through retrenchment, rationalized material, maintenance and energy cost in connection to less train-km but improved intensities, profit-improving market oriented operations, well organized asset management plans and improved collection of trade receivables. These are the only way to limit the inevitable diversion of part of the transit traffic to new private operators. If only the proposed measures are fulfilled, improved operating profit, sufficient debt-coverage ratio, and long term financial viability as envisaged in the forecast could be achieved. The company has so far implemented its plan in 2014 but will require strong commitment to continue.

### **C. HZ Infrastructure**

#### **Introduction**

19. This section describes the financial situation of the HZ Infrastructure (HZI) in 2014 and the financial forecast of its operations for 2015-2023. HZ Infrastructure has prepared and is implementing a restructuring plan.

20. The traffic forecast for HZI is based on the passenger and freight traffic forecasts for HZ Cargo and HZ Passenger Transport. Private operators are expected to penetrate the market in 2015 and increase their share in the market continuously.

**Revenue**

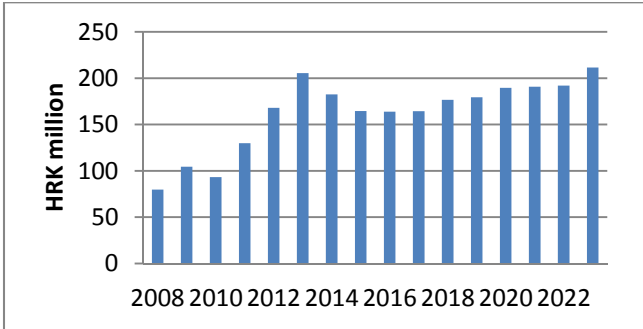
21. HZ Infrastructure has two main sources of revenue, infrastructure access fees (14 percent) and Government subsidy (71 percent). HZI revenue also includes amortization of investment grants. The increase in revenue in 2014 was driven by 85 percent growth of revenues from funding (operating subsidy that now includes revenue from fuel tax charges) and 17 percent increase in other revenue, including earnings from commercialization of real estate assets.

22. **Access Fee Revenue.** HZI receives infrastructure access fees from railway companies licensed to operate in Croatia. HZ Cargo remains HZI’s major client, although competition from private freight operators is expected as of 2015 which would likely lead to freight market redistribution. HZC currently accounts for 67 percent of gross ton-km transported and around 62 percent of HZ’s revenue from infrastructure charges and fees.

23. The revenue from access fee declined by HRK 23 million in 2014 following a reduction in freight turnover by 3 percent in gross ton-kilometers and 1.5 percent in train-kilometers, and a 8 percent decline in gross ton-km and 8 percent in train-km for passenger transportation. The trend is likely to persist in 2015 putting a downward pressure on HZI operating revenue and increasing its reliance on state support.

24. A new track access charge formula (TAC) was introduced in 2014. According to the Network Statement, the basic price of TAC per train-km in Croatia is determined on the basis of direct costs for the maintenance of railway infrastructure, the cost of railway infrastructure management, and train kilometers realized. A price correction ‘K’ is part of the formula used to calculate the TAC, and is determined in agreement with the Government depending on the transport market condition and the amount of State subsidies for the railway infrastructure costs. The correction coefficient in the current methodology for TAC calculation is decreased from K=1 to K=0.5. Based on the assumption that the TAC will remain at its current level to incentivize the freight market, the income from access tariff revenue is forecast to range between HRK 165 and 210 million in the period 2015 – 2023 based on conservative traffic forecast. The forecasted decline in HZI TAC revenue is expected to entail higher reliance on operating subsidies from the Government that have traditionally constituted HZI’s main source of revenue.

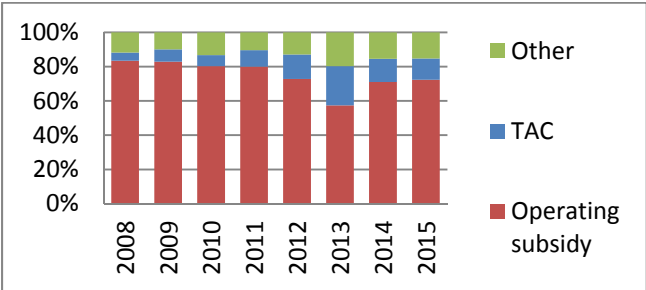
**Figure 17: HZI Revenue from Track Access Charges, Actual 2008-2014, Forecast 2015-2023**



25. Because of operators’ financial distress, they have not been able to pay regularly the cost of access charges to HZI, in particular HZC. According to Audited Financial Report of HZI for 2013, HZI holds HRK 397 million in accounts receivable; trade receivables make up HRK 277 million of this amount and exceed HZI’s entire access revenue in 2013. HZI’s largest debtor as of December 31, 2013 is HZC followed by HZP. The cumulative share of HZ companies in HZI’s account receivable constitutes almost 66 percent.

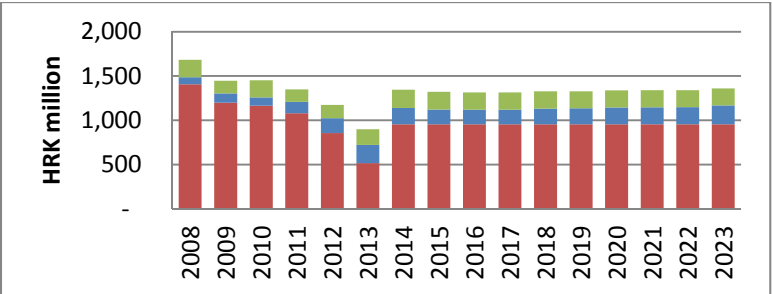
26. **Infrastructure Operating Subsidy.** HZI receives an operating subsidy from the State that has a decreasing trend from 2008. Since then the operating subsidy has decreased by 63 percent to HRK 516 million. However, in 2014 the Government introduced a new type of subsidy to HZ Infrastructure by transferring around HRK 440 million annually from fuel tax charges. This brings the overall operating subsidy to HRK 956 million in 2014, which is expected to remain at this level in the medium term.

**Figure 18: Increasing share of operating subsidy in HZI’s operating revenue, 2008-2015**



27. **Summary.** The graph below shows the overall revenue forecast for HZI, including showing access fee revenue, operating subsidy revenue, and other revenue through 2023.

**Figure 19: HZI Revenue, Actual 2008-2014, Forecast 2015-2023**



28. Labor is the largest component of HZI expenses, representing 53 percent of operating costs. HZI has taken steps to optimize its labor resources between 2012 and 2014 —HZI reduced employee numbers from 6,408 in 2012 to 5,416 in 2014 (of which 796 staff transferred to newly created subsidiary, Pruzne Gradjevine, which merged several previous subsidiaries). Nevertheless, HZI’s average of 2.08 staff per km in 2014 (2.44 staff per km in 2011) is relatively high among EU railway infrastructure managers, and the staff costs have not declined as fast as expected. HZI wage bill contracted only by 1.7 percent in 2014 compared to a year before. Total wage bill in

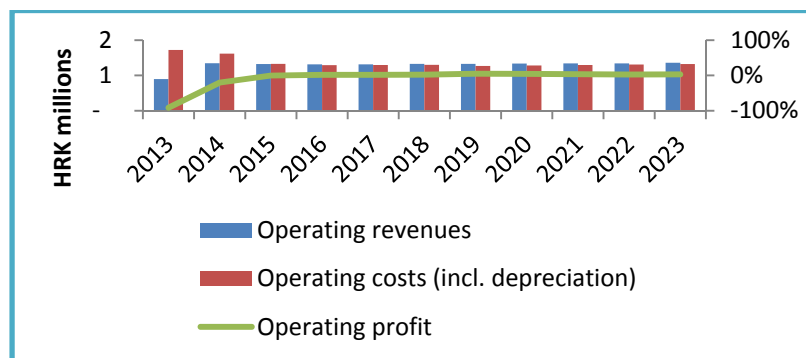
2014 was HRK 827 million compared to own revenues from track access charge of HRK 183 million.

29. Additional staff reductions are planned throughout the restructuring period until 2019 when HZI expects to have 4,709 employees. The financial forecast accounts for the planned staff optimization measures and associated costs. After 2015, the wage rates are forecast to partially increase with inflation.

30. HZI’s expenses are forecast based on the size of the infrastructure network HZI maintains and operates. The forecast is based on the assumption that the network size will remain constant at 2,603 km from 2014 onwards. The unit costs for each cost category are forecast to increase with inflation. Depreciation is expected to diminish during the forecast period due to limited planned investments in assets outside public domain.

31. **Profit.** HZI reported improvements in financial performance in 2014. The railway infrastructure manager reduced its operating losses from HRK 763 million in 2013 to less than HRK 220 million despite a decline in income from infrastructure charges and fees. With the planned reduction in operating costs and clearance of receivables from HZC and HZP following the financial restructuring of the companies, the forecast shows HZI will have an operating profit starting in 2015. A positive trend in operating profit is forecasted to be sustained in the medium-term.

**Figure 20: HZI Operating Profit, Actual 20013-2014, Forecast 2015-2023**



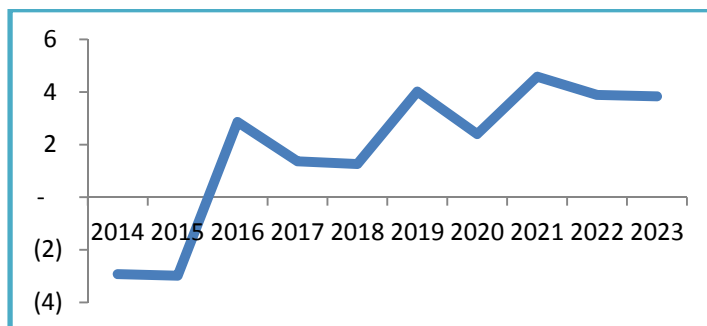
## Debt

32. HZI had large loan obligations amounting to HRK 695 million as of December 31, 2014. The company had not been able to service its debt to all creditors which lead to progressive taking over of loan obligations by the State in the amount of HRK 2,070 million due until 2022. However, the majority of these loans have been used for financing investments in the public domain without any compensation from the State given to the company for servicing these obligations. The liquidity and solvency indicators demonstrated further improvement in 2014, attesting to HZI’s sustained ability to service its current obligations. Interest is forecast based on HZI’s loans, which are quite small, and expected to remain a modest part of HZI’s capital structure.

33. The balance sheet of HZI contains two types of assets—those owned by the company, and public domain assets (e.g., railway lines). Public domain assets are exclusively owned by the State, but used and maintained by HZI. They represent 65 percent of the company’s fixed assets and do

not depreciate. Therefore, the depreciation expenses are forecast based on the value of the remaining assets outside of the railway lines themselves.

**Figure 21: HZI Debt Service Coverage Ratio, Actual 2013-2014, Forecast 2015-2023**



### Cash Flows

34. **Operations.** HZI has experienced negative cash flow from operations in the range between HRK 115 million to HRK 250 million over the last four years, partly because of operational losses and partly because HZI was not able to collect its receivables (mainly for infrastructure access charges), which has caused a large increase in accounts receivable for HZI. As HZI cuts its cost and its operations become more profitable, the cash from operations is expected to improve. HZ companies are expected to pay its current access charge from 2013 and payback the arrears in infrastructure charges over time.

35. **Investment.** Government is responsible to provide investment funds for HZI that is only managing the infrastructure assets (public domain) on behalf of the State. In 2014, the Government has provided an investment subsidy of HRK 123 million per year. HZI's projections foresee an increase in Government capital transfers to HRK 426 million in 2016, HRK 2,200 million in 2017, and HRK 2,260 million in 2018. The investments include the EU funded support, which account for a large increase in the capital subsidy. However, it is assumed that the EU funds that are expected to be allocated in the Operational Program Cohesion and Competitiveness 2014-2020 will be absorbed at the very slow rate.

### Conclusion

36. The financial autonomy of HZI remains limited and is forecasted to slightly improve during 2015-2023 due to a combination of factors, such as a constant subsidy, decrease in operating costs and market opening. However, very low level of TAC revenue and unclear investment planning threaten the financial stability of the company. For HZI to become financially sustainable it is necessary to implement operational and labor restructuring measures, including staff reduction, further rationalization of network size and a predictable investment plan.

## Annex 8: Maps of the railway Network





### CROATIA HZI RAILWAY NETWORK INTERNATIONAL PROJECTS

- |  |   |
|--|---|
| <ul style="list-style-type: none"> <li><span style="color: blue;">—</span> REPLACEMENT OF SWITCHES, ELECTRICAL AND SUPPORT SYSTEMS</li> <li><span style="color: black;">—</span> INTERNATIONAL RAIL LINES</li> <li><span style="color: red;">—</span> REGIONAL RAIL LINES</li> <li><span style="color: orange;">—</span> LOCAL RAIL LINES</li> </ul> | <ul style="list-style-type: none"> <li><span style="color: red;">★</span> NATIONAL CAPITAL</li> <li><span style="color: red;">⊙</span> COUNTY (ŽUPANIJA) CAPITALS</li> <li><span style="color: black;">○</span> MAIN CITIES AND TOWNS</li> <li><span style="color: black;">—</span> INTERNATIONAL BOUNDARIES</li> </ul> |
|--|---|



