# CHECKLIST of the ENVIRONMENTAL MANAGEMENT PLAN (EMP)

For the overhaul of diesel and electric locomotives and carriages for Croatian Railways Cargo (HZC) and Croatian Railway Passengers Transport (HZP)

#### INTRODUCTION

The main purpose of the Sustainable Croatian Railways in Europe Project (SUCRE) is to support Ministry of Maritime Affairs, Transport and Infrastructure (MMATI) and Croatian Railways companies (HZ Infrastructure HZI, HZ Passengers Transport-HZP and HZ Cargo-HZC) in further restructuring of national railways sector, assist them in achieving its economic sustainability as well as enable investments in order to increase efficiency of the railway system. The overall Project Development Objective (PDO) is to improve service and financial sustainability of the public rail sector.

The Project consists of four Components: (i) Component 1 supports MMATI in implementation of the overall sector reform and in coordination of the project implementation; (ii) Components 2-4 support the implementation restructuring programs in HZP, HZC and HZI, 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 periodic maintenance. Rolling stock maintenance is carried out for two beneficiaries -HZC and HZP. HZC will carry out overhauls of approximately 10 locomotives (7 electromotor and 3 diesel) and 7 periodical maintenances of locomotives (5 diesel and 2 electromotor ones). HZP plans to carry out periodical maintenance of locomotives and passenger carriages.

# **ENVIRONMENTAL CATEGORY**

Activities encompassed by the project that might produce adverse environmental impacts are tied to works under Component 2 of the project in the part related to overhaul and maintenance of locomotives and passengers carriages for HZP, Component 3 - overhaul and maintenance of locomotives for HZC and component 4 - Emergency repairs. For that reason, project activities triggered OP/BP 4.01 Environmental Assessment policy; however, these activities are expected to produce only temporary, typical, short term and limited adverse environmental impacts thus project is classified as category B project. Environmental Management Framework (EMF) has been prepared as a set of due diligence procedures ensuring compliance to WB policies, national legislation and good practices.

According to the EMF, for the overhaul and periodic maintenance of rolling stock as well as small, typical railway infrastructure emergency repairs, EMPs in the format of checklist (Checklist EMPs) are to be prepared in accordance with World Bank guidelines and policies. For larger, site specific construction interventions full EMP with mitigation measures and monitoring plan will be prepared. The works that already commenced require an audit report in order to establish compliance with WB and national policies hence eligibility for financing.

Table 1 Sub project environmental screening table for SUCRE Project

Types of Category B activities	Environmental Assessment documentation required	Applicable to:
1	Environmental Management Plans (EMP) for each individual construction (subproject)	Larger emergency repairs / upgrades (HZI)
2	Site-specific EMPs in form of a checklist	Smaller and typical emergency repairs (HZI), rolling stock maintenance and overhaul
3	Audit Report	Commenced emergency repairs

# Potential Environmental Impacts

The environmental impacts of the project are expected to be of manageable, easy to envisage, temporary and of local impact for both types of activities; (i) periodic maintenance and overhaul of rolling stock takes place in specialized premises equipped for exact type of work and predictable, exact type of environmental impact. These impacts most commonly include: hazardous and nonhazardous waste generation, recyclables, waste water and noise. (ii) Emergency repairs of railway infrastructure might produce typical construction related adverse impacts: dust and noise due to excavation, demolition and construction, management of demolition construction wastes and accidental spillage of machine oil, lubricants, fuel, anticorrosive agents, and other hazardous substances, potential encroachment to a private property, landslide risk, and traffic disturbance.

#### CHECKLIST EMP

## Application of the Checklist EMP

This Checklist EMP is applied for periodic maintenance and overhaul of rolling stock. It provides a "pragmatic good practice" and it is designed to be user friendly and compatible with WB safeguard requirements.

The checklist has four sections:

- Introduction or foreword part in which the project is introduced, environmental category defined, and Checklist EMP concept explained.
- Part 1 constitutes a descriptive part ("site passport") that describes the project specifics in terms of physical location, the institutional and legislative aspects, the project description, inclusive of the need for a capacity building program and description of the public consultation process. In this template, legislation overview is given of the Republic of Croatia. In the case of the contractor's repair facility would located elsewhere, the legislation overview needs to be supplemented by national legislation of the particular country as well as relevant measures; stricter regulations should apply.
- Part 2 includes the environmental and social screening in a simple Yes/No format followed by mitigation measures for any given activity type.

• Part 3 is a monitoring plan for activities during project implementation. It retains the same format required for standard World Bank EMPs. It is the intention of this checklist that Parts 2 and 3 be included as bidding documents for contractors.

The typical checklist format aims at covering all mitigating approaches of the joint contracts for construction / maintenance works related to localized impacts. The Checklist EMP presents the envisaged environmental impacts and offers the best operational practice for management of hazardous and non-hazardous solid wastes originating from maintenance activities as well as other like discharge control (i.e. dust, noise, and gas residues). It also offers instructions on avoidance of hazardous substances as toxic paints, solvents or cleaning solutions.

# Application of the Checklist EMP

The design process for the envisaged overhaul and periodic maintenance of rolling stock in Sustainable Croatian Railways in Europe Project are carried out in three phases:

- 1) General identification and scoping phase, in which the rolling stock (locomotives and carriages) for overhauling and maintenance at HZC and HZP are identified as well as the works that needs to be carried out. During this stage environmental screening is implemented to the selected works hence main potential adverse impacts to the environment are identified. At this stage, Parts 1, 2 and 3 of the Checklist EMP are drafted. Part 2 of the Checklist EMP can be used to select typical activities from a "menu" and relate them to the typical environmental issues and mitigation measures.
- 2) Detailed planning and tendering phase, including specifications and bills of quantities for individual vehicles by integrating the environmental provisions in tabular format (See Parts 2 and 3). This phase also includes the tender and award of the works contracts. This phase finally defines the contractual obligations of the Contractor on environmental measures to be taken during the maintenance / rehabilitation process. The Checklist EMP should be submitted publicly at the tendering stage.
- 3) During the works implementation phase environmental compliance and other qualitative criteria are checked on the respective site by the site supervisor(s). The mitigation measures in Part 2 and monitoring plan in Part 3 are the basis to verify the Contractor's compliance with the required environmental provisions.

Practical application of the Checklist EMP will include the achievement of Part I for having and documenting all relevant site specifics. In the second part, the activities to be carried will be checked according to the envisaged activity type and in the third part the monitoring parameters will be identified according to activities presented in Part 2.

The whole Checklist EMP filled in table (Parts 1, 2 and 3) for each of the type of work should be attached as integral part of work contracts and as analogue with all technical and commercial conditions which should be signed by the contracting parties.

#### MONITORING AND REPORTING

For the monitoring of the Contractor's safeguards due diligence, the site supervisor or responsible person appointed by the Borrower (in the case of works that do not require engagement of supervising engineer; site supervisor in the further text) will work with Part 3 of the Checklist EMP, i.e. the monitoring plan. Part 3 is developed site specifically and in necessary detail, defining clear mitigation measures and monitoring which can be included in the works contracts, which reflect the status of environmental practice on the working site and which can be observed/measured/ quantified/verified by the supervisor during the works.

Part 3 would thus be updated and revised during the design process to practically reflect key monitoring criteria which can be checked during and after works for compliance assurance and ultimately the Contractor's remuneration.

Such mitigation measures include the use of Personal Protective Equipment (PPE) by workers in site, dust generation and prevention, amount of water used and discharged in site, waste water treatment, presence of proper sanitary facilities for workers, waste collection of separate types (mineral waste, wood, metals, plastic, hazardous waste, e.g. asbestos, paint residues, spent engine oil), waste quantities, proper organization of disposal pathways and facilities, or reuse and recycling wherever possible. In addition to Part 3, the site supervisor should check whether the contractor complies with the mitigation measures in Part 2.

An acceptable monitoring report from the contractor or site supervisor would be a condition for full payment of the contractually agreed remuneration, the same as technical quality criteria or quality surveys. To assure a degree of leverage on the Contractor's environmental performance an appropriate clause will be introduced in the works contracts, specifying penalties in case of noncompliance with the contractual environmental provisions, e.g. in the form of withholding a certain proportion of the payments, its size depending on the severity of the breach of contract. For extreme cases a termination of the contract shall be contractually tied in.

### ANNEXI: Checklist EMP for the overhaul activities

PART 1: INSTITUTIONAL & ADMINISTRATIVE						
Country	Croatia					
Project title	Sustain	able Croatian Railwa	ys in Europe			
Scope of project and activity	Reconstruction and maintenance of rolling stock					
	Project management					
Institutional arrangements (Name and contacts)	WB, Republic of Croatia, HZC, HZP (name)	Ministry of Maritime Affairs, Transport and Infrastructure	Local party and/or beneficiary HZC, HZP Responsible for the preparation of the Checklist EMP, public consultation of the Checklist EMP and procurement of works and site supervision (the works			

			and supervising contracts/appointments include tabular parts of the Checklist EMP)  Contractor (name needs to be updated after contracting) Responsible for the implementation of mitigation measures and monitoring according to Parts 2 and 3 of Checklist EMP	
		Supervision		
Implementation arrangements (Name and contacts)	WB Safeguards supervision (name)	Responsible for contracted site; supervising engineer or responsible person appointed by the Borrower Site supervisor  Site engineer (name needed to be updated after contracting) Responsible for implementation of the Checklist EMP from contractor side.	Local Inspectorate Responsible for occasional visits to the site or upon public complaint  HZC, HZP Responsible for supervision of overall project.	
SITE DESCRIPT	ION			
Name of site Describe site location	Contractor's workshop  Periodic maintenance and overhaul works on the diesel locomotives, electric locomotives, electro-engine trains and passenger carriages will be carried out on contractor's premises.  The works mostly take place in closed industrial halls. Contractors are tender selected and can be located anywhere in Croatia, and further.  Annex 1: Site information (figures from the site) [X] Y			
Who owns the land?	The land is a private (con	tractor's) property.		
Geographic description	Depending on the contractor			
LEGISLATION				
Identify national & local legislation &	The following Croatian Laws define a legal framework for environmental management: Environmental and Nature Protection Act (OG 80/13), Sustainable Waste management Act (OG 94/13), Regulation on categories,			

permits that
apply to project
activity

types and classification of waste with a hazardous waste catalogue (OG 50/05, 39/09), Waste management rulebook (NN 23/14, 51/14, 23/07, 111/07), Waste batteries and accumulators rulebook (OG 113/06, 31/09, 156/09, 45/12, 86/13), Packaging and packaging waste rulebook (OG 97/05, 115/05, 81/08, 31/09, 156/09, 38/10, 10/11, 81/11, 126/11, 38/13, 86/13), Waste oils rulebook (OG 124/06, 121/08, 31/09, 156/09, 91/11, 45/12, 86/13), Electric and electronic equipment waste management rulebook (OG 42/14, 48/14, 107/14, 139/14), Rulebook on environmental Pollutants Register (OG 35/08), Noise Protection Act (OG 30/09, 55/13), Rulebook on the highest levels of noise in human environment (OG 145/04, 46/08), Water Act (OG 153/09, 130/11, 56/13, 14/14)

#### PUBLIC CONSULTATION

Identify when / where the public consultation process took place EMP Checklist will be disclosed at the company's web site for the two weeks period. Stakeholders will be notified. The interested public will be encouraged to send comments and questions all of which will be addressed and included to the final version of EMP Checklist.

Time of the consultation is not yet identified.

# INSTITUTIONAL CAPACITYBUILDING

Will there be any capacity building?

[] N or [X]Y if Yes, Annex 2 includes the capacity building information

Will the site	ONMENTAL /SOCIAL SCREENING Activity	Status	Additional references
activity	A. General good practice	[] Yes [] No	See Section A below
include/involve any of the	B. Locomotive and electromotor train overhaul and repair	[] Yes [] No	See Section A, B below
following:	C. Passengers carriage overhaul and repair	[] Yes [] No	See Section A, C below
	D. Locomotive modernization	[] Yes [] No [] Possible	See Section <b>A</b> , <b>D</b> below
	E. Passengers carriage modernization	[] Yes [] No	See Section <b>A, E</b> below
	F. Passengers carriage - replacement of vital parts	[] Yes [] No	See Section <b>A, F</b> below
	G.	[] Yes [] No	See Section below
	H.	[] Yes [] No	See Section below

ACTIVITY	PARAMETER	MITIGATION MEASURES CHECKLIST		
A. General	Permits, Notification and	(a) All legally required permits, licenses and authorizations have been acquired for carrying out		
Conditions	Worker Safety	operations (e.g. operating permit, waste management permits, health and safety requirements)		
		(b) All work will be carried out in a safe and disciplined manner designed to minimize impacts on neighboring residents and environment.		
		(c) Workers' PPE complies with international good practice (wearing hardhats at all times, as needed masks and safety glasses, harnesses and safety boots)		
		(d) Appropriate signposting of the sites will inform workers of key rules and regulations to follow		
		(e) Working teams are adequately trained and experienced (in basic profession as well as H&S, emergency procedures, etc.)		
	Transportation of rolling	(a) Take road safety precautions in transportation of rolling stock to the repair premises and back		
	stock	(obtain necessary permits, ensure police escort, limit the speed, etc.)		
	Waste	<ul><li>(a) All wastes generated during works will be separately collected on site and handed over to the waste collection authorized companies. Make sure recyclables (glass, paper, etc.) are sent to recycling units and not disposed together with municipal waste (checking waste manifests).</li><li>(b) If waste is temporarily stored at site it has to be adequately protected from weather conditions or kept in closed containers</li></ul>		
		(c) Waste is collected from the site, transported and recycled/recovered/disposed only by authorized companies for waste collection and management		
		(d) Waste management documentation including permits (e.g. copy of contracted waste management		

ACTIVITY	PARAMETER	MITIGATION MEASURES CHECKLIST
		company authorization), waste manifests, feedback documentation etc. has to be kept and regularly updated
	Toxic / hazardous substances and waste management	<ul> <li>(a) Temporarily storage on site of all hazardous or toxic substances (including anticorrosive agents, dyes, varnishes, solvents, coolants, acids, hydraulic fluids, petroleum based fluids, petroleum contaminated solids such as oil filters and saturated spill absorbent material, alkalis, and other wastes) will be kept in safe containers labeled with details of composition, properties and handling information. These containers should be leak-proof in order to prevent spillage and leaching. These containers should poses secondary containment system such as bunds (e.g. bunded-container), double walls, or similar. Secondary containment system must be free of cracks, able to contain the spill and be emptied quickly.</li> <li>(b) The containers with hazardous substances must be kept closed, except when adding or removing materials/waste. They must not be handled, opened, or stored in a manner that may cause them to leak.</li> <li>(c) The containers holding ignitable or reactive wastes must be located at least 15 meters (50 feet) from the working facilities</li> <li>(d) All hazardous wastes, including liquids, contaminated packaging and solids are transported by specially licensed carriers and disposed in a licensed facility.</li> <li>(e) Paints with toxic ingredients or solvents or lead-based paints will not be used</li> <li>(f) Sludge from oil separator needs to be adequately handled and disposed in accordance with the national regulation</li> <li>(g) Absorbent materials and debris collected in the shop-floor (e.g. oily sand, oily wood-dust) also present toxic wastes thus are transported by specially licensed carriers and disposed in a licensed facility.</li> </ul>
	Water	<ul> <li>(a) Water used for washing the rolling stock and all other uses in the premises is taken from the existing water supply sources. No additional water sources are engaged.</li> <li>(b) Operating premises are equipped with waste water collecting system. Water is collected through this system and taken to the waste water treatment. Waste water treatment is minimally equipped with oil and grease separator after which waste water is either released to the municipal water collecting system (that includes further treatment), water treatment system on site or water is collected and taken for treatment elsewhere.</li> <li>(c) Waste water collected from the site must not be released to the environment without prior treatment.</li> <li>(d) Prevent, as much as possible, oil and other pollutants leakages to water</li> </ul>

ACTIVITY	PARAMETER	MITIGATION MEASURES CHECKLIST
		<ul><li>(e) Apply dry cleaning before washing the floor, working and other surfaces and rolling stock</li><li>(f) Use air nozzles for washing if applicable. If washing is conducted manually, contact sprays should be used. Avoid uncontrolled use of water.</li></ul>
	Air	<ul> <li>(a) Ensure all transportation vehicles and machinery is regularly maintained and attested</li> <li>(b) Ensure all vehicles and machinery runs on petrol from official sources (authorized gas stations) and on fuel determined by the machinery producer</li> <li>(c) There will be no excessive idling of vehicles and machinery on the site</li> <li>(d) Painting and varnishing is carried out in well ventilated closed spaces. Ventilated air has to be filtered before released to the environment. Ventilation system is regularly maintained and filters are regularly changed.</li> </ul>
	Noise	<ul> <li>(a) Noise in the overhaul premises should not exceed values set in the national legislation (in Croatia it is set in the Rulebook on the highest levels of noise in human environment (OG 145/04, 46/08))</li> <li>(b) Work during the night will be avoided if possible</li> <li>(c) During operations the engine covers of generators, air compressors and other powered mechanical equipment should be closed</li> <li>(d) Mechanical equipment to be effectively maintained</li> </ul>
B. Locomotive Overhaul	Waste	<ul> <li>(a) Adequate collection and storage of residual oils should be in place. Further collection should be carried out by licensed companies and disposed/recovered in a licensed facility.</li> <li>(b) Adequate collection and storage of oil contaminated cloths, clothes, spare parts, other parts (e.g. replaced reservoirs) materials, etc. Further collection should be carried out by licensed companies and disposed/recovered in a licensed facility.</li> <li>(c) Scraped metal, metal debris and other metal parts are separately collected and delivered for recycling.</li> <li>(d) Paint chips and sandblast grit are to be collected separately as potentially toxic waste and disposed adequately. This material, not prone to leaking, does not ned to be contained in double bounded containers, however, needs to be covered and protected from atmospheric influences. Further collection should be carried out by licensed companies and disposed/recovered in a licensed facility.</li> <li>(e) Rubber parts and rubber waste materials are separately collected and delivered for recycling.</li> <li>(f) Electronic parts and equipment (e.g. static converters) is considered toxic waste and need to be handed over to the authorized electronic waste management company and adequately disposed.</li> <li>(g) Accumulators and batteries present toxic waste and need to be handed over to the authorized electronic waste management company and adequately disposed.</li> </ul>

ACTIVITY	PARAMETER	MITIGATION MEASURES CHECKLIST
		<ul> <li>(h) PCBs might be contained in older transformers, condensers and other parts. Croatia is a signatory to Stockholm Convention thus PCB containing parts must not be refilled or replaced with PCB containing ones wherever the overhaul or maintenance takes place. All found PCB fillings and contaminated parts must be handed over to the authorized waste management company and adequately disposed.</li> <li>(i) Asbestosis inert, but potentially toxic and need to be handed over to the authorized waste management company and adequately disposed in accordance with the national legislation.(In Croatia this is Rulebook on methods and procedures for asbestos containing waste management (OG 42/07) which stipulates, among other things, (1) asbestos particles entering natural environments, including air and water, must be prevented at all stages of asbestos materials management and life cycle, such as transport (e.g. dusting), handing and final disposal (asbestos disposing sites are clearly marked) (2) asbestos waste can be handed over for further management and disposal only to licensed companies, (3) both asbestos waste producer and waste management company must keep records on asbestos waste (waste manifests).</li> </ul>
	Hazardous waste	<ul><li>(a) If mercury can be found in removed equipment (e.g. manometers) and it needs to be treated as toxic waste and handed over to the authorized waste management company and adequately disposed.</li><li>(b) Replaced lights are handled in accordance with the type. For lights such as fluorescent lights and compact fluorescent lights, since containing mercury, must be handed over to the authorized waste management company and adequately disposed.</li></ul>
	New materials and equipment	<ul> <li>(a) Air conditioners installed need to be CFC free</li> <li>(b) Avoid use of toxic dyes</li> <li>(c) Avoid installing manometers containing mercury</li> <li>(d) Avoid toxic anticorrosive agents</li> <li>(e) Avoid lightning containing toxic gasses (e.g. mercury)</li> </ul>
C. Passengers carriage overhaul	Waste Management	<ul> <li>(a) Adequate collection and disposal of oil contaminated cloths, clothes, spare parts, other parts (e.g. replaced reservoirs), materials, etc.</li> <li>(b) Scraped metal, metal debris and other metal parts are separately collected and delivered for recycling.</li> <li>(c) Paint chips and sandblast grit are to be collected separately as potentially toxic waste and disposed adequately. This material, not prone to leaking, does not ned to be contained in double bounded containers, however, needs to be covered and protected from atmospheric influences. Further collection should be carried out by licensed companies and disposed/recovered in a</li> </ul>

ACTIVITY	PARAMETER	MITIGATION MEASURES CHECKLIST
		licensed facility.  (d) Rubber parts and rubber waste materials are separately collected and delivered for recycling.  (e) Electronic parts and equipment (e.g. static converters) is considered toxic waste and need to be handed over to the authorized electronic waste management company and adequately disposed.  (f) Replaced lights are handled in accordance with the type. For lights such as fluorescent lights and compact fluorescent lights, since containing mercury, must be handed over to the authorized waste
	Air	management company and adequately disposed.  (a) In the case of air conditioners replacement if any contain CFC, it must be handed over to the authorized company and adequately disposed.
	Materials management	<ul><li>(a) Avoid use of toxic dyes</li><li>(b) Air-condition installed to the carriage must not contain CFC or any other ozone depleting gas.</li></ul>
	Toxic / hazardous substances and wastes management	<ul> <li>(a) Temporarily storage on site of all hazardous or toxic substances (including anticorrosive agents, dyes, varnishes, solvents, petroleum based fluids, petroleum contaminated solids such as oil filters and saturated spill absorbent material, alkalis, and other wastes) will be kept in safe containers labeled with details of composition, properties and handling information. These containers should be leak-proof in order to prevent spillage and leaching. These containers should poses secondary containment system such as bunds (e.g. bunded-container), double walls, or similar. Secondary containment system must be free of cracks, able to contain the spill and be emptied quickly.</li> <li>(b) The containers of hazardous substances should be placed in an leak-proof container to prevent spillage and leaching</li> <li>(c) The wastes are transported by specially licensed carriers and disposed in a licensed facility.</li> <li>(d) Paints with toxic ingredients or solvents or lead-based paints should be avoided</li> </ul>
D. Locomotive modernization	Waste	<ul> <li>(a) Electronic parts and equipment (e.g. static converters) is considered toxic waste and need to be handed over to the authorized electronic waste management company and adequately disposed.</li> <li>(e) Replaced lights are handled in accordance with the type. For lights such as fluorescent lights and compact fluorescent lights, since containing mercury, must be handed over to the authorized electronic waste management company and adequately disposed.</li> </ul>
	Air	(a) Air-condition installed to the carriage must not contain CFC or any other ozone depleting gas.
<b>E</b> . Passengers carriage modernization	Air	<ul><li>(a) In the case of air conditioners replacement if any contain CFC, it must be handed over to the authorized company and adequately disposed.</li><li>(b) New air-condition installed to the carriage must not contain CFC or any other ozone depleting gas.</li></ul>
F.	Waste management	(a) Electronic parts and equipment (e.g. static converters) is considered toxic waste and need to be

ACTIVITY	PARAMETER	MITIGATION MEASURES CHECKLIST
Replacement of		handed over to the authorized electronic waste management company and adequately disposed. A
vital parts		proof of waste disposal should be kept on site.
		(a) Accumulators and batteries must be separately collected and stored adequately. These items
		should be then handed over to the authorized waste management company (registered for
		managing such wastes) and adequately disposed.

# PART 3: MONITORING PLAN

Rehabilitation / W	Rehabilitation / Works Phase						
What	Where	How	When	By Whom	How much		
parameter is to be monitored?	is the parameter to be monitored?	is the parameter to be monitored (what should be measured and how)?	is the parameter to be monitored (timing and frequency)?	is the parameter to be monitored— (responsibility)?	is the cost associated with implementation of monitoring		
1.							
2.							
Operation Phase	Operation Phase						
1.							
2.							

# ANNEX II: Capacity Building

#### HZP

HZP does not have a specific department dealing with environmental issues. Persons designated for these issues are appointed based on technical needs and are usually part of technical staff, and do not have specific knowledge in environmental protection nor specific WB safeguards policy knowledge and neither it has recently participated in any WB projects and therefore lacks specific WB safeguards policy knowledge. In previous contracts for overhaul and periodic maintenance of locomotives and carriages the entire responsibility for environmental compliance and performance was assumed by the contractor.

Given the above, it can be concluded that the capacity for preparation and implementation of the project is insufficient. Therefore, the preparation of EMF and subsequent EMP Checklists will be done in close cooperation with the WB environmental specialist. Additional training of the staff regarding the WB safeguards policies and assistance in preparation of environmental due diligence documents and review of the same would be provided during the project implementation or earlier.

#### HZC

HZC does not have a specific department dealing with environmental issues though some environmental protection tasks are carried out by Department for Health and Safety, Fire Protection and Environmental Protection. However, this department has minor environmental protection responsibilities reduced to the main building waste management therefore it can be concluded that this department lacks technical knowledge for performing environmental compliance supervision of rolling stock overhaul and periodic maintenance. Persons designated for these issues, at this project, are appointed based on technical needs and are usually part of technical staff, and do not have specific knowledge in environmental protection nor specific WB safeguards policy knowledge and neither it has recently participated in any WB projects hence lacks specific WB safeguards policy knowledge. In previous contracts for overhaul and periodic maintenance of locomotives the entire responsibility for environmental compliance and performance was assumed by the contractor.

Given the above, it can be concluded that the capacity for preparation and implementation of the project is insufficient. Therefore, the preparation of EMF and subsequent EMP Checklists will be done in close cooperation with the WB environmental specialist. Additional training of the staff regarding the WB safeguards policies and assistance in preparation of environmental due diligence documents and review of the same would be provided during the project implementation or earlier.