

**INTEGRATED SAFEGUARDS DATA SHEET  
APPRAISAL STAGE**

**Report No.: ISDSA16011**

**Date ISDS Prepared/Updated:** 20-Jul-2016

**Date ISDS Approved/Disclosed:** 25-Jul-2016

**I. BASIC INFORMATION**

**1. Basic Project Data**

<b>Country:</b>	China	<b>Project ID:</b>	P153173
<b>Project Name:</b>	Anhui Road Maintenance Innovation and Demonstration Project (P153173)		
<b>Task Team Leader(s):</b>	Jens Christian Helbech Hede		
<b>Estimated Appraisal Date:</b>	09-May-2016	<b>Estimated Board Date:</b>	01-Sep-2016
<b>Managing Unit:</b>	GTI10	<b>Lending Instrument:</b>	Investment Project Financing
<b>Is this project processed under OP 8.50 (Emergency Recovery) or OP 8.00 (Rapid Response to Crises and Emergencies)?</b>			No
<b>Financing (In USD Million)</b>			
Total Project Cost:	296.40	Total Bank Financing:	150.00
Financing Gap:	1.62		
<b>Financing Source</b>			<b>Amount</b>
Borrower			144.78
International Bank for Reconstruction and Development			150.00
Total			294.78
<b>Environmental Category:</b>	B - Partial Assessment		
<b>Is this a Repeater project?</b>	No		

**2. Project Development Objective(s)**

The Project Development Objective (PDO) is to improve highway maintenance delivery and asset management capacity in the participating municipalities and county in Anhui Province.

**3. Project Description**

The project will focus its activities in six selected jurisdictions in Anhui Province - the municipalities of Hefei, Chuzhou, Suzhou, Anqing, and Xuangcheng, and Guangde County. The project comprises five components: Component A focuses on providing better systems for decision-making and reform business processes to adopt these improved capabilities; Component B focuses on improving

maintenance delivery through better contracting models and improving work quality and value-for-money; Component C focuses on improving maintenance delivery through better technologies and thus increase value-for-money; Component D focuses on improving the time taken to respond to emergency events and restoring road service promptly; and Component E will provide relevant training to stakeholders.

The project comprises the following five components:

**Component A: Road Asset Management System Upgrade.** This component will finance improvements in business processes through, inter alia: (a) the preparation of analyses and studies, system design, and provision of technical assistance; (b) the development and/or upgrading of computerized asset management systems, including road databases, asset management applications, and information publishing systems; (c) systems operation and management; and (d) training related to systems' operation.

The backbone of the system will be based on commercial-off-the-shelf systems (COTS); however, two of the modules will be bespoke developed (project management module and public information system). The systems upgrade will include integration of different management systems as well as features to engage road users in road asset monitoring. Based on lessons learned from similar activities, this component will focus on issues beyond computerized systems and will hence include the development and implementation of a "to be" model - i.e. of revised work organization and business processes, which will support better decision-making for maintenance planning and programming.

**Component B: Road Maintenance Commercialization.** This component will finance: (a) rehabilitation, upgrading and maintenance of about 775 km of selected roads in the participating municipalities/county (such as base reconstruction, resurfacing, paving and/or asphalt concrete overlaying, as the case may be, including associated shoulder, sidewalks, drainage, masonry, signage, lighting and ancillary works plus road safety improvements), utilizing a Performance-Based Contracting modality; and (b) provision of technical assistance, including the carrying out of related studies.

Each PBC contract will be of a five-year duration and will comprise about 50-150 km of roads, forming contiguous networks. The contracts will include provisions for input or output based works, including selected emergency works (1 percent of contract value) and implementation of road safety measures (2 percent of contract value).

**Component C: Innovative and Preventive Maintenance Technologies.** This component will finance: (a) application of innovative maintenance technologies for improvement, rehabilitation and resurfacing works on about 447 km of selected national and provincial roads, using traditional ad-measurement contracting models; and (b) provision of technical assistance, including the carrying out of related studies.

Pavement technologies will include technologies already tested on a small scale but are not yet incorporated in the Anhui portfolio, as well as technologies not yet tested in Anhui. Roads covered by this component will not be included under the PBC contracts. Studies of the performance of each tested technology will be undertaken to determine, which technologies are the most promising for provincial roll-out.

Component D: Emergency Response Capacity. This component will finance: (a) construction of maintenance emergency response centers in Hefei and Chouzhou municipalities; (b) installation of required maintenance emergency equipment in six (6) emergency centers; and (c) development of emergency management systems in the participating municipalities/county, and provision of related technical assistance.

Component E: Institutional Capacity Building. This component will finance provision of Project implementation support, including technical assistance activities, carrying out of sector strategic studies, monitoring and evaluation, as well as project management-related training, capacity building, and study tours.

Strategic studies will include: (i) assessment of funding requirements for the provision of sustainable funding for maintenance in Anhui; as well as (ii) strategies for the dissemination of experience on PBCs to support potential provincial and national roll-out.

#### **4. Project location and salient physical characteristics relevant to the safeguard analysis (if known)**

#### **5. Environmental and Social Safeguards Specialists**

Peishen Wang (GENDR)

Zhefu Liu (GSU02)

<b>6. Safeguard Policies</b>	<b>Triggered?</b>	<b>Explanation (Optional)</b>
Environmental Assessment OP/BP 4.01	Yes	<p>The project will include physical activities of road maintenance and construction of emergency response centers in participating municipalities and a county of Anhui Province. The road maintenance will include typical activities such as repairing potholes and cracks, road surface overlays and pavement rehabilitation. The emergency response centers are storage warehouses for emergency response equipment, vehicles and materials standing by for emergent road repair needs.</p> <p>All maintenance works will be conducted on existing roads and within the existing right-of-way, and maintenance materials (e.g. aggregate, sand, cement, asphalt etc.) are to be purchased from market suppliers, so there will not be new quarry sites or borrow pits involved. It is envisaged that the main environmental impacts of the road maintenance works will be construction related impacts, such as disturbance of road traffic, nuisance of dust and noise/vibration, management of wastes, worker and community safety, and impact on existing green belt etc. Therefore, the environmental and social impacts will be site-specific, temporary in nature, and can be readily managed with known mitigation measures and good construction management practice. The main social</p>

		impacts are workers who will be relocated to new job functions, as their current job will be outsourced to the private industry. However, the head counts are low and no layoff is envisaged. Therefore, the project is classified as Category B as per OP4.01. An EIA and an EMP have been prepared. Meanwhile, a dedicated Social Development Plan has also been developed which includes measures to mitigate potential impacts on workers.
Natural Habitats OP/BP 4.04	Yes	There are nine ecological sensitive sites (one nature reserve, three scenic areas, three forest parks and two wetland parks) identified where maintenance will be conducted on existing roads in/or along the boundary of these sites. One road is located in the experimental zone of a Yangtze alligator nature reserve. However, the project activity will only involve maintenance of existing roads, and the location is outside the core zone and buffer zone of the reserve, therefore the project activity will not lead to degradation or conversion of natural habitat. Eight other roads are boundary roads of parks, tourism zones, lakes and reservoirs, but as all maintenance works are to be done on existing roads for specific locations or by specific sections within ROW, little impacts are envisaged to these sites.
Forests OP/BP 4.36	No	The road maintenance works within the right-of-way on the existing roads will not have impacts on forests; therefore this policy is not triggered.
Pest Management OP 4.09	No	The project will not involve procurement of pesticide or have any impact on pest management practice. This policy is not triggered.
Physical Cultural Resources OP/BP 4.11	Yes	As all the road maintenance works will be within the right-of-way on the existing roads, there are no physical cultural resources (including ancient trees) involved. Nevertheless, the chance-find procedures is included in the EMP.
Indigenous Peoples OP/ BP 4.10	No	The Bank Policy OP 4.10 Indigenous People is not triggered. All of the proposed maintenance work will be carried out within the right-of-way of existing highways in five municipalities and one county. There is no ethnic minority communities in those municipalities and county. The IP screening of the proposed roads and the interviews with the departments in charge of the ethnic minorities in the municipalities and county concluded that the project areas are predominantly Han Chinese and there are no ethnic minority groups as defined by OP4.10 present in, or have collective attachment to the project areas.

Involuntary Resettlement OP/BP 4.12	Yes	<p>All of the road maintenance will be carried out within the right-of-way of existing highways. Furthermore, the upgrade and construction of emergency response centers are confirmed not to require any additional land. As no land acquisition and resettlement relocation will be required, a resettlement action plan has not been requested. Due diligence review was conducted to determine whether there were any links between the Bank-financed sub-projects and other construction activities on the proposed roads. It was found that no new proposals for civil works, which are linked to the Bank loan supported project, are anticipated. The due diligence review to linked projects will continue regularly throughout the project period.</p> <p>In case there are any project modifications causing land acquisition and resettlement relocation prior to the Closing Date of the Bank Loan, a resettlement policy framework has been prepared and locally disclosed to guide possible project modifications. As a result, OP 4.12 was triggered.</p>
Safety of Dams OP/BP 4.37	No	The project will not involve any dams. Therefore, the policy is not triggered.
Projects on International Waterways OP/BP 7.50	No	The project will not involve any international waterways. Therefore, the policy is not triggered.
Projects in Disputed Areas OP/BP 7.60	No	The project will not involve any disputed areas. Therefore, the policy is not triggered.

## II. Key Safeguard Policy Issues and Their Management

### A. Summary of Key Safeguard Issues

#### 1. Describe any safeguard issues and impacts associated with the proposed project. Identify and describe any potential large scale, significant and/or irreversible impacts:

##### Environmental safeguards

The project will include physical activities of road maintenance and construction of emergency response centers in five municipalities and one county of Anhui Province. The road maintenance will include rehabilitation works (repair of significantly damaged pavements and roadside facilities for full restoration to the original, or better, technical standard), resurfacing works (periodic repair and reinforcement of damaged parts of the pavement and roadside facilities), thin surfacing (typically addition of 1-2 cm thin surfacing layer on existing road surface), and routine maintenance (cleaning, crack sealing, shoulder mowing, side ditch dredging, and repair of traffic facilities). All these activities are on existing roads and within the right-of-way. The emergency response centers are storage warehouses for emergency response equipment, vehicles and materials standing by for emergent road repair needs.

Based on the environmental impact assessment, there are nine ecological sensitive sites (one

nature reserve, three scenic areas, three forest parks and two wetland parks) identified where maintenance will be conducted on existing roads in/or along the boundary of these sites. One road is located in the experimental zone of a Yangtze alligator nature reserve, therefore OP4.04 is triggered. Since the project activity will only involve maintenance of existing roads, and the location is outside the core zone and buffer zone of the reserve, the project activity will not lead to degradation or conversion of natural habitat. Eight other roads are boundary roads of parks, tourism zones, lakes and reservoirs, but as all maintenance works are to be done on existing roads for specific locations or by specific sections within ROW, little impacts are envisaged to these sites. Maintenance materials (e.g. aggregate, sand, cement, asphalt etc.) are to be purchased from market suppliers, so there will not be new quarry sites or borrow pits involved. All emergency response centers are using existing road maintenance stations sites (two empty sites owned by local transport bureau and reserved for maintenance centers). The main environmental and social impacts of the road maintenance works will be common construction-related impacts, such as disturbance of road traffic, nuisance of dust and noise/vibration, management of wastes, worker and community safety, and impact on existing green belt along the roads etc. The EIA concludes that potential environmental impacts of the project are found to be site-specific, temporary in nature and insignificant, and can be readily managed with known mitigation measures and good construction management practice. The project is classified as Category B as per OP4.01.

Due to road maintenance works under component B being outsourced to the commercial sector, 281 maintenance workers will be affected (188 permanent staff and 93 contracted staff), as their current job functions will be transferred to the commercial sector. A social impact analysis has been carried out to evaluate the impacts on these workers and a mitigation plan been developed to ease the transition. Permanent staff will be offered new positions either doing the same job, but on other road sections where maintenance is not commercialized, or being assigned new jobs at the maintenance centers. Staff still under contract will be relocated to other road sections, while other staff will be provided training opportunities.

#### Social safeguards

While the project as designed will not involve resettlement the Bank Policy OP 4.12 Involuntary Resettlement, the RAP was not requested, but it was triggered since a resettlement policy framework is prepared for unanticipated land acquisition and resettlement relocations that may arise due to any project modification during the project implementation. The resettlement policy framework also covers any potential temporary impacts on land use and businesses loss that may not be avoidable during construction.

The Bank Policy OP 4.10 Indigenous People is not triggered. All of the proposed roads to be rehabilitated will be carried out within the right-of-way of existing highways in five municipalities and one county. There is no any ethnic minority community in those municipalities and county. The IP screening of the proposed roads and the interviews with the departments in charge of the ethnic minorities in the municipalities concluded that the project areas are predominantly Han Chinese and there are no ethnic minority groups as defined by OP4.10 such as Manchu and Mongolian communities present in, or have collective attachment to the project areas.

Due diligence reviews were conducted by the national consulting team. Those six emergent centers will be built on the state owned land. The latest land that was converted from collective land to state owned land was incurred 5 years ago from now and the earliest land that was converted from collective land to state owned land was incurred 10 years ago. The land policy carried out by local land department was in consistence to national and provincial land regulations

and also consistence to the subject to the Bank policy. It was integrated into RPF. Please review the annex of RPF.
<b>2. Describe any potential indirect and/or long term impacts due to anticipated future activities in the project area:</b>
There is no major potential indirect and/or long term impacts due to anticipated future activities envisaged.
<b>3. Describe any project alternatives (if relevant) considered to help avoid or minimize adverse impacts.</b>
As a category B project, the project only supports maintenance and rehabilitation of existing roads and construction of emergency response centers in existing road maintenance center sites, therefore, the alternatives for locations and alignments are not a main concern of the project.
<b>4. Describe measures taken by the borrower to address safeguard policy issues. Provide an assessment of borrower capacity to plan and implement the measures described.</b>
<p>To address the potential environmental and social impacts, an EMP has been developed which specifies environmental management organization setup with clear responsibilities and capacity requirement, management of contractors and environmental supervision arrangement, environmental mitigation measures, monitoring and reporting plan, capacity training plan, and budget estimate.</p> <p>The EMP includes environmental mitigation measures for environmental and social issues related to the road maintenance and construction activities, including traffic disturbance, community and occupational health and safety, utility disruption, noise, dust, wastewater and solid waste management, water conservation and erosion control, etc. These measures will be incorporated into bidding documents and construction contracts for implementation.</p> <p>All project maintenance roads are identified during the preparation stage. However, it is possible that one or some sections under the Innovation Maintenance Technologies Component (Component C) may be adjusted during implementation stage. Therefore, the EMP also includes a framework procedure to guide the screening and any follow-up EA preparation for such changes, which will exclude any road sections falling into major environmental and social sensitive areas, require EIA preparation for major or medium repairs, or directly apply the existing EMP for simple activities of small repairs.</p> <p>The PMO will be responsible for safeguards implementation, and monitoring and reporting to the Bank. A dedicated liaison staff for environmental management will be hired. The Highway Bureaus of the respective pilot municipalities and county will serve as the Project Implementing Units (PIUs), and will be responsible for direct supervision of the performance of contractors within their jurisdictions. Environmental management units are in place within PIUs, with dedicated staff. Project supervision contracts include the environmental supervision clause that ensure daily on-site supervision.</p> <p>The updated social assessment shows that 281 workers will be affected by the outsourcing of road maintenance works to the commercial sector, including 188 permanent staff and 93 contracted staff. As per the Chinese labor law, and as confirmed through interviews with local government, none of the affected workers, including the contracted staff, will lose their jobs. Instead those workers will be offered similar work on other road sections or areas, or be transitioned into new job functions within current locations. Further broad public consultations will be undertaken in</p>

order to ensure that the maintenance reform will be satisfactory to all effected staff. Furthermore provincial policies will be developed to ensure the reform, if rolled out provincially, will not affect staff negatively.
<b>5. Identify the key stakeholders and describe the mechanisms for consultation and disclosure on safeguard policies, with an emphasis on potentially affected people.</b>
<p>The proposed project will generate benefits to road users, residents, businesses and government agencies in the participating municipalities and county in Anhui Province.</p> <p>During the EA preparation process, public consultations were conducted in all the project municipalities/county through a combination of opinion surveys and public meetings along the major selected roads and response center sites. Information about the project, potential environmental and social impacts, and planned mitigation measures were provided to the public during consultation. Main concerns from the public (i.e. traffic disturbance, safety, nuisance of noise etc.) have been adequately addressed in the EIA, and necessary mitigation measures were developed in EMP and the project design.</p> <p>The EIA/EMPs have been disclosed on the local governments' websites of all project municipalities/county, and will also be disclosed through the InfoShop.</p> <p>Through focus group discussions and key informant interviews, potentially affected workers have been consulted and obtained views and preferences regarding the impacts and mitigation measures, including training and job options and the budget to be supported by the municipal highway bureau. The highway bureaus in the municipalities will play a key role in determining and implementing their job transfer programs.</p>

### **B. Disclosure Requirements**

<b>Environmental Assessment/Audit/Management Plan/Other</b>	
Date of receipt by the Bank	30-Mar-2016
Date of submission to InfoShop	20-Jun-2016
For category A projects, date of distributing the Executive Summary of the EA to the Executive Directors	
"In country" Disclosure	
China	22-Mar-2016
<i>Comments:</i>	
<b>Resettlement Action Plan/Framework/Policy Process</b>	
Date of receipt by the Bank	24-Mar-2016
Date of submission to InfoShop	20-Jun-2016
"In country" Disclosure	
China	22-Mar-2016
<i>Comments:</i>	
<b>If the project triggers the Pest Management and/or Physical Cultural Resources policies, the respective issues are to be addressed and disclosed as part of the Environmental Assessment/Audit/or EMP.</b>	
<b>If in-country disclosure of any of the above documents is not expected, please explain why:</b>	
NA	



### C. Compliance Monitoring Indicators at the Corporate Level

<b>OP/BP/GP 4.01 - Environment Assessment</b>	
Does the project require a stand-alone EA (including EMP) report?	Yes [ <input checked="" type="checkbox"/> ] No [ <input type="checkbox"/> ] NA [ <input type="checkbox"/> ]
If yes, then did the Regional Environment Unit or Practice Manager (PM) review and approve the EA report?	Yes [ <input checked="" type="checkbox"/> ] No [ <input type="checkbox"/> ] NA [ <input type="checkbox"/> ]
Are the cost and the accountabilities for the EMP incorporated in the credit/loan?	Yes [ <input checked="" type="checkbox"/> ] No [ <input type="checkbox"/> ] NA [ <input type="checkbox"/> ]
<b>OP/BP 4.04 - Natural Habitats</b>	
Would the project result in any significant conversion or degradation of critical natural habitats?	Yes [ <input type="checkbox"/> ] No [ <input checked="" type="checkbox"/> ] NA [ <input type="checkbox"/> ]
If the project would result in significant conversion or degradation of other (non-critical) natural habitats, does the project include mitigation measures acceptable to the Bank?	Yes [ <input type="checkbox"/> ] No [ <input type="checkbox"/> ] NA [ <input checked="" type="checkbox"/> ]
<b>OP/BP 4.11 - Physical Cultural Resources</b>	
Does the EA include adequate measures related to cultural property?	Yes [ <input type="checkbox"/> ] No [ <input type="checkbox"/> ] NA [ <input type="checkbox"/> ]
Does the credit/loan incorporate mechanisms to mitigate the potential adverse impacts on cultural property?	Yes [ <input type="checkbox"/> ] No [ <input type="checkbox"/> ] NA [ <input type="checkbox"/> ]
<b>OP/BP 4.12 - Involuntary Resettlement</b>	
Has a resettlement plan/abbreviated plan/policy framework/process framework (as appropriate) been prepared?	Yes [ <input checked="" type="checkbox"/> ] No [ <input type="checkbox"/> ] NA [ <input type="checkbox"/> ]
If yes, then did the Regional unit responsible for safeguards or Practice Manager review the plan?	Yes [ <input checked="" type="checkbox"/> ] No [ <input type="checkbox"/> ] NA [ <input type="checkbox"/> ]
Is physical displacement/relocation expected?	Yes [ <input type="checkbox"/> ] No [ <input checked="" type="checkbox"/> ] TBD [ <input type="checkbox"/> ]
Provided estimated number of people to be affected	
Is economic displacement expected? (loss of assets or access to assets that leads to loss of income sources or other means of livelihoods)	Yes [ <input type="checkbox"/> ] No [ <input checked="" type="checkbox"/> ] TBD [ <input type="checkbox"/> ]
Provided estimated number of people to be affected	
<b>The World Bank Policy on Disclosure of Information</b>	
Have relevant safeguard policies documents been sent to the World Bank's Infoshop?	Yes [ <input checked="" type="checkbox"/> ] No [ <input type="checkbox"/> ] NA [ <input type="checkbox"/> ]
Have relevant documents been disclosed in-country in a public place in a form and language that are understandable and accessible to project-affected groups and local NGOs?	Yes [ <input checked="" type="checkbox"/> ] No [ <input type="checkbox"/> ] NA [ <input type="checkbox"/> ]
<b>All Safeguard Policies</b>	
Have satisfactory calendar, budget and clear institutional responsibilities been prepared for the implementation of measures related to safeguard policies?	Yes [ <input checked="" type="checkbox"/> ] No [ <input type="checkbox"/> ] NA [ <input type="checkbox"/> ]

Have costs related to safeguard policy measures been included in the project cost?	Yes [ <input checked="" type="checkbox"/> ] No [ <input type="checkbox"/> ] NA [ <input type="checkbox"/> ]
Does the Monitoring and Evaluation system of the project include the monitoring of safeguard impacts and measures related to safeguard policies?	Yes [ <input checked="" type="checkbox"/> ] No [ <input type="checkbox"/> ] NA [ <input type="checkbox"/> ]
Have satisfactory implementation arrangements been agreed with the borrower and the same been adequately reflected in the project legal documents?	Yes [ <input checked="" type="checkbox"/> ] No [ <input type="checkbox"/> ] NA [ <input type="checkbox"/> ]

### III. APPROVALS

Task Team Leader(s):	Name: Jens Christian Helbech Hede	
<b><i>Approved By</i></b>		
Safeguards Advisor:	Name: Peter Leonard (SA)	Date: 22-Jul-2016
Practice Manager/ Manager:	Name: Michel Kerf (PMGR)	Date: 25-Jul-2016