# INTEGRATED SAFEGUARDS DATA SHEET CONCEPT STAGE

Report No.: ISDSC13230

Date ISDS Prepared/Updated: 13-Jul-2015

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### I. BASIC INFORMATION

### A. Basic Project Data

Country:	China Proje			P1531	P153173		
<b>Project Name:</b>	Anhui Road Maintenance Innovation and Demonstration Project (P153173)						
Task Team	Jens	Jens Christian Helbech Hede					
Leader(s):							
Estimated	04-Apr-2016		<b>Estimated</b>	01-Se	01-Sep-2016		
<b>Appraisal Date:</b>			Board Date	e:			
Managing Unit:	GTIC	)2	Lending		Investment Project Financing		
	Ц		Instrumen	t:			
Sector(s):		Rural and Inter-Urban Roads and Highways (70%), Information technology (15%), Sub-national government administration (15%)					
Theme(s):	Other public sector governance (100%)						
Financing (In USD Million)							
Total Project Cost: 380.00		Total Bank F	nk Financing: 150.00				
Financing Gap:		0.00		·			
Financing Source				Amount			
Borrower				230.00			
International Bank for Reconstruction and Development					150.00		
Total				380.00			
Environmental B - Partial Assessment							
Category:	, I						
Is this a	No						
Repeater							
project?							

### **B. Project Objectives**

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

### C. Project Description

The project is designed to address some of the principal challenges of road asset management in Anhui. The main focus of the project will be on supporting: (i) better network knowledge (data),

improved capacity for analysis (systems), and their adoption for better decision-making through reforms; (ii) better value-for-money of maintenance allocations through new maintenance technologies focusing on preventive maintenance and new contracting models to increase efficiency through the involvement of the private sector; and (iii) better response to emergencies, which affect road usage. The project will hence focus on improvements in maintenance planning as well as on delivery.

The project will introduce two new features in road maintenance in Anhui: (i) large scale PBC through private sector participation; and (ii) preventive maintenance techniques currently not used in Anhui. The project will also serve as a demonstration for these innovations, which if successful, can be replicated in other provinces.

Anhui has proposed that five pilot municipalities and one county will participate in the project (Hefei, Chuzhou, Suzhou, Anqing and Xuancheng Municipalities, and Guangde County). The pilot municipalities and county have been selected by Anhui Province based on criteria discussed with the Bank, and represent a geographic spread, socio-economic development levels, levels of poverty, road network conditions and road maintenance financing levels. These selections will be reviewed during project preparation, taking into account, inter alia, implementation capacity, fiscal capacity and the suitability of the road networks.

In support of the achievement of the PDO and to support Anhui's highway maintenance development plan, the proposed project will comprise the following components.

Component A – Road Asset Management System Upgrade. In response to the need for better and more efficient road asset management, this component will provide technical assistance, equipment, and software for the integration, optimization, and upgrade of the current road asset management information systems of Anhui, as well as introduction of relevant new modules and systems, e.g. condition monitoring on roads, bridges and tunnels; analysis of needs for maintenance and rehabilitation; prioritization of needs under budget constraints; and maintenance cost accounting.

Understanding that the developed and implemented technologies will only make an impact if institutionalized and embedded into the actual decision-making processes, this component will also include necessary activities to reform and enhance business processes to make full use of the asset management technologies. Project preparation will include analysis of and decisions regarding sustainable funding mechanisms and approaches to data collection (e.g., data collation in-house or keep it outsourced as today), systems operation and management (e.g. system upgrades and software licenses) as well as maintaining needed capabilities (e.g. replacement training). Taking into account the current implemented decentralized structure, the reforms will address revised roles and responsibilities as well as the re-engineered business processes, where system outputs will be used in decision-making. It will also examine opportunities to enhance the benefits of having up-to-date data and improved analytical capabilities in information dissemination, for instance through annual reports.

Component B – Road Maintenance Marketization. In response to the needs for restructuring the organization of maintenance and rehabilitation works in the sector, this component will provide financing for the civil works under the marketization of road maintenance and rehabilitation for about 1,100 km of roads for minor, medium and major works. It is a PCN stage estimate that medium and major works would amount to about 800 km of national and provincial roads over the contract period.

Minor maintenance includes routine maintenance (pavement surface cleaning, snow cleaning, grass cutting, drainage cleaning, slope erosion protection, pothole patching etc.) and patching of smaller areas. Medium maintenance includes renewal of pavement surface by overlaying or by replacing the existing wearing course. Major maintenance includes pavement reconstruction or rehabilitation. The project is not expected to include new roads, nor road widening.

The private sector is expected to be a key driver in this restructuring, with enhanced private sector involvement in asset management (primarily in maintenance programming and application), and will be the vehicle for achieving improved efficiency and secure sustainable funding levels.

Marketization will be implemented through PBC to the private sector where the contract holders will be required to plan and fund their work to meet defined road standards, and will be paid in installments linked to meeting these service standards. Contract periods are envisaged to be between 3 to 10 years, and that about 200 km of roads will be packaged into each contract package using Output and Performance Based Contracts (OPRC) types of private engagements.

Based on lessons learned from the previous project, this component will need to be carefully designed to: (i) offer work packages that will be of interest to private firms, as well as (ii) address internal resistance to marketization, especially resistance linked to staff losing their current jobs.

The key for developing attractive work packages includes a suitable combination of roads (condition and length) and work types and contract length (which will support efficient use of the contractor's equipment and staff). Works packages will thus include a range of maintenance activities (minor, medium, and major works) and the contract duration will be suitable for efficient deployment of the contractor's equipment and staff. During project preparation the Anhui Province, with assistance from the Bank, will reach out to the industry to get a better feel for their preferences.

Anhui has indicated that staff affected by the marketization will either be relocated to other road sections currently in need of staff or will be reassigned to the emergency centers to be established under the Project. This is expected to significantly reduce the likely internal resistance. The possibility of transferring current in-house staff to the contractors under certain conditions and obligations may also be considered during project preparation. Finally the project timing will benefit from being aligned with the Five Year Plan cycle (the 13th FYP will cover 2016-2020); this will make it easier to handle multi-year contracts, especially if the 5 year contract option is selected.

A key feature of the design of this component is to bring international experience to Anhui and modify it to the specific context of China in general, and Anhui in particular.

Component C – Innovative Preventive Maintenance Technology. This component will finance the application of innovative preventive maintenance technologies (medium maintenance) on about 640 km of national and provincial roads (not the road sections under PBC). Technologies envisaged include pavement surface recycling, micro-surfacing, and slurry seal. Technologies to be applied will be analyzed during project preparation, and will take into account technologies already applied elsewhere in China as well as new external technologies relevant to the road types and climate in Anhui. This component will also include the manuals and technical specifications needed to support the application of the new technologies into the maintenance works portfolio.

Component D – Establishment of New Road Emergency Response System. This component will

finance the development of maintenance emergency response centers (both upgrading of current facilities and new construction) in the participating municipalities/county (one in each), and equip the centers with advanced maintenance emergency response facilities and equipment. The centers will provide storage for equipment, and will include a maintenance workshop and office space. Emergency response capabilities are part of national regulations, and this component will pilot improvements towards meeting these regulations. The component will also strengthen the institutional system of operation, in order to fully benefit from improved capacity and will look into possibilities of enhancing Disaster Risk Management (DRM).

Component E – Institutional Capacity Building. This component will finance strategic studies and technical assistance (including international technical assistance) activities aimed at improving local capacities for planning and operating and maintaining road assets in Anhui. It will also support international and domestic study tours for relevant staff as well as relevant training. It is envisaged that study tours will focus on international and domestic best practices in asset management systems, asset evaluation, financial management, maintenance contracting, and maintenance technologies. Activities, including possible support to Project Management, and studies under this component will be developed during project preparation.

### **Project Costs and Financing**

The total project cost is estimated at RMB 2.28 billion (US\$ 380 million) of which US\$ 150 million will be financed by the proposed IBRD loan and the remaining US\$ 230 million will come from counterpart funds. Component A is currently budgeted at RMB 6 million (US\$ 1 million of which US\$ 800,000 is proposed as IBRD loan); Component B and C are together budgeted at RMB 2.20 billion (US\$ 366 million, of which US\$ 140 Million is proposed from IBRD); Component D is estimated at RMB 75.7 million (US\$ 12.6 million of which US\$ 8.3 million is proposed from IBRD); and Component E is estimated at RMB 3 million (US\$500,000, all proposed from IBRD). The distribution of project costs and loan allocation within the overall ceiling will be determined during project preparation.

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

The proposed project is located in Anhui Province, an inland province in central China. The physical activities of the proposed project are the road maintenance works on the existing roads (component B and C) and construction of road maintenance emergency response centers in six cities in Anhui (component D). The specific roads and locations for maintenance will be selected during the project preparation and implementation based on actual road quality and maintenance needs. Suitable locations for the emergency centers will also be selected based on further analysis during project implementation.

### E. Borrowers Institutional Capacity for Safeguard Policies

The Anhui PMO (i.e. Foreign Capital Utilization Office and Anhui Highway Administration Bureau) is very experienced in the application of World Bank safeguards policies given that they have successfully implemented four World Bank transport projects in the past decade. An experienced EA consultant will be engaged for safeguards documents preparation, and the Bank safeguards specialists will provide guidance and supervision on the project preparation and implementation.

### F. Environmental and Social Safeguards Specialists on the Team

Peishen Wang (GEN02)

### II. SAFEGUARD POLICIES THAT MIGHT APPLY

Safeguard Policies	Triggered?	<b>Explanation (Optional)</b>
Environmental Assessment OP/BP 4.01	Yes	The project will include physical activities of road maintenance and construction of emergency response centers in participating municipalities of Anhui Province. The road maintenance will include typical activities such as minor repairing of potholes, 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. It is envisaged that the main environmental and social 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. 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. 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. Therefore, the project is proposed to be a Category B project as per OP4.01.  Since not all the roads for maintenance may be identified during the project preparation stage, an environmental safeguards framework approach will be used for the environmental assessment. An Environmental Management Framework will be prepared, which will address the potential environmental and social impacts related to project activities, safeguards screening process for future roads maintenance, and include a set of generic Environmental Code of Practice (ECOPs). The ECOPs will be developed as a standard environmental manual for all the road maintenance activities, which will be incorporated into bidding documents and contracts with contractors. For the road maintenance identified during the preparation

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		for the first year of implementation, an EIA/EMP will be prepared to address road-specific environmental and social impacts.		
		A key social issues will be the relocation of the inhouse workers who are currently undertaking minor maintenance, but who will need to be relocated to other job locations or positions, as their current duties will be outsourced under the marketization. The EIA and EMP under this OP4.01 will include a robust analysis of the social impacts of this, not only for those directly impacted by the project, but also beyond the project scope, should Anhui decide later to rollout the marketization to the entire road network.		
Natural Habitats OP/BP 4.04	No	The road selected for maintenance will not involve natural habitats. All maintenance works will be conducted on existing roads and within the existing right-of-way, and maintenance materials are to be purchased from market suppliers, so there will not be new quarry sites or borrow pits involved. Therefore, this policy is not triggered.		
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	No	As all the road maintenance works will be within the right-of-way on the existing roads, there are no physical cultural resources involved. Nevertheless, the chance-find procedures will be included in the EMF (ECOPs).		
Indigenous Peoples OP/BP 4.10	TBD	As it is not known at this stage if indigenous people/ ethnic minorities are present in the project influence area, triggering of OP 4.10 is To Be Decided.		
Involuntary Resettlement OP/BP 4.12	Yes	The project will not require collective land and housing demolition, and the road maintenances will be implemented within the right-of-way of the existing highways in the participating municipalities. In case there are any project modifications causing land acquisition and resettlement relocation prior to the Closing day of the Bank loan, resettlement policy framework is requested to guide the project modification. As the result, OP 4.12 was triggered.		

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.

### III. SAFEGUARD PREPARATION PLAN

- A. Tentative target date for preparing the PAD Stage ISDS: 11-Jan-2016
- B. Time frame for launching and completing the safeguard-related studies that may be needed. The specific studies and their timing<sup>1</sup> should be specified in the PAD-stage ISDS:

Environmental Management Framework – October, 2015. Social impact analysis - October, 2015.

### IV. APPROVALS

Task Team Leader(s):	Name:	Jens Christian Helbech Hede			
Approved By:					
Safeguards Advisor:	Name:	Josefo Tuyor (SA)	Date: 13-Jul-2015		
Practice Manager/	Name:	Michel Kerf (PMGR)	Date: 14-Jul-2015		
Manager:					

<sup>1</sup> Reminder: The Bank's Disclosure Policy requires that safeguard-related documents be disclosed before appraisal (i) at the InfoShop and (ii) in country, at publicly accessible locations and in a form and language that are accessible to potentially affected persons.