Combined Project Information Documents / Integrated Safeguards Datasheet (PID/ISDS)

Appraisal Stage | Date Prepared/Updated: 28-Feb-2018 | Report No: PIDISDSA24364
### BASIC INFORMATION

**A. Basic Project Data**

<table>
<thead>
<tr>
<th>Country</th>
<th>Project ID</th>
<th>Project Name</th>
<th>Parent Project ID (if any)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lao People's Democratic Republic</td>
<td>P163730</td>
<td>Lao National Road 13 Improvement and Maintenance</td>
<td></td>
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<table>
<thead>
<tr>
<th>Region</th>
<th>Estimated Appraisal Date</th>
<th>Estimated Board Date</th>
<th>Practice Area (Lead)</th>
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<tr>
<td>EAST ASIA AND PACIFIC</td>
<td>14-Feb-2018</td>
<td>30-May-2018</td>
<td>Transport &amp; Digital Development</td>
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<table>
<thead>
<tr>
<th>Financing Instrument</th>
<th>Borrower(s)</th>
<th>Implementing Agency</th>
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</thead>
<tbody>
<tr>
<td>Investment Project Financing</td>
<td>Lao People's Democratic Republic</td>
<td>Ministry of Public Works and Transport</td>
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</table>

#### Proposed Development Objective(s)

To improve road condition, safety and climate resilience on critical sections of the National Road 13.

#### Components

- Road Improvement and Maintenance
- Technical Assistance and Supervision
- Project Management

#### Financing (in USD Million)

<table>
<thead>
<tr>
<th>Financing Source</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asian Infrastructure Investment Bank</td>
<td>40.00</td>
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<tr>
<td>Borrower</td>
<td>38.50</td>
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<tr>
<td>International Development Association (IDA)</td>
<td>40.00</td>
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<tr>
<td>Nordic Development Fund (NDF)</td>
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<tr>
<td><strong>Total Project Cost</strong></td>
<td><strong>128.00</strong></td>
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</table>

#### Environmental Assessment Category

A - Full Assessment

**Decision**

The review did authorize the preparation to continue
B. Introduction and Context

Country Context

Lao PDR has achieved important development gains during the past decade. Gross domestic product (GDP) growth averaged 7.8 percent per year over the past decade, making Lao PDR the 13th fastest-growing economy globally. The rapid economic growth has been primarily reliant on natural resources and regional integration under the Association of Southeast Asian Nations (ASEAN), and more recently, on expansion of services in retail, tourism and transport. The economy of Lao PDR is projected to continue to have grown at 6.7 percent in 2017. Growth in 2018 is projected at 6.6 percent before picking up slightly in 2019-2020. As the growth was supported by significant public investments, the fiscal deficit grew to 6 percent of GDP during 2015-2016, and public debt increased to 68 percent of GDP in 2016. Ambitious public investment plans, including the Lao PDR section of the Kunming – Singapore railway line, are expected to keep the deficit elevated. The Government of Lao PDR (GoL) has taken steps to consolidate its fiscal position over the medium term by removing exemptions, expanding the tax base and strengthening tax administration; however, further efforts are needed to improve the public investment management system.

Absolute poverty has declined in Lao PDR; meanwhile, a significant part of population is still at risk of falling back into poverty. The poverty rate, based on the national poverty line, has declined from 33.5 to 23.2 percent between 2003-2013. Despite this notable achievement, a large part of the population is vulnerable to frequent shocks. Households in agriculture are twice more likely than non-farm households to fall back into poverty due to their exposure to shocks from price fluctuations, loss of land, and adverse weather. Furthermore, inequality has also widened, with the Gini coefficient increasing from 32.5 to 36.2 between 2003-2013. Transport connectivity and proximity to schools and health centers remain lower for the bottom 40 percent of the population when compared to others.

Lao PDR is highly vulnerable to climate and disaster risks. Historical data indicate that annual expected losses from climatic events range between 3 to 4 percent of GDP, with the associated average annual fiscal cost being close to 2 percent of government expenditures. Three of the five costliest natural disasters have taken place since 2009, including two floods in 2013. The 2015-16 El Niño phenomenon was one of the strongest on record and impacted Lao PDR through lower agriculture yields, reduced hydropower production and infrastructure damages from storms. Climate change projections indicate further increases in temperature as well as intensity and frequency of extreme events, including increased rainfall and flooding risks. These conditions can severely impact economic activities such as hydropower, transportation and agricultural production, and affect the poverty reduction efforts. Vulnerability and losses may increase further if infrastructure planning does not consider climate and disaster risks.

Sectoral and Institutional Context

The Lao PDR’s membership in ASEAN and the World Trade Organization (WTO) has lowered barriers and increased its market potential. Making the most of this opportunity requires improving transport connectivity to efficiently move goods and provide services across borders. The Government has invested in the construction and upgrading of new roads and bridges but this has resulted in growing public debt, including a significant increase in arrears to contractors. The focus on new investments has also led to a comparatively lower budget allocation to maintenance and operation of roads. Therefore, internal connectivity continues to suffer, with a significant part of the network being impassable during the...
rainy season, particularly secondary roads. The growing impacts of natural disasters and climate change on the road network have increased the need for emergency repair, which accounts for approximately 30 percent of the overall annual road maintenance budget.

The road sector is under the overall jurisdiction of the Ministry of Public Works and Transport (MPWT). MPWT is responsible for policy making, financing, strategic planning, oversight and overall management of the sector. While it has progressively delegated maintenance and operational tasks for local roads to the provincial level, MPWT retains the responsibility for the maintenance and operation of the national road network. MPWT has ample experience in implementing IDA projects, which is being further strengthened through the ongoing IDA-financed Lao Road Sector Project 2 (LRSP2).

Funding for the road sector has been increasing, but higher efficiency is needed to serve the growing road maintenance needs. The road sector is financed through the Government budget, overseas development assistance and the Road Fund. Capitalized mainly through a fuel levy, the Road Fund is the key mechanism to ensure predictable allocations of funds for road maintenance. Its revenues have been growing by more than 10 percent per annum in recent years and reached over US$80 million in 2016, from US$2 million in 2002, when it became operational. Conservative projections by MPWT indicate future growth rates of the Road Fund at around 10 percent in the medium term. The Road Fund supports routine, periodic and emergency maintenance as well as rehabilitation and upgrading of the existing roads, with 80 percent of its funds allocated to national roads.

The road sector received a total allocation of US$107 million for the fiscal year 2017 from the national budget and the Road Fund, which is 37 percent higher compared to the fiscal year 2014-15 budget. However, a large portion of the allocation has been used to pay outstanding debt for road construction and upgrading, emergency repairs and road maintenance and disaster recovery works implemented over the last five years. As such, managing the road sector debt and the outstanding liabilities and enhancing the efficiency of the Road Fund allocations are critical. The IDA-financed LRSP2 is supporting the sector’s institutional development through preparation of financing and policy frameworks, sector strategic plan, improved governance systems and development of technical capacity to maximize the effectiveness of public expenditures in the sector. The proposed project will complement this work by demonstrating ways to achieve improved efficiency in the use of the Road Fund through the performance-based contracting approach.

The Government plans to further develop the North-South transport corridor across the country by provision of both road and railway connectivity as part of its policy of transforming Lao PDR from a land-locked to a land-linked country. The National Road 13 (NR13) is the most important road corridor in Lao PDR and its upgrade, rehabilitation and maintenance will result in significant benefits for the economy and population. NR13, with 1,500 km length, is the backbone of the road network that connects Lao PDR with China in the North and with Cambodia in the South. The road comprises NR13 North (671 km) from Vientiane Capital to Boten on the Chinese border and NR13 South from Vientiane Capital to the Cambodian border (829 km). There have been discussions on a potential future tolled expressway to connect to the border of China; however, this would require significantly higher investment compared to a full rehabilitation of the existing NR13 corridor. To further strengthen the transit role of the country, the Government has also concluded an agreement with China to build the China-Laos railway starting from the Mohan-Moten border area between the two countries, running over 414 kilometers to Vientiane. This railway line will link China with countries in Southeast Asia through Lao PDR as part of China’s Belt and Road Initiative. At the same time, NR13 is very likely to maintain its major role in domestic and regional connectivity of the capital and Vientiane province as it serves the highest traffic volume on the national road network of the country (see next paragraph) and passes through densely populated sub-urban areas. The main sections of the road were completed in 1997 and have not been rehabilitated since then, now requiring major improvement works to meet the growing demand of road users.
Strong economic growth and trade expansion have been accompanied by a rapid increase in traffic volume, including transit traffic on NR13, particularly in the stretches near Vientiane Capital, some of which are expected to reach their full capacity in the next 5 years. A detailed feasibility study carried out in 2015 identified several critical sections on NR13 requiring improvement and widening works. The study indicated that improvements in these sections would result in reduced vehicle operating costs and travel time, enhanced accessibility of enterprises, increased labor productivity, and reduced road fatality rates. Improved climate resilience of the road and truck overloading control measures will help increase the efficiency of expenditures allocated for maintenance and operation of the road. MPWT will use a phased approach to the improvement of NR13. To start, MPWT has prioritized the section from km 12 to km 70 on NR13 because this road section serves the highest traffic volume on the national road network, up to 22,100 Annual Average Daily Traffic in 2015. This section is also periodically damaged by severe flooding events such as Typhoon Haima in 2011. Results of the traffic study indicated that the capacity of the Section km 12-31 will be fully used in the next 5 years if no measures are undertaken. The Section km 31-70 serves less traffic but is in worse condition compared to the first section. Therefore, the proposed project will focus on these two priority sections of NR13, by widening of the first section and improving the existing two lanes on the second section. The improvement of other critical sections of NR13 will follow as financing becomes available.

The major gender gap identified in the transport sector relates to labor force participation. Lao PDR has achieved important progress in providing equal employment opportunities for men with women accounting for about 49 percent of total employment. However, the share of women employed in the transport and logistics sector is only 9.1 percent. Although there is no gender disaggregated data available related specifically to the road sector, consultations during project preparation indicated that there is very little participation of women, if any, in road operation and maintenance activities in the country. Women also are underrepresented in management jobs and business ownership in the sector with only a 9.6 percent share. Related to employment in the project area, the consultations revealed that the majority of traders working in adjacent markets are women from local communities who are facing serious road safety risks in the absence of basic pedestrian infrastructure. Local women and children are also facing these risks while using the road as pedestrians for daily short trips to schools. The project design includes specific gender actions to help address the above gaps by enhancing employment opportunities for women in the sector and providing improved and safer pedestrian protection for women and children. Furthermore, while the risk associated with labor influx under the project is considered moderate because most of the labor will be sourced locally and because of the high absorption capacity of the peri-urban area experiencing this influx, the project design also includes adequate measures on gender-related risks, including management of labor influx and gender-based violence (GBV) risks.

Reported road fatalities at the national level more than doubled between 2000 and 2010 (from 358 to 790) and increased to 1,054 in 2014. Nearly three-quarters of these fatalities were related to motorcyclists. Regionally, the World Health Organization places Lao PDR third behind Thailand and Vietnam – countries with significantly higher motorization rates – in terms of the share of GDP losses from road crash fatalities (2.7 percent in 2010). LRSP2 is supporting the Government to operationalize road safety management and safety improvements on local roads, but this remains an important issue on national corridors, including NR13. An improved condition of the road as well as comprehensive safety measures, both physical works and social engagement, included in the technical design will help reduce road safety risks along the project road. The feasibility study indicates that a “with project” option could help reduce the fatality rate by 20 percent and serious accident rate by 15 percent on the project road.

The Government, with assistance from IDA through the LRSP2, the Asian Development Bank (ADB), and the Japan International Cooperation Agency (JICA), is strengthening the institutional framework on truck overloading control. Truck overloading from national and international freight transportation is increasing rapidly and affecting the rate of
The deterioration of the network. Most of the main roads in Lao PDR, including NR13, were designed and built for 8.2-tonne standard axle loads while the current ASEAN standard is 11-tonne axle loads. MPWT has identified truck overloading as a significant contributor to pavement damage on roads that serve the bulk of transit transport, including NR13. The proposed project will support this effort of MPWT through the assignment of appropriate risks and responsibilities between the Government and contractor under an output and performance-based contract modality. In addition, MPWT will install a weigh station on the project road, and rehabilitation works will be carried out to the ASEAN standard.

C. Proposed Development Objective(s)

Development Objective(s) (From PAD)

To improve road condition, safety, and climate resilience on critical sections of national road 13.

Key Results

The project will support improvement works, and maintenance and operation of 58 km critical section of the NR13 - the most important transport corridor of Lao PDR in terms of both domestic and regional connectivity. The key outcomes of this investment will be improved (i) road condition by yielding significant economic benefits from reduced travel time and vehicle operating cost and reduced road congestion; (ii) road safety by helping reduce traffic injury and fatality risks as well as enhancing safety of pedestrians, who are mostly women and children; and (iii) climate resilience by building road infrastructure, which is more resilient to climate events. These three key outcomes will be measured by corresponding PDO indicators. Intermediate level results indicators incorporated to the project design will help measuring the key project outputs related to project objectives, including kilometers of roads to be upgraded and improved with climate resilient measures, improved access to pedestrians, capacity building on output and performance based contracting. The results chain also includes intermediate level indicators to monitor important social and gender aspects of the project including grievance redress and training of all contractor’s staff on worker code of conduct.

D. Project Description

Component 1: Road Improvement and Maintenance (US$121.0 million, including IDA US$36.5 million, AIIB US$40.0 million, NDF US$6.0 million and GoL US$38.5 million). This component will finance road widening, improvement, operation and maintenance works and land acquisition required for road works. The component will include the following sub-components:

Subcomponent 1.1: Road Improvement and Maintenance (US$100.5 million, including IDA US$36.5 million, AIIB US$40.0 million and GoL US$24.0 million): This subcomponent will support implementation of road improvement, operation and maintenance works on the following road sections: (i) the Section Sikeut-Songpeuay Market (km 12 to km 31), which will be upgraded from 2 to 4-lane road; and (ii) the Section Songpeuay Market-Phonhong (km 31 to km 70), which will be improved along the existing 2-lane road. The road improvement and maintenance will be carried out through the implementation of an Output and Performance-Based Road Contract (OPBRC) using a design, build, maintain, operate and transfer approach. The subcomponent will support implementation of climate resilience measures during the road improvement and initial period of the operation and maintenance phase. The subcomponent will also support participation of women from local communities in paid jobs under OPBRC and improvement of pedestrian facilities along the road.
Subcomponent 1.2: Land Acquisition (US$20.5 million, including NDF US$6.0 million and GoL US$14.5 million): This subcomponent will be financed by the GoL and NDF and support the acquisition of land needed for road works. As complimentary financing, AIIB plans to allocate a special fund (grant) to MPWT to finance the Resettlement Action Plan (RAP) implementation support consultancy.

Component 2: Technical Assistance and Supervision (Total US$4.3 million, including IDA US$0.8 million, NDF US$3.5 million). This component will support MPWT to manage the OPBRC implementation, implement traffic safety activities, overloading control, and enhance environmental and social monitoring and supervision. The component will also support preparation of studies for future investments on other sections of NR13. The component will include the following subcomponents:

Subcomponent 2.1: Traffic Safety, Overloading Control and Safeguards Monitoring (IDA US$0.8 million): This subcomponent will be financed by IDA and support implementation of (i) traffic safety campaigns and other traffic safety enhancement measures; (ii) overloading control and (iii) environmental and social monitoring.

Subcomponent 2.2: Management and Supervision of the OPBRC Implementation (NDF US$3.0 million): Under this subcomponent, NDF will support MPWT to manage and supervise OPBRC implementation through financing the consultancy for supervision of road improvement works during the construction period and supervision of the initial post-construction maintenance and operation until project closure.

Subcomponent 2.3: Preparation of Future Investments (NDF US$0.5 million): Under this subcomponent, NDF will finance preparation of environmental and social assessments for other critical sections of NR13. AIIB, through its special fund (grant), plans to support MPWT on preparation of conceptual designs for future investments along NR13. The critical road sections for future investments will be defined during project implementation.

Component 3: Project Management (IDA US$2.7 million). This component will be financed by IDA to support project management, including the costs of project management, monitoring and evaluation, financial and technical audits, OPBRC contracting training, vehicle and equipment, incremental operating costs, etc.

E. Implementation

Institutional and Implementation Arrangements

The project will be implemented through the existing Government structures. The project will receive the overall policy and strategic guidance from the Project Steering Committee chaired by the Vice-Minister of MPWT and includes the Vice-Governors of Vientiane Province and Vientiane Capital, with representatives from the Ministry of Finance (MOF), Ministry of Planning and Investment (MPI), Ministry of Natural Resources and Environment (MONRE), and MPWT's Department Directors directly involved in project implementation.

MPWT is the Project Implementing Agency. MPWT’s Department of Roads (DoR) is responsible for the overall management and implementation of the project, including monitoring progress, supervising the procurement process and chairing the Procurement Evaluation Committee, reviewing work plans and allocating funds to improvement and O&M activities. DoR has appointed a Project Manager with responsibilities for day-to-day implementation, who will be supported by a technical consultant.
The proposed project will use the arrangements that have proved successful for previous and ongoing IDA projects implemented by MPWT. As such, MPWT departments will have implementation responsibilities as per their official mandates, including: (i) Department of Finance (DoF) will have overall responsibility for financial management of the project and will provide procurement support to project activities; (ii) Department of Inspection (DoI) will apply internal controls to project activities, procure independent financial and technical auditors and oversee the project grievance redress mechanism; (iii) ICT Division of the Cabinet Office will oversee activities related to the administration of e-procurement, disclosure of bidding documents, and public information posted in MPWT’s website; and (iv) Environmental and Social Division of the Public Works and Transport Research Institute (ESD-PTRI) will lead all aspects of safeguards preparation, supervision and reporting. MPWT’s Department of Transport (DoT) will lead the activities related to traffic safety and overloading control. The Department of Planning and Cooperation (DPC) will provide coordination support to departments implementing the project activities.

**Procurement Committee:** A Procurement Committee has been established for the proposed project. DoR is the Chair of the Committee, which is comprised of representatives from DoF, DoT, DPC, DPWT of Vientiane Capital and DPWT of Vientiane Province, MPI, MOF, and the Project Manager.

**Resettlement Committee:** Two resettlement committees have been established, one for each project section. The Vice-Governor from Naxaythong District in Vientiane Capital chairs the resettlement committee for the Section km 12 to km 31, and the Vice-Governor of Phonhong District in Vientiane Province chairs the committee for the Section km 31 to km 70. The resettlement committees include representatives of the DPWT, district Lao National Front for Construction, and district Lao Women’s Union.

**Project Operations Manual:** The project will be implemented following a Project Operations Manual (POM), which contains detailed information on the project implementation arrangements and processes, including procurement, financial management and safeguards. AIIB and NDF will use the same POM for the co-financed project activities.

**Role of Partners:** The overall development financing and technical assistance to the transport sector in Lao PDR is coordinated through the Infrastructure Working Group chaired by the Minister of MPWT. Improvement and maintenance activities proposed under the project, including traffic safety and load axle control, will be implemented under the framework of ongoing programs supported by several partners including the IDA, ADB, JICA and KfW, among others. Close coordination will be maintained with all development partners involved in the transport sector of Lao PDR throughout the project implementation.

The participation of the World Bank in the project and comprehensive preparatory and due diligence work on technical design and safeguards compliance will help mobilize financing from other development partners. Both Asian Infrastructure Investment Bank (AIIB) and Nordic Development Fund (NDF) have expressed interest to finance the project. The safeguards and fiduciary policies of the World Bank will be applied for the implementation of all activities under the project, including those financed by AIIB and NDF. The co-lending agreement to be signed between the World Bank and AIIB will establish the framework for co-financing of the project. The AIIB’s special fund (grant) and NDF will use parallel financing arrangement. The implementation support and supervision of the project will be led by the World Bank in close coordination with AIIB and NDF.
F. Project location and Salient physical characteristics relevant to the safeguard analysis (if known)

The proposed project includes improvement and widening of 58 km section of the of the National Road 13 (NR13) from Vientiane to Phonhong (km 12-70). The road runs through two districts (Naxaythong and Phonhong), covering about 44 villages in total. The road passes through semi-urbanized areas and may impact a substantial number of land parcels and roadside commercial operations (although little relocation of households is anticipated). None of the road sections will pass through national parks or protected areas. The closest protected areas is the Phou Phanang National Protected Area (PA) which is roughly parallel to NR13 for the entire length of the project area. On average the PA is more than 10 kilometers from the road and the closest point is nearly 3 km distant. Communities, facilities and other receptors located along the road sections could potentially be disrupted by road construction and operations. There is also an ethnic Hmong Community located alongside the project road. These communities would be affected primarily by labor influx, dust, noise, vehicle emissions, and other forms of pollution from construction, drainage blockage, traffic interruption, removal of vegetation, and impacts to temples during construction, as well as increased traffic flow and speed and noise during operations. The landscape is typical of a marshy area, combined with small hilly zones. A detailed environmental and social impacts assessment (ESIA) conducted identifies nature and scope of impacts as summarized below: (i) 2,398 households are expected to be affected by the project. Of these, 96% are Lao Tai (majority Laotians), 2% are Hmong ethnic group, 0.5% are Khmu, and 1.5% are foreign (Chinese and Vietnamese business operators); (ii) 2,625 plots of land, of which 95% are along the section in Naxaythong where the road will be expanded from 2 to 4 lanes wide, and 211 of the land plots (210 in Naxaythong) will lose more than 10% of their total area; (iii) 3,297 built structures belonging to 2,161 households, of which 30% are houses, 13% are fences, and 25% are cement slabs in front of commercial buildings; and (iv) 1,808 business fronting the road, varying from one-person stalls to medium enterprises employing 50 or more staff. Of the 2,398 affected households, 81 or 3.4% are considered vulnerable. Among these, 32 households fall below the national poverty line with a per capita income of less than 240,000 LAK (or about US$30) per month.

G. Environmental and Social Safeguards Specialists on the Team

Sybounheung Phandanouvong, Social Safeguards Specialist
Martin Henry Lenihan, Social Safeguards Specialist
Wasittee Udchachone, Environmental Safeguards Specialist
### SAFEGUARD POLICIES THAT MIGHT APPLY

<table>
<thead>
<tr>
<th>Safeguard Policies</th>
<th>Triggered?</th>
<th>Explanation (Optional)</th>
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<tbody>
<tr>
<td>Environmental Assessment OP/BP 4.01</td>
<td>Yes</td>
<td>This policy is triggered due to potential environmental and social impacts from road improvements and maintenance under the Component 1 and technical assistance to prepare environmental and social studies, and detailed design for other critical sections of NR13 that will be defined during project implementation under the Component 2. Component 1 will finance improvement of the capacity, quality, climate resilience and safety of two sections of NR13, with a total length of 58 km. From km 12 to km 31, civil works include road widening from 2 to 4 lanes with 23 m right-of-way, with land acquisition of 1.5 m required on each side of this section. From km 31 to km 70, works include improvement of the existing 2-lane with 16 m right-of-way, with minor acquisition required. Additional 1 m on each side of these two sections will be temporarily acquired during the construction. An Environmental and Social Impact Assessment (ESIA) including Environmental and Social Management Plan (ESMP) that meets the World Bank Category A requirements has been prepared to identify and address environmental and social impacts from the project road improvement activities. The ESIA concluded that while it is expected that the project will create environmental and socio-economic benefits from GHG reduction, road climate resilience and road safety improvement, increased accessibility of enterprises and increased labor productivity, it could potentially cause negative environmental impacts from road construction and operation. Potential negative impacts to the environment derived from influx of workers, increased traffic flows, traffic safety and traffic disruption, borrow pit management, water quality, disturbance to natural habitats, blockage of drainage system, dust, noise, waste management and disposal, and other forms of pollutants, public safety and security have been assessed with</td>
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attention paid to construction near sensitive areas such as temples, schools, hospitals. These potential impacts are mostly low to moderate, site specific and temporary impacts, which could be readily mitigated through mitigation measures incorporated into project design and/or construction practices. Mitigation measures and monitoring plan have been developed when assessment show the need. The ESIA also requires contractor to prepare Site - Specific Environmental and Social Management Plan (SSESMP) during pre-construction. This requirement and the ESMP will be attached to the bidding package and construction contract.

A social assessment was conducted as part of the ESIA process. This included the collection of data on the socio-economic profile of the 44 villages along the alignment, and the completion of over 68 focus group discussions all of villages. The focus group discussions identified a number of positive social benefits including less congestion, improved safety, and less health problems due to a long term reduction in dust dispersion. Some of the adverse impacts and risks identified during the discussion included business disruption (due to land closure or access problems), impacts on temples and graves, disruption of the water and electricity supply, impacts on schools, long term impact on land prices and population growth, and the conduct of road workers during construction. The focus group discussions also highlighted a number preferred mitigation measures including specific design features, a strong emphasis on community health and safety during construction, cooperating with village authorities on worker conduct, the use of village mediation committees to resolve conflicts, community awareness raising, and the appointment of contractor focal person.

No specific safeguards instrument is prepared for the Component 2 TA as potential additional critical sections will be defined during the project implementation. Term of References (TORs) for environmental and social studies, and detailed design for these critical sections to be identified will be reviewed and cleared by the World Bank to
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<td>Natural Habitats OP/BP 4.04</td>
<td>Yes</td>
<td>This policy is triggered since landscape of the areas along the proposed NR13 project is typical of a marshy area (with flood plains and riverine forest vegetation along both sides) combined with small hilly zones. The project road improvements activities will involve expansion of three bridges to accommodate 4 lanes and improvements of one bridge on the 2 lanes section. The ESIA concluded that impacts to natural streams are expected to be minimal and mitigation measures were prepared in the ESIA. Use of construction materials and locations of various project facilities, including worker camps, equipment staging areas, borrow pits, etc., could potentially affect natural habitats. Locations of these facilities will be identified during pre-construction phase. The ESIA include mitigation measures including guidance on site selection, preparation of SSEMP, etc. to mitigate impacts on natural habitats. The project road sections will not pass through national parks or protected areas. The closest road sections located about 3 km from the designated Phou Phanang National Protected Area. No major impacts on natural habitats are expected.</td>
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<tr>
<td>Forests OP/BP 4.36</td>
<td>No</td>
<td>This policy is not triggered because the project does not pass through national parks or protected areas. It will pass through semi-urbanized areas. It is not anticipated that the project will affect the health and quality of forests or the rights and welfare of people and their level of dependence upon or interaction with forests.</td>
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<tr>
<td>Pest Management OP 4.09</td>
<td>No</td>
<td>The project will not lead to purchase or increase use of pesticides.</td>
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ensure adequate environmental and social considerations and safeguards policy requirements are taken into account.

The ESIA has been consulted with stakeholders during two rounds of public consultation and has been disclosed on the MPWT’s website and the World Bank’s website.
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<thead>
<tr>
<th>Physical Cultural Resources OP/BP 4.11</th>
<th>Yes</th>
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<tr>
<td>This policy is triggered due to the presence of village temples and graves observed near the road. The ESIA indicated that none of the temples or graves will need to have any portion of their properties removed, e.g. walls, gates, etc. The road alignment had been moved slightly to prevent one buddha tree close to the road section at a temple in Songpeuy-Neua in Naxaithong district from being cut. Some trimming of the trees branches may however be required. This activity will be coordinated between the contractor and the temple. No cutting of the tree will be allowed without the permission of the Engineer. The ESIA indicated low/medium impacts on physical cultural resources and measures, including chance finding procedure, necessary to minimize/mitigate impacts, have been included in the ESIA.</td>
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<tr>
<th>Indigenous Peoples OP/BP 4.10</th>
<th>Yes</th>
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<tr>
<td>This policy is triggered due to the presence of a Hmong Ethnic Community in the project area that could be potentially impacted by civil works and associated activities including labor influx, dust, noise, gas emission and other forms of pollution from construction, drainage blockage, traffic interruption, removal of vegetation and impacts to temples or graves during construction, increased traffic flow and speed during operation. The ESIA conducted indicates that a total number of households to be potentially affected by the project is 2,398 of which only 49 households are defined as Indigenous Peoples (locally recognized as ethnic people or groups). These include 38 Hmong households (about 273 people) and 11 (63) Khmu. Lak 52 and Phonkham-nua villages have the greatest number of Hmong ethnic group members who will be affected by the project: 13 households from Lak 52 and 16 households from Phonkham-nua. Khmu ethnic households are scattered and integrated into 7 PAVs (out of total 44 PAVs). No resettlement is anticipated in the Hmong ethnic community located at the 2 lanes section of NR13, where the civil work will be undertaken within the existing alignment and Right of Ways (ROWs). The client has prepared an Ethnic Group Engagement Plan based on a social assessment</td>
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(involving key informant interviews with community authorities and focus groups with community residents, and representatives of ethnic groups) of potential impacts, and a process of free, prior and informed consultation leading to broad community support, which was established through a participatory voting mechanism during the second round of consultation, and which was documented in the Ethnic Group Engagement Plan. The consultation process, and means of achieving broad community support, involved a series of public meetings held at times, and in venues, that were accessible to a broad range of community members. The meetings were independently facilitated to ensure the voices of different generations and genders are heard and impact the design of the mitigation measures.

This policy is triggered as the works to be financed will result in land acquisition, relocation of households required for the expansion of bridges in the 4-lanes section with pathways and expansion of sharp curve, the disruption of agricultural and livelihood activities, and the displacement of residential and commercial structure. This is primarily because the section of NR13 from Vientiane to Ban Dong (km 12 to km 31) will be upgraded from 2 to 4-lanes requiring the acquisition of 1.5m of land on each side. The resettlement action plan (RAP) prepared by the MTPW indicates that over 2398 households will be affected by some form of land acquisition or disruption of commercial and livelihood activities because of the project. It is also the case that 8 households and commercial structures will be totally displaced, primarily due to the works to take place on 4 bridges. The RAP is based on a comprehensive socio-economic census and inventory of losses, and has been disclosed and consulted with project affected people and households. A resettlement committee has been established at the provincial and district levels to review and approve the resettlement plan. The RAP provides information on social and livelihood impacts, land acquisition, mitigation measures including compensation and necessary support for PAPs with greater emphasis on the vulnerable and ethnic groups to restore their livelihood and income.
The World Bank  
Lao National Road 13 Improvement and Maintenance (P163730)

<table>
<thead>
<tr>
<th>Safeguard Policy Issue</th>
<th>Management Outcome</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Safety of Dams OP/BP 4.37</td>
<td>No</td>
<td>The RC committees will also oversee the RAP implementation and Grievance Redress Mechanism set up and managed by the existing national system starting from village mediation unit in all project affected villages, the District Office of Justice to the provincial court and provincial assembly.</td>
</tr>
<tr>
<td>Projects on International Waterways OP/BP 7.50</td>
<td>No</td>
<td>The project will not finance any activities related to the construction of dams nor affect operations of existing dams or affiliated reservoirs.</td>
</tr>
<tr>
<td>Projects in Disputed Areas OP/BP 7.60</td>
<td>No</td>
<td>The project will not affect international waterways.</td>
</tr>
</tbody>
</table>

### 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:

The project is expected to create long term positive socio-economic and environmental impacts due to improved connectivity and accessibility, improved climate resilience and reduced GHG, dust reduction due to road improvement, and improved road safety.

Negative environmental and social impacts are anticipated as a result of the project road improvement. This is primarily due to the fact that the section of NR13 from Sikeut to Songpeuay Market (km 12 to km 31) will be upgraded from 2 to 4 lanes requiring the acquisition of 1.5m of land on each side. The resettlement action plan prepared by the MPWT indicates that over 2,398 households will be affected by some form of land acquisition or disruption of commercial activities because of the road works. It is also the case that 8 households and commercial structures will either be displaced or rebuilt on the same plot of land, primarily due to the works to take place on 4 bridges. An additional 963 residential structures will be partially affected by the loss of verandas or other structural extensions into the right of way. The remaining impacts will involve the acquisition of land only, or impacts on commercial operations within the right of way. The resettlement plan, which is based on a comprehensive socio-economic census and inventory of losses, has been disclosed and consulted with project affected people and households.

The ESIA concluded that most of negative impacts on the environment are low to moderate, site-specific, temporary in nature and could be readily mitigated through engineering design and good construction and environmental management practices. These impacts include traffic disruption, traffic safety during construction, borrow pit management, water quality, blockage of drainage system, dust, waste management and disposal, and other forms of pollutants, contractor camp site management issues e.g. hygiene and sanitation, traffic safety. The project could also potentially generate long term impact from increased noise during the operation phase. The ESIA indicated that operational noise levels in commercial areas are unlikely to increase above WBG and national guideline. Consultations with stakeholders indicated that road noise is not a significant issue for them. The ESIA includes a monitoring program and community consultation to determine community concern on noise issue over time and periodically monitor noise level during construction and operation phase of the project. While the project aims to improve traffic safety...
increased traffic speed could result in road accidents. The ESIA includes an impact assessment on traffic safety and mitigation measures during design, pre-construction, construction and operation phase.

The project TA for the preparation of detailed design, and environmental and social studies for other sections of NR 13 may generate adverse environmental and social impacts downstream when these projects are implemented. These TA activities would comply with requirements in the Interim Guidelines on the Application of Safeguard Policies to Technical Assistance Activities in Bank-Financed Projects and Trust Funds Administered by the World Bank. The Bank will review and provide inputs on key terms of reference, including for the preparation of detailed design and environmental and social studies to ensure that appropriate safeguards measures, including environment and social screening, are incorporated in the studies.

2. Describe any potential indirect and/or long term impacts due to anticipated future activities in the project area:

The project is expected to create long-term positive socio-economic and environmental impacts due to improved connectivity and accessibility, improved climate resilience and reduced Green House Gas (GHG), dust reduction due to road improvement, and improved road safety. These positive impacts support the Eighth National Socio-Economic Development Plan (NSEDP) goals to achieve sustained and inclusive economic growth as well as the national efforts to achieve Sustainable Development Goals (SDG), while reducing the effects of natural shocks.

The road improvement may lead to an increased development along the road corridor, change of land use and may generate stress on social services and utilities. However, the project will have less adverse induced impacts comparing to green field development. In Lao PDR, provincial authorities have a mandate to apply relevant measures in supporting these growths. Such aspects are addressed through relevant legal framework and sector strategy including urban planning regulations, Road Law, Land Law, Agriculture Law, etc. Under this project, MPWT will establish the Project Steering Committee, chaired by the Minister and comprised of relevant provincial authorities and representatives from relevant line ministries. This arrangement will support improved inter-agency coordination. To address unplanned ribbon development along the project road, MPWT through the steering committee should encourage provincial authorities and line ministries to take into account impacts from these potential growths in the next five years of NSEDP and respective development plans/strategies. Also, the DOR and DPWTs should strictly implement their policy to control re-encroachment to the road ROW.

3. Describe any project alternatives (if relevant) considered to help avoid or minimize adverse impacts.

Several alternatives were considered as part of the ESIA. The “No Action” Alternative would result in the continued deterioration of the road, bridges and drainage structures along the ROW, thereby impeding the economic development of the Project Area and the region. All positive benefits would be foregone and as such this alternative is not deemed prudent.

The outcome of the ESIA and consultation informed project design. As a result, the width of the road to be improved has been reduced from original 24 m to 23 m for the 4 lanes road section.

Minor changes to the alignment have been assessed, the most significant of which is the re-adjustment of curve at Ban NaNgaa. The alternative has been incorporated into the Detailed Design (DD) as it will reduce accidents in a location where many were previously recorded.

Three bridges located within 4 lanes section were also assessed to determine if alternative locations for bridge
widening should be adopted instead of the assumed symmetrical widening to accommodate four lanes of traffic. After consultations with the ESIA team and the Detailed Design Consultant it has been determined that asymmetrical widening will be undertaken to lessen environmental and social impacts associated with symmetrical widening. The road alignment at a temple in Songpeuy-Neua in Naxaithong has also been moved slightly to prevent one buddha tree close to the road from being cut.

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.

The detailed ESIA was carried out and results have been used to inform the preparation of the Resettlement Action Plan, Ethnic Group Engagement Plan (EGEP) and Environmental and Social Management Plan (ESMP) to address and mitigate the identified impacts. These safeguard instruments provide comprehensive principles, process, budget estimation, institutional arrangements to be followed for effective impact mitigation and monitoring. Environmental and Social Division (ESD) of Public Works and Transport Institute (PTRI) of Ministry of Public Works and Transport (MPWT) has been tasked to prepare and implement the safeguard instruments for the project. ESD has extensive experience in working with the World Bank financed projects including LRSP2, under which ESD's capacity and systems have been improved. MPWT is considered to be the first GoL agency which has developed, institutionalized and applied national ESIA requirements, namely Environmental and Social Operational Manual (ESOM), which is largely in line with the World Bank safeguard policies. However, due to staff turnover, the project will continue to support its capacity development and further strengthen PTRI safeguard capacity.

The project will adopt OPBRC approach for the first time. Safeguard resources from the Implementation Support and Supervision consultants (Engineer) and Contractor will also be provided to ensure compliance with the project safeguards requirements. These resources include the International/Regional Environmental and Social Specialist and National Environmental and Social Specialist in the engineer team and the National Environmental and Social Manager as part of the contractor team. The ESIA defines roles and responsibilities and qualifications of these safeguards staff which will be included in the bidding package for the engineer and contractor.

5. Identify the key stakeholders and describe the mechanisms for consultation and disclosure on safeguard policies, with an emphasis on potentially affected people.

The key stakeholders have been identified through the process of ESIA. Consultation meetings were held at the beginning, and at the end of the ESIA process with all groups of project stakeholders and Project Affected People (PAP) including women and representatives of ethnic groups. Their voices and concerns have been incorporated into the project design to minimize the negative impacts and enhance project outcomes. All safeguards instruments (ESIA, RAP and EGEP) have been reviewed by the Resettlement Committee and Ministry of Natural Resources and Environment (MONRE). The documents have been publicly disclosed in both Lao and English in MPWT website and World Bank's website prior to appraisal. In addition, the instruments have also been made available in hard copy in MPWT, PWTOs of Vientiane Capital and Vientiane province. A reader-friendly brochure containing key information in Lao language is also available in all affected villages.
### B. Disclosure Requirements

**Environmental Assessment/Audit/Management Plan/Other**

<table>
<thead>
<tr>
<th>Date of receipt by the Bank</th>
<th>Date of submission for disclosure</th>
<th>For category A projects, date of distributing the Executive Summary of the EA to the Executive Directors</th>
</tr>
</thead>
<tbody>
<tr>
<td>26-Dec-2017</td>
<td>10-Jan-2018</td>
<td>06-Feb-2018</td>
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</table>

"In country" Disclosure  
Lao People's Democratic Republic  
03-Jan-2018

Comments

**Resettlement Action Plan/Framework/Policy Process**

<table>
<thead>
<tr>
<th>Date of receipt by the Bank</th>
<th>Date of submission for disclosure</th>
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<td>05-Dec-2017</td>
<td>10-Jan-2018</td>
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</table>

"In country" Disclosure  
Lao People's Democratic Republic  
03-Jan-2018

Comments

**Indigenous Peoples Development Plan/Framework**

<table>
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</thead>
<tbody>
<tr>
<td>05-Dec-2017</td>
<td>10-Jan-2018</td>
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</tbody>
</table>

"In country" Disclosure  
Lao People's Democratic Republic  
03-Jan-2018

Comments

### C. Compliance Monitoring Indicators at the Corporate Level (to be filled in when the ISDS is finalized by the project decision meeting)
OP/BP/GP 4.01 - Environment Assessment

Does the project require a stand-alone EA (including EMP) report?  
Yes

If yes, then did the Regional Environment Unit or Practice Manager (PM) review and approve the EA report?  
Yes

Are the cost and the accountabilities for the EMP incorporated in the credit/loan?  
Yes

OP/BP 4.04 - Natural Habitats

Would the project result in any significant conversion or degradation of critical natural habitats?  
No

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?  
NA

OP/BP 4.11 - Physical Cultural Resources

Does the EA include adequate measures related to cultural property?  
Yes

Does the credit/loan incorporate mechanisms to mitigate the potential adverse impacts on cultural property?  
Yes

OP/BP 4.10 - Indigenous Peoples

Has a separate Indigenous Peoples Plan/Planning Framework (as appropriate) been prepared in consultation with affected Indigenous Peoples?  
Yes

If yes, then did the Regional unit responsible for safeguards or Practice Manager review the plan?  
Yes

If the whole project is designed to benefit IP, has the design been reviewed and approved by the Regional Social Development Unit or Practice Manager?  
NA

OP/BP 4.12 - Involuntary Resettlement

Has a resettlement plan/abbreviated plan/policy framework/process framework (as appropriate) been prepared?  
Yes

If yes, then did the Regional unit responsible for safeguards or Practice Manager review the plan?  
Yes
Have relevant safeguard policies documents been sent to the World Bank for disclosure?
Yes

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

All Safeguard Policies

Have satisfactory calendar, budget and clear institutional responsibilities been prepared for the implementation of measures related to safeguard policies?
Yes

Have costs related to safeguard policy measures been included in the project cost?
Yes

Does the Monitoring and Evaluation system of the project include the monitoring of safeguard impacts and measures related to safeguard policies?
Yes

Have satisfactory implementation arrangements been agreed with the borrower and the same been adequately reflected in the project legal documents?
Yes

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APPROVAL

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