

Terms of Reference

Evaluation DRIVE Project TURN-KEY RE-CONSTRUCTION OF 12 BRIDGES ON THE NR20, Champasak & Salavan province Laos

1 Introduction

This Terms of Reference (ToR) describes the expectations, scope, questions, and process for the evaluation of the project “TURN-KEY RE-CONSTRUCTION OF 12 BRIDGES ON THE NR20, Champasak & Salavan Province Laos.”

This ToR focuses on establishing the baseline of the project, identifying some preliminary findings of the project and effectiveness of the TA. The baseline study done in this evaluation should form the base for the endline evaluation at outcome and impact level.

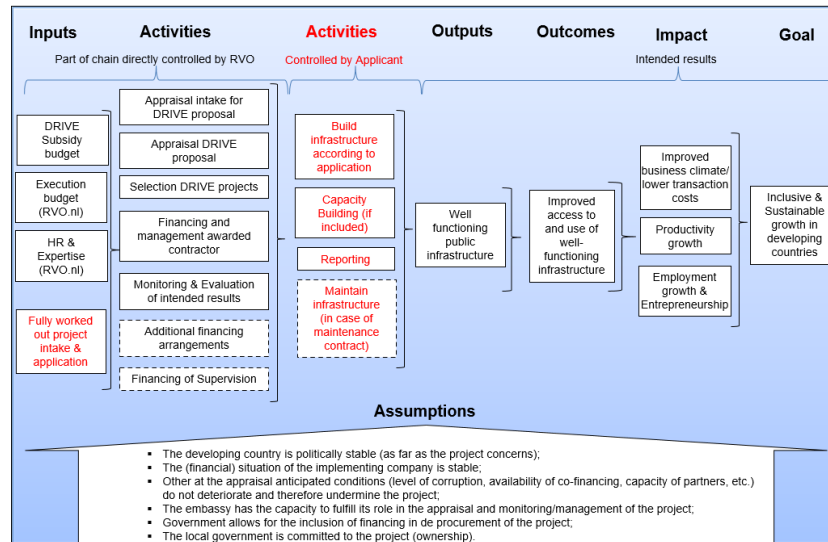
More information on the project itself can be found in the appendices to this ToR.

1.1 DRIVE programme results chain (on project level)

The overall objective of DRIVE is to contribute to inclusive and sustainable growth in developing countries, removing obstacles to development, and creating opportunities for vulnerable groups in low- and middle-income countries to participate fully in the economy and in society. Investments are aimed at improving conditions for the private sector, such as investments in infrastructure, improving business climate, and reducing transaction costs. This should foster entrepreneurship, employment and productivity growth, increasing opportunities and lifting wages of employed or self-employed people.

DRIVE-assisted projects are expected to lead to such impacts by either improving current public infrastructure or constructing new (high quality) public infrastructure. Both new construction and quality improvement are assumed to enhance the access to and quality of the infrastructure services for producers and consumers.

The following figure shows the DRIVE programme Theory of Change (ToC) and its underlying assumptions.



The ToC forms the framework for the appraisal of the project. At project level, the applicant is required to already provide indicators for the proposed project results chain at input, output and outcome levels, and regarding sustainability. However, the evaluators are asked to develop a ToC for the project, verify the indicators and suggest new indicators for the baseline.

Below we describe the various aspects of the project results chain in more detail.

Inputs

In the case of DRIVE projects, the financial, human, material, technological and information resources contain both the DRIVE and non-DRIVE financed project components. The former may include a commercial loan, (government) grants or another way of financing. Besides financial inputs, the input from the applicant includes a fully worked out project intake and application. Using this input one can carry out certain activities.

Activities

Activities for DRIVE projects include the activities for the implementation of the infrastructure project, like detailed design and construction and the operation and maintenance of infrastructure, like the delivery of spare parts and training. All these activities are needed to construct the actual infrastructure, the outputs.

Outputs

In the case of DRIVE, outputs are defined as well functioning public infrastructure, which can be described quantitatively and qualitatively. Quantitative descriptions give information about the expanded scope of the infrastructure, for example the number of kilometres of road that was built, the number of standpipes and kilometres of water distribution system that was constructed or the number of beds that are placed in a hospital. Besides expansions of scope, DRIVE projects may also improve the functioning (quality) of the infrastructure, leading to improved services. This functioning is often described qualitatively, for example, that the hospital beds are clean, that the constructed road is accessible throughout the year, also during a rainy season, that the drinking water is up to WHO standards. Outputs are thus the results of the activities. They could include physical or other output, e.g., capacities being strengthened to assure that the physical outputs are properly maintained. Outputs are the physical results of the activities, which lead to short term effects, the outcomes.

Outcomes

To know whether people use the infrastructure, it is important to look also at behavioural change (e.g., are people only drinking the tap water or are they also cooking with the tap water). This improved access and use of public infrastructure will eventually result in long-term effects.

Impacts

The regular monitoring system of DRIVE focuses on output and outcome levels. Thus, the baseline will validate the initial expected results determined during the design of the project, and later on, the evaluations are expected to define the impact achieved through the project. This information is needed to make a weighted decision on whether these expected impacts justify the project costs. These impacts will be evaluated for some projects by an independent, external project evaluation. Impact in the case of DRIVE means a contribution to private sector development. Accessible, well-functioning infrastructure is essential for the development of a private sector, enabling effective entrepreneurship and foreign trade and investment and giving people the chance to better provide for themselves. Examples of private sector development include higher earnings due to new irrigation systems, increased profit/profitability, and employment of (small) businesses due to access to the electricity network or a more productive labour force due to improved health (as an effect of access to healthcare or clean drinking water).

Assumptions

There are several assumptions underlying the project results chain which need to be fulfilled to ensure the project will achieve its stated objectives. Assumptions must be made explicit, and it must be possible to check these assumptions. It should also be made clear over which of these assumptions the applicant has control and over which it has not. In the latter case risks to the successful implementation and achievement of the project result chain should also be established, as well as means to manage or mitigate such risks.

1.2 Project Scope

The scope of this evaluation is limited to the DRIVE project "TURN-KEY RE-CONSTRUCTION OF 12 BRIDGES ON THE NR20, Champasak & Salavan Province Laos."

Project data	
Title of application	Turn-key re-construction of 12 bridges on the NR20
Number of application	DRI17/LA/01
Country & region	Laos, Champasak & Salavan Provinces
Applicant	JANSON BRIDGING INTERNATIONAL B.V.
Local authority	Government of Lao PDR, Ministry of Public Works and Transport (MPWT), Department of Roads. Provincial Departments of Public Works and Transport (DPWT) of Salavan and Champasak Provinces.
Project budget	€25.210.808 (Total project cost) €23.899.025 (Total eligible project cost) €28.650.857 (Total amount Loan and Grant)
DRIVE contribution	€11.435.683 (47.85%) (Construction) €1.030.928 (100%) (Supervision Services) €1.127.612 (50%) (ECA Premium) Total DRIVE contribution: €13.594.224
Non-DRIVE financing	€ 15.054.685 Loan taken by the Ministry of Finance, provided by Invest International Capital B.V.

1.3 Project rationale

The project will meet the **demand and needs** of (first and foremost) the local rural population in villages along the road (predominantly small-holder farmers) providing easier access to economic opportunities (markets) and social services (health, education, information) during the rainy season, and lowering transport costs throughout the year. It would provide the regional centres Pakse and Salavan with a faster connection thus allowing for the improvement of transport flows for e.g. commercial or tourism purposes. More indirectly, and dependent on further improvement of particularly the East-West road networks linking to the NR20, the project could benefit longer distance and even cross-border traffic. However, it should be noted this is not the primary focus of the project.

Location of the project

The project is located in the Southern Lao Provinces of Champasak and Salavan. The NR20 is the shortest connection between Pakse, the capital of Champasak Province and third largest city in Laos, and Salavan, the capital of Salavan Province. The map of the project location (Figure 1) clearly shows the area and surrounding road network to which the NR20 is linked. There is a total of 18 bridges along the entire NR20, 12 of which are included in the project between km 12 and km 63. The other six have all been refurbished or replaced recently and are in good condition. Of the 12 bridges, 8 are situated in the Champasak province and 4 are located in the Salavan Province.

The NR20 road has been refurbished recently in line with the technical standards required by the Department of Roads of Laos.

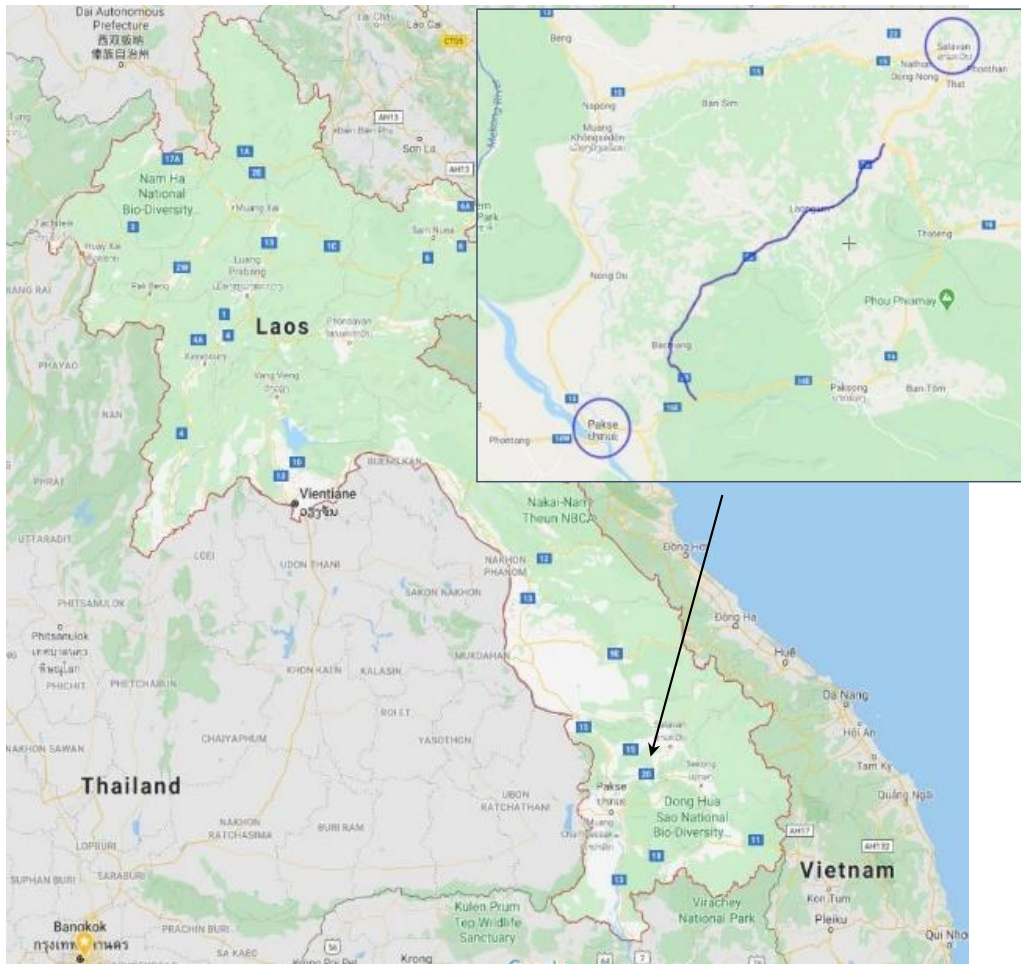


Figure 1 Project location

1.4 Project details

Although improvements to the NR20 enhance regional connectivity, the real benefits of the project accrue to the local population along the NR20, who will have reliable all-season access to other villages as well as regional hubs (i.e. Pakse and Salavan) in a with-project scenario.

With that in mind, the NR20 is the shortest connection between Pakse and Salavan. It connects to a number of other national roads (notably NR13 and NR16) that together form the North-South and East-West links in Southern Laos. Pakse lies on the East-bank of the Mekong River close to the Thai border. It is one of the few locations in the South with a major bridge crossing over the Mekong (the Lao-Japan Bridge); the nearest other crossing being in Savannakhet, more than 240km to the North of Pakse. Pakse has a direct connection (via the NR16) to the commercial border crossing to Thailand at Chong Mek, which is a customs location. This is the only such crossing in Southern Laos, the nearest next crossing again being in Savannakhet to the North. Pakse also forms a hub on the main North-South route in Laos (the NR13), which runs along the Mekong River constituting the Lao-Thai border.

A central circle labeled 'Pakse' is surrounded by four curved arrows pointing outwards to different regions: 'GMS E-W Corridor & Vientiane' (top), 'Bolaven Plateau & Vietnam' (right), 'Four Thousand Islands & Cambodia' (bottom right), and 'Thailand' (left). A thick grey curved line passes behind the arrows, separating the central hub from the surrounding regions.

The two provinces of Champasak and Salavan are predominantly agricultural and are the most important producers of coffee in Laos. There are a number of national parks and important areas of biodiversity located in these provinces as well as sites of cultural and historical importance that are major or potential tourist attractions.

6

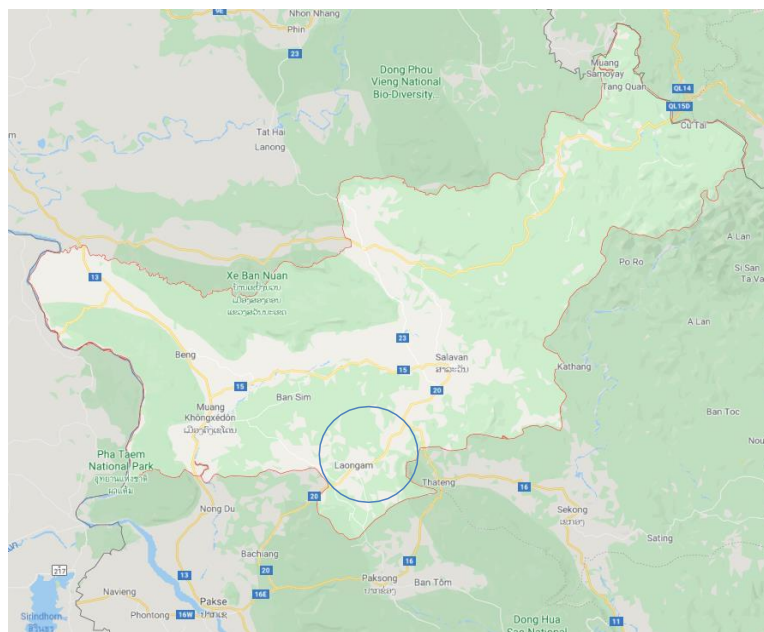


Figure 4 Province of Salavan (with project area encircled)

The population of Pakse was around 80,951 people according to 2015 population census. The population of the Champasak province as a whole was approximately 702,452 in that year. Champasak province is better served and more developed than the Salavan and other provinces in the southwest area.

Salavan is the capital of Salavan Province. While population figures for Salavan are unknown, the number of people in the province of Salavan stood at around 397,000 people (population census in 2015). Salavan Province is covered by agricultural plains (approx. 76,000 ha) and becomes mountainous toward the border with Vietnam. It lies in the foothills of the Bolaven Plateau, which it shares with Champasak and Sekong province (to its South). Given the geography and economic activity in Salavan, it is likely that the majority of its population lives in Salavan city and surrounding areas and in the districts to the East of Salavan.

The project covers Pakse and Bancheng districts in Champasak province and Laongam district in Salavan Province. Key features of this area are presented in the table below.

Feature	Champasak		Salavan	Total
	Pakse	Bancheng	Laongam	
Villages	42	47	50	139
Households	14,005	9,557	11,860	35,422
Population	80,951	55,816	71,149	207,916

Table 1 Key Territorial Features

Problem analysis

As indicated there is a total of 18 bridges along the entire NR20 (8 in Champasak and 10 in Salavan). While 6 of the bridges in Salavan have been refurbished or replaced recently, the remaining 12 bridges along the road are outdated (single lane and with a limited load capacity) and in a poor condition. As a result, heavier traffic has to use a detour. Moreover, the bridges are often flooded during the wet season as depicted in the pictures at the front cover.

The reasons for the poor state and inadequate capacity of the bridges are to a large extent to be found in their age and design: The bridges are so called Bailey type steel bridges. These were emergency (temporary) bridges used originally by the British army in WWII. They were not meant as long term structures, and typically have a lifetime of approximately 30 years. They were put in place as they are relatively easy and quick to install. However, with increased traffic volumes and heavier vehicles using the road and bridges, the bridges' maximum capacity has been exceeded. In addition, maintenance has been inadequate, whilst many wooden decks are in poor condition.

The NR20 was originally a single lane road but has been upgraded and widened to two lanes. However, the bridges were not replaced and remain single-lane, implying (larger) vehicles cannot pass one another on the bridges. Moreover, the bridges were designed with a maximum load capacity of 20 tonnes, which has become inadequate given the size and weight of current commercial traffic using the road. Most of the crossings are subject to a posted weight restriction of 20 tonne Gross Vehicle Weight (GVW), which leads to added journey times for heavy goods vehicle traffic that would otherwise use this part of NR20 if such restrictions did not exist. The applicant therefore indicates that "For an important national road these represent a sub-standard configuration."

Evidently, the bridges are at the end of their lifetime providing connectivity & accessibility issues and safety hazards for the local population and representing bottlenecks for traffic. Given erosion and damage, the bridges are at a risk of becoming useless altogether and several are already (partly) broken. On these bridge locations a road deviation has been established. These deviations are on a lower level and prone to flooding (while the road is designed to be operable in all weather conditions, thus, not subject to floods during the wet season).

As mentioned, six of the bridges on the NR20 in Salavan Province, between Salavan City and the junction of the NR20 with the NR16 at Ban Beng (see figure 1), have already been replaced. They were part of the Asian Development Bank (ADB) project "Road Sector Governance and Maintenance Project", which covered Salavan Province (but not Champasak Province). Two were replaced with ADB funding, but due to lack of further funding the remaining 4 were replaced by the MPWT itself with government funding. The six bridges all have a load capacity of 30 tonne as required by government standards, and confirmed by the Department of Roads to Invest International. The bridges were selected for replacement as they allowed for a connection (for heavier traffic) between Salavan and Paksong to the South and onwards to Pakse via the NR16. The NR16 in Xekong Province also benefitted from the ADB project and is in a reasonable state; moreover, the 42km section of NR16 between Pakse and Paksong has been upgraded to four lanes asphaltic concrete funded by national budget. The project was completed in the mid of 2019 and officially opened for traffic in October 2019.

The four bridges in Salavan Province that were not considered for replacement (6 of the 10 bridges in Salavan have been refurbished) referred to a decision of limited loads. Due to the fact that similar loading constraints would remain further south in Champasak Province, the result would be heavy vehicles continue avoiding that part of the NR20.

The **proposed solution** is to replace all 12 bridges along the NR20 between km 12 and km 63, 8 of which are situated in the Champasak province from km 12 to km 37 and 4 of which are located in the Salavan Province from km 47 to km 63.

With the proposed bridge replacement project, all restrictions on the NR20, i.e. in both Salavan and Champasak Provinces, are eliminated. It thus provides unfettered access for the local population to travel to other villages on the NR20 as well as to Pakse and Salavan. Moreover, it opens up opportunities for local businesses, including in the agricultural sector, to sell produce in wider markets. Moreover, the NR20 will be fully opened up to heavier traffic along the entire route from Salavan to Pakse. It, therefore, complements and completes the earlier bridge replacement projects implemented by the ADB and Government of Laos (GoL) on the NR20 as well as the road upgrades by the GoL.

The old bridges will be replaced by steel bridges with concrete decks, which typically have a long lifespan, while requiring minimal maintenance. The bridges will be 2 lanes wide and will have a 30- tonne load capacity as required by Government standards and in line with the upgraded NR20 road.

The components of the project are listed below.

	Main components of the project	Location on NR20	Length
	<i>Champasak Province</i>		
1	Champy Bridge	@km12+548	69.0 mtr (34.5 + 34.5 mtr)
2	Mak Ngeo Bridge	@km13+907	34.5 mtr
3	Theune Bridge	@km17+152	23.0 mtr
4	Lam phy Bridge	@km18+092	69.0 mtr (34.5 + 34.5 mtr)
5	Kalong Bridge	@km18+622	23.0 mtr
6	Pa Lai Bridge	@km22+730	69.0 mtr (34.5 + 34.5 mtr)
7	Som Bridge	@km35+361	23.0 mtr
8	Ka Pheu Bridge	@km37+773	69.0 mtr (34.5 + 34.5 mtr)
	<i>Salavan Province</i>		
9	Nam San Bridge	@km47+100	34.5 mtr
10	Ta POUNG Bridge	@km48+200	46 mtr (23 + 23 mtr)
11	Pao Bridge	@km54+550	23 mtr
12	Xe'Set Bridge	@km63+500	69 mtr (34.5 + 34.5 mtr)

Table 2 Main Components of the Project

The bridges will be two lanes wide as opposed to the current single lane bridges. The lanes will be 7.5m wide in total, with a sidewalk of 1.5m on each side of the span, making the bridge 10.5 meters wide.

The reconstruction of the bridges will include site clearing, excavation of foundation, concreting, assembly of steel girder, erection of super structure, preparation of carriage way, reconstruction of approach road including slope protection and road appurtenance as part of the Bridge Construction Contract construction works. These elements will be implemented within the 3-year period.

In addition to the project investment components (works contract), the DRIVE contribution includes financing costs and several TA assignments.

Technical Assistance

There were three different TA assignments in this project.

1) TA procurement support

TA Procurement Support comprised the in-kind contribution from the Invest International Public Programmes B.V (IIPP) in the form of a procurement expert who was present in Laos during the procurement process of the FIDIC Engineer/Supervision Services. The targets include: providing capacity to write procurement documents according to international standards; facilitating communication between IIPP and the Employer concerning procurement; facilitating the procurement process in order to shorten procurement time on the side of Lao PDR whenever possible (note that as the supervision services were procured prior to finalizing the grant arrangement, the procurement process was at times delayed as a conscious decision).

2) TA Supervision Services:

The objectives of this TA are as follows:

Design and review of the detailed design prepared by the Contractor as part of its obligations under the Yellow FIDIC contract.

Construction supervision and contract management.

Monitoring of the Environmental & Social Safeguards requirements including implementation of the Resettlement Action Plan and supervision of the contractor's ESMP, including associated management plans, according to IFC Performance Standards and/or World Bank Environmental & Social Standards.

Regarding the TA supervision services, the evaluation should indicate whether the FIDIC engineer delivered on the above in a more effective way than the Employer themselves would have been able to do; in addition, the evaluation should indicate whether the FIDIC Engineer was able to provide 'independent' assessments without undue interference from the Employer or funder (IIPP) (note that the FIDIC engineer speaks on behalf of the Employer, but should also apply the requirements of IIPP particularly when it comes to IFC performance standards).

3) TA Root Cause Analysis:

The objective is to provide a second opinion on the robustness of the bridges (i.e. risk to the assets from water-related challenges, particularly floods) by analyzing selected JBI bridges as well as proposing various measures that could improve the robustness of the bridges in the context of Lao PDR. The final evaluation, not baseline, should indicate in what way the results (second opinion and suggestions to enhance the design) were relevant if at all.

2 Evaluation Scope, Methodology & Research Questions

2.1 Inception Phase

Timelines at this moment indicate that site mobilisation will start in December 2022 and construction 6 months later. Due to a special situation with bridge #8 that collapsed during February 2023, temporary construction has been fast tracked on the project for that specific bridge. However, construction of the whole project should be finalised by 1 January 2025 with a Defects Liability Period extending to 31 December 2026. The next phases of the project will be determined when the timelines of the construction phase are clear. Data sets (raw data collected during the assignment) are expected to be shared with Invest International as findings will be used as input for the mid-term and end-line evaluations. Data refers to the qualitative and quantitative information collected as part of the assignment but not necessarily the models to process the data.

The inception phase contains three working packages: a) creating a baseline for the study, b) assessing the implementation of TA assignments and c) analysing ESG impacts. In addition, the evaluator is expected to provide preliminary conclusions and lessons learned, which Invest International could consult for future infrastructure projects with similar characteristics. The packages should at least consider the following:

- a) **Baseline:** the baseline measurement must conform to the overall objectives of the mid-term and end-line evaluations, as outlined in 2.2. It is also expected to align with the ToC and indicator list that have already been drafted (see Chapter 1 and Annex 1), although necessary improvements should be made in dialogue with Invest International. As stated before, the Baseline must be suitable for rigorous impact evaluations. The evaluator is not expected to fully work out the methodology but is expected to explain (or validate) why certain choices are made with regard to the baseline and give an indication of the methodology it expects to use and why.

When establishing the baseline, the evaluator is invited to use innovative measures such as drones to map spatial changes. Moreover, Invest International has a strategic focus on SDG 8 (job creation) and SDG 13 (climate action). Consequently, such impacts (or the lack thereof) should be highlighted in the M&E-framework. Possible impacts but not exhaustive to incorporate are:

- Safety
- Water levels
- Tourism flows
- Traffic volumes
- Indirect job effects
- Land use conversions
- Demographical changes
- Access to healthcare and education
- Carbon use during construction and afterwards
- Number of employed persons in the project (by skill and gender)

- b) **TA implementation:** the first evaluation phase should provide preliminary judgements on the implementation of TA assignments and the potential for reaching relevant ESG impacts and mitigating ESG risk. Regarding the TA assignments, Invest International has given support to supervision services, procurement and the root cause analysis of proposed bridges. These assignments should be evaluated from an effectiveness perspective and questions such as can be considered but the evaluators are invited to expand on these questions:
- To what extent has the TA Procurement Support achieved its results as determined by the objectives and targets? (output and outcome)
 - Have outputs and results been achieved on time?
 - Was the support given in a cost-effective manner?
- c) **ESG impact:** Linked to package b), the analysis of the inception phase is expected to cover the several risks when financing infrastructure projects in developing countries, most notably regarding land-use, biodiversity, pollution and livelihood. Invest International has done an analysis of the major risks in line with the IFC PS/World Bank Standards and conditions have been set to mitigate any potential risks. The Inception phase must evaluate to what extent these conditions are being met. Some conditions are supposed to be met before construction, others during. Such consequences should be addressed in the first evaluation phase with a methodology that is clearly defined in the inception report. When devising research methods and data sources for the ESG-analysis, special attention should be paid to the IFC performance standards on environmental and social sustainability. These standards are outlined by the World Bank. The ESG analysis/ ESMP of Invest International are included where the major ESG risks are identified including the steps that must be taken at each phase.

During the inception phase, the evaluator is required to meet with local authorities in Laos to coordinate exploratory research, analyse project risks and build relationships. Subsequent recommendations regarding evaluation design and research techniques should be clearly communicated to Invest International in an inception report that includes:

- A description of the DRIVE project.
- Selected approach and strategies (including how to ensure collaboration).
- Key inputs and direct results (summary of findings, discussion, limitation, biases, analysis and data gathered)
- Baseline indicators and final ToC.
- A key task for the inception report is to inventory available data. The researchers are thus encouraged to encapsulate previous research and existing statistics into the evaluation design. For example, earlier studies indicate that the DRIVE-project can be justified with an EIRR of 22% and NPV of approximately EUR 20 million. To what extent are these estimations still valid and how should they be handled in the mid-term and end-line evaluations? Moreover, the researchers are invited to enrich and substantiate their findings by analysing the following documents and sources:
 - Site surveys (performed in 2020 (2 bridges) and 2021 (10 bridges) detailing technical, environmental and social aspects of each of the 12 bridge sites and environs as well as on potential for the location of a temporary bridge during construction).
 - Rain figures 1990-2020 (data was gathered by the Contractor and focuses on higher level rain figures, but not site specific situations; no site-specific rain, nor water, data exists as far as known; this can be further verified with the meteorological agency in Laos).
 - Resettlement Policy Framework (as included in the Environmental & Social Impact Assessment with a field report from local consultants (final version: 2022) and providing aggregated figures concerning affected families and livelihoods and an estimate of compensation costs; note that the Resettlement Action Plan, including a detailed census, is expected to be delivered in April 2023).
 - Shadow Carbon Pricing Exercise (this should be aligned to Invest International's model).
 - Traffic studies for the Champasack and Salavan province (data gathered in 2019-2020 and provides an aggregate count of motorised vehicles subdivided into various typologies; further updates concerning road use including accidents can be obtained from Department of Roads of the Ministry of Public Works & Transport).

2.2 Mid-term and end-line evaluations

The criteria for the mid-term evaluation and end evaluation will be determined by the progress of the project, but also the findings, gaps and recommendations from the inception phase. The definite methodology should respond to the OECD/DAC criteria (as shown in section 2.2.1) and the DRIVE ToC. It's important to note that the baseline must be suitable for evaluation methodologies as outlined below. Tendering parties are, of course, free to draft their own methodology, but the research design is encouraged to consider the following themes:

- Experimental techniques
- A formative approach
- Triangulation of data
- Cost-benefit analysis
- Learning and development
- Local understanding

As mentioned before, the mid-term and end-line evaluations will be guided by the OECD criteria, but also considering the usefulness of the evaluations for learning. Learning is a crucial theme expected to be cross-cutting through the evaluation, which will provide insights on future decision-making for the policies or project's design under DRIVE. The following elements should be taken into account:

- Evaluation is expected to confront the attribution challenge, preferably by using experimental or quasi-experimental techniques. If such designs are infeasible, alternative research methods should be proposed, with the aim of addressing issues regarding causality, endogeneity and selection bias.
- The evaluator should provide a thorough analysis of why (or why not) the project objectives have been met. This requires a formative and explanatory approach, which seeks to unpack the black box of the intervention by systematically testing the causal chain that is outlined by the ToC.
- The evaluation must address the extent to which the expected changes and the structure serve to meet the needs, policies and priorities of the Laos' population, institutions and stakeholders involved in the intervention. The analysis should cover the relevance of the intervention to the economic, political, environmental and social conditions. This also includes the assessment of how the project is suitable to other interventions/projects developed or implemented by the country.
- The evaluation should focus on the relationship between observed results and allocated resources. To what extent does DRIVE provide value-for-money? When studying the efficiency of the project at large (and its various parts), a cost-benefit analysis should be carried out.
- The evaluator should define whether the current social, environmental, economic and institutional systems facilitate the continuation of the project after its construction (mostly the O&M phase). This entails a study of the risks, capacity of resilience and upcoming events that could influence the sustainability of the project over the years.
- A mixed-methods approach is advised. This implies that the analysis of project impacts and their explanations could be based on a triangulation of qualitative and quantitative data sources such as:
 - Interviews
 - Desk studies
 - Official statistics
 - Focus groups
 - Existing research
 - Surveys

Learning is instrumental to the assignment at hand. For this reason, it is crucial that the evaluator works closely together with local agents, as well as advisors from Invest International to ensure that a consensus is reached on the scope of the work. Moreover, tenderers are expected to clarify how their proposal contributes to capacity-building amongst relevant parties, both national and international.

Finally, it should be mentioned that English is a commonly spoken language in Laos and that most counterparts master the language, although some civil servants, contractors, consultants and civilians do not speak English. From this perspective, it is important to include local researchers in the evaluation team. Amongst other things, this will ensure that research methods, findings and evaluation questions are properly explained to third parties and local authorities (see also the award criteria as Annex of the Tender documents).

2.2.1 Evaluation Questions

The purpose of the impact evaluation as a whole is to analyse the nature and magnitude of effects, direct and indirect, positive and negative, intended or unintended, which can be attributed to the intervention. More specifically, the research will be divided into separate phases with different aims and purposes. As mentioned previously, the inception phase includes three main activities: baseline measurement, review of TA assignments and ESG impacts. These working packages can be summarised with the following questions:

- What are the optimal indicators to measure change and progress of the project at output, outcome and impact levels? And how will these be measured?
- Have the TA assignments achieved their goals in an effective way?
- To what extent have ESG risks been mitigated at this phase of the project?
- To what extent do the conditions set by DRIVE work towards better implementation of ESG guidelines?

When proposing baseline indicators, special attention should be placed on the overall requirements of the evaluation, for example regarding experimental or semi-experimental techniques, a mixed methods approach and triangulation of data. Regarding the implementation of TA assignments, the evaluator is recommended to consider (and possibly revise) the sub-questions that outlined below, including:

- Have the targets of the TA assignments been met?
- Have outputs and results been achieved on time?
- Was the support given in a cost-effective manner?

In terms of ESG impacts, the evaluator is expected to use the IFC Performance Standards on Environmental and Social Sustainability as a benchmark and use the ESMP and other ESG related documents that have been prepared by the ESG experts. Possible questions that could be derived from the ESMP are:

- Was the stakeholder consultation managed properly?
- Were precautions taken for occupational health and safety?
- How did the construction work deal with COVID-restrictions?
- Was the capacity to resettle and restore livelihoods in line with the IFC Performance Standards?

Since the project covers many ESG factors, a selection of the priority topics to be analysed during the inception phase will be done. The selection needs to take into account that some of these topics will be indirectly (or often directly) linked to impacts on ESG for the mid-term and end-line evaluations. The assessment must include the risks of the project from ESG perspective (e.g. safety, water levels, traffic volumes, job effects, land use, or carbon use), and their effects on economic development, access to health, amongst others.

After the inception phase, a mid-term and end-line evaluation will be conducted. With this caveat in mind, Invest International anticipates that future evaluations will be structured around the overall criteria and questions that are outlined below.¹

OECD/DAC criteria	Possible research questions
Output and efficiency	To what extent do the results and impacts related to DRIVE offset the cost of the intervention? Has the project been cost-effective? What is the social and economic distribution of end-users?
Effectiveness	Have the project targets been met? Has the number of vehicles on the road increased? (traffic surveys are available). Has the DRIVE-project contributed to accessible and affordable infrastructure?
Project results and impact	Does the project improve all season access to regional hubs, markets and social services (primarily health and education)? Is the Theory of Change functional to assess the development of the project in meeting the needs (or objectives), including the assumptions underlying it?
Relevance	How building bridges in Laos is a relevant measure for the social, environmental and business climate? Could the project objectives have been achieved in a better way with other activities and interventions, according to existing research on sustainable growth in developing countries?
Additionality	Was the DRIVE subsidy needed to achieve the observed results? What would have happened in the absence of the financing?
Sustainability	To what extent is the project sustainable? Has the construction process conformed to international standards outlined by the World Bank? What are the likely effects on SDG 1,8,9 and 13? What is recommended to amplify and generate a long-lasting impact for the remaining period and beyond.
Coherence	Is the DRIVE-project compatible with other interventions or country plans that are taking place in Laos? What synergies can be detected?
Conclusions and lessons learned	What are the conclusions and lessons learned from the evaluation? What impacts can be attributed to the DRIVE-project? What were the major factors influencing the achievement or non-achievement of the objectives? What lessons should Invest International consider in future interventions with similar characteristics?

3 Schedule, Arrangements and Guiding Principles

3.1 Deliverables

The Evaluator proposed the deliverables as well as an estimation of the planning according to the criteria included in this ToR and the Tender documents. The evaluator is free to suggest the planning and the deliverables that enhances the quality of the evaluation. Please note that innovative approaches, usefulness of the information, communication of the findings and validation of the information are topics that should be considered for the development of the deliverables. In the proposal, the evaluators is expected to produce a modus operandi that would result as much as possible in maintaining progress even if restrictions due to the covid-19 pandemic continue. Institutional Arrangements

Steering Committee

For this project evaluation, a steering committee will be formed in which the following representatives will be represented:

- Monitoring & Evaluation Advisor, Daniel Cartin
- Senior Investment Manager, Jeroen Bakker.
- ESG officer, Merve Birgul

The Steering Committee meets (via virtual conference calls) at key moments during the process.

¹ A detailed overview of the contextual changes is needed (preferably following the PESTLE approach)

3.3 Appendices

Please find below the list of appendices for this ToR. The Appendices belonging to this ToR can be requested separately through the TenderNed platform. The request needs to be accompanied by a signed NDA (Non-disclosure Agreement). After receiving the request and checking the NDA, the Appendices will be shared:

- Appendix 1. Application Appraisal
- Appendix 2. Intake Appraisal
- Appendix 3. Report & Indicator Sheet
- Appendix 4. Resettlement Policy Framework
- Appendix 5. Vulnerability of bridges assessment
- Appendix 6. Traffic count