Mekong River Commission

The 6th MRC Regional Stakeholder Forum

Second Regional Information Sharing for Pak Lay Hydropower Project Prior Consultation Process

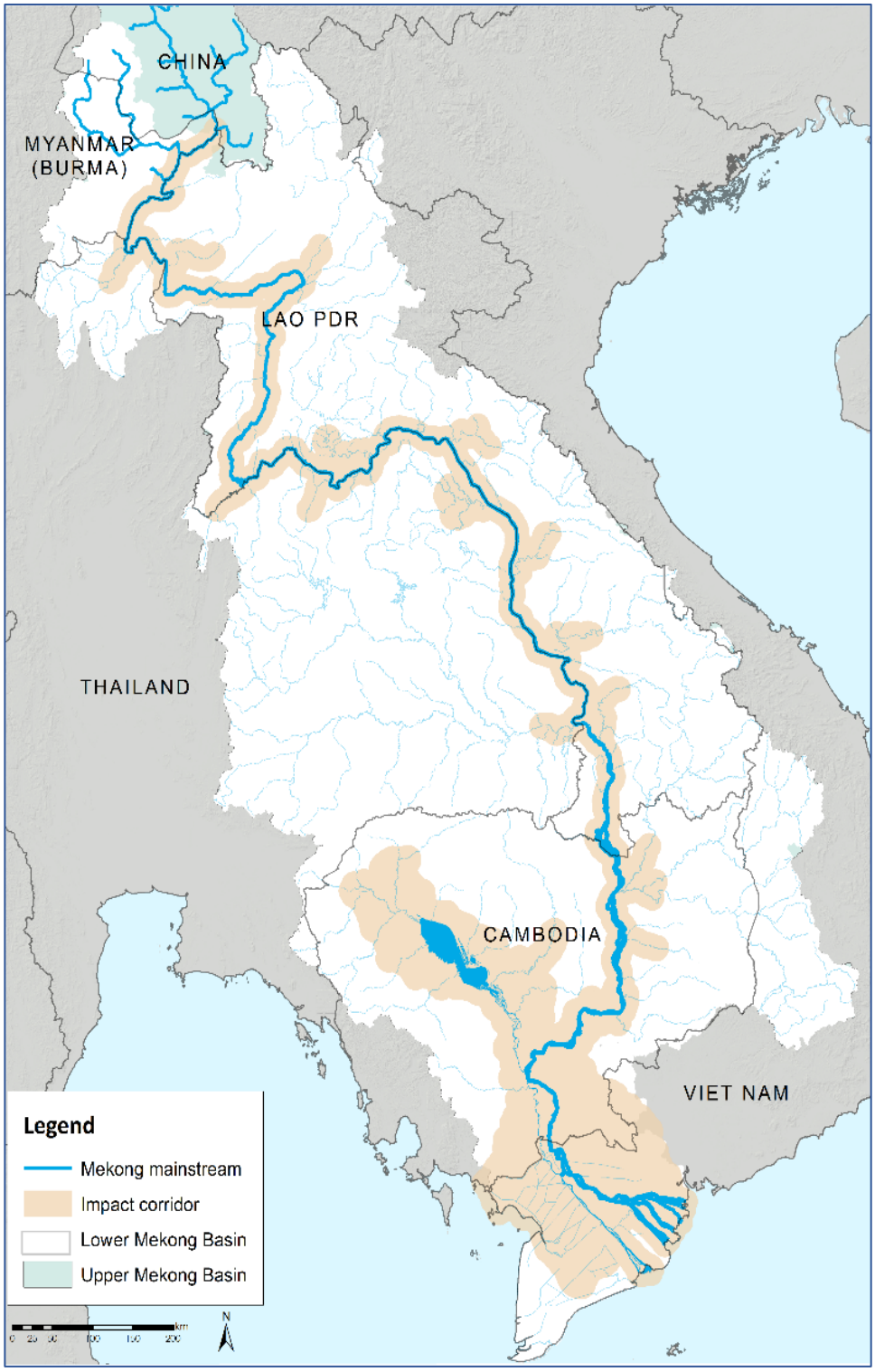
17 January 2019
Luang Prabang, Lao PDR

FORUM REPORT

February 2019

Prepared by
The Mekong River Commission Secretariat

This report is a record of the proceedings of the 6th Regional Stakeholder Forum organised by the MRC Secretariat (MRCS) on 17 January 2019 in Luang Prabang, Lao PDR.



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I. Background

On 13 June 2018, Lao PDR submitted the Pak Lay Hydropower Project for Prior Consultation under the MRC's Procedures for Notification, Prior Consultation and Agreement (PNPCA). The six-month Prior Consultation process officially started on 08 August 2018. The Prior Consultation process allows the notified countries to evaluate potential transboundary impacts of the proposed water use with technical support from the MRC Secretariat, and to discuss the review findings and recommendations through the MRC's Joint Committee mechanisms. The process aims to arrive at an agreement on the proposed use and a decision on measures that will apply to the project to avoid, minimise, and mitigate possible harmful effects on the environment and people downstream and upstream.

Taking into account the lessons learnt from the previous implementation of the PNPCA processes, the MRC places great importance on stakeholder involvement. The MRC believes that this involvement should aim to inform, consult, and involve potentially affected, interested stakeholders and the public on the proposed Pak Lay project in order for them to share their views, raise their concerns, and suggest solution to make the proposed project a better one. To enhance stakeholder participation with adequate understanding of the project and review findings and to allow enough time for them to provide feedback, the MRC will make relevant information available to the public and share this with stakeholder groups ahead of their participation.

During the Prior Consultation process for the Pak Lay Hydropower Project, two regional information-sharing and consultation meetings have been planned, together with a series of national consultation meetings.

The first Regional Information-Sharing Meeting for the Pak Lay Hydropower Project held on 20 September 2018 at the 5th MRC Regional Stakeholder Forum. As per the agreed roadmap for the Prior Consultation Process of the Pak Lay Hydropower Project, the MRC Secretariat organized the second Regional Information-Sharing Meeting on the Pak Lay Hydropower Prior Consultation Process at the 6th RSF on 17th January 2019 in Luang Prabang, Lao PDR.

II. Approach of the forum

Forum objectives

The 2nd Regional Information Sharing on the Prior Consultation Process for the Proposed Pak Lay Hydropower Project will provide a platform for multi-stakeholders to exchange viewpoints and provide comments and recommendations on preliminary technical review findings of the proposed project undertaken by the MRC Secretariat.

Participants

The forum was open and free of charge. The MRCS and the Member Countries welcomed all participants. A total of 110 participants represented developers and hydropower-related companies, NGOs, research institutions, civil society, media, as well as MRC MCs and MRC Development Partners at the 6th Forum. In order to support fuller participation of the under-

represented groups, MRCS offered travel support for local NGO and community representatives. (see Annex 1: List of participants).

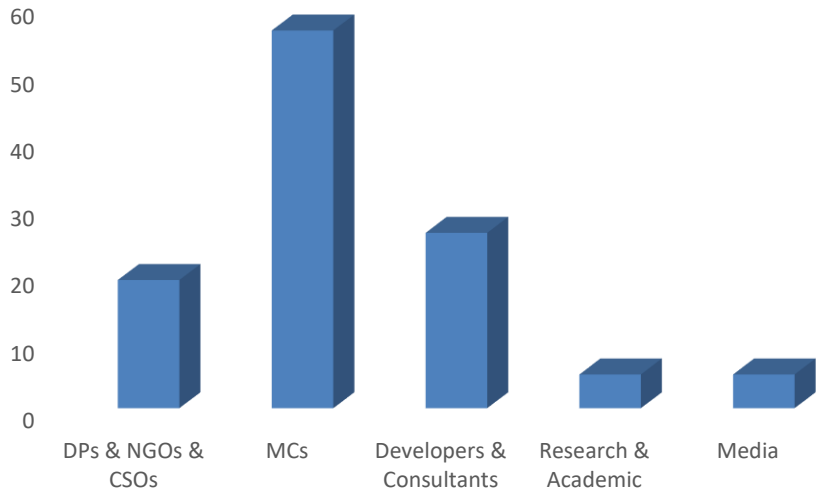

Figure 1. Overview of participants at the 6th RSF

Forum proceedings

To facilitate timely information sharing and transparency for an effective consultation and discussion, information had been made available on the MRC's website to the extent possible for one month before the event. The website is updated and maintained as source of reference http://www.mrcmekong.org/news-and-events/events/the-6th-mrc-regional-stakeholder-forum/.

The MRCS has also made efforts to communicate and promote engagement including through media releases, opinion pieces in regional newspapers, and social media (Facebook). **The forums were broadcasted live to enable those who could not attend directly but still can follow process and proceedings to get update and be able to provide comments and suggestions**.

As a follow-up from the 5th forum, the 6th forum focused on preliminary findings of the Technical Review Report of the proposed Pak Lay Hydropower project that carried out by the MRC Secretariat and update on National Stakeholder Consultations by MRC Member Countries.

In facilitating the discussion, the plenary session was designed with short presentations to introduce the findings. It was then followed by parallel group discussions with appropriate time given for in-depth discussions on 5 impacted aspects following the current PDG's requirements (hydrology, sediment, environment and fisheries, dam safety, and navigation) and socio-economic issues. In each group discussion, the methodology used for recording stakeholder inputs was a matrix of comments, recommendations, and responses. This is to ensure key points were captured, debated, recorded, and then followed up during finalizing the Technical Review Report.

Before closure of the regional forums for Pak Lay hydropower prior consultation process, representatives of different stakeholder groups participated in a panel discussion to reflect their views on the process and way forward. The reflections are summarized in the next section III under part 1.

Questions, comments, suggestions, responses, and follow-up actions made on the Prior Consultation for Pak Lay Hydropower Project have been recorded and presented in this report, under Part III: 2. Comment matrix for the Prior Consultation process for the Pak Lay Hydropower Project.

III. Summary of forums' outcomes

1. Public consultation for the Prior Consultation process for the Pak Lay Hydropower Project

At regional level, the MRC Secretariat organized totally two regional stakeholder forums to inform and get inputs from the publics during development of this Technical Review Report (TRR). The first forum focused on the approach and methodology to be undertaken by the MRC for conducting the Technical Review of the proposed Pak Lay Hydropower Project, while the second forum enabled exchange of viewpoints, comments and recommendations on the technical aspects of the proposed Pak Lay Hydropower Projects based on preliminary technical review findings undertaken by the MRC Secretariat regarding the Engineering and Environment and Socioeconomic aspects.

These 02 regional stakeholder forums were attended by 210 participants from different backgrounds including private sector & consulting companies (22%), development partners and NGOs (22%), University and Research Institutes (3%), Media (5%) and MRC Member Countries (47%).

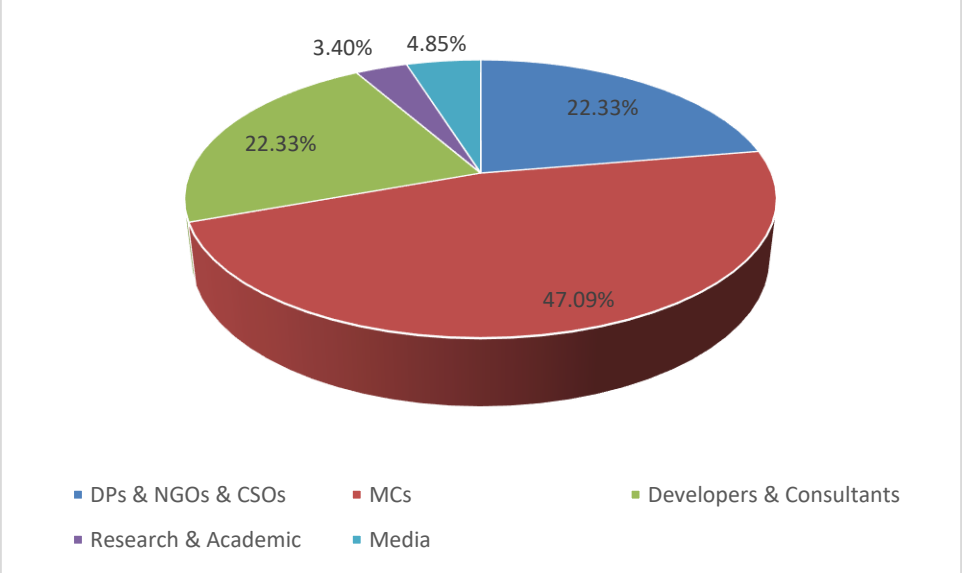

Figure 2. Overview of participants at 02 RSFs on PLHPP Prior Consultation process

The discussion was focused on six technical aspects: hydrology & hydraulics, sediment transport, environment & fisheries, navigation, dam safety, and social economic issues.

Questions have been raised regarding fish related issues and social economic impacts and dam safety. Like previous cases, stakeholders' concerns focussed on transboundary impacts, the operation of the cascade and standardized procedures for quality control during construction and operation of the dams. Several comments and suggestions were related to the progress and status of the Joint Action Plan for Pak Beng hydropower project and the Xayaburi design changes review as well as its linkage to the prior consultation process of the Pak Lay project.

In general, the key comments and recommendations about Pak Lay HPP related to:

- Clarity they required with respect to the content of the documents submitted, as well as progress with the studies on the conjunctive operation of the cascade, and the ongoing Pak Beng process;
- The design process, and the ongoing improvements in the design that may follow the prior consultation process. Clarity on the design features of the PLHPP were provided where required;
- The use of 'unapproved' guidelines to evaluate the PLHPP;
- The method and process of the MRC's review of the documents. This addressed the use of international Standards, and how differences in standards would be addressed. This included the compatibility of the Xayaburi HPP design and operations with those proposed for the PLHPP;
- The socio-economic impacts, as a cross-cutting issue throughout all reviewed aspects, should be addressed with more details and in consideration of transboundary impacts and benefit-sharing, including but not limited to back-water effect in upper part as well as cumulative impacts of the cascade operation to the downstream.
- The use of the Council Study results.
- The PBHPP JAP development process achieved some progress however the delay in finalization and implementation of PBHPP JAP created concerns for PLHPP way forward.

Being notifying country, Lao government appreciates the PNPCA process and expressed willingness to take comments into consideration. Lao PDR commits to follow suggestions in the spirit of cooperation for sustainable development in order to fulfil the purpose of the 1995 Mekong Agreement and to live up to the vision of its founders.

For the project developer, Power China Resources Ltd. finds the process useful and opens to Joint action plan. They noted the comments on fish passage especially and will try to improve the design in next steps.

Cambodia concerned on three issues: (1) transboundary impacts from the mainstream development to the downstream countries; (2) cooperative and communication strengthening mechanisms and the Secretariat should facilitate the discussion in a technical approach; and (3) understanding the best approach (including benefit and cost principle) for the sustainable development on the mainstream.

Viet Nam concerned the cumulative and transboundary impacts to the Mekong Delta. These were addressed by local communities in national consultation meetings for the Pak Lay PNPCA. The comprehensive assessment results should be shared among the MCs.

Thailand shared that the most important recommendations from its national consultation meetings was the mitigation measures for transboundary fisheries impacts which were addressed by local fishery communities along the mainstream since these are their major household incomes.

The public representative expressed concern on impacts from sediment transport to local communities in downstream areas and suggested the MRC should take into account the transboundary benefit sharing.

The questions and comments made at the national consultation meetings and regional forums are recorded in the comment matrix and attached to the Technical Review Report. During the technical review of the project's submitted documents, the MRCS specialists and experts have considered these suggestions in the recommendations.

The key outcomes of the stakeholder processes are reported more detail in separate reports: the 5th forum report and this 6th forum report.

All documents and information regarding the 5th forum and the 6th forum are available on MRC website.

2. Comment matrix for the PLHPP at the 6th MRC Regional Stakeholder Forum

Details of questions, comments, suggestions, and follow-up actions regarding the Technical Review of the Pak Lay Hydropower Project (HPP) made at the forum are recorded in the below table. As the final draft of the Technical Review Report was finalized during the drafting of this forum report, so the 4th column of the matrix reflected how the comments and suggestions have been considered in the final draft TRR:

#	Questions and Comments made at the 6th RSF	Responses and follow ups	Consideration in the Final Draft TRR
Overview and General comments			
PNPCA process	Regarding the PNPCA process, after the PBHPP PNPCA a Joint Action Plan (JAP) was issued. However, the PBHPP JAP is behind schedule. What is status of the PBHPP? How JAP for PLHPP will be developed as it will go the same pass of PBHPP? What will be timeline and process for PLHPP?	MRCS expects to have PBHPP JAP approved by March 2019, before completion of the PLHPP PNPCA process. PBHPP JAP will be further discussed at the Joint Platform meeting. The PBHPP JAP will pave the way for the PLHPP.	The final draft will indicate that the *intention* is to prepare a JAP if there is consensus on the way forward.
PNPCA process – documentation of comments	Regarding the preparation of the final TRR, MCs have different views. Thailand suggests to make a clear differentiation of comments and suggestions from notified and notifying	The MRCS have documented comments in such way and attached to TRR.	The JC must arrive at a consensus on the TRR, and so it would not be advisable include dissenting opinion. The intention of including the

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	countries. The view of notifying and notified countries can be captured separately in a comment matrix, and thus facilitate the completion of the process. The final TRR may differ from previous formats.		[bracketed] text is for the JC to discuss those and arrive at a consensus. The final draft TRR will therefore retain the [bracketed] text unless it has subsequently become resolved. The JCWG may propose alternative consensus wording during their final meeting.
PNPCA process – review methodology	Regarding supporting documents for the review of the PLHPP, the DG2018 is not endorsed yet, meanwhile the RSAT, Council Study and Mitigation Guidelines are also not agreed with all MCs. How can MRCS refer to these documents in the TRR?	MRCS used PDG 2009 as main document, but it has some gaps on the social aspects. Lessons learned from PBHPP and DSHPP lead to the combination of resources using the additional information to fill the gaps of the PDG2009. The information used form the Council Study was only used to guide some aspects of the review, not the full review process.	The TRR will only use approved documentation (MRC or international like ICOLD, PIANC) for the evaluation of „compliance“, but will use the best available science in the review process. The wording of the final draft will tighten up on these aspects.
PNPCA process – review methodology	DG2018 has been approved by 3 MCs. Cambodia therefore recommends using this tool, since it refers to good technical guidance and information provided form countries and international experts. Cambodia suggests that TRR follows the DG2018, and the use of other MRCS tools such as RSAT	Following MRC cooperation framework, the approval process should by four member countries. Lao PDR probably needs more time due to legal implications with already signed contracts.	As above, the JC Rules of Procedure (RoP) require consensus. Where there is a disenting view, they should make every effort to reach acceptable compromises. However, the RoP due not provide for a unaimity rule (which is an effective veto). The JCWG should consider the above proposal in this light. The final draft TRR will highlight the above.

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Standardization of hydropower development	Recommend developer to check the structure design against international standards. Referring to the Chinese Standards mentioned in the TRR, what does the Chinese standards mean? to what extent are they applied?	MRCS review found that many documents refer to the Chinese Standards. There is the need to compare the PLHPP Standards to international standards. This will be incorporated into the final TRR and further elaborated in other presentations today.	English translations of the Chinese Standards have been received. Where these are equivalent to the MRC or other international standards, their use is acceptable. Where they are lower than these standards the developer must justify the deviation. This will be added to the final draft TRR.
CIA and TbESIA	While the TbEIA Guidelines is still a working document, does it have any impact to the assessment? How has the TRR been conducted? What criteria have been used for assessment?	The current draft TbEIA Guidelines can serve as practical guideline to look at TbEIA issue. The guideline itself doesn't provide the guidance to conduct the report but follow the national standard on EIA. MRCS encourages the GOL to look at the regional practice. The TbEIA emphasis on the consultation process while the GOL follows national standard on conducting national EIA.	The TRR makes use of the generic principles of the TbEIA to evaulate likely TB issues particularly in relation to effects of flows (TRR4.2.9, 4.4.6 Annex E-4.2), sediments and barriers on fisheries (TRR 4.5.6 and F5.1 and 5.3). Unfortunately the TbEIA of the PL documentation is generic and lacks robust assessment. In the absence of approved TbEIA guidelines, the TRR adopts international good practice principles for EIAs. This said the MRC needs to move towards a consensus approach to Transboundary impact assessments that considers the specific Mekong context.
Information sharing	How are additional information and documents provided by GoL disseminated to	For Thailand, TNMC provided results of the RSF and the summary discussions, including the responses and clarifications of the GoL to stakeholders. Documents	All the documentation provided by all the Member Countries will be considered in the formulation of the TRR.

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	notified countries after the 1st RSF on Pak Lay?	were also uploaded to the TNMC website. For Cambodia, information was disseminated to the relevant line agencies and stakeholders, including the feedback form the GoL and Developers. Stakeholders expressed concerns on the lack of data and data insufficiencies for the assessment. CNMC informed Stakeholders that Lao PDR will try to accommodate the requests and requirements. For Viet Nam, additional documents and the TRR draft where shared with stakeholders in the second consultation round. Stakeholders still have remaining concerns on the cumulative impact assessment in the delta region, due to missing information for the impact assessment. There was a request for further information form the GoL and recommendations on improvement of the assessments. For MRCS, all the documents has been published on the Website. The final TRR will also document all this.	
Public participation	There should have a review on public participation in the TRR.		

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Terminology	Some concerns on used terminology regarding environmental flow of run-off river dam and storage dam, etc. and they are needed for further clarifications and explanations. It should remove the word "in-depth study" since EIA cover the comprehensive study. We should not use the term 'storage capacity' instead 'pounding capacity'.	The team will consider these during TRR finalization	
Draft Technical Review Report			
HYDROLOGY & HYDRAULICS			
Data sharing system	Easily accessibility to hydrology and hydraulics data by different stakeholders, especially local people.	People can request data from the GoL if the dam is in Laos and can also visit MRC website (and MRC data portal). Developer will establish a warning system in terms of water level for the impacted population when operation starts	Data sharing is considered of high relevance for the Mekong, which is again confirmed by this suggestion. MRC has addressed this issue in the ongoing program Joint Environmental Monitoring (JEM). The present data system available at MRC is not sufficient to provide the details required to monitor the flows affected by hydropower operations (already concluded in MRCs ISH11 study). To adjust to the alterations, stakeholders need to be informed properly. A warning system is essential but not covering all, as this will only be used for downstream hazards, rather than

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			informing water use during the regular operations (i.e. for navigation, fisheries). We recommend GOL and the developer to consider public sharing of data on actual and forecasted flow releases for the local stakeholders. A comment is added to the TRR.
Water level & water quality	Regarding cascade hydropower, disaster management is an issue. How will water quality be managed? There should establish a joint monitoring system for water discharge and water level between Laos and Thailand	Procedures for managing WQ are defined in the ESIA specifically for PLHPP but these are largely descriptive and gives no indication of how the programme will be implemented. No linkage to a cascade of dams is discussed. The comment on joint monitoring connects very well to MRCs program on Joint Environmental Monitoring (JEM). This will cover flow, water-levels and water quality monitoring in the cascade and downstream river. JEM also includes other disciplines, i.e. sediments and fisheries. The focus of JEM is on regular alterations in conditions, and not meant for specific use in disaster or crisis situations. See previous comment. For transboundary issues the JEM proposes improvement and extension of monitoring at Chiang Khan and Sanakham, in addition to monitoring near the dam sites by the developer. MRC can play a	

#	Questions and Comments made at the 6th RSF	Responses and follow ups	Consideration in the Final Draft TRR
		guiding role by these joint monitoring, but responsibilities are expected to be in the hands of the countries.	
Hydrological simulation	Request is made to see the hydrological simulation and understand how it will affect the downstream part especially during the critical dry year and during the hydro peak	TRR has addressed these issues	In section 4.2.4 of the TRR has already been addressed that large fluctuations can be expected for the downstream reach during hydropeaking operations. From the documents it has been concluded that no proper simulation was made, and it has therefore been recommended in the TRR that these impacts should be quantified (i.e. by modelling). Preliminary calculations by the IE show that damping of these fluctuations is limited, and there effect may be noticeable even at hundreds of kilometres downstream. In that situation they can be considered transboundary impacts. In 4.2.5 is also requested to present (quantitative) information on how these fluctuations are going to be mitigated.
Water fluctuation	Communication (on water level, fluctuation, etc) between provincial levels of different countries should be established and between MRCS and the country to disseminate the information better	Data sharing is relevant if it serves specific purposes, such as optimisation of mitigation (effectivity), warning of downstream users (e.g. during sudden flow releases), separating impacts of the dam from other impacts. As mentioned	

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		above in the previous comments, JEM (Joint Environmental Monitoring) of MRC/MCs/Developer may serve as an important information source for this communication. The real-time monitoring system and the planned operations of the dam developer can be considered a relevant and necessary component of this JEM, considering the aims of this comment.	
Hydrological conditions	Concern on the impacts of hydropower development on the Great Lake, MRCS is requested to share better hydrological conditions through their website (water quantity, water quality parameters) and make them more easily accessible.	MRCS is presently working on improving its database structure and data portal. This will enhance the sharing possibilities of the data that is made available from the (decentralised and centralised) monitoring sources. It should be remarked that the countries have a responsibility in providing the data to MRC for including in the database. In relation to this comment it is also relevant to mention that Pak Lay operations will not affect the Great Lake because it is operated as Run of River, and is very far away, athough this is wrongly addressed in the TbEIA. It therefore does not need to be addressed in the TRR. The impacts have been highlighted in the Council Study and based on MRC hydrological data. These should be open	

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		source for developers and MCs to validate models.	
Additional modelling on hydraulics	Regarding the Secretariat's request to the developer for conducting additional modelling on hydraulics to assess the different operational rules, Lao PDR requested for more explanation on applying the said model with the previous HPP on the mainstream.	The MRCS doesn't request to quantify the downstream flows and water levels in relation to the proposed operations. The most relevant impacts are flow fluctuations caused by opening and closing of gates and peaking operations. These are highly unsteady flow phenomena (propagating as waves) which require hydrodynamic modelling tools. (Analytical) flood routing tools are not sufficient. The developer has not carried out model simulations because the lack of cross-section data (according to the documents). For modelling these fluctuations… the JC will "request" this if it is expected that a one-dimensional hydrodynamic model, with unsteady flow, extending from Pak Lay HPP to Vientiane, will be needed.	This included in the final TRR is not recommending such detail as it is the developers responsibility to choose the right tool for the right task.
Operating rules	MRC should also share the operating rules from the different dams with the countries. Not only operating rules in the design but also actual operation.	It would be in the interest of all downstream countries if this kind of information is shared with MRC, and if MRC is allowed to share this with the countries. From discussions with developers and operators of some of the existing HPPs in Laos, the sharing of this information requires permission of GOL.	

#	Questions and Comments made at the 6th RSF	Responses and follow ups	Consideration in the Final Draft TRR
		Developers may be hesitant to share this information because of commercial interests, and without further obligations in the concession agreement (by GOL) their sharing is voluntary.	
Tb impacts	TB impacts not only from hydropower development but also from deforestation, from agricultural practices, land use change, etc.	The TRR is a review of the impacts of the Pak Lay HPP, and what can be done to avoid, minimise and mitigate those. However, any evaluation of whether the PLHPP is a reasonable and equitable (R&E) use must place these impacts in perspective. Not all the potential impacts have been included in the Council Study and are not quantified. This makes a fair assessment of R&E difficult.	Text to this effect will be added to the final draft TRR.
Cascade operation	How will the coordination between downstream and upstream dams be ensured? This aspect needs to be clarified so that we see/understand better	It has been found that the coordination between Pak Lay HPP, Xayaburi HPP, Nam Ou cascade, and potential downstream dams have not been considered so far. Presently GOL is studying the feasibility of a central monitoring centre that will be used to coordinate the operations. The responsibility for the coordination apparently lies in the hands of GOL, and not the developers. However, it is clear that without coordination it is hardly impossible to optimise operations from only hydrological forecasts.	This has already been mentioned in the earlier drafts of the TRR.

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		The GoL is addressing these aspects, and a report on this is expected.	
Emergency responses - Safeguards	MRCS plays an important role regarding emergency support (dam break or any abnormal situation): to assist the country with assessment, technical assistance, recommendation on how to address the issue. Lessons learned from the dam break should be considered: how to prepare better, how to establish warning mechanism (before, during and after construction)	When dam break happens on tributary this does not fall directly under MRC's mandate but MRC happy to provide support if needed and as far as it can	
Sediments and River Morphology			
Sediment transport & quality	Need to clarify how far the sediment will be transported downstream? Developer should run different scenarios for sediment flushing Quality of the sediment also has to be considered?	The context of how far the sediment will be transported is unclear. Sediment that remains in suspension in the impoundment and is discharged via the power house or over the spillway will continue to be tranported downstream. Sediment that is deposited in the impoundment will remain where deposited until conditions change, such as during a flood or sediment flushing. It is agreed that additional model runs showing the results of sediment flushing under different flow rates and draw down rates would be beneficial.	This recommendation is contained in the TRR

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Sediment flushing	The newly submitted documents have not been shared with the TNMC yet. Presentation from the MRCS in this forum will be taken as the interim information to the TNMC. There are still some different views between the MRCS and TNMC regarding trapping process sediment in impoundment, moving of the sediment, and others. We are close to the end of the process, but new information was sent by Laos that we have to consider. But still, we think that our national review does not concur with MRCS review. Thailand especially thinks that the way MRCS addresses and comments on the flushing process is adequate for a storage reservoir dam but not for a run-of-the-river dam (case of Pak Lay) which functions completely differently.	MRCS clarified that three additional submitted documents from Laos have been sent to notified countries in December 2018. The other two additional submitted documents which have just received from Laos in January 2019 have been uploaded in MRC website. Due to large size of the documents which could not be sent by email, MRCS will inform notified countries on the link for their download and record. Flushing of sediments from any impoundment (run-of-river or storage) requires that the sediment reach the dam wall, and that there is a mechanism for the sediment to pass through the dam. Lowering water levels within the impoundment will promote the movement of sediment downstream, and opening low level gates will permit passage of the material. The proposed Pak Lay impoundment is over 100 km in length, and water velocities will be lower than 'natural' over this distance, so sediments will not be transported to the dam at the same rate as prior to damming causing deposition in the impoundment. In this sense, the run-of-river project has a lot of similaraities with a storage dam, e.g. sediment will be trapped and it will be	

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		difficult to move it to the toe of the dam where it can be passed downstream. The developer's modelling shows this is the case, with the model runs with higher sand concentrations having higher sediment trapping efficiencies. The developer proposes to only flush sediments when flows exceed 16,700 m^3/s. This is unlikely to occur every year, so sediments will not be released on an annual basis as recommended in the PDG 2009. Periodic draw-down flushing would increase sediment delivery to the downstream river and promote the movement of sediment down the impoundment, which would increase the rate at which it could reach the dam and be transported downstream. Otherwise, a delta will need to be deposited (>100 km) that extends from the tailwater of the impoundment to the toe of the dam wall before sediment can be flushed through the bottom outlets.	
River morphology	Morphology will change after construction, this has to be considered by the developer.	It has been recommended that basin wide sediment transport and geomorphic change should be considered in a TbESIA.	
Data sources	MRC data are not sufficient and not reliable, more discharge and sediment measurements	The developer has used the most recent information available, and is collecting	

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	are needed for proper rating curves, more hydro data needed on tributaries.	additional data. There is a commitment to share this data with the MRC when it is available. The PDG 2009 does not recommend minimum data requirements, whereas the updated DG2018 does.	
Socio-economic impacts	Sediments seen as the physical material, but it is also an economic good (construction material, fertilizer, etc…). Dam construction affect the distribution of sediment. Can impacts on sediments be assessed through a cost and benefit / benefit sharing analysis? What are the assessment tools to analyze the sediments in their full dimension? What are the mechanisms available to compensate for the loss of sediments multi-dimensional value?	The economic impacts associated with sediment loss should be considered in the social impact assessment, and in a TbESIA. Models are used to simulate the sediment. Only sediment transport is assessed. Mechanisms for compensation/ benefit-sharing: very difficult in a TB context and no approach so far.	It has been recommended that the JC request an updated and appropriate TbESIA be prepared and shared with the MRC. The developer has used numerical and physical models to predict changes associated with the the proposed develoment. No consideration has been to benefit sharing. This is a social issue and could be considered in an TbESIA The PDG 2009 does not contain guidance on benefit sharingor compensation.
Monitoring network	For the monitoring network suggested by the developer (12 stations), who will install/operate/own this network?	This is not specified in the documents submitted to MRCS by GoL. The developer has presented a monitoring strategy. The developer will be responsible for its implementation but how that will occur is unknown.	
Environment and Fisheries			

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Fish passage	Thailand support the Secretariat's recommendations. The recommendations on fish passage are in line with the national consultation. Thailand suggested to provide some upstream and downstream fish passage in navigation log.		This is a recommendation of the TRR 4.5.4 and Annex F 4.3.2.
	In TRR, MRCS calls for re-design of fish pass. GoL suggests if the review can propose a re-design concept and idea.	A re-design concept is beyond the scope of the review but we would be pleased to be re-engaged to do this. It is recommended any engagement is through the planning, design and construction phases followed by a full evaluation of the efficiency of the fish pass facilities.	The TRR does provide parameters for the re-design, but any re-design must be done by the developer.
	Cambodia suggested that the budget for fish passage should be at least 5% of total investment.	Lao PDR agreed with the Secretariat on the provision of specific budget for fishery mitigation, management and monitoring from the developers.	The TRR (4.5.5) and Annex F 4.7 suggests the cost of effective fish passage solution is closer to 10%, which is inline with World Bank gudelines. Current investment is about 0.4% which is wholly inadequate but costs need to be put into context of a success of effective u/s and d/s fish passage over the upper cascade of dams and not treat PLHPP in isolation. This budget needs to be considerably greater than indicated, especially if robust monitoring and mitigation measures are to be implemented. The developers should provide a robust

#	Questions and Comments made at the 6th RSF	Responses and follow ups	Consideration in the Final Draft TRR
			monitoring programme for review by the MRC with a well-defined budget (as commented in TRR 4.4.7).
Fish species	Thailand found some data gaps regarding fish larvae and juvenile studies and fish species with big size which can't pass the passage both in upstream and downstream. To fulfill the gap regarding fish larvae in EIA report, Lao PDR suggested to use the existing MRC studies on fish larvae and update from that study.	The fisheries baseline studies are limited and do not include any assessment of larval and juvenile drift or the life history requirements of large endangered species such as the Mekong giant catfish. Additional studies are required but the developers should draw on MRC information in the first instance. The studies should be comprehensive and cover all seasons and lunar cycles. It is recommended the protocols outlined in the JEM are adopted.	
	Thailand informed that it has been reported that Mekong Giant Catfish, one of the critical endangered species and found only in the Mekong river. How to mitigate through the spawning areas? The design of fish passage must guarantee that the endangered species can migrate through the dam structure.	It will be difficult to ensure the fish passage facilties will enable free movement of all species, especially larger iconic species. It is highly likely the Mekong giant catfish will be lost from the upper Mekong if the cascade of dams is constructed as the flowing water habitats that are used for spawnng will be inundated.	
Fisheries impact assessment	Lao PDR suggested that the assessment of fish biology, aquatic ecology habitat and	Whilst aquaculture based measures are traditional recommended for developments, these measures are	This is in line with the recommendations of the TRR 4.5.3 and 4.5.7. The baseline fisheries

#	Questions and Comments made at the 6th RSF	Responses and follow ups	Consideration in the Final Draft TRR
	socio-economics for fisheries activities should be improved. The Secretariat should provide more detail suggestion regarding fish mitigation measures besides mentioned ones in the existing EIA report. Lao PDR recommended to promote aquaculture as alternative livelihood. For that, developer can consult Lao's Department of Fisheries (DoF) with support from Thai DoF regarding aquaculture programme especially on the fish re-stocking, agricultural fish farming and endangered fish species.	unlikely to compensate for the lost fisheries production. They also do not address social and economic issues associated with the establishment of aquaculture, as most rural communities do not have the skills or capacity to invest in developing these activities (TRR 4.5.7). This is particularly true of run-of-river schemes such as PLHPP that have fluctuating water levels in the impoundment and low retention time. It is agreed that support should be sought from national agencies but a full situation analysis to determine the efficacy of aquaculture-based measures in the region is required first.	studies are limited and considerable investment is needed to understand potential impacts.
Dam safety			
Dam break analysis	Thailand has different opinion on how to address the dam break analysis as considered as run off river type. If the structure break and flood situation and routing process will be different from reservoir dam. Further discussion will be occurred in the JCWG meeting.	We agree that there is a signficant difference between the dam failure impacts of run-of-river and storage dams. However, the methodology for assessing the impacts is still the same. It is important that the developer carries out a dam break and inundation assessment using an appropriate failure scenario based on a failure modes assessment. The developer has provided a preliminary dam break assessment but this does not clearly demonstrate the impact of failure.	This is already included in the existing TRR.

#	Questions and Comments made at the 6th RSF	Responses and follow ups	Consideration in the Final Draft TRR
		Therefore, MRCS encourage Developer to review their dam breach assessment and provide inundation maps and a consequence classification for Dam safety design and emergency preparedness.	
Chinese standards	Technical standard is one issue but more important is operational standards. Chinese developers prefer Chinese standards. There are different views such as calculation (designed flood and checked flood). An analysis of similarities and differences of Chinese standards and common standards is suggested, for future references.	Developer responded that the Chinese design standard complied with the PDG and recommended by the CNR. In addition, the developer follows the ICOLD standard. From MRCS view, the comparison of Chinese and international standards carried out by CNR only covered the selection of the design flood, check flood and the seismic hazard. They did not check any of the other standards used for the strucutral design of different components. This comparison was requested from the developers by CNR.	Some additional comments will be added to reflect that the some Chinese standards have been supplied.
Chinese standards	Which parameter to be compared between Chinese standard and other standards? CNR already reviewed and compared the Chinese standard.	There are many different comparisons to be made between the Chinese and International standards. First there is the consideration of the design loads such as the return periods for the floods and earthquakes, then there is the determination of the actual loads based on collected flow and earthquake data. Finally, there is the application of the loads to the design of the structures. All	Comments added to TRR to explain the different level of standards

#	Questions and Comments made at the 6th RSF	Responses and follow ups	Consideration in the Final Draft TRR
		of these are covered by different standards and guidelines. With regards to the CNR comparison between the Chinese and ICOLD standards we have identified an anomaly with this review which is not explained as we believe that there is a difference.	
Information sharing – dam safety during construction	Local people in Thailand concern on the dam safety during the construction phase. MRCS should have additional information on this issue. MRCS plays an important role regarding emergency support (dam break or any abnormal situation) to assist with assessment, technical assistance, recommendation on how to address the issue. Lessons learned from the dam break should be considered: how to prepare better, how to establish warning mechanism (before, during and after construction)	It is already included in TRR. It is the Developers responsibility to provide the details to satisfy the concerns of the local people in Thailand. This is why the dam break and consequence assessments discussed above are so important. When dam break happens on tributary this does not fall directly under MRC's mandate, but MRC is ready to support if needed and as far as it can. It is important that the Developer understands the need for the detailed dambreak and consequence assessments and how they will help in the emergency planning.	Additional comments added. The TRR already provides recommendations on how to address the main dam safety and emergency preparedness issues. It is the responsibility of the developer to adopt these recommendations by following international and national standards and guidelines
Navigation			
Ship lock	Knowledge on the navigation ship lock and how it operates needed in the region	MRC will provide some training on basic knowledge. A one day workshop is scheduled together with a visit to the ship lock of Xayaburi. The workshop will be	

#	Questions and Comments made at the 6th RSF	Responses and follow ups	Consideration in the Final Draft TRR
		arranged in two parts: one for the general aspects of ship locks and the second part for discussing the shiplocks of Xayaburi (completed and oprational), Pak Beng (design) and Pak Lay (design).	
Socio-economic issues			
Local impact	Local impact is important, however it's also an internal issue of Lao PDR. If possible, there should be a clearer suggestion how to improve the process as well as recognize sensitivity of certain issues and record it in the TRR	Both local and longer-distance impacts are covered in the review. The purpose of the review is not to provide guidance for future assessments, but to analyse whether the current documentation provides adequate information to support decision making on the Pak Lay project. The deficiencies pointed out should help with the preparation of future projects, however.	
Overview of socio-economic impacts	Socio-economic as a cross cutting issue, in the final TRR there should have a chapter to link socio-economic impacts from all technical aspects. It needs to identify significant Tb impacts.	The socio-economic issues are covered both in the relevant technical chapters and in the socio-economic chapter. The review cannot replace an impact assessment and can only review the transboundary impacts as identified in the assessments. It is mentioned that there are likely to be additional socio-economic impacts (such as the effects of reduced sediment delivery) but to go beyond that would be speculative.	

#	Questions and Comments made at the 6th RSF	Responses and follow ups	Consideration in the Final Draft TRR
Economic impacts	Social impact assessment has been mentioned, however economic aspect is missing, if possible there should have assessment on impacts to economic values (fertility due to sediment loss, fish loss in case of malfunctioning fish passages, etc..)	Livelihood impacts on populations along the river are covered in the review, but not macro-economic issues. As mentioned in the review, quantitative predictions of economic impacts in the different zones would have been preferred, but are not available.	
EIA & TbEIA	EIA is for individual project while TbEIA is used for cascade. There should have guidelines to assess and evaluate how Pak Lay fit into that guidelines.	TbEIA can cover either impacts of an individual project or cumulative impacts from a cascade. Guidelines for cumulative impact assessment are available globally, but not specifically for the Mekong. The RSAT covers cumulative impacts.	
	Regarding the Secretariat's recommendations to request for more full EIA for the PNPCA process, Lao PDR responded that the existing EIA report can be used as a good baseline data and they suggested to focus on the gaps in the existing topics (scoping analysis) which are not well studied in EIA, e.g., fish species, ecology instead of studying the EIA report again.	As indicated in the TRR the EIA baseline is limited to a few samples taken once in the dry and once in the wet season. This is not a simple question of filling gaps as the baseline does not provide a robust assessment of the status of the fisheries in the region or in the transboundary context	
Resettlement, livelihoods and gender	Livelihood restoration & resettlement and Gender based violence assessment should be considered. GoL should have consultation on	Livelihoods restoration and improvement for resettled households are part of the SIA, SMMP and RAP. A Gender and Vulnerable Group Assessment is also part of the documentation; however it only	

#	Questions and Comments made at the 6th RSF	Responses and follow ups	Consideration in the Final Draft TRR
	livelihoods and income generating activities with affected people.	mentions the risk of violence superficially. Best international practice on the consultation process are detailed, two-way consultations to achieve consensus with affected people. Although most of the documents on consultations are in the Lao language and could not be reviewed, there appear to have been some consultations on livelihoods restoration.	
Benefits sharing	Linkages between sediments and livelihood such as agriculture, aquaculture is important but also land subsidence is becoming an issue, whatever happens has direct impact to rice production. How to develop a benefit sharing mechanism on many things not only hydropower development?	Land subsidence particularly in the Mekong delta is a growing problem, with sediment retention in upstream reservoirs one of the causes. As mentioned in the review, this can lead to loss of land. Benefit sharing for water resource development in the Mekong is addressed in the draft Design Guidelines. Design of a general mechanism is not a matter for this review.	
TRR's recommendation should be more specific	The TRR should identify clear roles and responsibilities of different actors including developers, government agencies, especially in the recommendations. In making references to other studies, it should be clear on which part, for example specific findings of the Council Study. Recommendations should be more specific, referring to data missing or inconsistency.	Roles and responsibilities for hydropower development in general are addressed in the draft Design Guidelines. In this review of project documentation, the responsibility for providing complete information rests clearly with the host government (GoL) through the Lao National Mekong Committee and ultimately, the developer.	

3. Conclusion and next steps

The 6-month prior consultation process of the PLHPP is approaching the deadline, two regional forums together with series of national consultations have been organized, working together towards the sustainable development of the Mekong river and in supporting the notifying country to avoid, minimize, mitigate potential TB adverse impacts of the project, several actions and follow-ups will be continuing implemented beyond its scope of prior consultation process.

For the first step, all key points and comments made at the National and Regional Consultations will be considered to feed them into MRC's final draft Technical Review Report (TRR).

The 3rd Meeting of PNPCA Joint Committee Working Group (JCWG) will be held on 22 February 2019 to review and discuss final draft TRR with a focus on summary of key recommendations (*a set of measures*) and proposed Statement.

On 29 March 2019, Special JC Meeting will organize to discuss and negotiate technical findings using country Reply Forms and final TRR to derive agreement on: (1) A "Statement" including key recommendations (*a set of measures*), and issues to be included in the Joint Action Plan (JAP) development, if project proceeds, (2) Each Notified Country's position using reply form – meeting minutes.

After that, MRCS works with notifying country and notified countries to develop a Joint Action Plan for PLHPP as post 6-month PC.

VI. Annexes

Annex 1: List of participants

No.		Name	Position	Organization
1	Mr	Watt Botkosal	Deputy Secretary General	Cambodian National Mekong Committee
2	Mr	Chea Narin	Deputy Director General	Ministry of Mines and Energy
3	Mr	Sok Khom	Director of Projects and Programs Department	Cambodian National Mekong Committee
4	Mr	Chheang Hong	Director of IKM Department	
5	Mr	Thay Piseth	Deputy Director of Projects and Programs Department	
6	Mr	Sok Bun Heng	National Expert on Hydropower and Power Planning, Hydroplogy and Navigation Lock	
7	Mr	They Kheam	National Expert on Socio-Economics	
8	Ms	Phakkavanh Phissamay	Deputy Director General	Department Natural Resources and Environment Policy, Ministry of Natural Resources and Environment
9	Mr	Vithounlabandid Thoummabout	Deputy Director General	Department of Energy Policy and Planning, Ministry of Energy and Mines
10	Mr	Akomdeth Vongsay	Deputy Director General	Department of Energy Business, Ministry of Energy and Mines
11	Mr	Ounakone Xayviliya	Director of Division	Department of Water Resources, Ministry of Natural Resources and Environment
12	Mr	Asoka Rasphone	Deputy Director General	Department of International Organization, Ministry of Foreign Affairs
13	Mr	Keomany Luanglith	Director of Division	Lao National Mekong Committee Secretariat, Ministry of Natural Resources and Environment

14	Mr	Lamphone Dimanivong	Director of Division	Department of Energy Policy and Planning, Ministry of Energy and Mines
15	Mr	Litthanoulok Raspho	Director of Division	
16	Mr	Sommano Phousavath	Director of Division	Department of Fishery and Livestock, Ministry of Agriculture and Forestry
17	Mr	Somoula Yaphichit	Director of Division	Permanence Secretary Office, Ministry of Natural Resources and Environment
18	Mr	Soudaxay Khamphengxay	Director of Division	Department of Natural Resources and Environment Policy, Ministry of Natural Resources and Environment
19	Mr	Douangkham Singhanouvong	Deputy Director	Living Aquatic Resources Research Center, National Agriculture and Forestry Research Institute, Ministry of Agriculture and Forestry
20	Mr	Khamfong Souvannavong	Deputy Director of Division	Department of Waterway, Ministry of Public Works and Transport
21	Mr	Khamsone Philavong	Deputy Director of Division	Lao National Mekong Committee Secretariat, Ministry of Natural Resources and Environment
22	Mr	Ketsana Xaiyasarn	Deputy Director of Division	
23	Mr	Prasith Deemaneevong	Deputy Director of Division	Department of Meteorology and Hydrology, Ministry of Natural Resources and Environment
24	Mr	Aphisath Phanthaly	Technical Officer	Lao National Mekong Committee Secretariat, Ministry of Natural Resources and Environment
25	Ms	Ounphachanh Sengdavanh	Technical Officer	
26	Mr	Bounphanh Saisipaseuth	Technical Officer	
27	Mr	Kattiya Vannasak	Deputy Director	Department of Natural Resources and Environment, Luang Prang Province
28	Mr	Vilaphong Kanyasone	Chief of Water Resources and Meteorology Sector	
29	Mr	Vueyang Yangchangyang	Chief of Environment and Climate Change Sector	
30	Mr	Mr. Boupha Phiathep	Technical Officer	DNEP, MONRE
31	Mr	Khamla Insounanh	Technical Officer	Provincial Office of Natural Resources and Environment of Xayaboury province
32	Mr	Chaiyuth Suksri	Member of TNMC	TNMCS
33	Mr	Winai Wangpimool	Civil Engineer, Senior Professional Level	DWR

34	Mr	Satit Phiromchai	Plan and Policy Analyse, Senior Professional Level	DWR
35	Mr	Pradab Kladkempetch	Assistant to the Secretary-General	Office of the National Water Resources
36	Mr	Pongsak Suttinon	National Consultant on Hydropower and Power Planning, Hydrology and Navigation Lock	Chulalongkorn University
37	Mr	Pisit Phomikong	Fisheries Officer, Professional Level	Department of Fisheries
38	Mr	Sarawut Jamrussri	Engineer Level 7	EGAT
39	Mr	Apichat Hongsawong	Representative from Nakhon Pranom Province	Nakhon Pranom Province
40	Mr	Boonnak Jomtham	Representative from Chiang Rai Province	Chiang Rai Province
41	Mr	Aram Muangkoatra	Representative from Mukdahan Province	Mukdahan Province
42	Mr	Suchart Sirijungsakul	Acting Director, Bureau of International River	DWR
43	Ms	Mrs. Khanittha Phoothong	Plan and Policy Analyse, Senior Professional Level	DWR
44	Ms	Nguyen Hong Phuong	Deputy Director General	Viet Nam National Mekong Committee
45	Ms	Le Thi Huong	Head of Division	Viet Nam National Mekong Committee
46	Ms	Pham Thi Minh Hoa	Senior Official	The Government Office
47	Ms	Nguyen Cam Linh	Official	Department of International Organizations, Ministry of Foreign Affairs
48	Ms	Doan Thi Xuan Huong	Senior Official	Department of International Cooperation, Minitry of Natural Resources and Environment
49	Ms	Dang Thi Kim Nhung	Head of Division	Institute of Water Resources Planning, MARD
50	Mr	Ngo Manh Ha	Head of Division	Department of Water Resources Management, MONRE
51	Mr	Hoang Minh Tuyen	Head of Division	Institute of Water Resources, MONRE
52	Mr	Pham Hai Bang	Official	MONRE Office
53	Mr	Nguyen Hai Thanh	Senior Official	Viet Nam National Mekong Committee
54	Ms	Bui Thi Thu Thuy	Official	Viet Nam National Mekong Committee
55	Ms	Chawin Prapanukool		Charoen Energy and Water Asia Co., Ltd.

56	Ms	Preechaya Aunchai	Project Coordinator	
57	Ms	Chitraporn Intharanok	Project Coordinator	
58	Mr	Saknoi Leangtongplew		
59	Mr	Nanthaphan Hansarphiphat	Business Development Manager	
60	Mr	Thanasak Poomchaivej	Manager-Environmental Engineering	CK Power Public Company Limited
61	Mr	Sakolkiat Puangpatcharakul	Expert - Civil	CK Power Public Company Limited
62	Mr	Songpan Panvanich	Engineer	GMS PowerPublic Company Ltd.
63	Mr	Oh Yisung	General Manager	KOWEPO LAO International company
64	Mr.	Youn Ho Ko	Representative, Developing Power Plant	KOWEPO LAO International company
65	Mr	Montri Suwanmontri		National Consulting Group
66	Mr	Xu Kun	Pak Lay Hydropower Project Developer	PowerChina Resources Ltd.
67	Mr	Ye Mao		
68	Mr	Huang Jing		
69	Mr	Jia Peng		
70	Mr	Zhao Fei		
71	Mr	Robert Braunshofer	Business Director Hydropower	Poyry Energy Ltd.
72	Ms	Sirinimit Boonyuen	Executive Director	TEAM Consulting Engineering and Management PCL
73	Dr.	Virawan Sombutsiri	Advisor	Xayaburi Power Company Limited
74	Mr	Yu Ja	Head of division	PLHHP
75	Mr	Chen Gang	Project manager, Pak lay project consultant	Zhongnan Engineering Corporation Limited
76	Mr	Chen Lei	Pak lay project consultant	
77	Mr	Guo Yunqiang	Deputy project manager, Pak lay project consultant	
78		Luo Xi	Engineer, Consultant	
79		Gong Zhao Hui	Engineer, Consultant	
80	Mr.	Ounheuan Saiyasith	Program Manager	Australian Embassy, Lao PDR
81	Mr	Laurent Umans	1st Secretary	Embassy of the Kingdom of the Netherlands
82	Ms.	Elizabeth Thipphawong	Volunteer - Project Management Advisor	GDA - Gender Development Association - Laos
83	Mr	Bertrand Meinier	Programme Director	GIZ

84	Ms	Set Sopagna	Regional advisor	GIZ
85	Ms.	Erinda Pubill Panen	Junior Advisor	GIZ
86	Ms	Anne Chaponniere	Regional advisor	GIZ
87	Mr	Zaw Htun	Executive Director	Integrated Development Executive Association - IDEA
88	Mr	Nguyen Thanh Binh	Vice-Head of Department	Mekong Delta Development Research Institute
89	Mr.	Tai Keo	COUNTRY DIRECTOR, NTFP-EP	NTFP-EP Non timber forest products exchange programme
90	Mr.	Thy Try	Executive Director/ Editor-in-Chief	ODC - Open Development Cambodia
91	Mr.	Suparerk Janprasart	Coordinator, Sustainable Infrastructure Partnership Project	PACT Thailand
92	Ms	Noun chandany	Program Assistant	People In Need
93	Ms	Phouthamath Sayyabounsou		SDC - Swiss Agency for Development and Cooperation
94	Mr	Clemens Grunbuhel	Senior Research Fellow	Stockholm Enviroinment Institute
95	Ms	Asa Heijne	Counsellor - Senior Programme Manager	Sweden Embassy
96	Mr.	Kunvichet Than	UNOPS Cambodia Partnerships Manager	UNOPS
97	Mr	James O'Driscoll	Business Intelligence Analyst	United Nations Office for Project Services (UNOPS)
98	Mr	An Pich Hatda	Director of PD	Mekong River Commission Secretariat
99	Mr	Naruepon Sukumasavin	Director of AD	
100	Mr	Tran Minh Khoi	Director of ED	
101	Mr.	Bountieng Sanaxonh	Director of TD	
102	Mr	Thim Ly	Chief River Basin Planner	
103	Mr	Anoulak Kittikhoun	Chief Strategy and Partnership Officer	
104	Mr	So Nam	Chief Environment Management Officer	
105	Mr	Prayooth Yaowakhan	Ecosystem and Wetland Specialist	
106	Mr	Piriya Uraiwong	Technical Coordinator Specialist	
107	Mr	Palakorn Chanbanyong	Sustainable Hydropower Specialist	
108	Ms	Duong Hai Nhu	Stakeholder Engagement Specialist	
109	Ms	Nguyen Thi Ngoc Minh	Socio Economic	

110	Ms	Chamaporn Paiboonvorachat	Agriculture and Irrigation Specialist	
111	Ms	Le Thi Huong Lien	Communication Officer	
112	Ms	Janejira Chuthong	Chief Hydrologist	
113	Mr	Tuan Nguyen Duc	Water and Climate Monitoring Specialist	
114	Ms	Yen Thi Thanh Ton Nu	Navigation Operations Specialist	
115	Mr	Rattykone Sayasane	Modeller	
116	Mr	Santi Baran	M&E Specialist	
117	Mr	Meas Sopheak	Communication Officer	
118	Ms	Soukouman Voravong	Administrative Assistant	
119	Ms	Malinya Phetsikhiaw	M & E Assistant	
120	Ms	Varaphone Silaphet	Administrative Assistant	
121	Ms	Khongpadith Mekkhayom	Secretary	
122	Ms	Sophiny Prang	Librarian	
123	Ms	Bounyong Phounpaseuth	IT Assistant	
124	Mr	Soulasith Phomchaleun	Communication Outreach Component	

Annex 2: Agenda

AGENDA

The 6th MRC Regional Stakeholder Forum

Second Regional Information Sharing on the Prior Consultation Process for the Proposed Pak Lay Hydropower Project

17th January 2019, Pullman Hotel, Luang Prabang, Lao PDR

SESSION 1: INTRODUCTION		
8:00	***Registration***	
8:30	Welcome (10’)	Dr Anoulak Kittikhoun, Forum Facilitator CEO of the MRCS Representative from Lao Government
8:40	**Overview and progress with the PNPCA Prior Consultation process** for Pak Lay hydropower project, including summary of key events so far and roadmap for future consultations and information sharing (10’) - Q&As (5’)	Dr. Thim Ly, Chief River Basin Planner, MRCS
8:55	**Recap of the 1st Regional Information Sharing on Pak Lay Hydropower Project**, documentation and response to key comments, and the specific inputs needed from this forum (10’) Q&As (5’)	Ms. Nhu Duong Hai, Stakeholder Engagement Specialist
9.05	Screening of proposed Pak Lay Hydropower Project (5’)	
9:10	**Report on National Information Sharing Meeting** by Notified Countries and Notifying Country, including national consultation process and outcomes (10’ for each Member Country) - Q&A (10’)	Representative of each MRC Member Country
10:00	Overview and background of the preparation of the 1st draft **Technical Review Report** for the Pak Lay project (10’) - Q&As (5’)	Dr. Thim Ly, Chief River Basin Planner, MRCS
10:15	***Coffee break***	
SESSION 2: DRAFT TECHNICAL REVIEW REPORT		
10:30	Hydrology and Hydraulics (15’) Q&A (5’)	Dr. Janejira Chuthong, Chief Hydrologist, MRCS
10:50	Sediments and River Morphology (15’) Q&A (5’)	Dr. Nguyen Duc Tuan, Climate and Water Monitoring Specialist, MRCS

11:10	Environment (15') Fisheries (15') Q&A (10')	Dr. So Nam, Chief Environment Management Officer, MRCS
11:50	Dam safety (15') Q&A (5')	Mr. Palakorn Chanbanyong, Sustainable Hydropower Specialist, MRCS
12:10	***Lunch***	
SESSION 2: DRAFT TECHNICAL REVIEW REPORT (CONTINUED)		
13:00	Navigation (15') Q&A (5')	Ms. Ton Nu Thi Thanh Yen, Navigation Specialist, MRCS
13:20	Socio-economic issues (15') Q&A (10')	Ms. Nguyen Thi Ngoc Minh, Socio-economics Specialist, MRCS
SESSION 3: DISCUSSIONS & RECOMMENDATIONS ON DRAFT TECHNICAL REVIEW REPORT		
13:40	**Parallel discussions** & recommendations (90') on preliminary technical review findings in four break-out groups: 1) Hydrology & Hydraulics and Sediments & River Morphology 2) Environment and Fisheries 3) Dam Safety and Navigation 4) Socio-economics	All
15:15	***Coffee break (15') & return to plenary***	***All***
15:30	**Report back** on key comments and recommendations (10' per group) Plenary discussion (10')	Rapporteurs
16:20	**Reflection Panel** of the MRCS and Notifying Country representatives and experts – on key comments and recommendations (30')	MRCS, Lao MEM/developers/consultants
SESSION 4: CONCLUSION AND NEXT STEPS		
16:50	**Recap** of overall key points and future plan for engagement and information sharing on the Pak Lay project (10')	Dr. Thim Ly, Chief River Basin Planner, MRCS
17:00	**Closure of the forum** (5')	CEO of the MRCS
17:05	**End of 2nd Regional Stakeholder Information Sharing on the proposed Pak Lay Hydropower Project**	

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