

## Comment matrix for the LPHPP at the 8<sup>th</sup> MRC Regional Stakeholder Forum

Details of questions, comments, suggestions, and follow-up actions regarding the Technical Review of the LPHPP made at the forum are recorded in the table below. The 4<sup>th</sup> column of the matrix reflected MRCS actions to further address those comments and suggestions during preparation of the draft TRR.

	<b>Questions? Comments/Recommendations</b>	<b>Further action and reference to the draft TRR</b>
General project information	Project general information including beneficiaries, cost, access the information of HPP projects in Laos, purchase agreement, etc ...	TRR also includes a section on the general project information that addressing these (see Chapter 3)  Further information to be shared when available.
Stakeholder engagement	Based on feedbacks from national consultation, due to complexity and huge amount of information contained in the project document, it would take times for local people and civil society to understand the documents for qualified inputs to the process. The stakeholder should have the documents before the 6-month process has started so they have enough time to study them – sufficient time before the 1 <sup>st</sup> national information sharing/consultation and after the 1 <sup>st</sup> PNPCA JCWG meeting.	Summary of the draft TRR in English and Riparian languages is available on MRC website.  MRCS will work on project overview and translation well in advance of the consultations.
	What will be the roles of CSO in the assessment of impacts in cooperation with private sector, governments and researchers?	Regional and national consultations.

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	Some communities were not able to participate in the consultations. How can this be improved?	Further engagement with CSOs: informal dialogues, online comment box, exchanges, further discussions, participating and contributing to each other's events, etc.
Cascade management	Pak Beng developer raised concern regarding levels of tail water that were fixed by GoL for each project. The LPHPP level is 312m while the max. downstream level for Pak Beng is 310, it is not in line for cascade management. The upstream and downstream levels need to be aligned.	This issue will be taken into account in the TRR and further action to be made by the GoL.
	In the project document it has been mentioned that the design features of LPHPP would follow and adapt from Xayaburi. How do we make sure it works for this project?	Further dialogue with developers. The TRR has recommended that certain aspects of the LPHPP be separately tested to ensure that the design is also applicable to this HPP
	We experience low flows, droughts in different parts of the Mekong. How does the consultations of LPHPP and other dams make sure that this situation is not exacerbated? How can the infrastructure be used to cope with these issues?	Information sharing, coordinated operation of dams, run of river principle will be reflected in the TRR.
	With reference to ppt, retention time in LPHPP is different to Xayaburi and if the retention time is 3-9 days, quite a long time, which is not a run of river scheme.	Further dialogue with developers and reflection in the TRR

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Extension of 6-month prior consultation process	There have been several comments regarding extension of 6-month PNPCA timeframe, to discuss the issues further to come to common terms. However, in practice, there is no further discussion after 6-month period, but there is Joint Statement and JAP. Does this become the norm now, even if Procedures indicate that it can be extended?	While the official six months may likely not be extended, for the post-PC there is the JAP mechanism. For the pre-PC, MRCS encourages proposing countries to submit documents in advance and MRCS will work on project overview and communication materials such as translations.
Council Study uptake	The MRC Council Study (CS) has not been mentioned much in BDS discussion. How do you uptake the CS's recommendations? How do you plan to use it for national planning process?	Uptake strategy is being prepared including for further promoting the CS.  The MRC Council Study is one of the documents that has been used in the review.  It has been extensively used to understand the cumulative impacts.
Insufficient information	Operational curve downstream of Luang Prabang is not enough information to make assessment at this stage.	To be discussed with developer and GoL
	The developer informed that no data from China to conduct the simulation whereas the developer focused on energy production during low flow. Data-information on model and calibration are available. Hydrological data is available in the Annex.	The forecasts of inflows to the LPHPP are made with and without the Lancang Cascade dams. The differing MRC and Developer's results are highlighted and discussed.

	Questions? Comments/Recommendations	Further action and reference to the draft TRR
	Data and information are needed to update for sediment model. Sediment is an important issue, and it needs baseline and monitoring data at the dam site, as well as accumulated data along the cascade.	<p>The TRR includes additional comments calling for the developer to provide more information about sediment analysis, including any monitoring results collected for the project.</p> <p>The TRR call for the developer to implement monitoring ASAP. In the December meeting the developer stated that monitoring at the site had commenced, but did not provide details about the locations, frequency or monitoring methods</p>
Cross, independent review	Will the project consultants or MRCS staff be carrying out additional studies to compliment the gaps in the current studies?	<p>The draft TRR indicates that the prior consultation process does not have the resources for additional studies, and so information only comes from the existing studies.</p> <p>However, recommendations are made for additional monitoring by the developer.</p>
	Will there be an independent panel of experts to conduct the review or will it be conducted only by MRC and the MCs?	<p>Draft TRR will be shared preparing for the 2<sup>nd</sup> Regional Information Consultation in early February 2020. The PDG2009 and 2019 recommend the appointment of independent panels, and this has been addressed in the draft TRR.</p> <p>The MRCS teams are however independent of the MC, but still subject to oversight by the JCWG, and its decision by consensus rule.</p>

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Sediments, hydrology, flow maintenance	The impact of upper stream Lancang cascade in reduction of sediment indicated is not correct. Total is 80million tones, not 100 million tones. How has it been estimated?	The data is based on the investigation that CNR carried out along 1,000km stretch from Northern Laos border to Vientiane over the last years. We didn't receive any data from Lancang in this matter. This has been addressed in the draft TRR.
	Flow regime maintenance is an issue, water fluctuation keeps changing, this will increase with new dam construction, together with increased erosion. What type of maintenance is proposed?	<p>For water flow maintenance, during dam operation the water level and flow regime will be affected and impact on bank erosion and landslides. Reduced velocity of water release can change the erosion regime.</p> <p>From the developer's perspective, there will be no hydropeaking. It's a pure run of river dam. For the rating curve, we intend to have a constant low level. The operating range needs a 0.5m for the operating range.</p> <p>These aspects are addressed in the section on managing the cumulative impacts in the draft TRR (Section 5.4)</p>
	How much sediment deposit in reservoir? How much sediment discharge? How much reservoir capacity reduced due to sediment?	The documentation submitted does report on preliminary assessments of deposition of sediments in the impoundment and concurs with the developer's commitment to do more detailed studies. The impacts on the backwaters of Xayaburi are dealt with in some detail.

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	The sedimentation rate, bank erosion impact has not been addressed.	The sedimentation rate, bank erosion impact has not been addressed.
	Impact on normal WL, impact from Xayaburi Dam backwater, quality of data from MRCS?	The backwater of Xayaburi dam reaches the LPHPP, there is no free-flowing section remaining between the impoundments. The impacts on the backwaters of Xayaburi are dealt with in some detail (Section 3.1).
	What can MRC do if there is not enough water in the Mekong for the communities?	The MRC is to promote and coordinate the use of the resources in a sustainable manner. MRC is the one that can indicate and advise the MCs on the issues based on data and research. Member countries must take actions in terms of helping and supporting their own peoples in times of critical situations. MRCS will continue to monitor and issue forecasting information and analysis. MRC member countries are discussing the issue and planning and implementing different measures at regional and national levels. This is part of the PMFM process.
Fish assessment,	Is there a baseline on the fish assessment that we can assess any differences and impacts, to judge the success of the mitigation measures?	The draft TRR reviews the current recommendations for fish passages and makes extensive recommendations for improving the design.

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passage, ladder, species		MRCS to request programme and budget from developer for review and comment. Developer confirms additional activities are ongoing on regular basis at the project site and in alignment with Xayaburi. MRCS to request review of additional information collected as part developer ongoing monitoring studies.
	With regard to fish pass, have your preliminary findings been addressed by GoL?	Developer noted proposals in TRR to improve the efficiency of the system and will study the implementation thereof. This would not be considered a “re-design” but optimisation of the present concept
	The fish before dam project was 160 species. The MRC research has shown 200 species. How can this be?  One the Se San river, some traditional fish species have declined, new ones appear, but they are not commercially beneficial. What is the kind of the fish found?	Differences likely caused by some species listed in MRC studies only found in Tributary headwaters.
	Fish passage in LPHPP seems very different to XBR with the absence of fish ladder. Is this because the XBR fish ladder is inefficient or because there are different conditions?	Tail water level variations at Xayaburi much greater (>15 m) than LPHPP (max 7 m) due to Xayaburi back water, therefore developer considers no need for fish pass.

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		Appropriate hydraulic modelling required to show design effective.
Dam safety	The dam safety design is based on WB policies. Are other dams in Laos based on WB guidelines too?	The TRR refers to the importance of the Lao Electric Power Design Standards with regard to design. These would apply to all the dams in Lao PDR.
	Is the LPHPP conventional concrete or RCC?	RCC is used for the closing structure.
Navigation	Concern on ship lock design for the water head is 35.5m; the proposed seems too high.	The MRC PDG 2009 stated that water head of more than 30m requires a double lift system which has been included.
	If the size of vessel 500ton is designed based on study of the Mekong-Lancang navigation plan and MRC Navigation master plan agree with this size of the vessels.	Yes, this is consistent with the Chinese Standards that are used on the Mekong.
	The Master Plan on Regional Navigation should be taken into account by considering 2 <sup>nd</sup> ship lock in the future in the design and plan.	The Navigation Master Plan does not call for bigger ships (upstream Khone Fall), vessels and barges than those that can be accommodated by the actual approved ship lock chamber dimensions: 120x12x4m.  The PDG2009 and PDG2019 only requires that sufficient place should be allocated to the construction of a second [line of] ship locks.



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Socioeconomics	Regarding economic considerations, cost and benefit analysis (IRR or NPV information) is not available in the documents.	This is not addressed in the documentation provided and has therefore not been reviewed. It will be explored using the previous MRC Studies under the MRC Joint Platform as a working paper.
	Limited baseline information on transboundary communities	Flagged up clearly in TRR and transboundary impact mitigation consideration has been addressed more fully in a separate paper on reasonable and equitable use
	No information on alternative projects of greener nature or market demand for energy.	These subjects, while very valid, are not covered in the PNPCA process. There are suggestions in the Sustainable HP Development Strategy
	Reserve fund from Project's revenue should be used for further environmental restoration and protection. The impact mitigations should be feasible and acceptable for the local communities and riparian stakeholders. Benefit could have been shared in fairness.	Mekong fund issue will be further explored under the MRC Joint Platform.