

*The 5<sup>th</sup> Regional Stakeholder Forum*

*First Regional Information Sharing on Pak Lay Prior Consultation Process*

*20-21 September 2018*

*Landmark Hotel, Vientiane, Lao PDR*



## **Overall Approach**

**for the Technical Review of Pak Lay Hydropower Project**

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# CONTENTS

- Introduction and Purpose
- Scoping Assessment and Approach
- Submitted documents and the list
- Technical review methodology by themes (presented separately by concerned MRCS specialists)



# I. INTRODUCTION AND PURPOSE

- 13 JUNE 2018: Lao Gov notified for PNPCA PC for Pak Lay HPP
- 4<sup>th</sup> proposed use following PC for Xayabouri in 2010-2011; Don Sahong in 2014-2015 & Pak Beng in 2016-2017
- A first step within the PC process
- Issues & gaps of submitted docs
- Approach to prepare **Technical Review Report (TRR)**
- Bases on MRC Preliminary Design Guidance (PDG)
- Outlines Needed additional information
- **TRR aims to provide basis for MRC JC to CONSIDER ALL Viable and reasonable measures to avoid, minimise or mitigate** potential Tb impacts of the proposed project



## **The Pak Lay Hydropower Project**

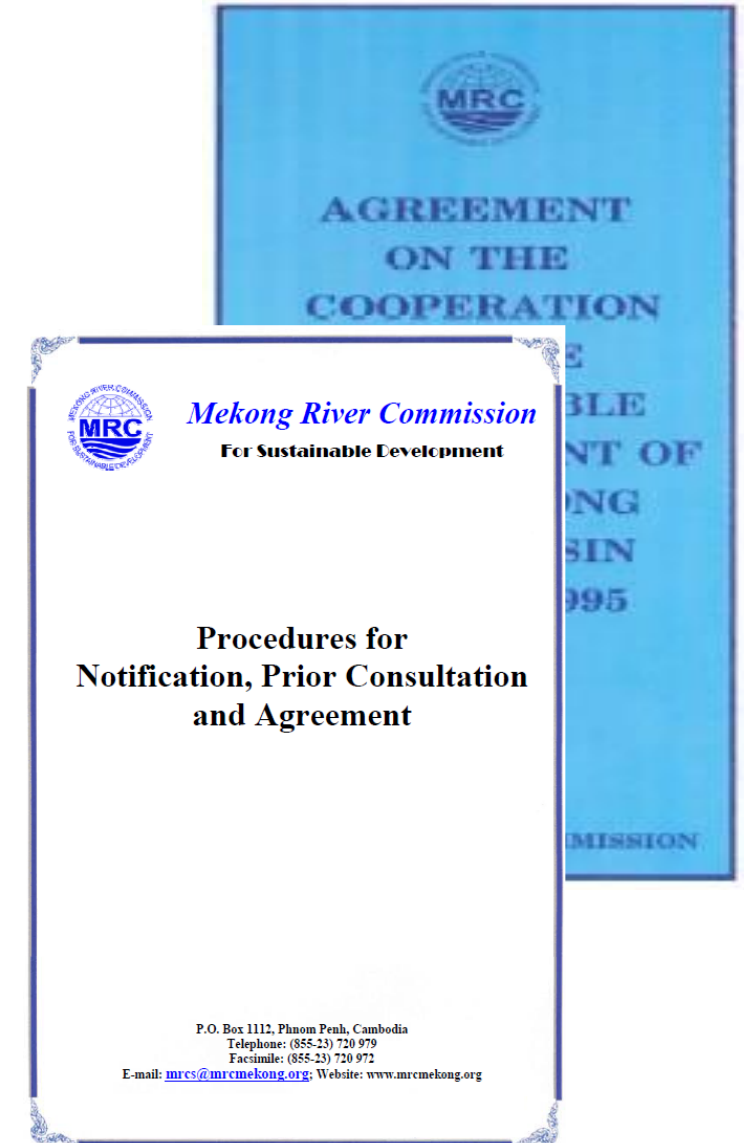
- Run-of-river project
- 241 km upstream of Vientiane
- 4<sup>th</sup> cascade of dam projects in LMB
- Installed capacity: 770 MW
- Turbines: 14\*55 MW
- Construction date: ~2022
- Operation date: ~2029
- Mainly for export & local consumption

## II. SCOPING ASSESSMENT & APPROACH

- **The MRC Framework for Prior Consultation**

Aims to provide technical due diligence to support discussions towards:

- Reasonable and equitable use (Article 5 of 1995 MA, and MRC Procedures);
- Proposed measures to avoid, minimise & mitigate impacts (Article 7 of 1995 MA and Article 5.4.3 of PNPCA) ; and
- Opportunities for increasing joint benefits & cooperation (Article 1 of 1995 MA)



## II. SCOPING ASSESSMENT AND APPROACH

- **The MRC PDG 2009**

- Provide overall guidance on performance targets, design & operating principles for mitigation measures, monitoring & adaptive management
- Cross-checked:
  1. Fisheries/fish passage
  2. Sediment & morphology
  3. Water quality, aquatic ecosystem health & environment,
  4. Navigation
  5. Dam safety

Hydrology and Hydraulic aspects / disciplines appear as cross cutting in all



Mekong River Commission

Preliminary Design Guidance  
for Proposed Mainstream Dams  
in the Lower Mekong Basin

Final Version

31 August, 2009

## II. SCOPING ASSESSMENT AND APPROACH

- **Supporting Documents/Reports**

- MRC BDS 2016-2020

- MRC Council Study 2017

[Study on Sustainable Management & Dev't of the Mekong River including Impacts of Mainstream Hydropower Projects]

- MRC Mitigation Guidelines (ISH 0306)

[Guidelines for Hydropower Environmental Impact Mitigation & Risk Management in the Lower Mekong Mainstream & Tributary]

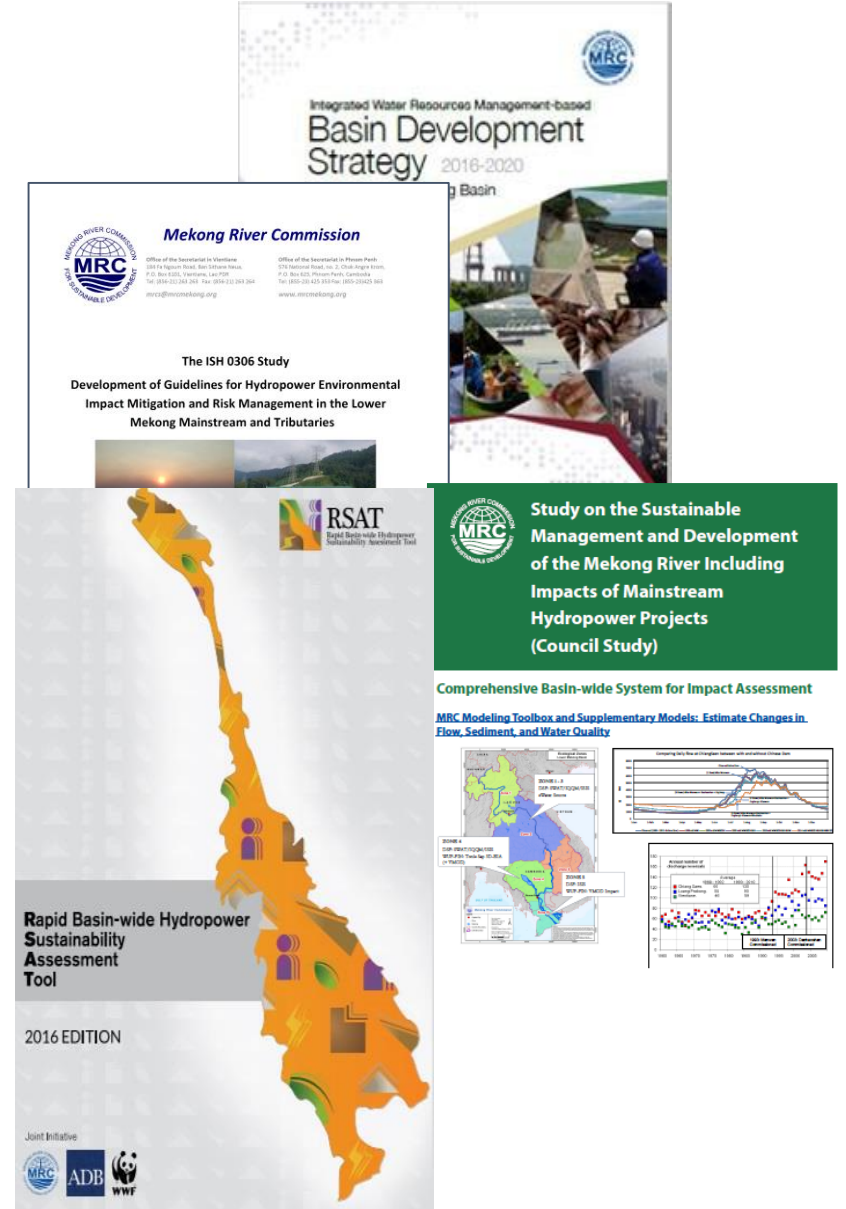
- Rapid basin-wide Hydropower Sustainability Assessment Tool (RSAT)

- Updated Design Guidance 2018's recommendations

- MRCS technical reports

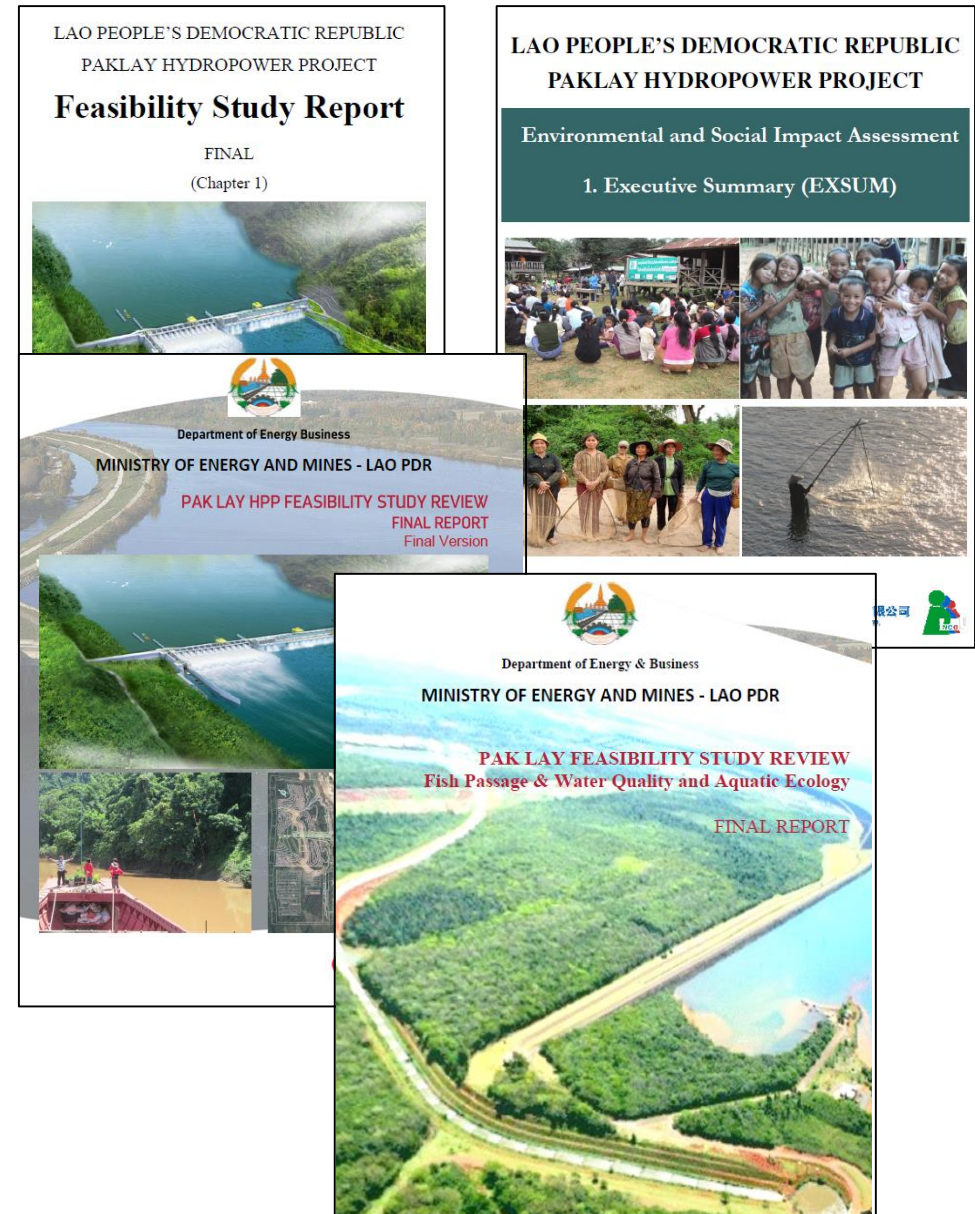
- MRC TRR of the past three PNPCA PC

- Review Report of Xayaburi design change



### III. SUBMITTED DOCUMENTS

- ❑ Feasibility Study Report (**1,298 pages**)
- ❑ Environmental and Social Impact Assessment (ESIA) Report (**~1,553 pages**)
- ❑ Review Reports of CNR (Compagnie Nationale du Rhone) & Fishing Engineering of Brazil (**244 pages**)



### III. LIST OF SUBMITTED DOCUMENTS

No		Document title	
I	<b>Doc #</b>	<b>Final Feasibility Study Report</b>	<b># of pages</b>
	I. 1	Executive Summary	151
	I. 2	Hydrology	82
	I. 3	Engineering Geology	165
	I. 4	Project Planning	190
	I. 5	Project Layout and Main Structures	245
	I. 6	M & E Equipment and Hydraulic Steel Structures	156
	I. 7	Construction Organization Design	127
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	I. 9	ESIA	79
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	I. 11	Economic Evaluation	10
	I. 12	Drawing	21



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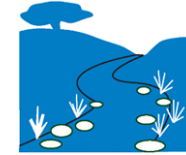
No		Document title	
<b>II</b>	<b>Doc #</b>	<b>Final ESIA Report</b>	<b># of pages</b>
	II. 1	Executive Summary	78
	II. 2	EIA	270
	II. 3	EMMP	75
	II. 4	SIA	~294
	II. 5	HIA	72
	II. 6	SMMP (social monitoring and management plan)	62
	II. 7	RAP (Resettlement Action Plan)	124
	II. 8	IEE	~271
	II. 9	TBESIA & CIA	307
<b>III</b>	<b>Doc #</b>	<b>Final Review Reports from CNR &amp; Fishing Engineering</b>	<b># of pages</b>
	III. 1	Pak Lay Feasibility Study Review Report by CNR	121
	III. 2	Pak Lay Feasibility Study Review – Fish Passage & Water Quality and Aquatic Ecology	123

## IV. Technical Review Methodology by themes

1. Fish passage and fisheries ecology



2. Water quality and aquatic ecosystem health



3. Hydrology and hydraulics



4. Sediment transport



5. Navigation



6. Dam safety



7. Potential transboundary socio-economic impacts



# Thank you

