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MRC Initiative on Sustainable Hydropower (ISH)

GUIDELINES FOR THE EVALUATION OF HYDROPOWER AND MULTI-PURPOSE PROJECT PORTFOLIOS



November 2015

MRC Initiative on Sustainable Hydropower (ISH)

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Produced for	MRC Member Countries
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** NOTES:

- 1. This Working Version has been reviewed by MRC member countries at Regional and National Meetings through 2014 and 2015. However, there is a need for ongoing and further discussion between MRC member countries on several aspects including the methods proposed for the multi-criteria analysis.
- 2. The economic valuation methods proposed here are based on international practice and research in the Mekong Region. The application of these methods by suitably qualified practitioners will require discussion with MRC member countries to ensure the valuation methods are suitable for the context of that particular application.

Acknowledgments

The authors wish to recognize the inputs and support received from the following individuals and organizations:

From the MRCS and their consultants: Voradeth Phonekeo, Simon Krohn, Piseth Chea, Inthaneth Norasingh, Janka Rokob, Ton Lennaerts, Athanaphone Chanchouly, Helen Locher, Donna Brown, Malcom Wallace, Lois Koehnken, Chaminda Rajapakse, Birgit Vogel, Georg Petersen, Mike Comeau, Nikolai Sindorf, and others.

Also, Mr. Khankhoun Khounboline (WWF Biodiversity Conservation Specialist)

From Cambodia: H.E Mr. So Sophort, Deputy Secretary General, CNMC; Dr Bun Narith, Deputy General Director, MIME; Mr. Yin Savuth, Deputy Director, Department of Hydrology and River Works, MOWRAM; Mr. Sar Kosal, Deputy Director, EIA Department, MOE; Mr. Ou Sary, Chief of Administration, Office of Administrative Affairs and Litigation Department, Fisheries Administration, MAFF; Mr. Sok Bun Heng, National Consultant to support Development of Guidelines on the Multipurpose Evaluation of Hydropower Project.

From Lao PDR: Mr. Khonesavanh Louangraj, MONRE; Ms. Phayvanh Bandavong, Department Irrigation; Ms. Theppachanh Xaoboutdavong, Technical officer, LNMC; Dr. Daovong Phonekeo, DEPP/MEM; Mr. Koryang Pamah, LSB; Mr. Thongthip Chandalasane, ISH/NC; Mr. Souksakhone Phouthamath, DUR; Mr. Thoangsamlid Onemanisone, MONRE; Mr. Phoukhong Sengvilay, MONRE, and Ms. Thiane Khamvongsa, Adviser for the Lao National Mekong Committee Secretariat.

From Thailand: Mr. Naruepon Sukumasavin, Aquatic Ecology Expert, Department of Fisheries; Dr. Nawarat Krairapanond, Director, Natural Resources and Environmental Management Coordination Division; Mr. Cherid Kalayanamitr, Electricity Generating Authority; Miss Ratda Suhataikul, Foreign Relations Officer Professional Level, National ISH Coordinator (DWR); Mrs. Pharichat Siwarak, Socio-Economic Expert.

From the Vietnam National Mekong Committee: Dr. Nguyen Huy Phuong, Mr. Pham Huy Trao, Dr. Tran Van Dat, Mr. Hoang Minh Duc.

Disclaimer

This document was prepared for the Mekong River Commission Secretariat (MRCS), Initiative on Sustainable Hydropower (ISH), by a team of independent consultants (ISH02 Consultant Team), including Dr. Armando Balloffet, Environmental Specialist and Team Leader, Dr. Bruce Aylward, Economist, and Dr. James Taylor, Social Assessment Specialist, engaged by MRC to facilitate preparation of these Guidelines on the Multi-Purpose Evaluation of Hydropower Projects.

While the development of the Guidelines is undertaken in a collaborative process involving the MRC Secretariat, National Mekong Committees of the four countries as well as civil society, private sector and other stakeholders, this document was prepared by the ISH02 Consultant Team to assist the Secretariat, and the views, conclusions, and recommendations contained in the document are not to be taken to represent the views of the MRC. Any and all of the MRC views, conclusions, and recommendations will be set forth solely in the MRC reports.

Further information on the MRC Initiative on Sustainable Hydropower (ISH) can be found on the MRC website: http://www.mrcmekong.org/ish/ish.htm.

Abbreviations and	Acronyms
ADB	Asian Development Bank
BDP	MRC's Basin Development Plan (approved January 2011)
EGDP	Ethnic Group Development Plan
EIA	Environmental Impact Assessment
EP	Environment Programme (of the MRC)
FP	Fisheries Programme (of the MRC)
IEA	International Energy Agency
IHA	International Hydropower Association
IKMP	Information and Knowledge Management Programme (of the MRC)
IP	Indigenous Peoples
ISH	Initiative for Sustainable Hydropower (MRC)
IWRM	Integrated Water Resource Management
KSA	Knowledge, Skills and Abilities
LMB	Lower Mekong Basin
M&I	Municipal and Industrial
MIGA	Multilateral Investment Guarantee Agency (of the World Bank)
MONRE	Ministry of Natural Resources and Environment
MP	Multipurpose (hydropower dams)
MRC	Mekong River Commission
MRCS	Mekong River Commission Secretariat
NGO	Non-governmental Organization
NMC	National Mekong Committee
NMCS	National Mekong Committee Secretariats
NUL	National University of Laos
PDR	People's Democratic Republic
PPA	Power Purchasing Agreement
PTNA	Participatory Training Needs Analysis
RAP	Resettlement Action Plan
RSAT	Rapid Sustainability Assessment Tool
SCB	Social Costs & Benefits
SEA	Strategic Impact Assessment
SIA	Social Impact Assessment
SIMVA	Social Impact Monitoring and Vulnerability Assessment
TNA	Training Needs Assessment
ToR	Terms of Reference
UN	United Nations
VF	Village Facilitators
WCD	World Commission on Dams
WWF	World Wide Fund for Nature

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1 Introduction

1.1 Using these Guidelines and the associated Planning Support Tool (HPST)

The MRC's Initiative for Sustainable Hydropower (ISH) seeks to propose sustainable hydropower considerations which can be integrated into the planning and regulatory frameworks of member countries. The purpose and need for the Guidelines for the Evaluation of Hydropower and Multi-Purpose Project Portfolios (The Guidelines) developed under the ISH02 Project can be summarized as:

- Current ways of planning hydropower schemes need to adequately take into account their wider social, economic and environmental implications. The key to integration of <u>all</u> costs and benefits into the national strategic planning approach is to identify credible values for these costs and benefits and then to "internalize" them into the normal economic analysis used to compare hydropower and multi-purpose options.
- Multi-purpose uses of dams need to be considered at the outset of project and basin planning.

The Guidelines propose a portfolio planning process with associated tools for valuation and evaluation of hydropower and multipurpose dam project portfolios. Their objective is to assist Member Countries in their basin planning and energy/hydropower planning frameworks. The figure below illustrates the essential components of ISH02 Guidelines concept.



Figure 1 The Portfolio Planning Concept

It is important to note that "portfolio planning" here is taken in its broadest sense. This means that any set of projects that meet a planned purpose could constitute the portfolio of projects for evaluation with the Guidelines. For example, a portfolio might include:

- all planned hydropower projects in a country:
- all planned hydropower projects in the Mekong:
- all planned hydropower projects in a sub-basin of the Mekong: or

• a suite of alternatives for a single site or a single cascade of dams on a river

The idea behind the Guidelines is that including, quantifying and valuing as many of the costs and benefits in an agreed upon and standardized way that promotes sustainability would add value to the decision-making process. The Guidelines will not provide "the" answer for decision makers. Rather they represent a tool that informs stakeholders and decision-makers enabling improved decisions. The Guidelines – consistent with the approach recommended by the World Commission on Dams (2000) – then are ultimately a multi-criteria decision support tool supported by sound financial and economic analysis.

1.2 The Process to Develop the Guidelines and HPST

The Guidelines were developed in collaboration with member countries. Stages in the development included:

- a team meeting in August of 2013;
- preparation of a project Inception report in October of 2013;
- a regional consultation with member countries and brief individual national consultations in November 2013;
- national consultations in each country in February of 2014;
- preparation of an initial draft document "Guidelines For The Evaluation Of Hydropower And Multi-Purpose Project Portfolios" in May 2014;
- a regional consultation in July 2014 at which member countries agreed with the MRC to undertake a pilot study to assist in the development of the guidelines in the Srepok Basin;
- preparation of Phase 1 Final Report, and Phase 2 and Case Study Plan in August of 2014;
- field Visit to the Srepok Basin, with representatives from member countries, in November of 2014;
- preparation of a Srepok Case Study to demonstrate the application of the HPST, including a draft Case Study Report and HPST User Manual in March 2015;
- a Regional Consultation in April of 2015 at which review and training of the HPST was provided to member countries
- a final Regional Consultation in November 2015 to review the HPST was provided to member countries; and
- preparation of the draft final Guidelines documents.

The development of the guidelines was completed in the context of the realities faced by the various stakeholders. In other words, the detailed Guidelines will be most useful if they are adapted to account for national planning methods and regulatory requirements, as well as effective consultation with all stakeholders.

2 Structure and Content of the Guidelines

The Guidelines consist of the documents and tools as illustrated in Figure 2. The components of the guidelines are as follows:

- **The Guidelines Process document (this Main Report):** Provide the "process" for implementing the Guidelines including all the instructions and step-by-step activities.
- Guidance on Economic Evaluation and Valuation for Hydropower and Multi-Purpose Dams (Annex 1 to the Main Report): Provides a process for the monetization of technical, engineering, environmental and social characteristics of the dams being assessed. It is understood that not all impacts can be expressed in monetary terms.
- Guidance on Valuation of Non-Monetary Indicators for Hydropower and Multi-Purpose Dams (Annex 2 to the Main Report): Provides a recommended approach for selecting, scoring and weighting of a set of social and environmental indicators that represent impacts that are not valued in monetary terms; and also provides guidance on consultation and participation processes to elicit these values from stakeholders and stakeholder representatives.
- The Hydropower Planning Support Tool: User's Manual (Annex 3 to the Main Report): The HPST User Manual provides guidance on how to enter and upload data into the HPST, how to customize applications of the HPST to particular circumstances (the type of analysis as per above); and explains the results that the HPST provides.
- Sustainable Hydropower Portfolio Planning Support Tool. 'The HPST consists of two spreadsheets. The HPST Project Data Workbook is where project data is entered and refined according to protocols in the User Manual. The project data is then uploaded into the HPST Basin Workbook. This workbook takes the project data, the default parameters, and stakeholder weightings and generates a series of outputs. Outputs of this model include prioritization of projects, total net present value of all (or some) of the dams being assessed in financial and economic terms, normalized scores and ranking of projects on social and environmental criteria, and ranking of projects using a risk-weighted benefit-cost ratio. A set of standard modifications and customization to the Basin Workbook can be made by users and stakeholders following guidance provided in the HPST User Manual. Additional customization is possible by modifying the underlying algorithms and formulae in the workbook.

The Guidelines were applied to a case study to test the processes, procedures, guidance and materials in the LMB country context. Based on the case study experience and lessons learned a final draft Guidelines were produced for ISH and the member countries.

Figure 2 Guidelines for Hydropower and Multi-Purpose Planning



Figure 3 summarizes the information required and analytical flow of the HPST which is designed to facilitate informed high-level planning decisions on hydropower and multi-purpose dams.



Figure 3 HPST Inputs and Outputs

Following in Figure 4 are sample outputs resulting from the use of the Guidelines and HPST to assess a hypothetical portfolio of projects. The graphics can be developed by the planners as an end product of the process and reflect the results obtained from the HPST. Similar tables and charts may be useful to include in the reports presented by the Planning Team to Decision Makers (see Section 3.4 below). These graphics are illustrative only. They were developed using the outputs from the HPST model and are not automatically produced by the model.

The sample graphics are for a portfolio of five hypothetical hydropower projects with varying financial, economic, environmental, and social characteristics which are reflected in the inputs to the HPST. For a full description of the HPST inputs please refer to Annex 3.





End Product: Ranking the Projects





Economic Costs and Benefits Comparison





Social and Environmental Impact Comparison

1

0

Project 1

Project 2

Project 3

Project 4

Project 5

Ethnic Minorities

Lost Land/MW

Displaced People/MW



Risk Comparison for the Five Projects by Social and Environmental Impact

3 Guidelines Process for Planning and Evaluation of Hydropower and Multi-Purpose Portfolios

The Guidelines implementation follows a logical step by step approach, starting with procedures for identifying the problem, collecting the necessary data, carrying out analysis, involving stakeholders through a consultative process, using a spreadsheet model, and documenting the decision process (see Figure 5). The process should be continuously improved by users as effective lessons are learned over time.

Figure 5 Guidelines Process



The above steps are described in more detail below. Note that these steps are suggestions only and the actual process should be modified to match national planning processes where possible. What is proposed is a clear process to allow inclusion of multiple factors in the planning decision-making. It is acknowledged that there may be other factors that enter into decision that are beyond the scope of these guidelines. However a robust defensible process is important for good governance and sustainable hydropower outcomes.

3.1 TEAM ESTABLISHMENT AND PROBLEM DEFINITION

NOTE: These steps are indicative and should be modified to match the processes in each country. However, the intention is that cross-cutting expert knowledge and judgement is applied to the planning process as this represents normal good governance. In addition, the views of key stakeholders are to be brought into the planning process in a constructive consultative manner.

Step 1: Appoint the Facilitator and Planning Team

- The Agency responsible for planning hydropower and multi-purpose dams names a senior, technically proficient officer to be the "Facilitator" for the application of the Guidelines. This person must have training in facilitating a decision-making process involving many and varied stakeholders and should encourage booth a "bottom-up" as well as a "top-down" flow of information and ideas. Terms of Reference for this position are found in Section 6.1.
- The Facilitator nominates and obtains approval from his/her agency for a small (5 to 8 members is suggested) multidisciplinary group of technical contributors, which should include women and men that will coordinate and lead the subsequent process. This will be the technical "Planning Team" (consisting of environmental and social scientists, engineers and economists) that would usually be found in the relevant government departments, with consultant/s as required. Effort should be made to include in the Planning Team such subject matter experts as is useful and to include as beneficial representatives of academia and civil society, not just agency staff. This team will do most of the work of gathering and analysing data.
- Section 6.2 of this document contains a Terms of Reference (ToR) for Planning Team members. Planning Team members will need to be familiar with the selected basin(s) and the Guidelines.

Step 2: Identify the Scope of the Planning Effort

- The Facilitator works with the Responsible Agency to identify the scope of the planning effort which may include any or all of the following:
 - A basin or catchment area with existing or proposed dams, for which an integrated planning level assessment is needed to inform decision-making
 - A dam or dams that have a number of potential configurations, for which an integrated assessment will assist in the selection of preferred alternatives
 - Hydropower or multipurpose dams, as well as their alternatives, for which the choice of dams or their alternatives requires integrated assessment (Please note that while the Guidelines are developed here for the evaluation of portfolios of hydropower and multipurpose dams, the process, methods and tools may be extend to include other infrastructure.
 - The Planning Team reviews existing literature (e.g. feasibility studies, etc.) and conducts any preliminary interviews with key informants (e.g. planning entity officers, environmental agency, project proponents (if available), local officials and community members as appropriate).
 - The Planning Team holds an initial scoping meeting to share observations and carry out the following tasks:
 - Review their Planning Team **ToR** (Section 6.2) which outlines roles and responsibilities, and to be clear on the Portfolio Planning Process (using the Guidelines)
 - Identify and discuss the planning portfolio (the projects to be considered)

- Preliminary identification of the impacts and issues faced in the basin by the projects (e.g. SWOT analysis?)
- o Build capacity / relationships amongst Planning Team
- Identify additional stakeholders, stakeholder representatives (see Step 5), and any additional subject matter experts to provide sufficient expertise to carry out the technical evaluation
- Step 3: Identify and Recruit Stakeholder Group
 - The Facilitator, with support from the Planning Team nominates and recruits a comprehensive but manageably sized group of **stakeholder representatives** for the Planning Process. At a minimum, the stakeholder group should include:
 - representatives of the local and national government, relevant line agencies (planning, finance, agriculture, forestry, environment, energy, fisheries, etc.)
 - o the project developer (if available), and
 - potentially affected local or regional persons local government, civil society representatives, and NGOs.
 - The selection of stakeholders should recognize the sensitivity of some project issues but allow for sufficient stakeholders to join the Stakeholder Group so that representation is inclusive and comprehensive.
 - The maximum number of stakeholder representatives will vary depending on the application, but should not exceed **30 persons** so as to make the team representative but workable.
 - A Terms of Reference (ToR) for Stakeholder Group members is included in Section 6.3.
- Step 4: Inception Workshop with Stakeholder Group
 - The Facilitator organizes an Inception Workshop, which is led by the Planning Team, to acquaint the Stakeholder Group with the objectives and constraints of the Planning Process, the basin and proposed portfolio of projects, the data requirements, expected outputs, and time schedule.
 - The group establishes initial validation of the project portfolio, list of impacts and priorities for valuation.
 - The Stakeholder Group provides inputs and guidance to the Planning Team with respect to issues of importance to the Group to ensure that all views are identified and assessed during the planning process.

3.2 DATA COLLECTION AND ANALYSIS

- Step 5: Joint Fact Finding
 - The Planning Team, with advice of the Stakeholder Group, engages in data collection and analysis to obtain the inputs necessary for carrying out the portfolio Planning Process. This may include:
 - Critical review of relevant literature (e.g. feasibility studies, EIAs, SIA, recent subject matter studies relevant to the basin, etc.)
 - Data gathering and limited field work as needed to supplement the literature and fill gaps
 - Participatory Rural Appraisal (PRA) (to obtain reliable information on social conditions among the locally affected people and their inputs and preferences. This will help guide the identification and evaluation of social indicators, both monetized and non-monetized)

• The minimum basic information that will be required to carry out the planning process and use the HPST is presented in the Guidance Annexes and the HPST Manual.

Step 6a: Economic Valuation and Evaluation of the Costs and Benefits (refer to Annex 1)

• The Planning Team (especially subject matter experts and consultants), will apply the Guidance presented in Annex 1 to value the financial, economic, social and environmental indicators for the HPST.

Step 6b: Assessment of non-monetary social and environmental Indicators (refer to Annex 2)

 The Planning Team (especially environmental and social subject matter experts and consultants), will apply the Guidance presented in Annex 2. The non-monetary indicators will be based on evidence from a review of available relevant literature, and best practice project baselines (where accessible) to inform the support tool (HPST). The Guidelines Process has limited capacity to undertake direct micro-level field studies on e/valuation indicators, and must therefore rely largely, aside from national case studies, on secondary sources of information and inputs from the stakeholders or their representatives.

Step 6c: Adapt/validate decision support tool (HPST)

- The Facilitator and the Planning Team review the data and information gathered to ensure that it contains the minimum required for proper running of the HPST. The current version of the HPST is described in Annex 3.
- The HPST is adapted, if necessary, to correspond to the availability and reliability of realworld information.
- In the event that insufficient information is able to be gathered, the HPST should not be used. The Facilitator should report this to the Responsible Agency and a decision is taken as to how to continue the Planning Process, including by carrying out additional preliminary technical studies, requiring more information from developers, and implementing more in-depth consultations with local stakeholders.

3.3 STAKEHOLDER CONSULTATION AND MULTI CRITERIA ANALYSIS

- Step 7: Planning Workshop
 - The Facilitator organizes a full Stakeholder Group Workshop. (This may require the services of a competent workshop facilitator).
 - The Planning Team and experts/consultants present the information gathered in Step 5.
 - A facilitated interactive consensus process may be used to gather inputs from the Stakeholder Group on particular parameters used in the non-monetary indicators (?) and weighting and preferences for the social and environmental indicators. The process should collect separately the weightings of different stakeholder types (for example: developer interests, local government, affected communities, national government ministries, etc.). These are then combined in the HPST to arrive at a "consensus" weighting for the non-monetized indicators.
 - The workshop results in a draft set of recommendations on the
 - o priority projects in the basin that add most value for implementation
 - o projects that need careful re-examination or subsidy to make them suitable, and
 - projects that clearly are not beneficial (in the views of the Planning Process) in the basin context, and considering financial, economic, social, and environmental aspects.

• Convergent or divergent views on facts, assumptions, interpretations, and findings are recorded to **preserve the record of the workshop**

3.4 REPORTING AND DECISION MAKING

- Step 8: Reporting
 - The Facilitator and the Planning Team write a Report based on the results of the Planning Workshop. The report clearly describes the process, data, assumptions, preferences, etc. used to reach a consensus. The report includes the record of convergent or divergent views on the topics discussed at the workshop.
 - The Report may be circulated among the Stakeholder Group representatives for comments and corrections.
 - The Facilitator and Planning Team finalize the Report and distribute the final report to the Stakeholder Group.

Step 9: Decision-Making

- The Facilitator and stakeholders present the Report to Decision Makers and answer questions or explain the process.
- Decision Maker(s) may accept the Report, ask for clarifications, or in some cases require the entire process to be repeated with the same or additional portfolio.

3.5 PROCESS REVIEW AND LESSONS LEARNED

Step 10: Evaluate the process, methods and tools and modify the Guidelines as required.

4 Capacity-Building and Training for the Guidelines

Implementation of the Guidelines by member countries will require integrated knowledge and skills focusing on physical, environmental, social and economic assessment, including technical proficiency with spreadsheet modelling. During the national and regional consultations which guided the development of these Guidelines member countries indicated a strong interest in capacity-building and training with respect to the technical content of the Guidelines, including economic evaluation and valuation, the process of indicator selection, scoring and weighting, and the use and operation of the planning tool. In addition, questions were raised as to how to effectively include stakeholder participation and consultation as part of the process laid out above. Given the limited time and resources that is likely to be available for implementation of the Guidelines the consultant team has proposed the participation of stakeholder representatives wherever access to actual stakeholders in the field is simply not possible. Capacity building and training would be in methods for facilitation and outreach to stakeholders within the context of such a planning process.

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6 Appendix – Terms of Reference

6.1 Terms of Reference for Facilitator

Objective

The Facilitator is a senior, technically proficient officer appointed by the hydropower planning agency. The Facilitator will lead a core group of technical experts in economics, environment, and social issues, and will convene several workshops with stakeholders as described in these Guidelines.

Main Tasks

- Become familiar with the Guidelines process and lead their implementation for the portfolio of hydropower and/or multipurpose projects being considered.
- Nominate and obtain approval from the appropriate agency(ies) for a small (5 to 8 members is suggested) multidisciplinary group of technical contributors/experts, which should include women and men that will carry out the technical aspects of the Guidelines process. This will be the Planning Team.
- Lead the stakeholder engagement and consultation process including building a strong rapport with NMCs, line agencies, and other stakeholders.
- Engage with regional and national agencies, institutions and NGOs who may be involved in research in this field and to document summary of findings.
- Work with the Responsible Agency to identify the scope of the planning effort which may include any or all of the following:
 - A basin or catchment area with existing or proposed dams, for which an integrated planning level assessment is needed to inform decision-making
 - A dam or dams that have a number of potential configurations, for which an integrated assessment will assist in the selection of preferred alternatives
 - Hydropower or multipurpose dams, as well as their alternatives, for which the choice of dams or their alternatives requires integrated assessment (Please note that while the Guidelines are developed here for the evaluation of portfolios of hydropower and multipurpose dams, the process, methods and tools may be extend to include other infrastructure.
- Lead field work, as required, using participatory methods in order to elicit information for the case study with respect to social and other indicators.
- Convene and lead an **initial scoping meeting** with the Planning Team to share observations and carry out the tasks identified in the Guidelines.
- With support from the Planning Team, nominate and recruit a comprehensive but manageably sized group of **stakeholder representatives** for the Planning Process. At a minimum, the Stakeholder Group should include:
 - representatives of the local and national government, relevant line agencies (planning, finance, agriculture, forestry, environment, energy, fisheries, etc.)
 - the project developer (if available), and
 - $\circ~$ potentially affected local or regional persons local government, civil society representatives, and NGOs.
- Organize an **Inception Workshop**, which is led by the Planning Team, to acquaint the Stakeholder Group with the objectives and constraints of the Planning Process, the basin and proposed portfolio of projects, the data requirements, expected outputs, and time schedule.

- Lead and support the Planning Team in the data collection and analysis aspects of the Planning Process as outlined in the Guidelines.
- Organize a full **Stakeholder Group Workshop** to review and discuss the data and analysis and arrive at a consensus set of recommendations, using the HPST model as appropriate.
- With support from the Planning Team, write a Report based on the results of the Stakeholder Group Workshop. The report clearly describes the process, data, assumptions, preferences, etc. used to reach a consensus. The report includes the record of convergent or divergent views on the topics discussed at the workshop.
- Circulate the Report among the Stakeholder Group representatives for comments and corrections.
- Finalize the Report and distribute the final report to the Stakeholder Group.
- Present the Report to Decision Makers and answer questions or explain the process, and lead the effort to make any required changes or enhancements to the recommendations.

Required Skills and Experience

- Postgraduate degree (at least Masters Level) in an appropriate economics, environment, or social science is desirable.
- At least 10 years professional experience in the field of hydropower project planning.
- Extensive experience in the Mekong Region (or equivalent) and a good understanding of environmental, social, cultural and political issues within this region and their interconnection with hydropower development.
- The Facilitator must have training in facilitating a decision-making process involving many and varied stakeholders and should encourage both a "bottom-up" as well as a "top-down" flow of information and ideas.
- Experience in the assessment of multiple use opportunities of hydropower infrastructure.
- An understanding of institutional processes and decision-making structures in the Mekong Region and the country where the projects are being considered.
- Proven communications skills and excellence in writing in English and in the principal language of the country where the projects are being considered.

6.2 Terms of Reference for Planning Team Members

Objective

The Planning Team is a multidisciplinary group of technical contributors, which will include women and men that will coordinate and lead the planning process. It will consist of environmental and social scientists, engineers, and economists that would usually be found in the relevant government departments, with consultant/s as required as well as representatives of academia and civil society. This team will do most of the work of gathering and analysing data.

Main Tasks

- Support the Facilitator in implementing the stakeholder engagement and consultation process including building a strong rapport with NMCs, line agencies, and other stakeholders.
- Engage with regional and national agencies, institutions and NGOs who may be involved in research in this field and to document summary of findings.
- Carry out field work, as required, using participatory methods in order to elicit information for the case study with respect to social and environmental indicators.
- Participate in an **initial scoping meeting** with the Facilitator to share observations and carry out the tasks identified in the Guidelines.

- Support the Facilitator in nominating and recruiting a comprehensive but manageably sized group of **stakeholder representatives** for the Planning Process. At a minimum, the Stakeholder Group should include:
 - representatives of the local and national government, relevant line agencies (planning, finance, agriculture, forestry, environment, energy, fisheries, etc.)
 - the project developer (if available), and
 - potentially affected local or regional persons local government, civil society representatives, and NGOs.
- Support the Facilitator in organizing and implementing an **Inception Workshop** to acquaint the Stakeholder Group with the objectives and constraints of the Planning Process, the basin and proposed portfolio of projects, the data requirements, expected outputs, and time schedule.
- Carry out the data collection and analysis aspects of the Planning Process as outlined in the Guidelines.
- Support the Facilitator in organizing and implementing a full **Stakeholder Group Workshop** to review and discuss the data and analysis and arrive at a consensus set of recommendations, using the HPST model as appropriate.
- Support the Facilitator in writing a **Planning Report** based on the results of the Stakeholder Group Workshop. The report clearly describes the process, data, assumptions, preferences, etc. used to reach a consensus. The report includes the record of convergent or divergent views on the topics discussed at the workshop.
- Support the facilitator in addressing comments and needed corrections emanating from the stakeholder review of the Planning Report.
- Help the Facilitator to finalize the Report and distribute the final report to the Stakeholder Group.
- Support the facilitator to answer questions or explain the process, and lead the effort to make any required changes or enhancements to the recommendations.

Required Skills and Experience for each planning team member (technical experts)

- Postgraduate degree (at least Masters Level) in an appropriate economics, environment, or social science is desirable.
- At least 10 years professional experience in his/her field, especially with respect to hydropower project planning.
- Extensive experience in the Mekong Region (or equivalent) and a good understanding of environmental, social, cultural and political issues within this region and their interconnection with hydropower development.
- Experience in the assessment of multiple use opportunities of hydropower infrastructure with respect to his/her field of expertise.
- An understanding of institutional processes and decision-making structures in the Mekong Region and the country where the projects are being considered.
- Proven communications skills and excellence in writing in English and in the principal language of the country where the projects are being considered.

6.3 Terms of Reference for Stakeholder Group Members

Objective

The Stakeholder Group will work closely with the Facilitator and Planning Team to help assess the economic, environmental and social aspects of the development of a portfolio of hydropower projects by bringing to the table the ideas and preferences of those most impacted by the projects.

The Stakeholder Group should include representatives of the local and national government, relevant line agencies (planning, finance, agriculture, forestry, environment, energy, fisheries, etc.); the project developer(s), and potentially affected local or regional persons - local government, civil society representatives, and NGOs.

Main Tasks

- Participate in an **Inception Workshop** to become acquainted with the objectives and constraints of the Planning Process, the basin and proposed portfolio of projects, the data requirements, expected outputs, and time schedule.
- Support the Planning Team by providing available relevant information to enhance the Planning Process as outlined in the Guidelines.
- After the data gathering and analysis phases, participate in a full **Stakeholder Group Workshop** to review and discuss the work performed by the PlannigTeam and arrive at a consensus set of recommendations, using the HPST model as appropriate.
- Review the **Planning Report** developed by the Planning Team based on the results of the Stakeholder Group Workshop. The report clearly describes the process, data, assumptions, preferences, etc. used to reach a consensus. The report includes the record of convergent or divergent views on the topics discussed at the workshop.
- Provide relevant comments and needed corrections emanating from the stakeholder review of the draft Planning Report.
- Review the Final Planning Report and help the Facilitator and Planning Team to finalize the Report.

Required Skills and Experience for each Stakeholder Member

The selection of stakeholders should recognize the sensitivity of some project issues but allow for sufficient stakeholders to join the Stakeholder Group so that representation is inclusive and comprehensive. The maximum number of stakeholder representatives will vary depending on the application, but should not exceed 30 persons so as to make the team representative but workable.

- Demonstrated involvement or stake in the projects being discussed and planned. The Stakeholder Group Member may be an affected stakeholder or a representative of other stakeholders who may not be able to participate directly.
- Ability to work with other stakeholders with varying views and concerns to arrive at a consensus set of recommendations. This means experience in workshop settings where everyone's views are respectfully considered so as to approach a consensus.
- A general understanding of legal and regulatory processes and decision-making structures in the Mekong Region and the country where the projects are being considered.
- Proven verbal communications skills. Ability to read and write reports in English and in the principal language of the country where the projects are being considered will be desirable.