Review and Update of the MRCs’ Preliminary Design Guidance for Proposed Mainstream Dams of the Lower Mekong Basin
1. MRC-BDS and SP for 2016-2020

- **Outcome 3**: Guidance for development and management of water and related projects and resources shared and applied by national planning and implementing agencies

  - **Output 3.1**: PDG for mainstream dams reviewed, updated and implementation supported

  - **Objective**: “Updated PDG for Proposed Mainstream Dams on LMB provides: contemporary, research based performance standards, design and operating principles; which also covers compliance monitoring and adaptive management”
2. PDG2009 Update Needs

✓ **Council Study** – clearly emphasizes *mainstream and tributary hydropower projects* are accompanied by *impacts and development risks* in MRC MCs

✓ **PDG 2009** – developed to serve as an *Initial Reference Framework* for MRC Technical Reviews of mainstream dams under the PNPCA process

✓ **After practical application for 3 PC process** – there are gaps to be filled, areas of ambiguity to be clarified, and updated knowledge to be incorporated

✓ **With ongoing large-scale hydropower development** – increasing recognition of risks of *cumulative impacts* and the need for *coordinated operation*
3. Scope & Approach to the Review

A common understanding was reached among MCs on how to proceed:

✓ All sections of PDG2009 have been reviewed and selectively updated;

✓ “Performance Standards” rather than “Prescriptive Designs” – same philosophy was retained;

✓ New contents were added to fill identified areas with gaps (Hydrology and Hydraulics, Riparian Communities and River-Based Livelihoods);

✓ Clear links were made to the MRC Hydropower Mitigation Guidelines (ISH0306);

✓ Stakeholder opinions and suggestions have been taken into account;

✓ Consultation and active participation of MCs has been vital in DG2018 update.
4. DG2018 – Progress

- In 2017 Concept Note (CN) developed and consulted → JC took note with **high priority**
- Consultant **team mobilised** from January 18
- Draft **Ver 0.2 shared with MCs** at end April 18
- **National Consultations** held during 9 – 16 May 18
- **Developer Consultation #1** held on 10 May 18
- Draft **Ver 0.3 shared with MCs early June 18**
- **Developer Consultation #2** held on 21 June 18
- **Public Comment between** 27 June and 18 July 18
- **Regional Consultations** on 6 August 18 – **resolves key discussion points**
- **Draft Ver 1.0 for JC Consideration and Guidance** shared with MCs 14 August 18
5. Engagement with Developers

25 Jan 2018
Consultation with Developers on PDG2009 Review

Mid - Mar 2018 / Full project team meeting (Intl. + National Experts) & Meeting with Developers (XPCL, DSH, CNR, etc.)

10 May 2018
Consultation with Developers on PDG2018 ver0.2

21 June 2018
Consultation with Developers on PDG2018 ver0.3
6. Engagement with MCs / Stakeholders

Mekong River Commission

No. L-MRCS(PD)504/18

4 July 2018

Subject:

(1) Request for the written comments from Member Countries (MCs) on the MRC PDG2018 Work-in-Progress Version 0.3

(2) Publishing the MRC PDG2018 Work-in-Progress Version 0.3 on the MRC Website

Dear Joint Committee members,

1. **Written comments from MCs on the PDG2018 Work-in-Progress Version 0.3**

After the national consultation meeting with each MC and dialogue with several Developers, the Secretariat revised and updated the PDG2018 Work-in-Progress Version 0.2 to version 0.3 according to comments from meetings. Since 5th June 2018, the PDG2018 Work-in-Progress Version 0.3 has been shared to all MCs (s) email for their review and comment before the first regional consultation meeting which is expected to be organized on 2nd August 2018 (We are still waiting for the confirmation from LNMC on the new proposed date). Other three NMCs already agreed on this new meeting date. To support the MCs on this matter, we have also engaged National Experts to work with MCs to come up with written comments on the PDG2018 Work-in-Progress Version 0.3.

In this connection, we would very much appreciate it if each NMCS could send us written comments on the PDG2018 Work-in-Progress Version 0.3 by 6th July 2018 for our timely processing and preparation for coming regional consultation because these comments will be addressed and discussed during the coming RC meeting as per attachment.

2. **MRC PDG2018 Work-in-Progress Version 0.3 on the MRC Website**

The Mekong River Commission Secretariat would like to cordially inform the Joint Committee members about our recent release of the MRC PDG2018 Work-in-Progress Version 0.3 on the MRC website. The document will be further updated through MRC consultative approach with relevant stakeholders of the Member Countries together with written comments received from MRC Member Countries before / during the MRC Regional Consultation in early August 2018, before it is finalized and submitted to the Joint Committee for approval by the end of August 2018.

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**Public Comment on PDG2018 ver 0.3 period**

(27 June and 18 July 2018)
7. Objectives of DG 2018 – Version 1.0

Objective of updated Guidance (DG2018) – provides **performance targets** and **principles for design and operation** of mainstream dams ➔ **avoidance, minimisation and mitigation of harmful effects** and **cessation of substantial damage** (MA Article 7 and 8).

Aims to ensure:

✓ All mainstream HPs have **a common design and operational approach** ➔ to meet common objectives and mitigate commonly understood risks

✓ **Joint operations** within a mainstream hydropower cascade are guided by **a common framework** informed by this Guidance

✓ **Developers** can plan for and undertake the **assessments and designs for mitigation and management measures** as early as possible in the project cycle

✓ **Developers** have **flexibility to identify and propose the solutions** that will meet the objectives and recommendations in this Guidance as outlined by “**performance standards**” rather than “**prescriptive designs**”.
8. Completed DG 2018 – Version 1.0

As per MRC-BDS and the SP 2016-2020 and in line with timeline:

✓ Updated (P)DG 2018 has not lifted the standard required, just better explained what is required

✓ Practical and Implementable Guidance – aligned to national standards

✓ Key gaps have been filled:
  ✓ Clear explanation: objectives and role of the (P)DG2018
  ✓ Sections added: hydrology/hydraulics and socio-economics
  ✓ Each topic: clarity on monitoring requirements to inform design

✓ Mitigation options are better aligned to risks – reference to MRC Mitigation Guidelines

✓ Construction and Operation monitoring and Adaptive Management are emphasized

✓ Update process engaged stakeholders including private developers and NGOs
9. Structure of DG 2018

Eight Topics:

2. Hydrology and Hydraulics
3. Sediment Transport and River Geomorphology
4. Water Quality
5. Aquatic Ecology
6. Fish and Fisheries
7. Dam Safety
8. Navigation
9. Riparian Communities and River-Based Livelihoods

Common sub-structure for topic guidance:

- Objectives
- Risks
- Pre-Project Monitoring and Assessments
- Specific Design and Operational Guidance
- Construction and Operation Stage Monitoring and Assessments

More information on each topic can be found in the Summary Note for Stakeholders
## 10. Issues for PDG2009 and Responses in DG2018

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| **Address key gaps in coverage** including: Transboundary Environmental Impact Assessment (TbEIA), significant tributaries, socio-economic impacts, water flows | ✓ **Added a section on water flows** (Section 2 Hydrology and Hydraulics)  
✓ **Added a section on socio-economics** (Section 9 Riparian Communities and River-Based Livelihoods)  
✓ **Discuss TbEIA and tributaries** in Section 1  
✓ Ensured content addresses transboundary issues and risks |
| **Draw on improved knowledge globally** (e.g. through the Hydropower Sustainability Assessment Protocol) and at the MRC (including the ISH0306 Mitigation Guidelines) | ✓ **Researched guidance on good practice** and ensured updated Design Guidance content is consistent  
✓ Provided a **number of links to external reference documents** |
## 10. Issues for PDG2009 and Responses in DG 2018 (cont’d)

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| Provide guidance on **minimum primary data requirements** | ✓ **Clause 26 in Section 1** introduces pre-project monitoring and assessments.  
✓ **A sub-section in each topic** addresses Pre-Project Monitoring and Assessments. |
| Elaborate on **Monitoring and Adaptive Management** | ✓ **Clause 27 in Section 1** introduces monitoring during construction and operation  
✓ **A sub-section in each topic** addresses Construction and Operation Stage Monitoring and Assessments  
✓ **Clause 28 in Section 1** addresses adaptive management  
✓ **Each topic** includes design guidance for later adaptive management |
## 10. Issues for PDG2009 and Responses in DG 2018 (cont’d)

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<td>Provide better emphasis on the <strong>avoidance of impacts</strong> (through strategic planning)</td>
<td>✓ <strong>Clause 6 in Section 1</strong> introduces the mitigation hierarchy and prioritising impact avoidance and minimisation&lt;br&gt; ✓ <strong>Section 1.3</strong> addresses Timing of Use&lt;br&gt; ✓ All topics include options for avoidance, minimisation and mitigation</td>
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<td>Provide guidance as to <strong>quality of the EIA</strong> to avoid delays in provision of adequate information for assessment</td>
<td>✓ <strong>Clause 13 in Section 1</strong> addresses the relationship of the DG with the project ESIA&lt;br&gt; ✓ <strong>Section 1.3</strong> on Timing of Use addresses timing of information submission about the project into the PNPCA process</td>
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<td>Ensure that <strong>operating rules</strong> for projects are provided in PNPCA documents</td>
<td>✓ <strong>Section 1.6</strong> on General Requirements includes operating rules&lt;br&gt; ✓ <strong>Joint operations</strong> has a stronger focus as a mitigation approach</td>
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