

**Memorandum of Understanding  
under the Joint Working Group on Water Resources  
Cooperation of Lancang-Mekong Cooperation  
on the Provision of Hydrological Information  
of the Lancang River Throughout the Year  
by China to the Other Five Member Countries**

The Joint Working Group (JWG) on Water Resources Cooperation of Lancang-Mekong Cooperation of the six LMC member countries, hereinafter referred to as the 'Parties'.

Appreciating China's intension to share of hydrological information of the Lancang River throughout the year as stated in the Vientiane Declaration of the Third Lancang-Mekong Cooperation (MLC) Leaders' Meeting;

Recognizing timely and reliable hydrological information is crucial to joint response of the six LMC member countries to the flood and drought challenges, as well as scientific and effective steps for disaster prevention and mitigation.

Under the Lancang-Mekong Water Resources Cooperation Mechanism;  
Have agreed as follows:

I. In order to promote the Lancang-Mekong Water Resources Cooperation and meet the needs of flood control and drought relief of the Mekong river, the Chinese JWG agreed that China will provide hydrological information of the Lancang River throughout the year to the JWGs of the other five member countries following the principle of friendly cooperation, mutual benefits and trust, and equality.

II. The hydrological information to be shared with this MOU by China will be collected from the Yunjinghong and Man'an stations located at the downstream of the China's Lancang River.

III. All parties agree that China will provide data on water level and rainfall twice a day to the other five member countries. The first data sharing will be made before 9:00 (Beijing time), including the data observed from 21:00 of the previous

day to 8:00 of the current day. The second data sharing will be made before 21:00 (Beijing time), including the data from 9:00 to 20:00 of the current day.

IV. China covers the related costs of the above hydrological information provision to the other five member countries.

V. The executive institution of the parties are as follows:

**The Chinese side:**Bureau of Hydrology and Water Resources of Yunnan Province, the People's Republic of China.

**The Cambodian side:**Asian office, Department of Planning and International Cooperation, Ministry of Water Resources and Meteorology, the Kingdom of Cambodia.

**The Lao side:**Lao National Mekong Committee Secretariat, the Lao People's Democratic Republic.

**The Myanmar side:**Directorate of Water Resources and Improvement of River Systems and Department of Meteorology and Hydrology under Ministry of Transport and Communications, the Republic of the Union of Myanmar.

**The Thai side:**The National Water Command Center, Office of the National Water Resources, the Kingdom of Thailand.

**The Vietnamese side:**Viet Nam National Mekong Committee, the Socialist Republic of VietNam.

VI. All parties agree the Implementation Plan for this Memorandum of Understanding (MOU) (see Annex for details) the main contents of which include technical details on hydrological information provision and transmission method.

VII. Differences between the parties arising out of the interpretation or application of this MOU, or of any question affecting the provision of hydrological information throughout the year, shall be resolved through friendly consultation.

VIII. This MOU shall enter into force on 1<sup>st</sup> November 2020 and shall remain valid for a period of five years. The valid period of the present MOU will be extended for another five years, if the parties agree before the expiration of the present MOU. The parties will revise this MOU if they all agree.

IX. *'Memorandum of Understanding under the Joint Working Groups of Lancang-Mekong Water Resources Cooperation on the Provision of Hydrological Information the Lancang River in the Flood Season by China to the other five member countries'* signed on 5<sup>th</sup> June 2019 will be invalid automatically when this new MOU come into force.

Signed in English, in six copies, all being equally authentic.



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Head of Chinese JWG



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Head of Cambodian JWG



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Head of Lao JWG



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Head of Myanmar JWG



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Head of Thai JWG



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Head of Vietnamese JWG

## **Implementation Plan**

### **Section I**

#### **Contents and procedures of data provision**

##### **1.1 Name of hydrological stations:**

Hydrological data will be provided by two stations, namely Yunjinghong station (latitude: 22°02'N, longitude: 100°47'E), and Man'an station (latitude 21°55'N, longitude: 101°16'E).

##### **1.2 Content of hydrological information:**

A) The Chinese side will provide the other five member countries with rainfall and water level data throughout the year of the above two stations.

B) The Chinese side will regularly provide the latest rating curves/table and related cross-section to the other five member countries. At Man'an station, the above data (rating curves/table and related cross-section) will be updated and sent to the other five member countries once every two years, while at Yunjinghong will sent once a year before May 15<sup>th</sup>.

C) The Chinese side agrees that under the permissive observation condition and hydrological information acquisition condition, the Chinese side will also share with the other five member countries any urgent information on any abnormal rise/fall in water level/discharge, and other information on the factors that might lead to sudden flood.

##### **1.3 Time schedule for hydrological information:**

The data from 21:00 (Beijing time) of the previous day to 08:00 of the current day should be daily transmitted to the other five member countries by 9:00, and the data from 09:00 to 20:00 of the current day should be daily transmitted to the other five member countries by 21:00 (Beijing time).

##### **1.4 Form of Data Transmission:**

The rainfall unit is millimeter (mm). The rainfall record is in integer. The interval rainfall record is the accumulated rainfall from the last providing time to the present providing time. The water level unit is in meters (m). The record with two decimal points is to be provided. The Chinese '1985 datum level' is used. The observation time will be recorded by Beijing time. The hydrological

information shall be transmitted to the other five member countries in the following form:

\*\*\*\* Year\*\* Month \*\* Day\*\* 09:00

Time	Yunjinghong (code)		Man'an (code)	
	Water Level (H)	Rainfall (P)	Water Level (H)	Rainfall (P)
21:00	***. **		***. **	
22:00	***. **		***. **	
23:00	***. **		***. **	
24:00	***. **		***. **	
01:00	***. **		***. **	
02:00	***. **		***. **	
03:00	***. **		***. **	
04:00	***. **		***. **	
05:00	***. **		***. **	
06:00	***. **		***. **	
07:00	***. **		***. **	
08:00	***. **	***	***. **	***

\*\*\*\* Year\*\* Month \*\* Day\*\* 21:00

Time	Yunjinghong (code)		Man'an (code)	
	Water Level (H)	Rainfall (P)	Water Level (H)	Rainfall (P)
09:00	***. **		***. **	
10:00	***. **		***. **	
11:00	***. **		***. **	
12:00	***. **		***. **	
13:00	***. **		***. **	
14:00	***. **		***. **	
15:00	***. **		***. **	
16:00	***. **		***. **	
17:00	***. **		***. **	
18:00	***. **		***. **	
19:00	***. **		***. **	
20:00	***. **	***	***. **	***

**1.5 Channel of Data Transmission:**

The Chinese side will transmit the hydrological information to the other five member countries from its data center located in the Kunming data terminal through the established FTP server or email (if the data transmission through FTP fails) by 09:00 and 21:00 Beijing time. In the case of the data transmission fails, upon request, the Chinese side will resend/transmit the hydrological information to the other five member countries by facsimile and or the other ways/channels as then agreed by all parties.

#### **1.6 Contacting Address:**

##### **The Chinese side:**

Yunnan Province, P.R.C

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##### **The Lao side:**

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**The Vietnamese side:**

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## **Section 2**

### **Upgrading of information provision system**

2.1 The Chinese side will take responsibility to maintain automatic systems of data collection and transmission of two stations and cover the costs of their regular operation and maintenance.

2.2 If the automatic system breaks down, to avoid intermittence of hydrological information provision to the other five member countries in flood season (from June 1<sup>st</sup> to October 31<sup>st</sup>), manual observation method will be used. The Chinese side will provide the other five member countries with water level and rainfall data observed at 8:00 and 20:00 Beijing time of the current day, which will be transmitted to the other five member countries in one hour (by 09:00 and 21:00 Beijing time). While in dry season, in case of error, omission or interruption of hydrological information, the Chinese side will revise and supplement the information within 15 working days.

## **Section 3**

### **Exchange visits**

If necessary, after consulting, all parties can carry out technical visits to the hydrological stations.