

The background of the slide is a light gray gradient with several realistic water droplets of various sizes scattered across it. The droplets have highlights and shadows, giving them a three-dimensional appearance.

# **WATERBORNE CONNECTIVITY IN MEKONG-LANCANG RIVER**

**International Conference  
Transboundary Water Resources and Related Resources  
on 2 March 2018**

by  
Mr. Thanatip Jantarapakde  
Marine Department of Thailand

# OUTLINE

- **MEKONG RIVER BACKGROUND**
- DEVELOPMENT PLAN OF JCCCN
- SAFE NAVIGATION PROJECT
- WATERWAY TRANSPORTATION
- CONCLUSION
- Q&A

# CONNECTIVITY

- TRADE
- TOURISM
- LOGISTIC
- CULTURE

# Lancang-Mekong River Basin



## Length

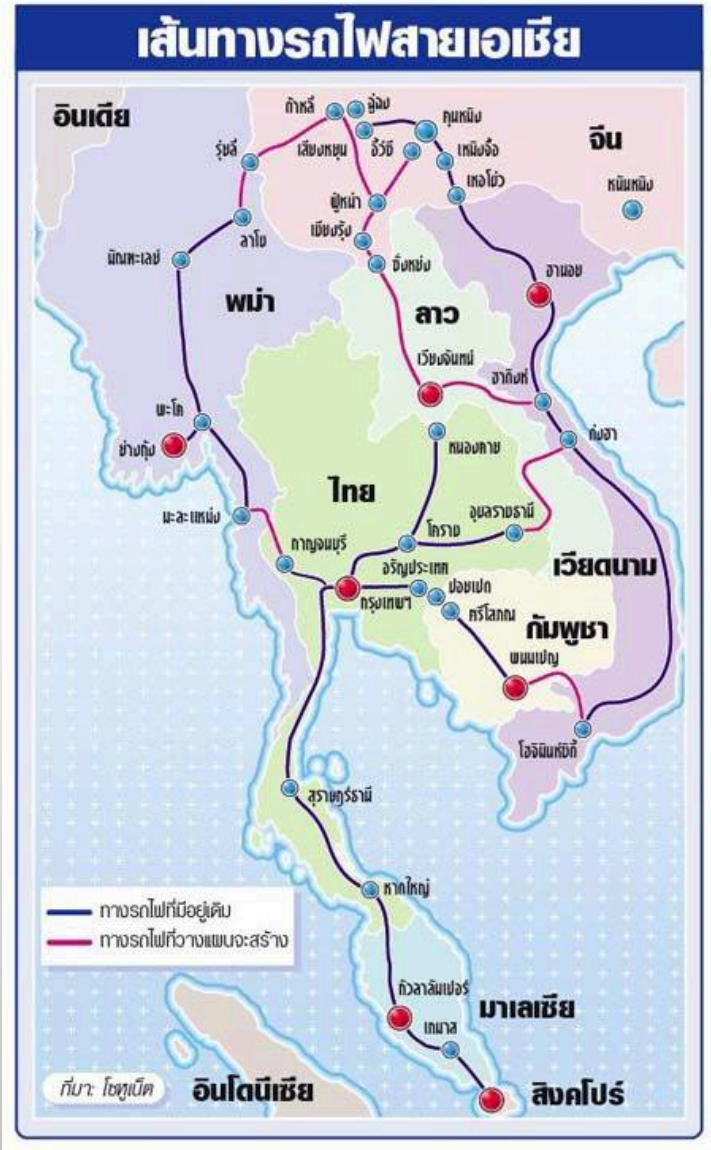
- 4,880 kms in total
- 2,130 kms in China

## Populations

- China : 1.3 bil (60 mil)
- Myanmar : 52 mil
- Laos : 6.8 mil
- Thailand : 65 mil
- Cambodia : 16 mil
- Vietnam : 94 mil



# Railways connectivity



# BASIC FIGURES ABOUT THE RIVER

- 4880 KM IN LENGTH CONNECTING 6 COUNTRIES IN ASIA
- 2130 KM INLAND RIVER IN CHINA
- 31 KM BOUNDARY RIVER BETWEEN CHINA AND MYANMAR
- 234 KM BOUNDARY RIVER BETWEEN LAOS AND MYANMAR
- 976 KM BOUNDARY RIVER BETWEEN LAOS AND THAILAND
- 777 KM INLAND RIVER IN LAOS
- 502 KM INLAND RIVER IN CAMBODIA
- 230 KM INLAND RIVER IN VIETNAM
- THE RIVER BASIN COVERS 810,000 Km<sup>2</sup>

# TRADE VOLUME : 2016

**Export :15,229 mil Baht from Thailand**

- To China : 2,836 mil Baht
- To Myanmar : 2,810 mil Baht
- To Laos : 9,583 mil Baht

**Export Cargo : frozen chicken (40,000 tons) ,  
white sugar, car**

**Import cargo : fresh garlic, sun peanut**

# ข้อมูลการนำเข้า - ส่งออกสินค้า

สถิติมูลค่าการค้าชายแดน ณด่านศุลกากรเชียงแสน

(หน่วย : ล้านบาท)

ปีงบประมาณ	นำเข้า	ส่งออก	ดุลการค้า
2552	1,230.37	5,082.05	3,851.68
2553	1,057.39	5,630.20	4,572.81
2554	1099.98	8,991.17	7,891.19
2555	512.22	11,337.50	10,825.28
2556	654.733	12,325.521	11,670.788
2557	702.21	13,532.75	12,830.54
2558	669.71	15,814.42	15,144.71
2559	710.95	15,229.51	14,518.56
2560	899.90	14,431.26	13,521.36

## Numbers of ships in Chiangsean Port

<b>YEAR</b> <b>MONTH</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>
<b>January</b>	332	554	1,358	1,005	1,517	372	432	635
<b>February</b>	305	767	939	835	1,567	901	507	
<b>March</b>	426	612	935	1,045	1,594	1,097	585	
<b>Appril</b>	417	217	983	955	988	1,000	393	
<b>May</b>	376	330	1,059	1,036	991	703	413	
<b>June</b>	416	581	944	812	1,052	447	384	
<b>July</b>	344	369	1,062	999	1,531	386	512	
<b>August</b>	353	427	1,073	960	1,589	355	425	
<b>September</b>	259	709	964	1,063	702	298	428	
<b>October</b>	474	842	1,187	1,251	376	358	384	
<b>November</b>	686	1,043	1,158	937	558	400	631	
<b>December</b>	592	1,205	1,069	1,393	1,017	528	729	
	<b>4,980</b>	<b>7,656</b>	<b>12,731</b>	<b>12,291</b>	<b>13,482</b>	<b>6,087</b>	<b>5,823</b>	<b>635</b>



# OUTLINE

- MEKONG RIVER BACKGROUND
- **DEVELOPMENT PLAN OF JCCCN**
- SAFE NAVIGATION PROJECT
- WATERWAY TRANSPORTATION
- CONCLUSION
- Q&A

# DEVELOPMENT PLAN OF INTERNATIONAL NAVIGATION ON THE LANCANG-MEKONG RIVER (2015-2025)

- AGREEMENT ON COMMERCIAL NAVIGATION ON THE LANCANG-MEKONG RIVER AMONG THE GOVERNMENTS OF THE PEOPLE'S REPUBLIC OF CHINA, THE LAO PEOPLE'S DEMOCRATIC REPUBLIC, THE UNION OF MYANMAR AND THE KINGDOM OF THAILAND IN APRIL 2000 (**THE QUADRIPARTITE AGREEMENT**)
- GMS ECONOMIC COOPERATION AND ACCELERATE THE OVERALL CONSTRUCTION OF **CHINA-ASEAN FREE TRADE AREA** HAS POSED INCREASING DEMAND FOR THE CONNECTIVITY OF TRANSPORT INFRASTRUCTURE IN THE REGION.
- **THE LANCANG-MEKONG RIVER**, AS A VITAL TRANSPORT CORRIDOR, AND FROM THE PERSPECTIVE OF INTERNATIONAL NAVIGATION, WILL SERVE FOR PASSENGERS AND GOODS TRANSPORT, AND THE SUSTAINABLE SOCIO-ECONOMIC PROSPERITY OF THE REGION
- JOINT COMMITTEE ON COORDINATION OF COMMERCIAL NAVIGATION ON THE LANCANG-MEKONG RIVER (**JCCCN**)



*Quadripartite Agreement :*

**890 kms** from Simao to Luang Prabang

**Legend**

- River
- lake
- Road
- Capital
- provincial capital
- prefecture-level city



# Main Port in Mekong River: JCCCN



631 kms  
from marker  
243 to Luang  
Prabang

# Main port in Mekong River : JCCCN



**Cargo Volume Prediction (Unit: Ton)  
between China, Laos, Myanmar, Thailand**

Prediction method	By 2025
multiple regression models	6,300,000
Analysis based on investigations	6,000,000~7,200,000
Final recommended value	6,450,000

Source : Development Plan of JCCCN, 2015

# Passenger Prediction Volume

## Unit: Person-Time

Predicting method	By 2025
polynomial regression model	3,600,000
Analysis based on investigations	2,200,000~3,000,000
Final recommended value	3,300,000

## Channel Conditions of the Section from Simao to Luang Prabang

Section	Length (km)	Grade	DWT of navigating vessels	Channel dimensions(m)
Nandeba area of Simao Port to Nuozhadu Hub	74	IV	500 DWT throughout the year	1.2×30×180
Nuozhadu Hub to China-Myanmar Boundary Marker 243	185	V	300 DWT	2.0×40×300
China-Myanmar Boundary Marker 243 to China-Laos-Myanmar Boundary Marker 244	31	VI	150 DWT throughout the year and 200-300 DWT seasonally	1.2×30×180
China-Laos-Myanmar Boundary Marker 244 to Houaysai, Laos	300	VI	150 DWT throughout the year and 200-300 DWT seasonally	1.2×30×180
Houaysai to Luang Prabang	300	Never improved and maintained, some simple aids to navigation, wide and shallow section navigable for vessels of 60 DWT in dry season		
Total	890			

Source : Development Plan of JCCCN, 2015

## Planning of the International Navigation Channel from Nandeba Port Area of Simao Port of China to Luang Prabang of Laos

Name and Type of Project			Length and Standard of Navigation Channel Planned (2025)	
No.	Scope	Current Grade	Length(km)	Planned Target
1	Nandeba Port Area of Simao Port of China to China-Myanmar Boundary Marker 243	Grade IV and V	259	Navigable for vessels of 500 DWT
2	China-Myanmar Boundary Marker 243 to Luang Prabang of Laos	Grade VI and under	631	Navigable for vessels of 500 DWT
Total			890	

## DEVELOPMENT PLAN : PHASE I (2015-2020)

- 1) Preliminary Work** : Engineering Design , ESIA, Public Participation
- 2) Improvement of Channel** : The 631 kilometers channel from China-Myanmar Boundary Marker 243 to Luang Prabang will be upgraded for vessels up to 500 DWT.
- 3) Construction of Port** : 3 berths for cargo vessel will be built respectively at Guanlei, Xiengkok, Wan Pong, Pakbeng and Luang Prabang Ports. Passenger ports: 1 berth will be built respectively at Xiengkok, Pakbeng and Luang Prabang.
- 4) Establishment of Supporting System** : 3 channel maintenance and emergency response, rescue ships, training of crew and shore personnel.

**Investment Estimation** : 2.3 billion RMB (approximately 377 million USD).



## DEVELOPMENT PLAN : PHASE II (2020-2025)

- 1) Preliminary Work :** Engineering Design , ESIA, PP
- 2) Improvement of Channel :** 259 kms from Nandeba Area of Simao Port ถึง China-Myanmar Boundary Marker 243 for vessels up to 500 DWT

### **3) Construction of Port**

**Passenger Port:** 1 berth will be respectively built at Simao, Jinghong, Ban Sai, Muongmom, Wan Pong, Ban Khouane, Chiangsaen, Houaysai, Chiangkhong ports.

**Cargo Port:** 3 berths of 500 DWT will respectively be built at Simao, Menghan, Suploi and Chiangsaen Ports. 1 berth of 300 DWT will be built at Wan Seng Port

**Investment Estimation 1.6957 billion RMB (approximately 278 million USD).**



# ESTIMATED INVESTMENT

## (UNIT: MILLION RMB)

No.	Item	Phase I		Phase II		Total
		2015-2017	2018-2020	2021-2023	2024-2025	
	Total	1212.3	1087.7	743	952.7	3995.7
1	Preliminary Work	176		43		219
2	Channel Improvement	801.6	837.3		672.7	2311.6
3	Port Construction	227.7	183.4	520	280	1211.1
4	Establishment of Supporting System	7	67			74
5	Bridge Reconstruction			180		180

[WWW.JCCCN.ORG](http://WWW.JCCCN.ORG)



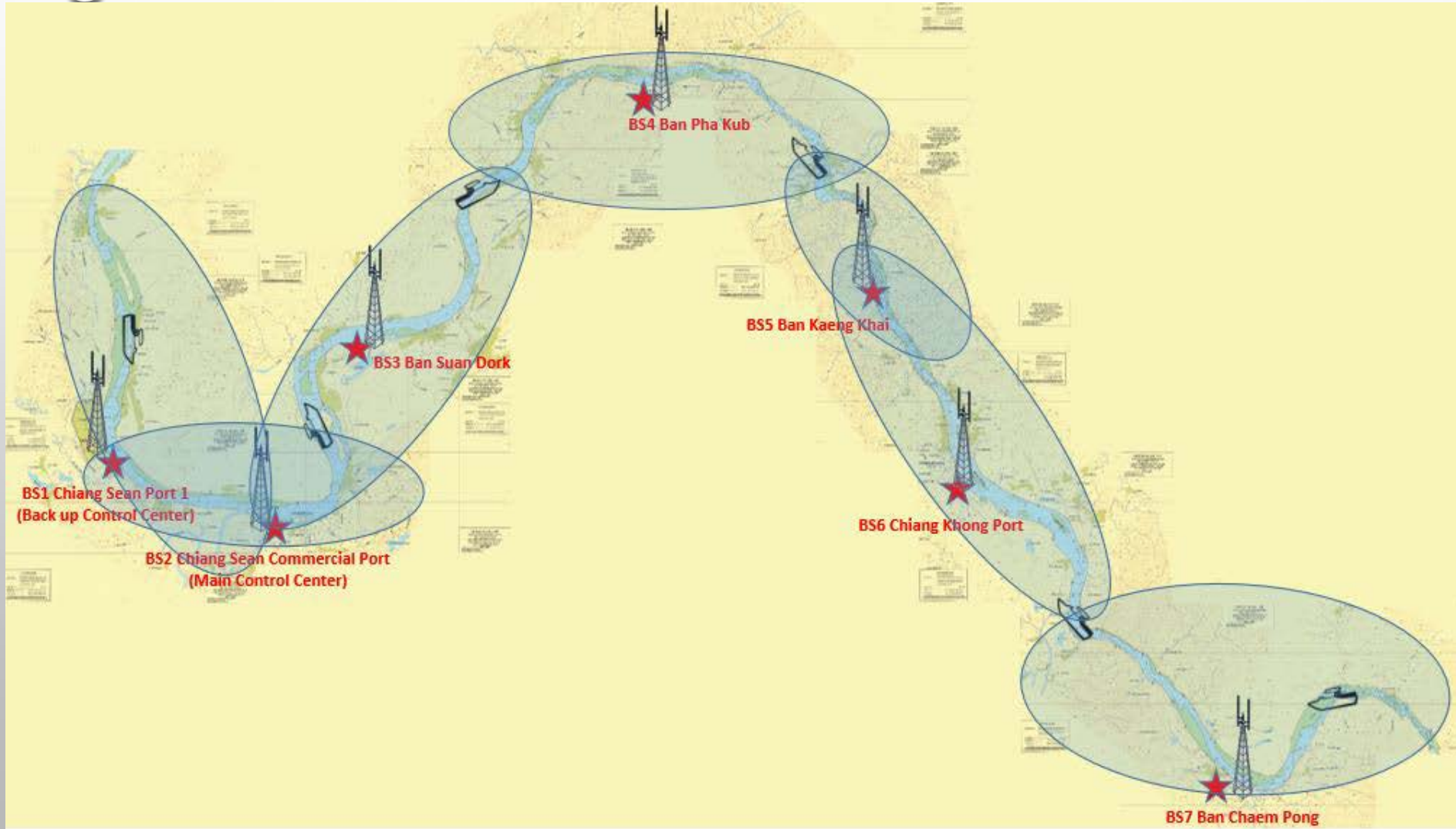
# JCCCN WEBSITE INFORMATION

- RULE AND REGULATIONS (MOU, AGREEMENT, ANNEXES, GUIDELINES)
- PORT INFORMATION
- FLEET INFORMATION / ENTERPRISE (SHIPOWNER)
- NAVIGATIONAL CHANNEL INFORMATION
- WATER INFORMATION (WATER DISCHARGE / LEVEL)
- PROJECT : DP, PW, ESIA, FS-AIS+VHF
- JCCCN MEETING INFORMATION (SUMMARY RECORD)
- PUBLIC RELATION
- CONTACT POINT INFORMATION

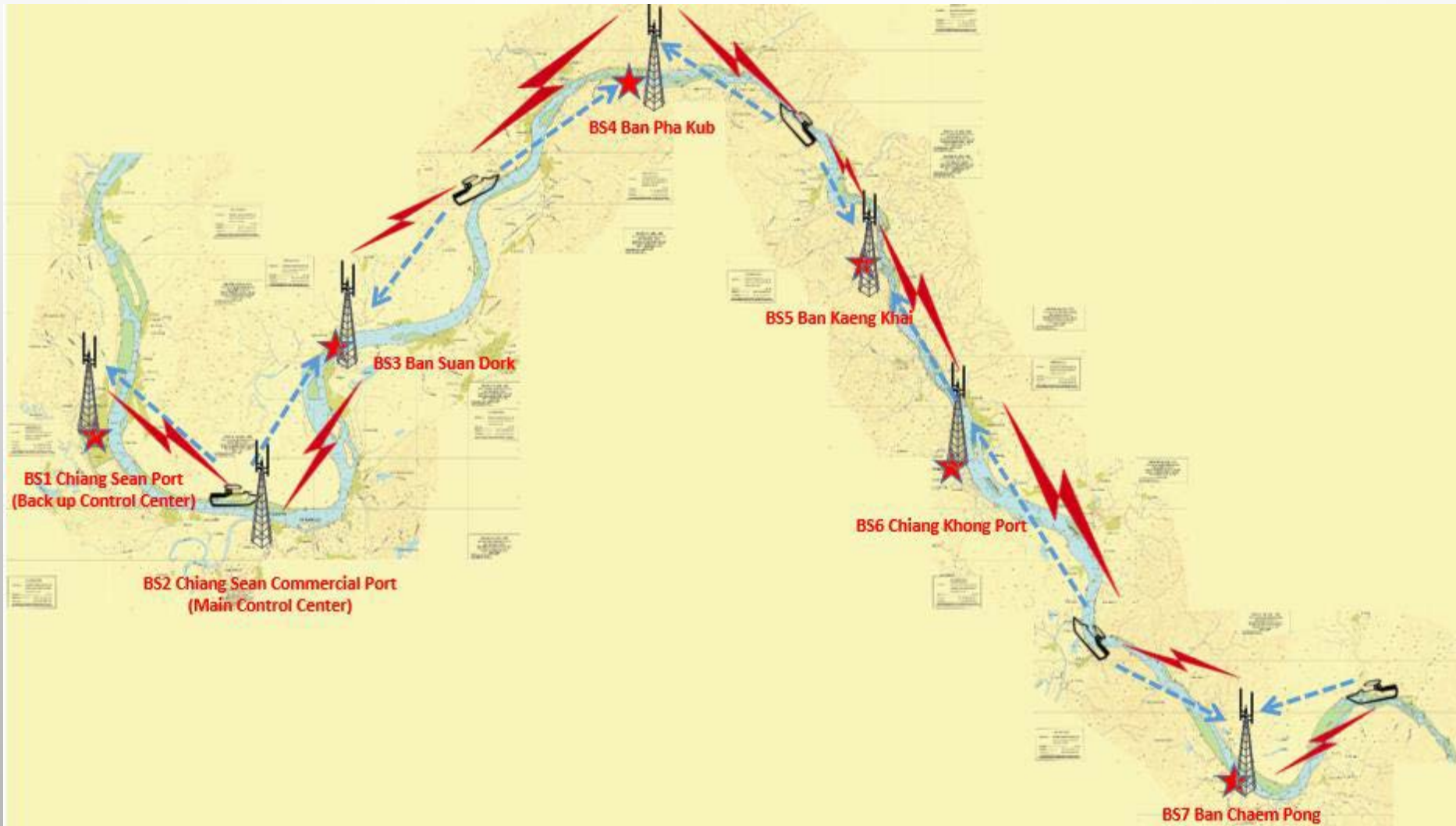
# OUTLINE

- MEKONG RIVER BACKGROUND
- DEVELOPMENT PLAN OF JCCCN
- **SAFE NAVIGATION PROJECT**
- WATERWAY TRANSPORTATION
- CONCLUSION
- Q&A

# MRC FEASIBILITY STUDY FOR VHF AND AIS INSTALLATION IN THAILAND AND LAOS

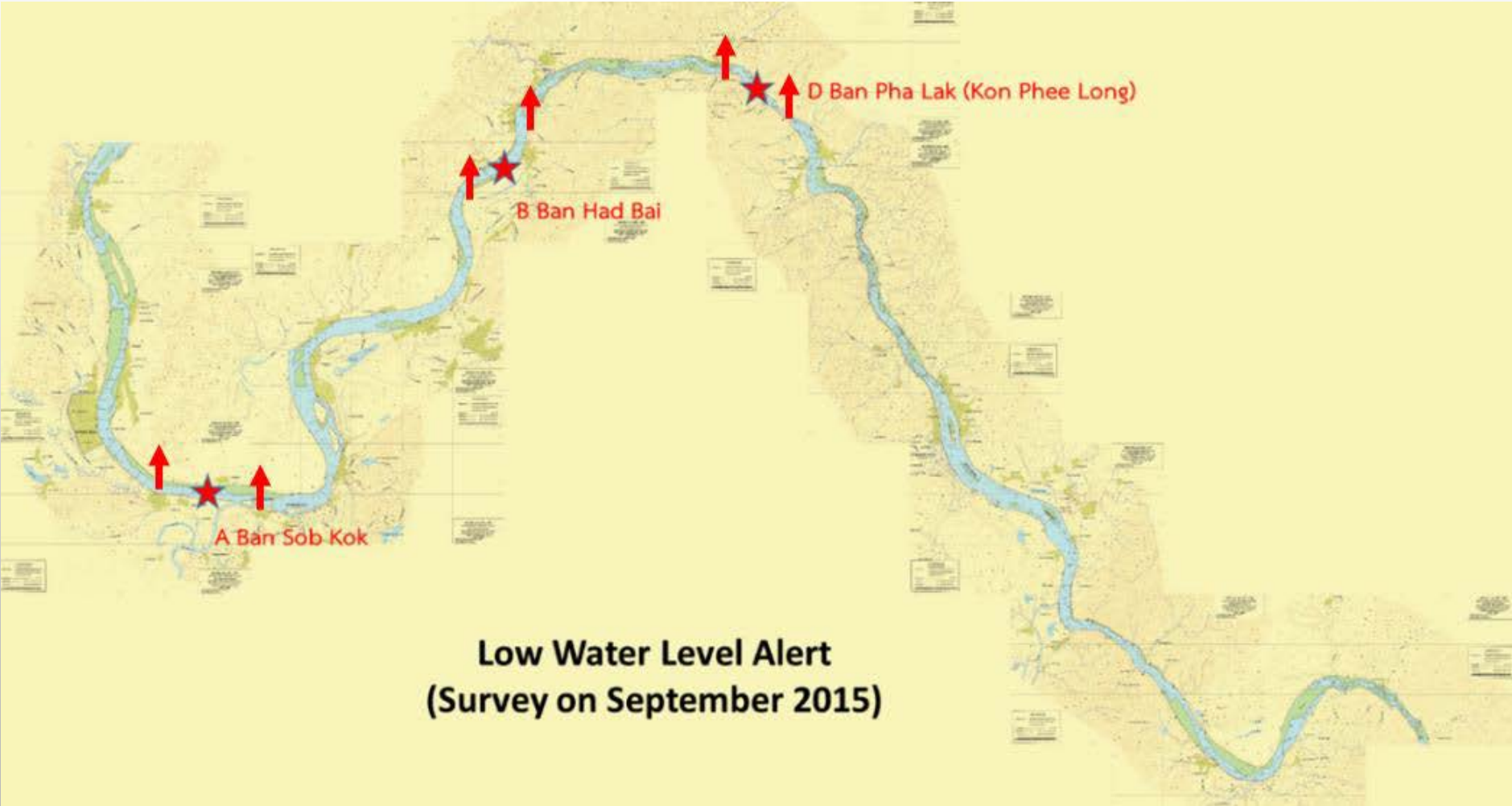


# Radio Communication Systems: VHF base station and communication coverage

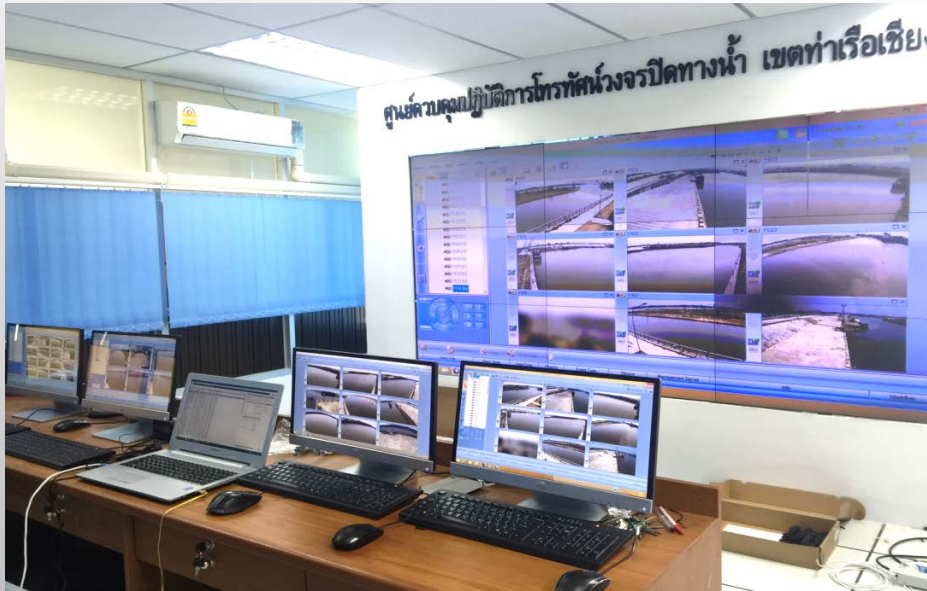




# Critical Low Water Level Alerts: Map of Locations to install the Low Water Level Gauges



# CHIANG SAEN SHIP REPORTING SYSTEM





# REPORTING POINT



# OUTLINE

- MEKONG RIVER BACKGROUND
- DEVELOPMENT PLAN OF JCCCN
- SAFE NAVIGATION PROJECT
- **WATERWAY TRANSPORTATION**
- CONCLUSION
- Q&A

# Main Port in Mekong River: JCCCN



631 kms  
from marker  
243 to Luang  
Prabang



# Vessel sailing in Mekong river



# Jing Hong Hydropower Dam





# Jing Hong Hydropower Dam





# Ship Locks



# Lift vessel





# Jing Hong Port (ท่าเรือเชียงรุ่ง)



จังหวัดเอกในเขตปกครองตนเองชนชาติไต ลิบสองปันนา มณฑลยูนนาน ประเทศจีน

# Tourism Cooperation : Thai-China



云南同饮一江水国际  
NOURISHED BY THE SAME RIVER



# Passenger Vessel



# Tourism Cooperation Project : Thai-China



同饮一江水 共享旅游美  
Nourished by the Same river Share the Beauty of Tourism

扬帆起航  
Hoist the sails set sail

澜湄水路 昆曼公路

水陆连运环游金三角国际旅游产品首航仪式

Launch Conference on International Tourism Product of Travel around the Golden Triangle through  
Lancang-Mekong Waterway & Kunming-Bangkok Highway

昆明文化体育广播电视和旅游局  
Kunming Culture, Sports, Radio, TV and Tourism Bureau

云南同饮一江水国际旅游航运有限公司  
Yunnan Tongyi-Jiang River International Tourism Shipping Co., Ltd.

2017年5月1日  
May 1st, 2017



# Tourism Cooperation : Thai-China





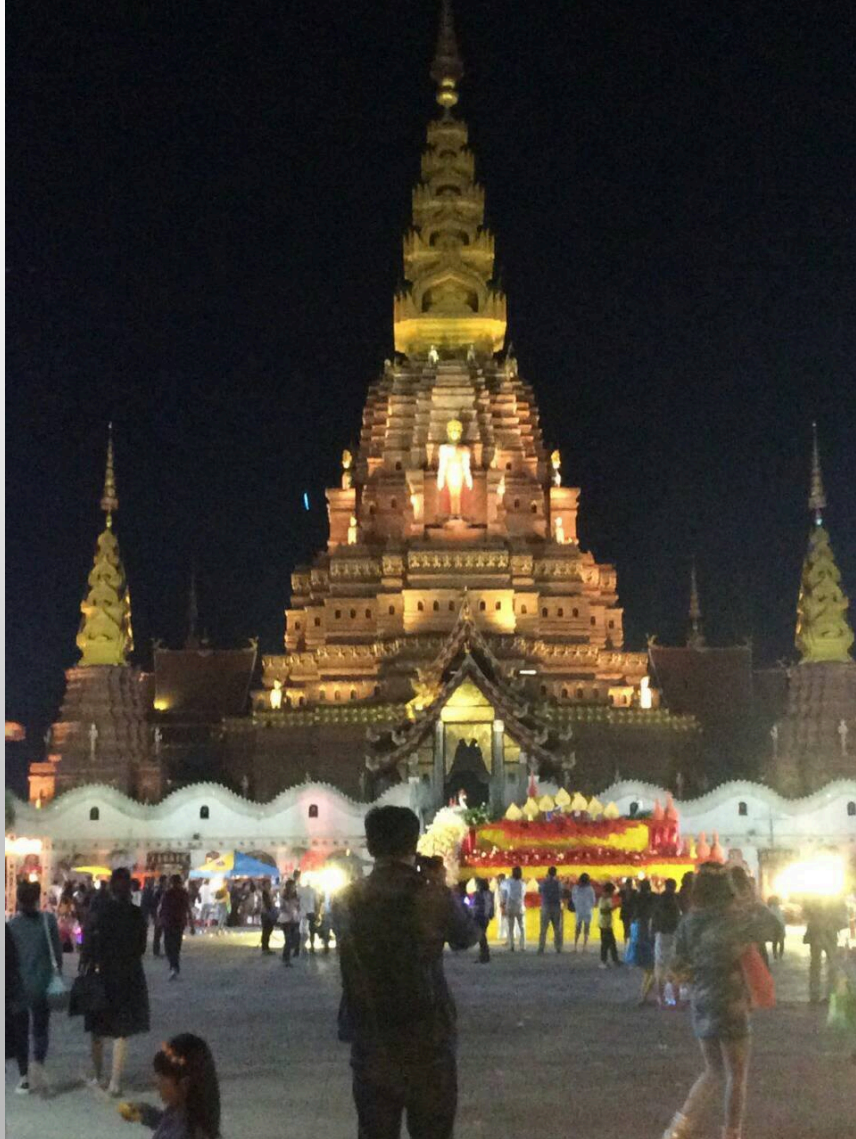


# Jing Hong Gate





# Kao Jom (เมืองจำลองเชียงใหม่)





# Galanpa Bridge







# Guan Lei Port



关 累	30 km
GUAN LEI	
勐 腊	59 km
MENG LA	
磨 憨	111 km
MO HAN	

၆၈၈ ဘ၀၀ ဘ၀၀ ဘ၀၀ ဘ၀၀ ဘ၀၀  
中国 关 累 港  
CHINA GUAN LEI PORT





# Guan Lei Port







# Guan Lei Port







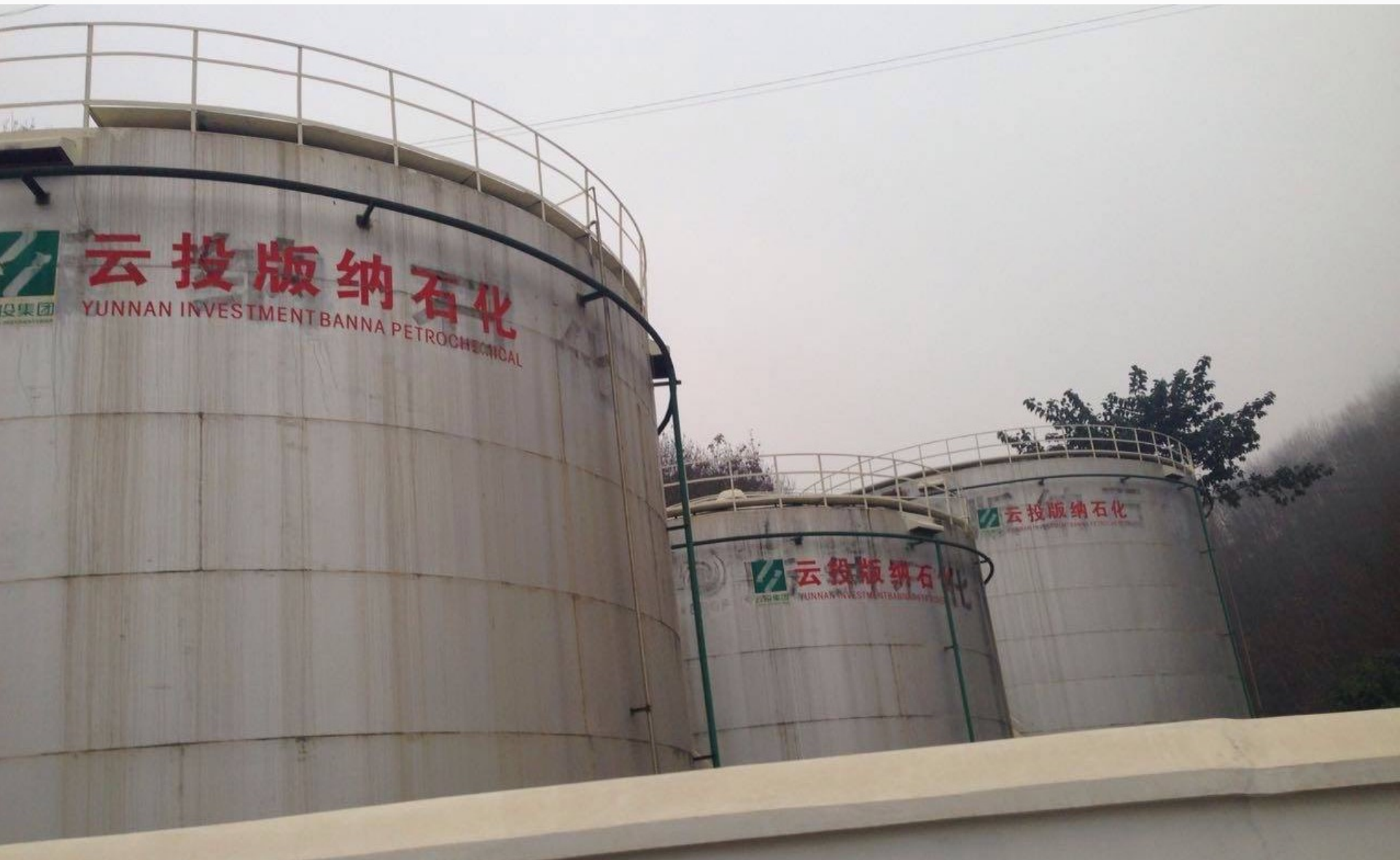
# Guan Lei Port







## Oil Tank Farm, Guan Lei Port





# Guan Lei Port







## Cold Storage, Guan lei Port





## Cold Storage, Guan lei Port



- Area : 20,000 sq.m.
- Temperature : -18 degree
- Storage Capacity : 3,800 tons , 150,000 tons/years
- 40 feet containers





## Soaploi Port / Myanmar







## Soaploi Port / Myanmar







## Soaploi Port / Myanmar







## Soaploi Port / Myanmar



# Navigational Channel





# Navigational Channel



# Chinese Cargo Vessel







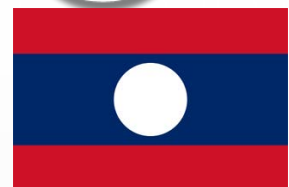
## Laos Vessel







## Chianglab Bridge (Myanmar-Laos)



## Oil Tanker Pump in Chiangkok port

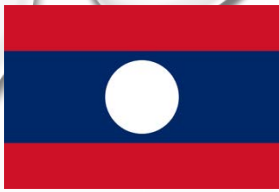




## Oil Tanker Pump in Mom Port

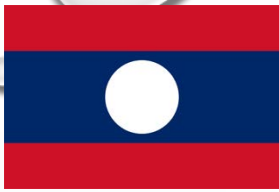






## Mom Port





## Mom Port

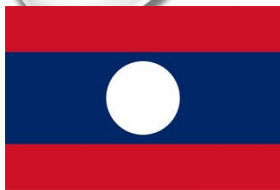






## New Mom Port





# Mom Port





# Navigation Obstruction





# Aids to Navigation

ทวนเครื่องช่วยการเดินเรือ





## Wang Pong Port / Myanmar





## Wang Pong Port / Myanmar





## Widest Channel at Mong Pa Lei

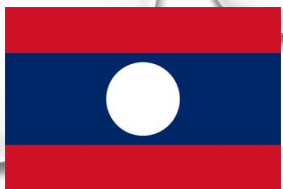




## Closest Channel at Pasang







## Patrol Vessel of Lao People's Army







# China Border Police







## Myanmar Police







## Mekong River Unit, RTN







## Thai Marine Police





# Ha Chiang Terminal







# Golden Triangle Terminal







## Chiang Saen Port (Passenger Terminal)







# Chiangsaen Commercial Port





# Chiang Kong Passenger Terminal





# Chiang Kong Passenger Terminal

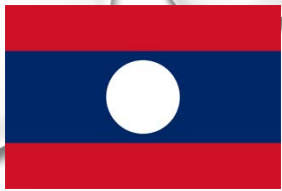




## Ferry Crossing, Chiang Kong

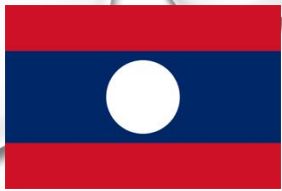






## Houysai Port, Laos





## Houysai Port, Laos



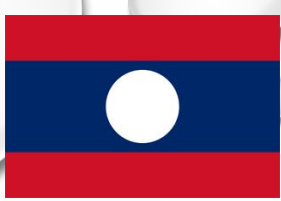




## Houysai Port, Laos



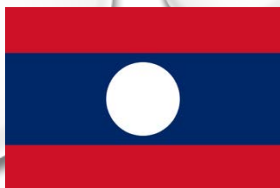




# Houysai City, Laos

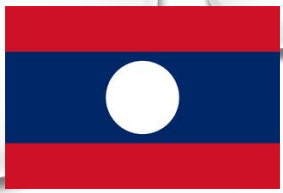






## Houysai-Laoung prabang

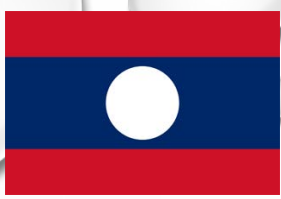




## Pakbeng-Houydan Bridge



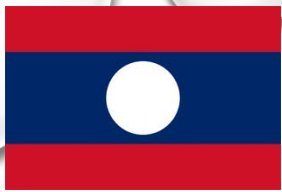




# Pakbeng Port







## Pakbeng city



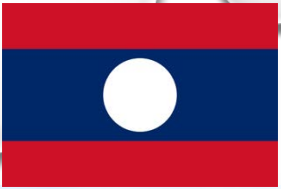




## Pakbeng city



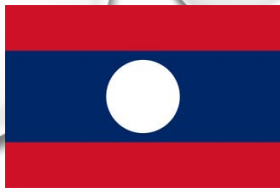




## Loung prabang passenger jetty



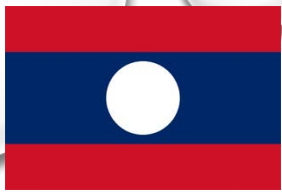




## Loung prabang Port







## Loung prabang passenger jetty







## Tourism Place







# Chaiyaburi Hydropower Dam

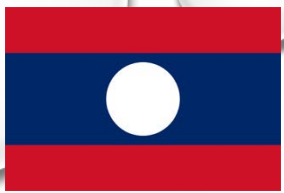






# Chaiyaburi Hydropower Dam





## Chaiyaburi Hydropower Dam





# CONCLUSION

- SAFE AND SECURE FOR WATERWAY TRANSPORT
- NEED IN TIME INFORMATION SHARING FOR SAFE NAVIGATION

# Thank You for your attention !



Mekong Delta, Kasalongkum passenger vessel