

# Other Activities

## Traffic Volume Survey outside the Port

Purpose: to obtain the basic data related to the design of the access road of the New Container Terminal

Survey Site: Three points around the port

Date and Period: from 12:00, 7th (Fri) to 12:00 on 9th (Sun), September and from 00:00 on 11th (Tue) to 00:00 on 12th (Wed), September.

A data input sheet for a traffic count survey. The table has columns for 'Time Interval', 'Vehicle Type', 'Count', and 'Total'. The rows show data for various time intervals from 12:00 to 14:30. The total counts for each interval are: 12:00-12:15 (240), 12:15-12:30 (225), 12:30-12:45 (210), 12:45-13:00 (195), 13:00-13:15 (180), 13:15-13:30 (165), 13:30-13:45 (150), 13:45-14:00 (135), 14:00-14:15 (120), 14:15-14:30 (105).

Data Input Sheet



Survey Site

# Other Activities

## Study Tour to Thailand

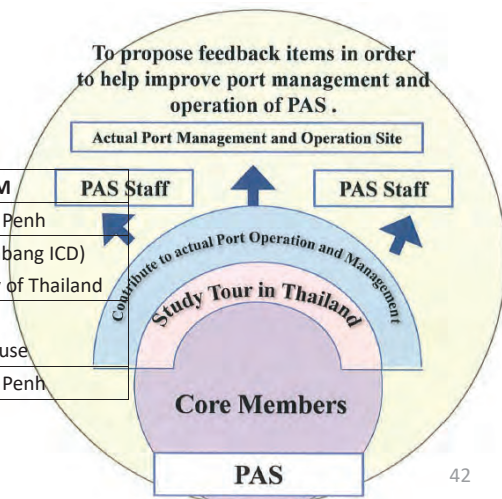
The Study Tour is under preparation.

Purpose: To help improve port management and operation of PAS through observation tours to ports and other sites.

Participant: Nine (9) members from PAS, Mr. Yabunaka and two JICA Team members

Tentative Schedule:

Date	AM	PM
Monday, 10 <sup>th</sup> December	Travel from Sihanoukville to Bangkok via Phnom Penh	
Tuesday, 11 <sup>th</sup> December	Port Authority of Thailand	ESCO (Lat Krabang ICD) State Railway of Thailand
Wednesday, 12 <sup>th</sup> December	Eastern Sea Leam Chabang Co., Ltd. (ESCO)	IEAT JWD Warehouse
Thursday, 13 <sup>th</sup> December	Travel from Bangkok to Sihanoukville via Phnom Penh	



# Other Activities

## Activity Plan and Progress Report

**1. Major Activities of the 3<sup>rd</sup> Dispatch**  
**(1) To hold the 2<sup>nd</sup> JCC**  
 The Team will request the chairman of PAS to hold the 2<sup>nd</sup> Joint Coordination Committee (JCC) in order to authorize the initial and target values of the verifiable indicators and to report the progress of the Project. The discussions and resolutions of the 2<sup>nd</sup> JCC will be recorded in the minutes and shared among the concerned parties.

**(2) To hold the 4<sup>th</sup> PIU**  
 The Team will request the chairman of PAS to hold the 4<sup>th</sup> PIU as soon as after the Team returns to Sihanoukville in order to explain and obtain basic approval of the action plan of the 3<sup>rd</sup> dispatch.

**(3) To hold Workshops by Working Group**  
 The workshops held during the 2<sup>nd</sup> dispatch were successful in achieving technical transfer as some of proposals which the Team presented at the workshops were implemented on the sites; therefore the workshops by the working group will be actively held.

**(4) To conduct baseline surveys if necessary**  
 The Team will conduct baseline surveys continuously if necessary. Specifically, continuous observation of congestion status outside the port is important to grasp the characteristics of congestion; therefore the working group will conduct this survey.

**(5) To continuously grasp the status of port operation, etc.**  
 The Team will continuously conduct observations of container handling operation, traffic status of the port and so on. The Team will also grasp the usage status of trailers coming from outside and so on.

3. Activity Plan of the 3<sup>rd</sup> Dispatch (tentative)

Category	Activity	Responsible Party	Start Date	End Date	Status
JCC Team Members	1. JCC Meeting (1st)	Leader/Manager, Port Management (1)			
	2. JCC Meeting (2nd)	Leader/Manager, Port Management (1)			
	3. JCC Meeting (3rd)	Leader/Manager, Port Management (1)			
	4. JCC Meeting (4th)	Leader/Manager, Port Management (1)			
	5. JCC Meeting (5th)	Leader/Manager, Port Management (1)			
	6. JCC Meeting (6th)	Leader/Manager, Port Management (1)			
Schedule of Major Events	1. JCC Meeting (1st)	Leader/Manager, Port Management (1)			
	2. JCC Meeting (2nd)	Leader/Manager, Port Management (1)			
	3. JCC Meeting (3rd)	Leader/Manager, Port Management (1)			
	4. JCC Meeting (4th)	Leader/Manager, Port Management (1)			
Major Activities	1. Baseline Survey for road	Working Group			
	2. Baseline Survey for port	Working Group			
	3. Baseline Survey for container	Working Group			
	4. Baseline Survey for trailer	Working Group			

## The Project for Capacity Development on Container Terminal Management and Operation in Sihanoukville Port (Phase 2)

Progress Report of the Project  
 2<sup>nd</sup> Dispatch (from 14<sup>th</sup> August, 2018 to 28<sup>th</sup> September, 2018)

Appendix Table

- Appendix 1: Activity Plan for the 2<sup>nd</sup> Dispatch (for PIU #2)
- Appendix 2: Minutes of PIU #2
- Appendix 3: Results of Baseline Surveys and Setting of Baseline and Target Value (revised) (for PIU #3)
- Appendix 4: Minutes of PIU #3
- Appendix 5: Discussions on the Issues related to Output 1 (Team-A) (Team-B #1)
- Appendix 6: Issues concerning Container Handling Operation in Vessel Operation 3 and Passage next to PAS Administration Building (Team-B #2)
- Appendix 7: Current Conditions of Motorcycles and Cars entering through Gate 2, 3 and Passage next to PAS Administration Building (Team-B #2)
- Appendix 8: SOP for the Lashing Team and Traffic Flow of Trailers inside the Port (Team-B #3)
- Appendix 9: Proposal of Some Measures for Enhancement of Container Handling Capacity (Team-B #4)

The Project for Capacity Development on Container Terminal Management and Operation in Sihanoukville Port Phase 2

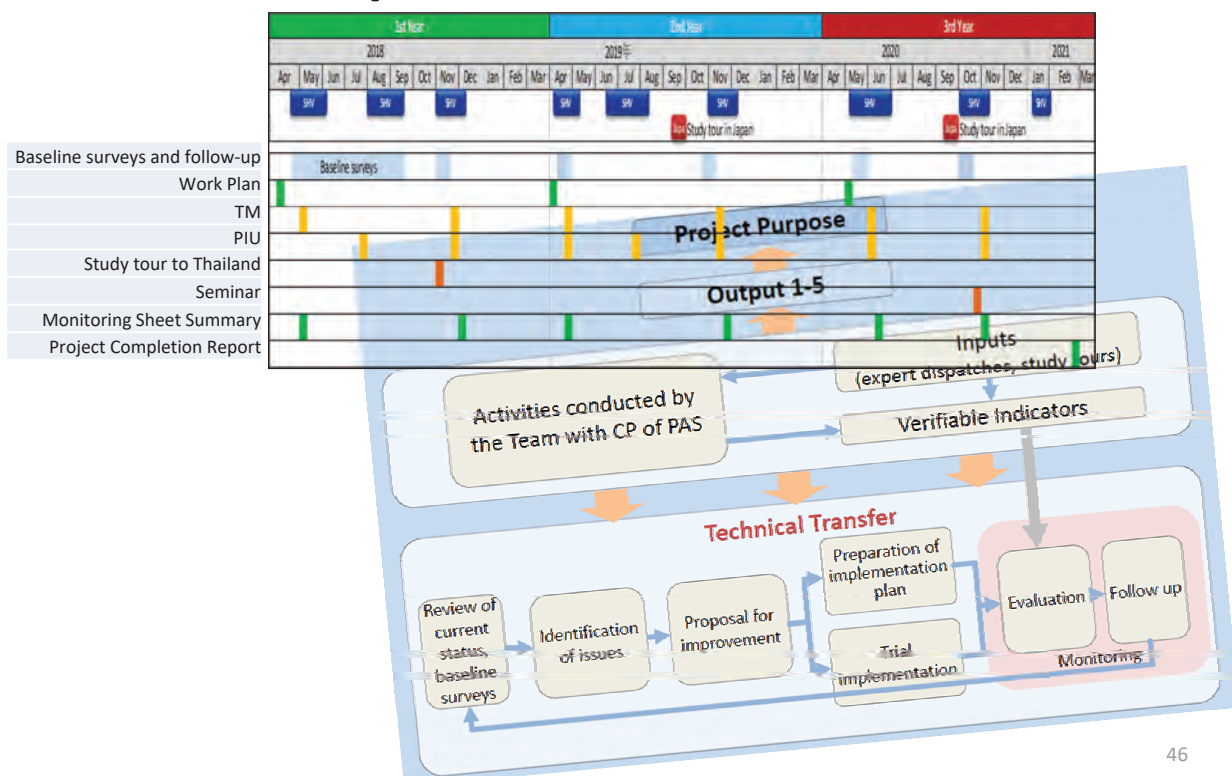
# Part 3: Basic Approach toward the Next Stage

## Basic Approach toward the Next Stage

- Activities that really **suit your very need** (as long as we can do)
- Securing **more flexibility** of the Project (the situation of the port has changed from the beginning of the project; therefore, we will consider changes of the initial PDM and conduct the **most suitable activities**.)
- More **thorough site oriented** approach and more intensive discussions with PAS staff
- Further consideration on port management **as a public company**
- Activities more aware of the **global standards**

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## Tentative Dispatch Schedule and Implementation Scheme



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# Thank you for your Attention



1st TM



PIUs



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We, the JICA Expert Team is always with you!



# The Project for Capacity Development on Container Terminal Management and Operation in Sihanoukville Port

~ Phase 2 ~

3<sup>rd</sup> Joint Coordination Committee

April 8, 2019



OCDI

(The Overseas Coastal Area Development Institute of Japan)

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## Contents

- Progress of the Project
- Modification/Revision of Project Design Matrix (PDM)
- Others
  - Training in Japan in September
  - Schedule of the next (5<sup>th</sup>) dispatch

# Work Schedule of 4<sup>th</sup> Dispatch

■ From March 13 to April 12, 2019

## Work Schedule ~4th Dispatch~

As of March 12, 2019

		March														April																
		13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	1	2	3	4	5	6	7	8	9	10	11	12
		Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri
JICA Team Members	1 Koichi MIYAKE (km)	Leader/Strategic Port Management (1)																														
	2 Kiyoshi NAKASHIMA (kn)	Co-Leader/Strategic Port Management (2)																														
	3 Norihiro FUKAZAWA (nf)	CTMS Operation/Management Information (0)																														
	4 Susumu KIMURA (sk)	Entry/Exit Control of Container Terminal																														
	5 Norihiko KATAOKA (nk)	Container Handling Equipment																														
	6 Takashi FURUNO (tf)	Operation of Rail Yard and Multi-Purpose Terminal																														
	7 Yutaka MIKAMI (ym)	Traffic Flow Management of Off-Dock Yards																														
	8 Takehiko SAIKAWA (ts)	Baseline Surveys/Study Tours/Project Administration																														
Schedule of Major Events	all members	Courtesy Call to Chairman, Deputy Chairman																														
	some of members	Courtesy Call on MPWT																														
	some of members	Explanation of 4th Activity Plan																														
	all members	4th Project Implementation Unit (PIU)																														
	all members	3rd Joint Coordination Committee (JCC)																														
Major Activities	some of members	Report to JICA Office in Cambodia																														
	necessary members	Baseline Surveys (as needed)																														
	necessary members	Observations/Surveys of Port Operations/Management																														
	necessary members	Traffic Surveys around Gates																														
	assigned members	Holding Workshop by Working Group																														
all members	Preparation of Progress Report IV																															

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## Records of JCC and PIU

### ■ JCC (Joint Coordination Committee)

No	Date	Subject	Attendants
1	May 9, 2018	Approval of the Work Plan	30
2	Dec. 4, 2018	Results of the Baseline Surveys and setting Target Values for KPIs/Progress of the Project in the 1st, 2nd and 3rd Dispatches	33
3	Apr. 8, 2019	Approval of revised PDM/report on the progress of the project	

### ■ PIU (Project Implementation Unit)

No	Date	Subject	Attendants
1	May 17, 2018	Method of Baseline Surveys and Follow-up Surveys	33
2	Aug. 16, 2018	Progress Report of the 1st Dispatch/Activity Plan of the 2nd Dispatch	24
3	Sep. 19, 2018	Results of Baseline Surveys and Setting of Baseline/Target Value	25
4	Nov. 14, 2018	Activity Plan of the 3rd Dispatch	26
5	Mar.19, 2019	Activity Plan of the 4th Dispatch	25

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# Records of Workshops

Working Group	No.	Date	Subject	Attendants
Team-A: Strategic Management (Output 1)	1	14-Sep, 2018	Issues related to Output 1	26
	2	19-Sep, 2018	Marketing Action Plan	21
	3	6-Dec, 2018	Introduction to the Managerial Accounting	18
	4	3-Apr, 2019	Methodology of Managerial Accounting	20
Team-B: Container Operation and Management (Output 2 & 3)	1	27-Aug, 2018	Issues related to container handling efficiency/sharing information and examining countermeasures	34
	2	6-Sep, 2018	Current situation and issues of motorcycles and cars entering gates 2,3, etc./sharing information and examining countermeasures	32
	3	13-Sep, 2018	SOP for the lashing team and traffic flow of trailers inside the port	29
	4	21-Sep, 2018	Proposal of some measures for enhancement of container handling capacity	17
	5	16-Nov, 2018	1. Comparison of productivity between gate and yard (RTG) using CTMS data 2. Container Storage plan and utilization of the Multi-Purpose Terminal	20
	6	30-Nov, 2018	The role of Control Center and current issues	23
	7	28-Mar, 2019	Observation of container handling at site/issues & countermeasures (Output 2)	24
	8	5-Apr, 2019		
Team-C: Congestion Mitigation (Output 4)	1	21-Sep, 2018	Congestion issues (Results of congestion surveys outside the port and at the gate)	13
	2	8-Nov, 2018	Trial countermeasures for mitigating the congestion at Gate 3	24
	3	9-Apr, 2019		
Team-D: Port EDI Task Force (Output 5)	1	29-May, 2018	Port entry/departure clearance procedures and Port EDI	12

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## Overall Goal and Project Purpose in PDM

### Overall Goal

- Modernized Corporate strategy (mainly Container Terminal (CT)) of PAS will contribute to trade promotion in Cambodia.

- Indicator: Annual container throughput of Sihanoukville Port **will be expected to exceed 800,000TEU** in 2023. (middle growth case)

### Project Purpose

- Capacity of business operation (mainly CT) of corporatized PAS will be enhanced.

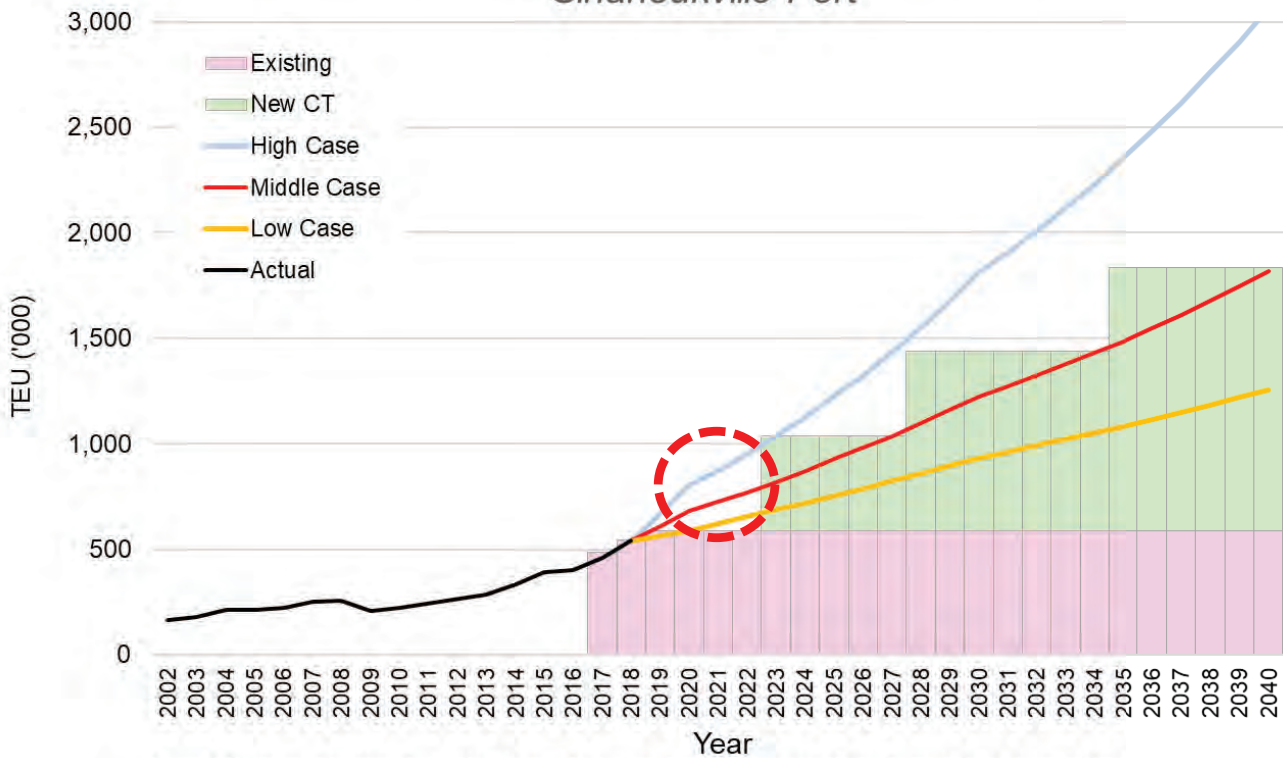
Year	Actual	Growth	Low Case	Middle Case	High Case
2013	286	9%			
2014	334	17%			
2015	392	17%			
2016	400	2%			
2017	460	15%			
2018	541	18%	541	541	541
2019			565	612	672
2020			589	682	804
2021			622	725	874
2022			655	771	951
2023			687	820	1,035
2024			720	872	1,126
2025			752	927	1,226
2026			788	980	1,325
2027			825	1,037	1,432
2028			861	1,096	1,549
2029			897	1,159	1,674
2030			933	1,226	1,810
2031			963	1,274	1,908
2032			992	1,324	2,011
2033			1,022	1,376	2,119
2034			1,052	1,431	2,234
2035			1,082	1,487	2,354
2036			1,116	1,548	2,481
2037			1,150	1,611	2,615
2038			1,185	1,677	2,757
2039			1,219	1,746	2,905
2040			1,254	1,818	3,062

Source of Demand Forecast: Preparatory Survey for Sihanoukville Port New Container Terminal Development Project (JICA; Nov. 2016)

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# Demand & Capacity

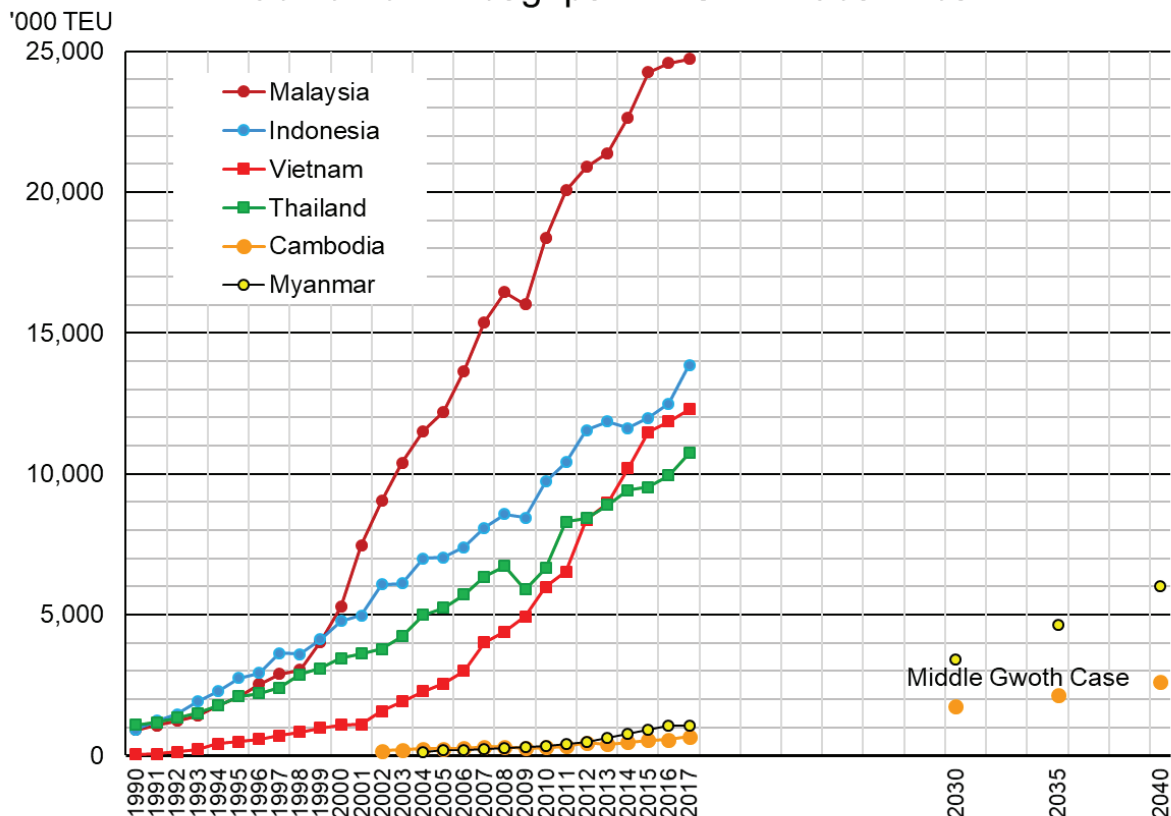
Container Throughput Prediction & Terminal Capacity at Sihanoukville Port



Source of Demand Forecast: Preparatory Survey for Sihanoukville Port New Container Terminal Development Project (JICA; Nov. 2016)  
Source of Terminal Capacity: Expert Team

# Comparison among the ASEAN Countries

Container Throughput in ASEAN Countries



Cambodia includes PAS and PPAP.

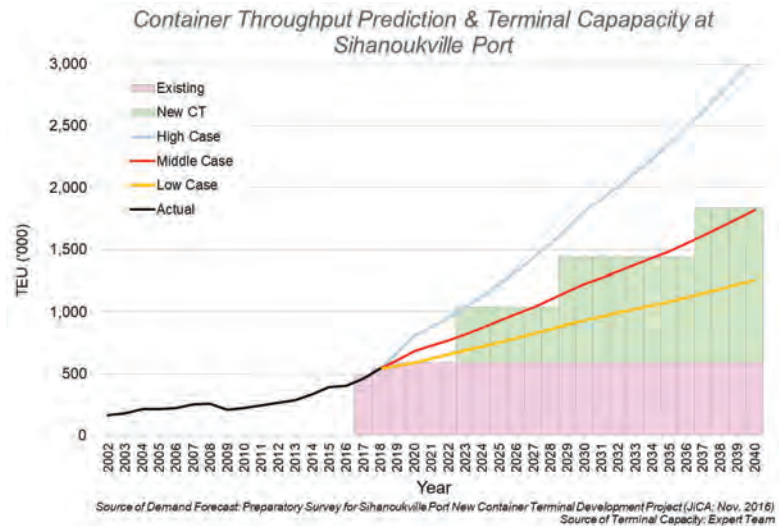


# Major Issues

- It is vitally important to maintain international competitiveness of Sihanoukville (SV) port in terms of **user-friendliness** and **terminal performance/productivity**.
- It is necessary to ensure SV port to accommodate the increase of container cargo, i.e. **0.8 million TEU until the commencement of a new CT by 2023**.



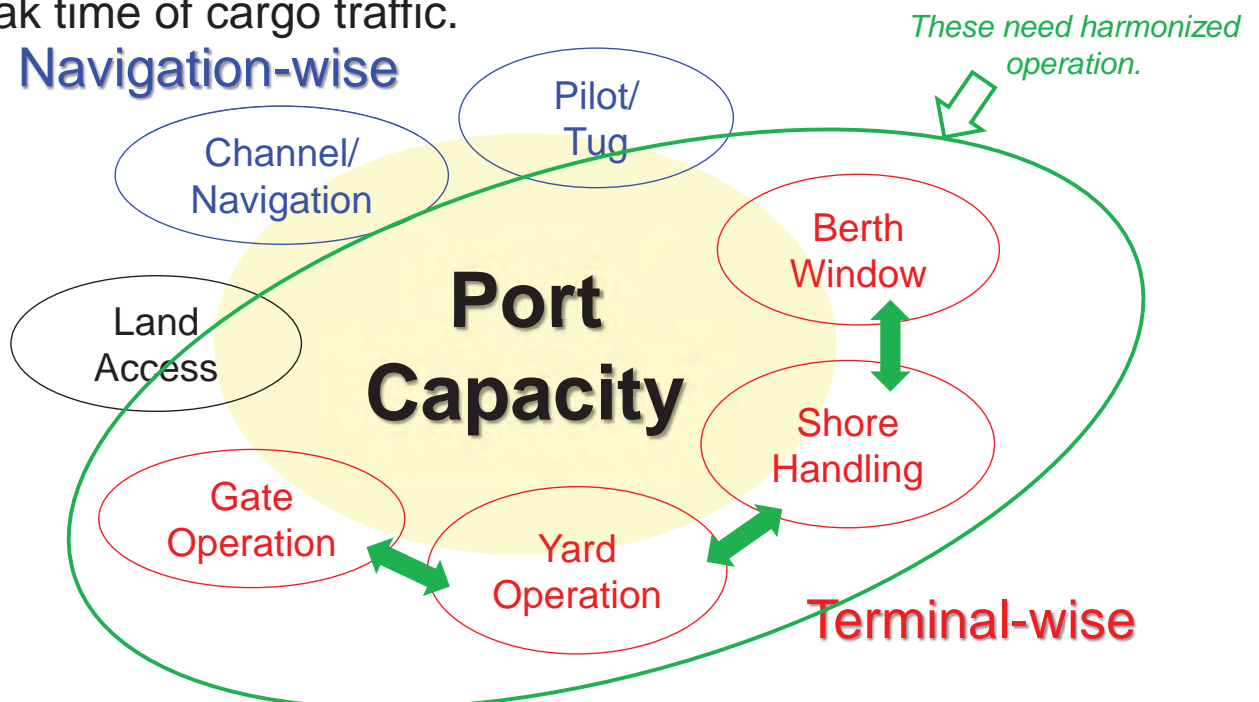
Major Target  
of the project



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## Port Capacity/Productivity

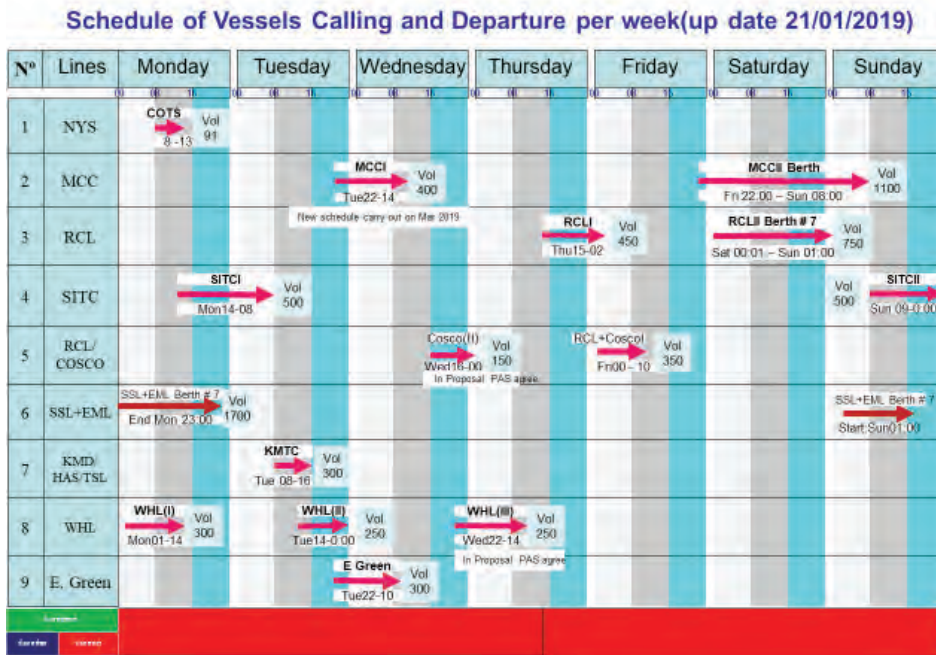
- In general, a port capacity/productivity is defined by a minimum capacity among operations below.
- A terminal capacity/productivity is also defined by the operation in a peak time of cargo traffic.



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# Berthing Schedule

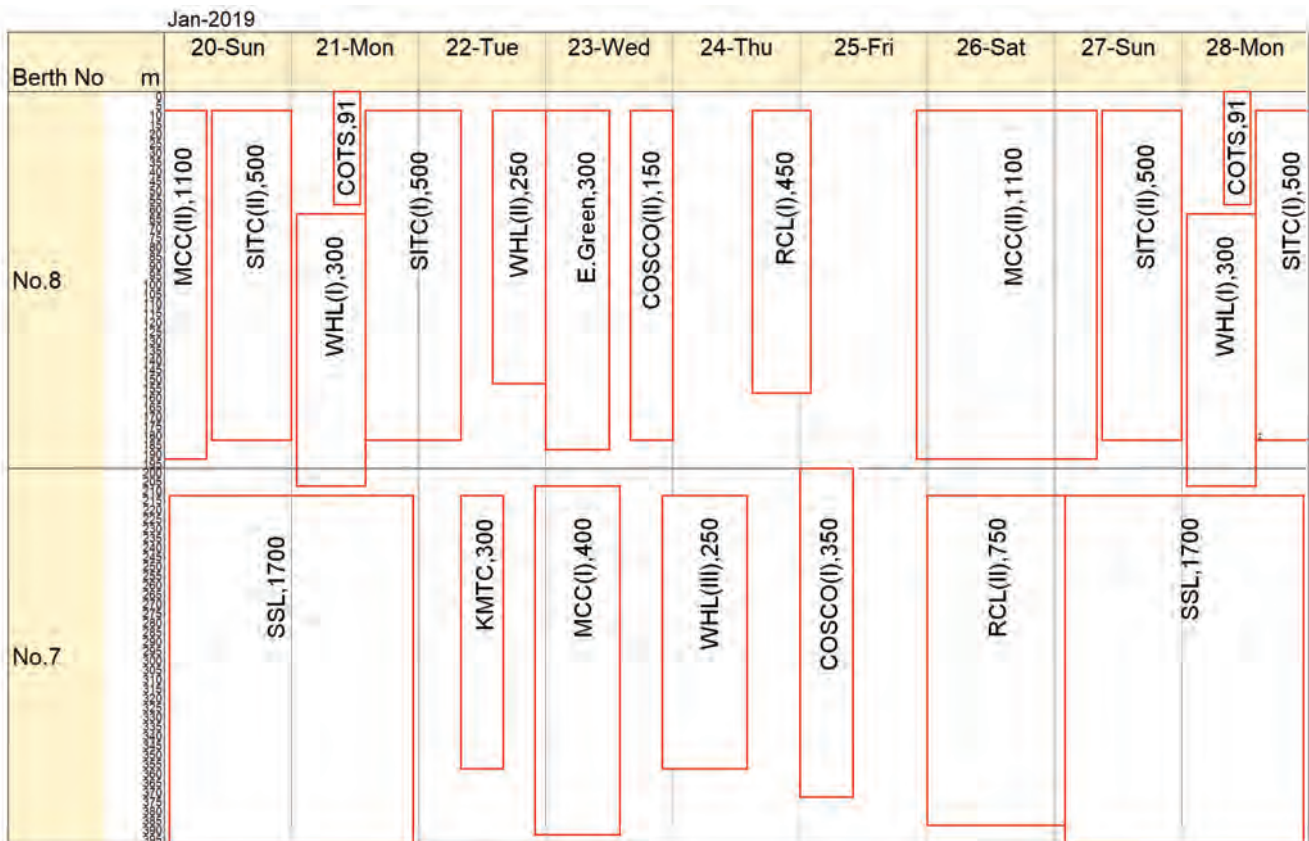
- PAS makes the Berthing Schedule.



We've drawn Berth Window based on the above schedule as follow:

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## Drawing of Berth Window



Berth window is narrow to receive new weekly shipping services.

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# Vessel Arrival & Departure Plan

## PAS makes the Vessel Arrival & Departure Plan. c

Total Dish		3092		ការរៀបចំផែនការចូល និងចេញដំណើររបស់តារាងសំរាប់អាទិត្យទី 11							Weekly Gross Productivity	
Total Load		5792		PLANNING ARRIVAL AND DEPARTURE OF VESSELS FOR WEEK 11 to 17/03/2019							#REF! Boxes/h	
Nº	ក្រុមហ៊ុន Liner	ទំហំ Berthing	ឈ្មោះ/ដំណាក់ Vessel's name/Voy	ស្ថានីយដ្ឋាន (ETA)	ស្ថានីយដ្ឋាន (ETB)	ចេញដំបូង Start Op.tion	ចេញដំបូង End Op.tion	តម្លៃ Dish	តម្លៃ Load	តម្លៃ Total	កំណត់សម្គាល់ Remarks	
1	NYS	7	CHIANG TUN 1909	Mon, 11/03/19 12:00	Mon, 11/03/19 14:01	Mon, 11/03/19 14:31	Mon, 11/03/19 18:41	32	66	98	ចេញដំបូង (Departured)	
2	WAH	8	WANHAI 105-232	Tue, 12/03/19 16:00	Tue, 12/03/19 17:03	Tue, 12/03/19 17:33	Wed, 13/03/19 4:23	326	92	418	ចេញដំបូង (Departured)	
3	SITC	8	SITC JAKARTA 1906	Tue, 12/03/19 19:30	Tue, 12/03/19 21:05	Tue, 12/03/19 21:35	Wed, 13/03/19 21:38	282	461	743	ចេញដំបូង (Departured)	
4	MCC	7	MIA SCHULTE 910	Wed, 13/03/19 8:30	Wed, 13/03/19 12:01	Wed, 13/03/19 12:31	Thu, 14/03/19 3:13	435	23	458	ចេញដំបូង (Departured)	
5	COSCO	8	SINO. KAOHSIUNG 029	Thu, 14/03/19 22:30	Fri, 15/03/19 0:04	Fri, 15/03/19 0:34	Fri, 15/03/19 18:33	299	183	482	ចេញដំបូង (Departured)	
6	RCL	7	RATHA BHUM 682	Thu, 14/03/19 20:00	Thu, 14/03/19 22:49	Thu, 14/03/19 23:19	Fri, 15/03/19 12:02	263	167	430	ចេញដំបូង (Departured)	
7	RCL	7	CHANA BHUM 700	Fri, 15/03/19 20:00	Fri, 15/03/19 20:55	Fri, 15/03/19 21:25	Sat, 16/03/19 23:30	348	447	795	ចេញដំបូង (Departured)	
8	MCC	8	B TRADER 910	Fri, 15/03/19 20:00	Fri, 15/03/19 22:29	Fri, 15/03/19 22:59	Sun, 17/03/19 6:30	406	509	915	ចេញដំបូង (Departured)	
9	EML	7	BRIDGE 0067	Sun, 17/03/19 0:00	Sun, 17/03/19 4:00	Sun, 17/03/19 4:30	Mon, 18/03/19 13:00	701	752	1453	ចេញដំបូង (Departured)	
10	SITC	8	SITC BANGKOK 1906	Sun, 17/03/19 9:00						0		
11	WAH	7	WANHAI 105-232	Sun, 17/03/19 23:00						0		

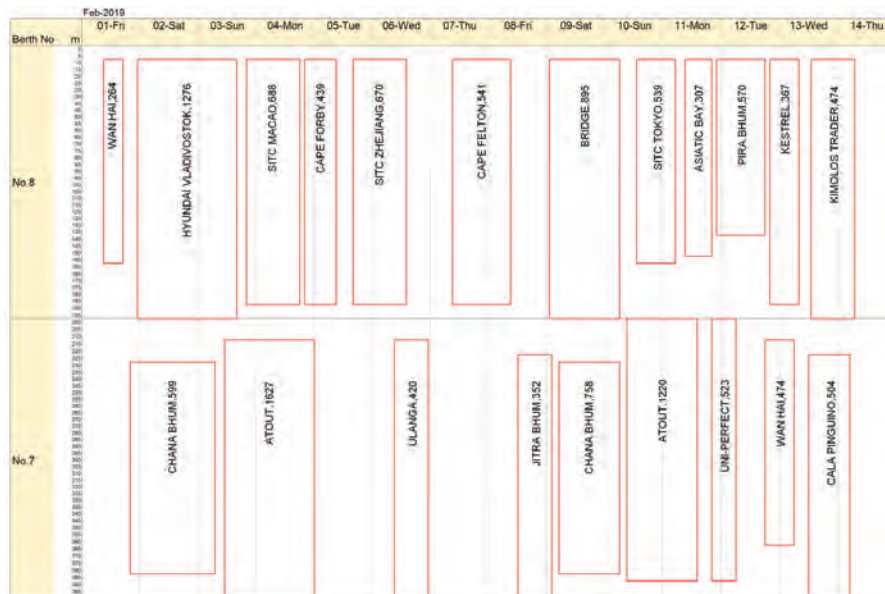


Based on the above data, we produce the actual berth window and calculate waiting time for berthing as follows:

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## Berth Window (Actual; from Feb.1 to 14)

- Berth window has been already narrow to receive additional weekly shipping services.
- 800,000 TEU could be realized when receiving additionally 2 weekly services with 1,500 boxes handling. (1,500 x 1.6 TEU/box 52 weeks x 2 services = 250,000 TEU/year)



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