

# Real-time Tracking and Document Sharing Service for ASEAN Transit Cargo

## Proof of Concept for Business Improvement Cycles of Trade and Logistics in ASEAN Region by Utilizing IoT and Measuring Accurate Time of Transit Cargo

We conduct PoC to solve the following three issues by combining two cloud services

### Issue 1 [Lack of Cargo Location Visibility]

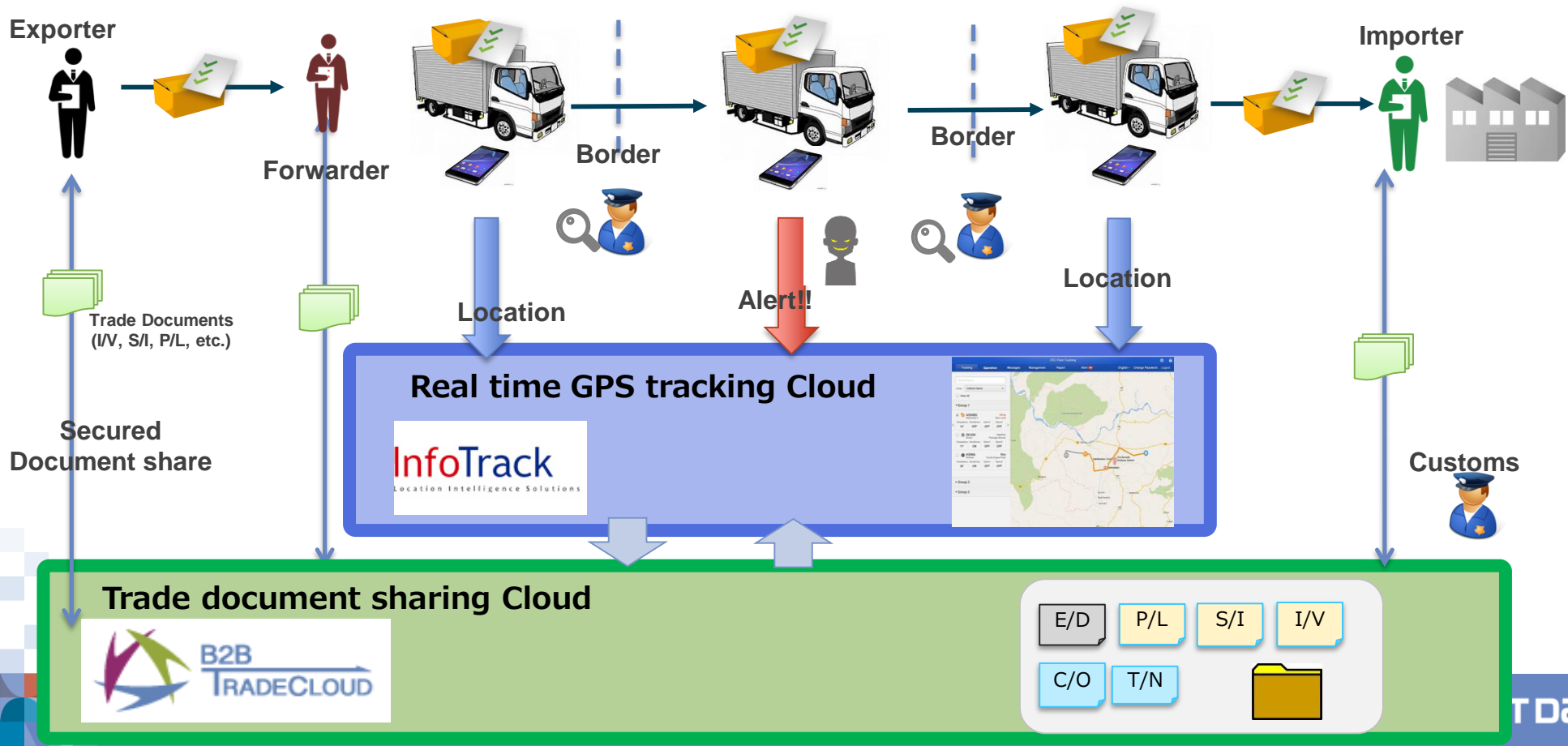
- Hard to know real time cargo location
- Hard to check ETA online

### Issue 2 [Ineffective Trade Data Sharing]

- Too many emails to exchange trade docs
- Double work without reuse of data
- Non-automated document filing

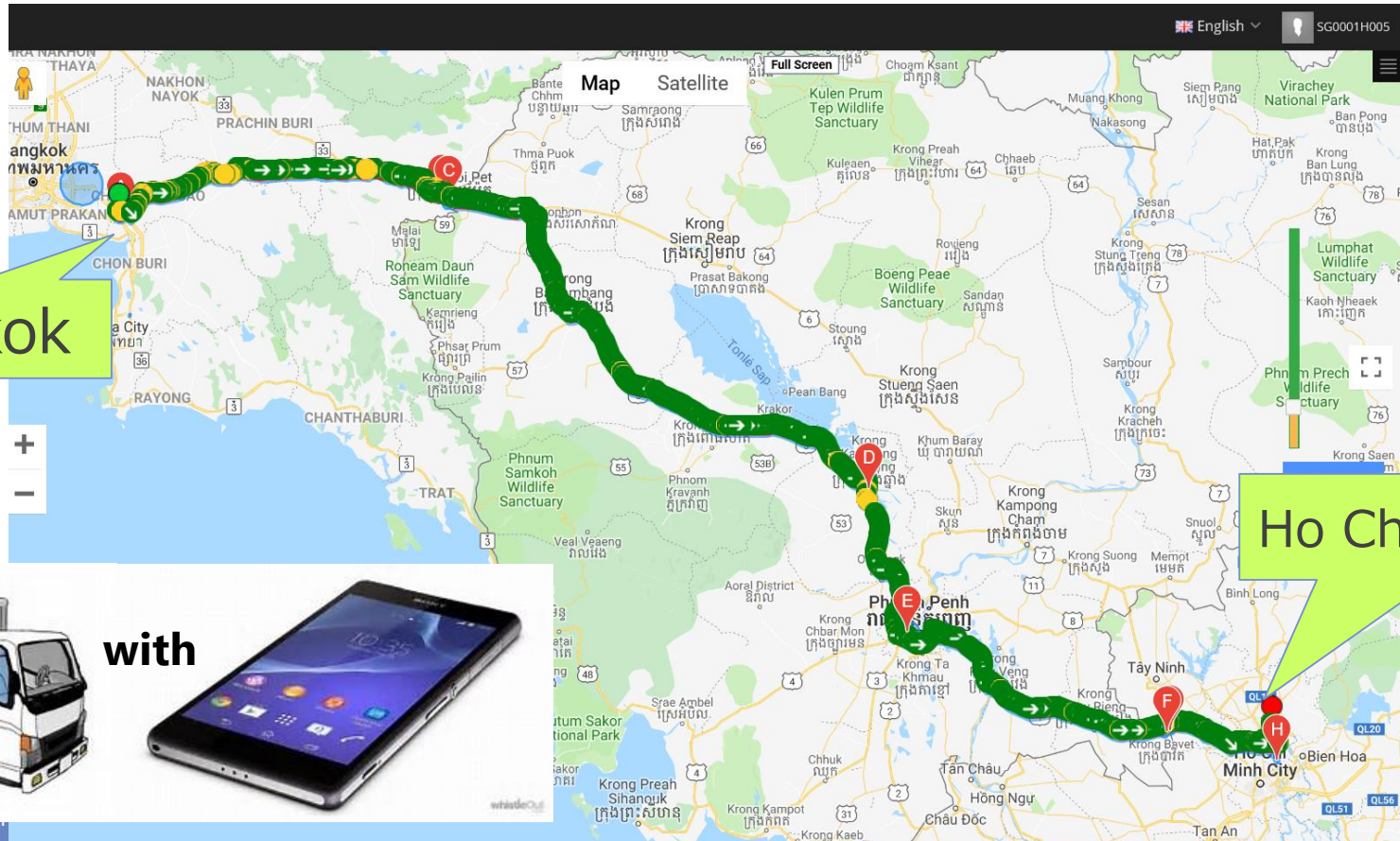
### Issue 3 [Theft/Smuggling of Cargo]

- Theft/Smuggling of cargo occurs together with data falsification in-between borders



# Cargo Route (Bangkok – Ho Chi Minh City)

- 4 Customs (Thailand, Cambodia, Vietnam, and Myanmar) joined.
- LINTEC Corporation provides real cargo for this project
- Forwarder (Kamigumi) coordinated 3 countries' trucks and forwarders
- Transport cargo from Thailand to Vietnam through Cambodia
- We transported same goods 5 times between September and December for collecting accurate data and average duration.



Bangkok

Ho Chi Minh City



with



## Finding 1: Long queue for the exit gate from Thailand



- The queue for the exit gate from Thailand was around four km at the time of customs export permit, 10 a.m., in the weekend (Saturday)
- The completion of both process of exit from Thailand and entry into Cambodia is compulsory. Otherwise, truck is not allowed to queue. In case of breach, the driver is fined (1,000 Baht).
- Customs officer and Immigration officer separately examine customs and immigration documents and truck license number at the border gate (only one lane). Five minutes are needed per truck. Only 12 trucks can pass through the border.



## Finding 2: Transshipment of container at dry port (border)

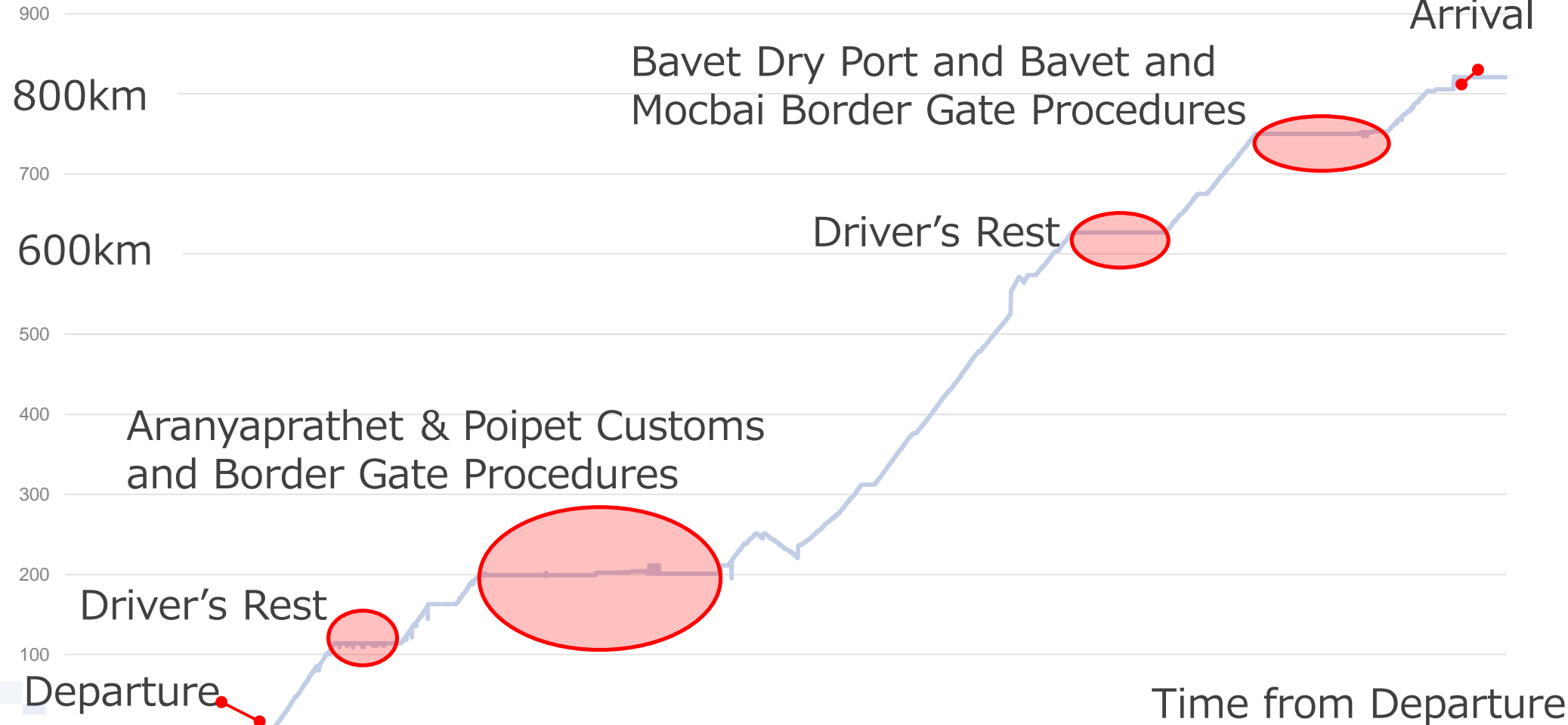


- Many transporting companies have not obtained cross border license, so-called truck passport or double license despite CBTA has been valid. Transporting companies need to transship containers at each border because one truck can not run through Thailand, Cambodia and Vietnam. Container must be transshipped at each border.
- Waiting time may be needed in case the other truck has not arrived before a truck arrives at a dry port (border). It is difficult to adjust the time of transshipment because a transporting company handles many cargoes/containers.
- Land transporting cost with transshipment is supposed to be higher than the one without transshipment because transshipment at each border is needed.

# Time and distance data for the 1<sup>st</sup> shipment

Acquisition of data without any interference with the actual operation

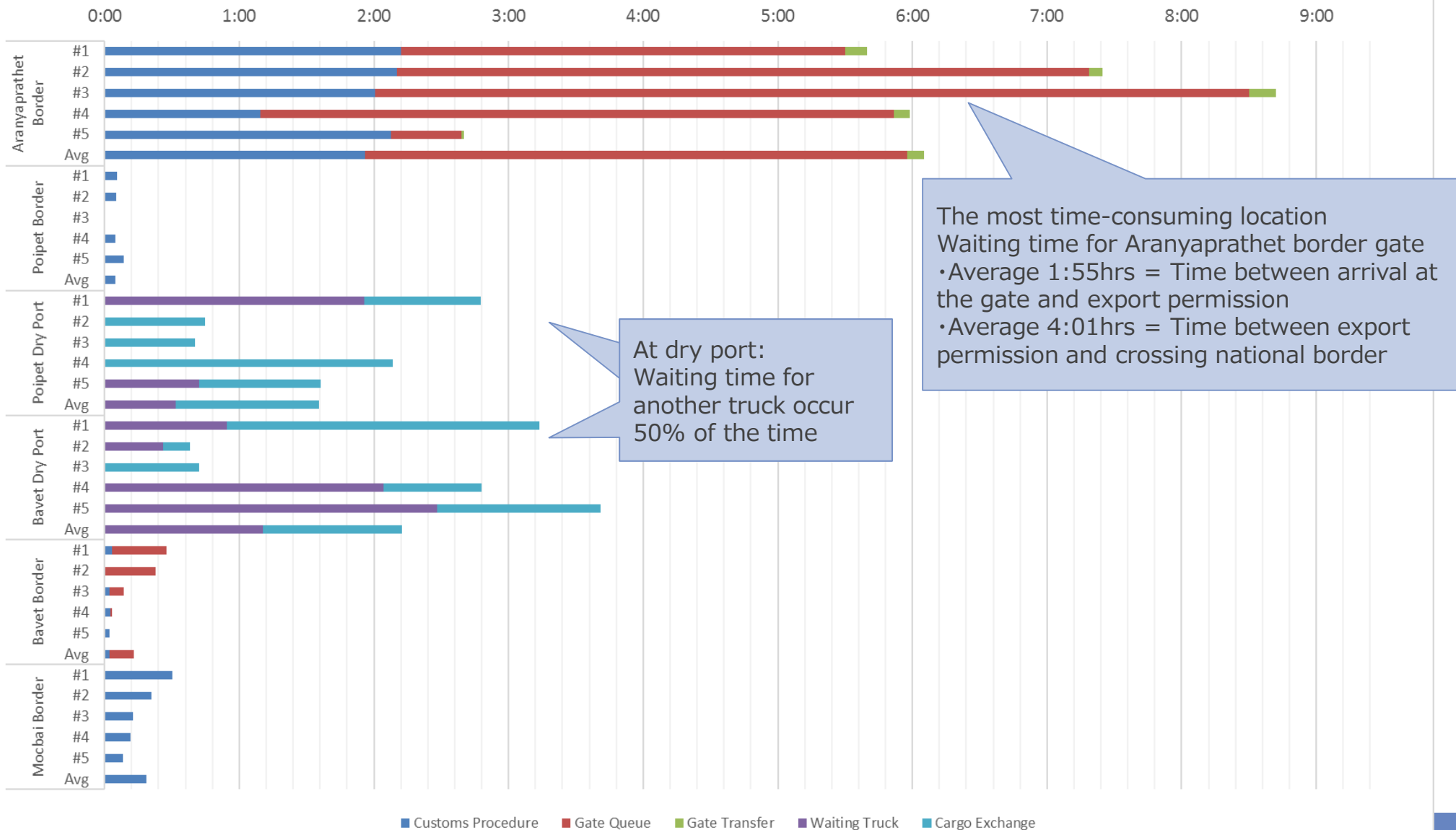
Distance



04/10/2018 10:00  
04/10/2018 10:15  
04/10/2018 11:00  
04/10/2018 12:00  
04/10/2018 12:40:28  
04/10/2018 13:13:52  
04/10/2018 13:48:27  
04/10/2018 14:21:51  
04/10/2018 14:55:15  
04/10/2018 16:26:25  
04/10/2018 17:00:00  
04/10/2018 18:00:00  
04/10/2018 19:00:00  
04/10/2018 20:00:00  
04/10/2018 21:00:00  
04/10/2018 22:00:00  
04/10/2018 23:00:00  
04/10/2018 24:00:00  
04/10/2018 25:00:00  
04/10/2018 26:00:00  
04/10/2018 27:00:00  
04/10/2018 28:00:00  
04/10/2018 29:00:00  
04/10/2018 30:00:00  
04/10/2018 31:00:00  
04/10/2018 32:00:00  
04/10/2018 33:00:00  
04/10/2018 34:00:00  
04/10/2018 35:00:00  
04/10/2018 36:00:00  
04/10/2018 37:00:00  
04/10/2018 38:00:00  
04/10/2018 39:00:00  
04/10/2018 40:00:00

# Tracking data for 5 transportations

Transit Cargo Duration from Thailand to Vietnam through Cambodia



The most time-consuming location  
Waiting time for Aranyaprathet border gate  
•Average 1:55hrs = Time between arrival at the gate and export permission  
•Average 4:01hrs = Time between export permission and crossing national border

At dry port:  
Waiting time for another truck occur 50% of the time

## Finding 3: Many trade related documents are required.

### Documents and procedures required for transport from Thailand to Vietnam through Cambodia

- Certificate of Origin: Apply prior to the departure of truck. Truck driver transports the original copy together with cargoes.
- Aranyaprathet customs house
  - ✓ Details of export is recorded on declaration book and declaration with supporting documents is submitted.
  - ✓ Permit at the customs house by paper.
  - ✓ The paper (permit) is examined by customs officer at the border checkpoint.
- Poipet customs station for transit declaration
  - ✓ Transit declaration is lodged through ASYCUDA in Poipet customs station
  - ✓ Documents are required in case the channel is yellow or red.
  - ✓ Transit permit at the customs station by paper
  - ✓ Entry procedure into Poipet dry port
  - ✓ Permit of bonded transportation to Bavet
- Bavet customs station for arrival declaration
  - ✓ Arrival declaration is lodged through ASYCUDA in Bavet customs station
  - ✓ Documents are required in case the channel is yellow or red. Container is scanned by large x-ray scanner.
  - ✓ Copy of transit permit is submitted to Bavet customs border checkpoint.
  - ✓ Copy of transit permit is submitted to Bavet customs head office.
  - ✓ Original of transit permit is returned to Poipet customs station on the other day.
- Moc Bai customs branch
  - ✓ Import declaration is lodged through VNACCS.
  - ✓ No document is required in case of green. Documents are required to present at the Moc Bai border customs checkpoint in case the channel is yellow or red. Cargo is inspected in case of red channel.
  - ✓ Verification of documents and cargo at Moc Bai customs checkpoint.
  - ✓ Permit ...etc.

- Many and duplicated trade related documents are required for cross border trade among three countries. The financial burden with regard to transport among three countries are big because waiting time at customs is needed without advance declaration.

**Proposal 1:**

**Expand B2B TradeCloud to ASEAN and trade facilitation by prioritizing B2BTC Users**

**Proposal 2:**

**Strengthen the framework of CBTA and TAD and increase the number of license**

**Proposal 3:**

**Streamline border gate procedures and efficiency as soon as possible**

**Roadmap of B2B TradeCloud in ASEAN:**

**NTT DATA plans to expand B2B TradeCloud service to ASEAN countries' private companies and customs for the region's trade facilitation and economic growth.**