

# Export Process Analysis of Sugar and Automobile Spare Parts from Thailand to South Asia

“Regional Study on Improving Regional Trade Procedures and Processes”  
for ARTNeT Trade Facilitation Research (ATFR) 2010

Institute for Information Technology Innovation  
Kasetsart University, Thailand



ARTNeT Trade Facilitation Research Team Meeting  
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Kuala Lumpur, Malaysia



# Export of Sugar and Auto Spare Parts during 2005-2009

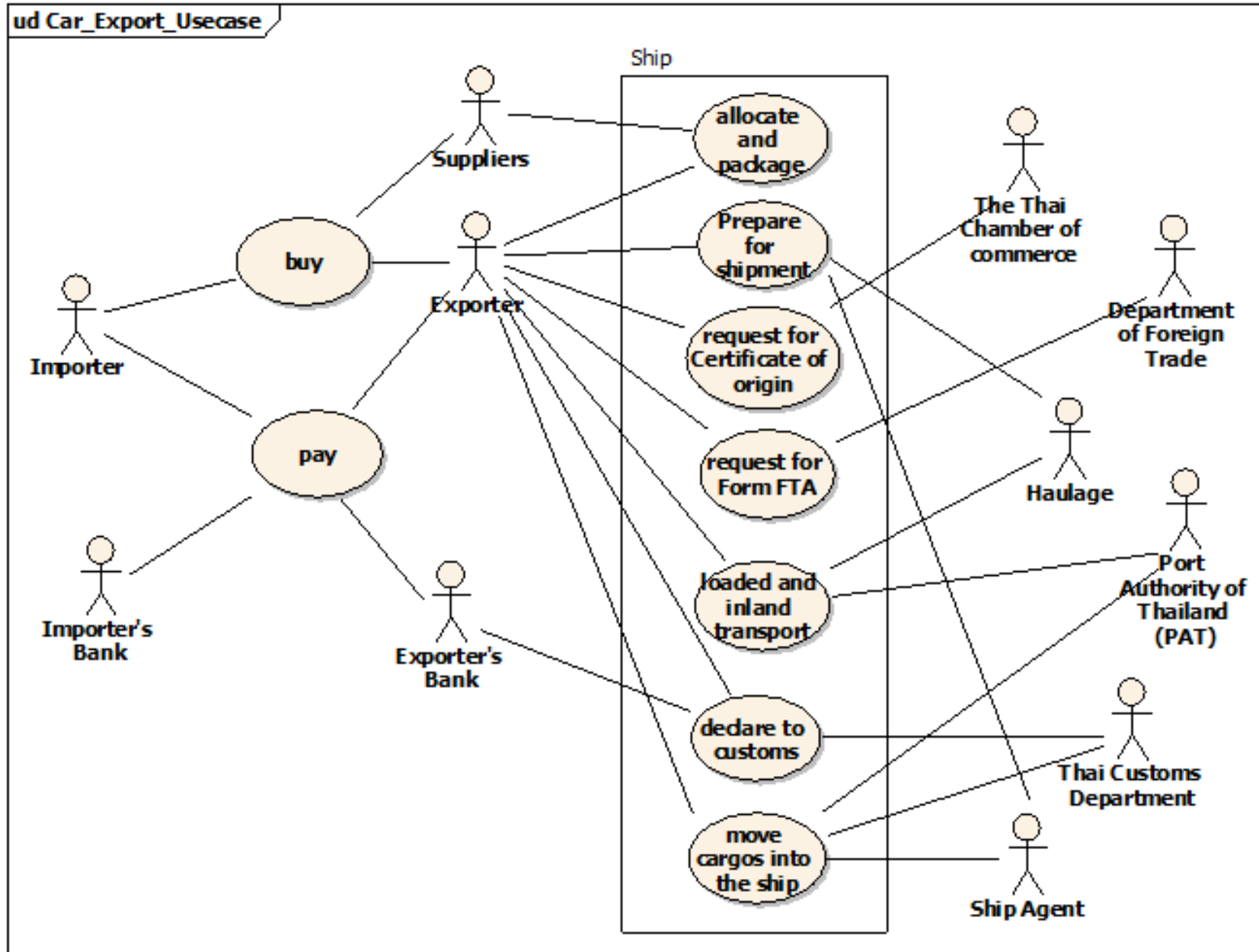
Year \ Products		Sugar <sup>2</sup>	Auto Parts <sup>3</sup>		
			O.E.M. Part		Spare Parts
			Body Part	Component Part	
2005	Quantity (ton)	1,419,417	---Total units not specified---		
	Value (mil.bath)	14,437.50	6,462.11	70,328.58	4,100.74
2006	Quantity (ton)	981,463	---Total units not specified---		
	Value (mil.bath)	13,151.60	6,677.28	80,489.32	5,026.38
2007	Quantity (ton)	2,321,484	---Total units not specified---		
	Value (mil.bath)	25,383	39,910.06	72,432.02	8,115.21
2008	Quantity (ton)	2,015,012	---Total units not specified---		
	Value (mil.bath)	21,733.50	71,493.36	61,320.34	11,007.91
2009	Quantity (ton)	2,694,467	---Total units not specified---		
	Value (mil.bath)	35,503.40	14,665.70	86,225.42	12,531.84

- Increasing export quantity and value during the part five years
- Set high impact on national economic growth

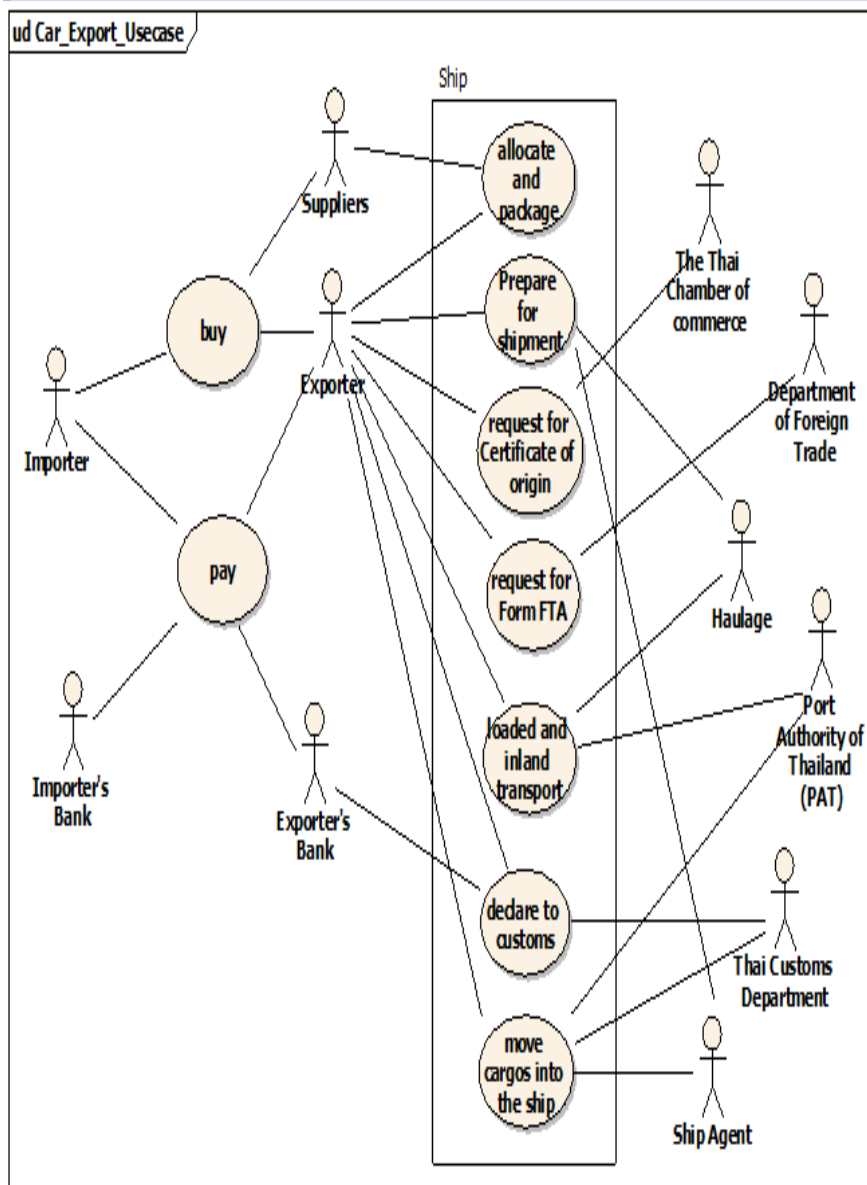
2 Source: Office of Agricultural Economics <http://www.oae.go.th/>

3 Source: Thailand Automotive Institute [http://www.thaiauto.or.th/statistic/vehicle\\_and\\_part\\_export.asp](http://www.thaiauto.or.th/statistic/vehicle_and_part_export.asp)

# Business Process Analysis of Automobile Spare Parts Export from Thailand



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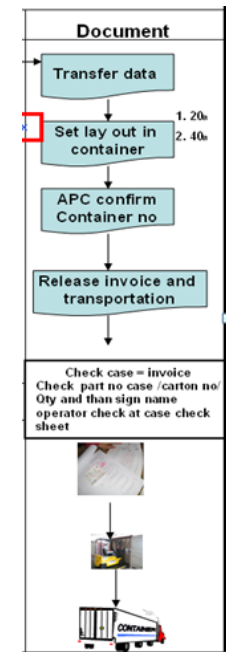
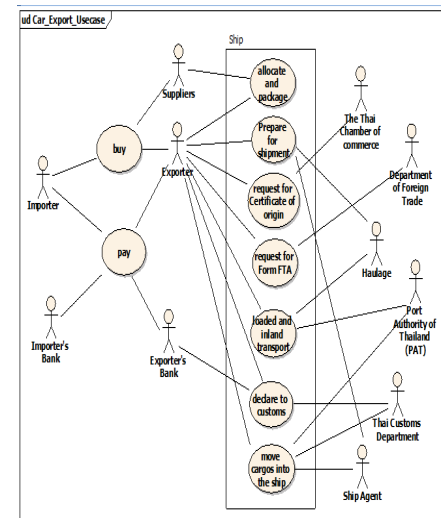
**12 Stakeholders** - involved in fulfilling procedural and documentary requirements

- 1) Exporter
- 2) Importer
- 3) Exporter's bank
- 4) Importer's bank
- 5) Suppliers
- 6) Inland haulage service
- 7) Carrier (shipping agent)
- 8) Port Authority of Thailand
- 9) Terminal Operator
- 10) Department of Foreign Trade
- 11) Royal Thai Customs Department
- 12) Thai Chamber of Commerce

# Business Process Analysis of Automobile Spare Parts from Thailand

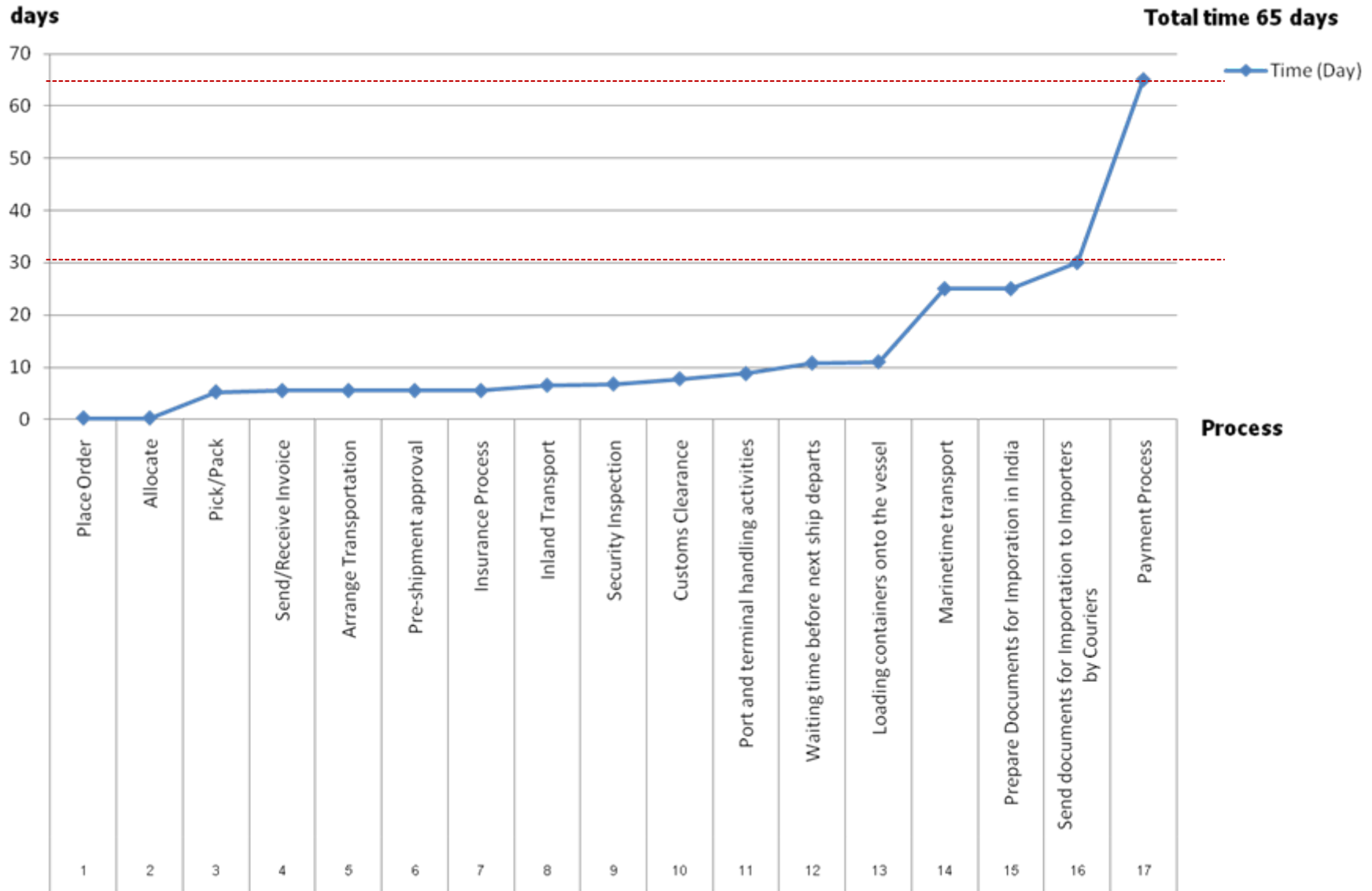
## 29 related trade documents (approx.)

- 1) Purchase Order
  - 2) Picking Slip
  - 3) RTS Invoice
  - 4) Commercial Invoice
  - 5) Preemption Freight
  - 6) Bill of Lading
  - 7) Haulage Order
  - 8) Request for Certification of Origin
  - 9) Certification of Origin
  - 10) Request for FTA Form
  - 11) FTA Form
  - 12) Request for Permission for Container Movement to the Port Area (TKT 308.2)
  - 13) Permit for Cargo Movement (KN 6.1)
  - 14) Packing List
  - 15) Equipment Interchange Receipt (EIR)
  - 16) Goods Transition Control List
  - 17) Case Check Sheet
  - 18) Export Declaration
  - 19) Export Entry
  - 20) Payment Order
  - 21) Credit Advice
  - 22) Debit Advice
  - 23) Remittance Advice
  - 24) Export Permit
  - 25) Manifest
  - 26) Bill of Lading
  - 27) Application for Letter of Credit
  - 28) Letter of Credit
  - 29) Shipping Documents
- (as per importer's purpose)



# Business Process Analysis of Auto Spare Parts from Thailand

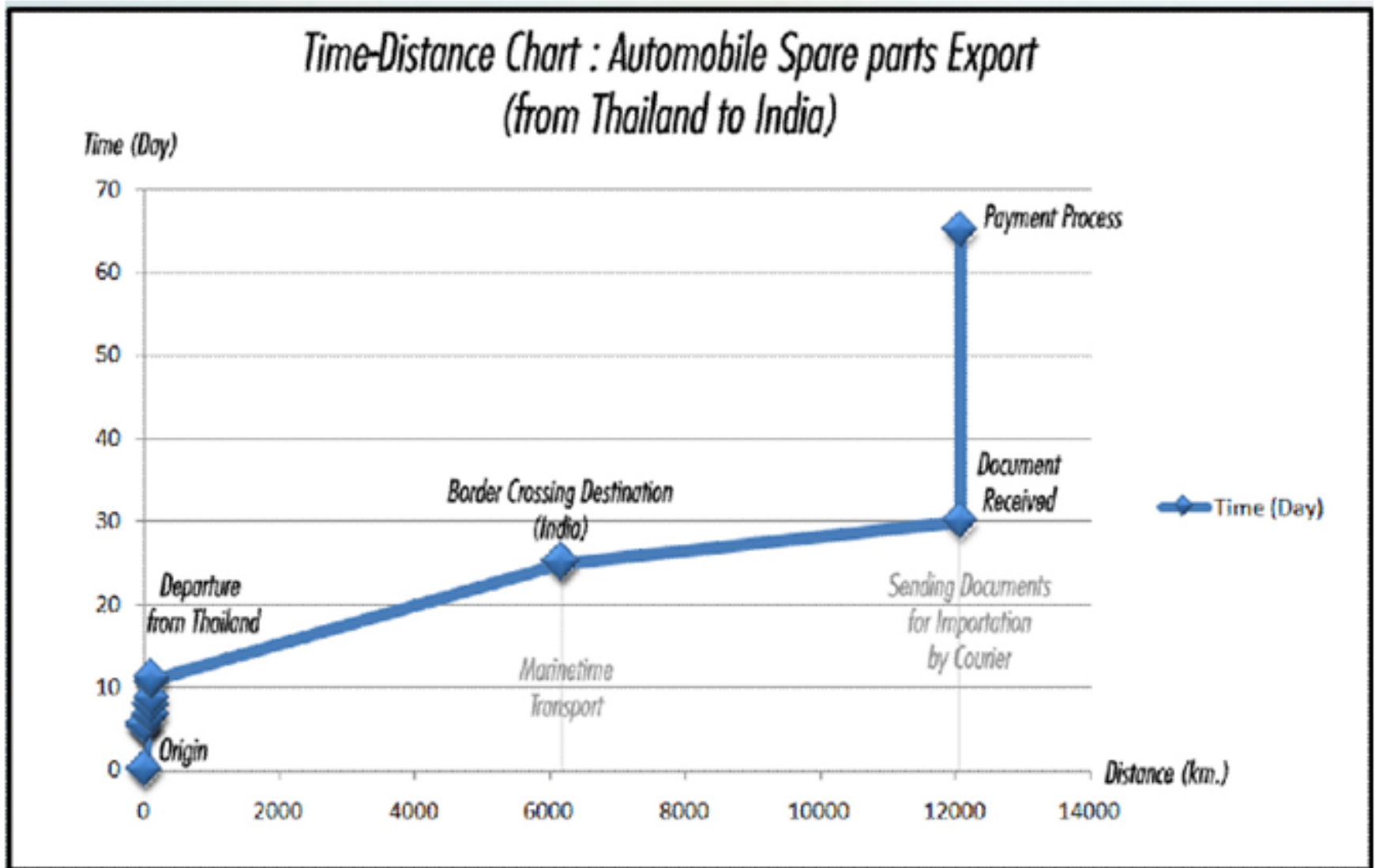
## Time-Procedure Chart



## Time/Cost-Distance Analysis: Automobile Spare Parts from Thailand

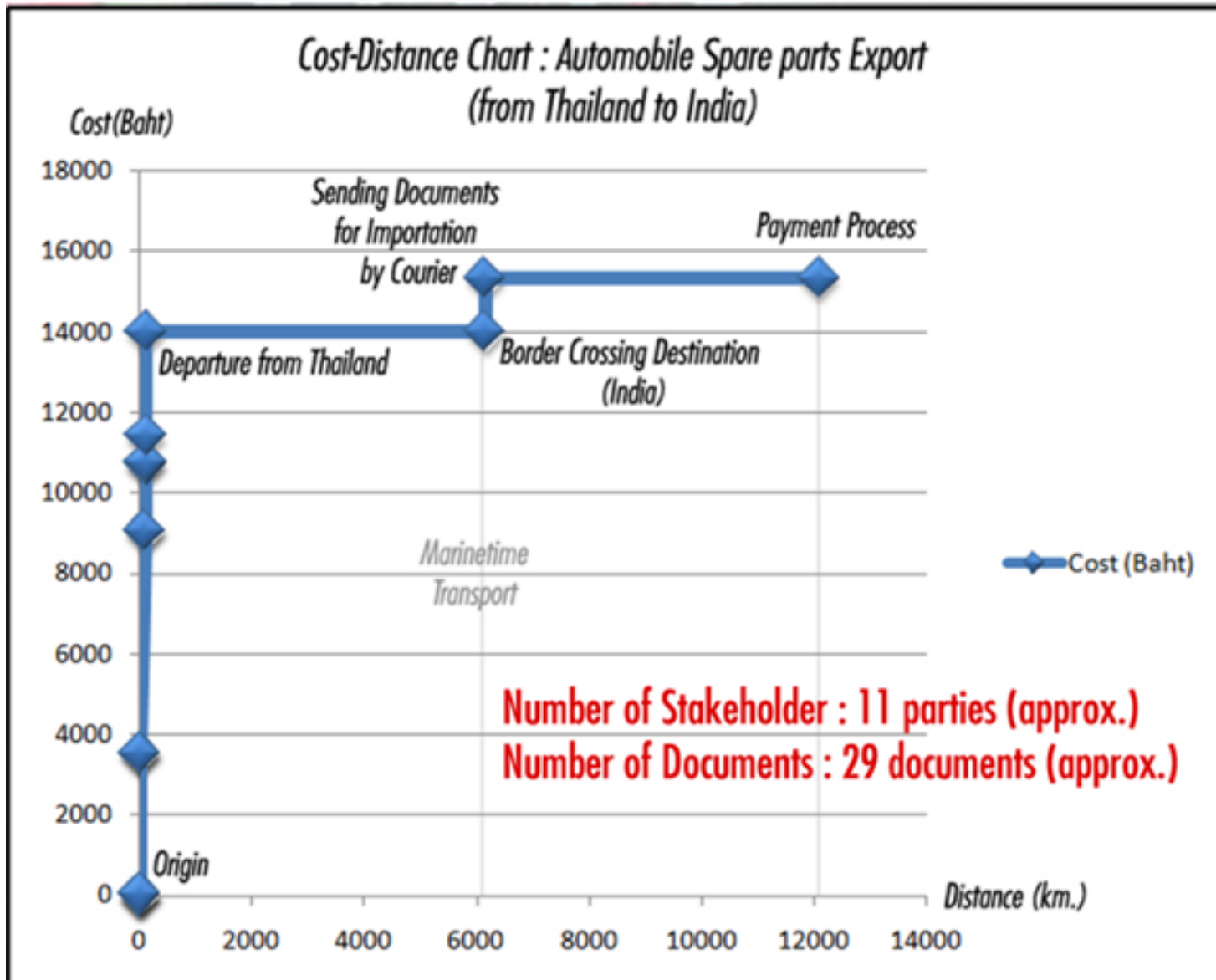
<b>Export Process</b>	<b>Time (Day)</b>	<b>Cost (Baht)</b>	<b>Distance (km.)</b>
1. Place Order	0.25	0	0
2. Allocate	0.25	0	0
3. Pick/Pack	5	0	0
4. Send/Receive Invoice	0.25	0	0
5. Arrange Transportation	0.25	3547	0
6. Pre-shipment approval	0.25	0	0
7. Insurance Process	0	0	0
8. Inland Transport	1	5500	100
9. Security Inspection	0.25	0	5
10. Customs Clearance	1	1650	3
11. Port and terminal handling activities	1	65	2
12. Waiting time before next ship departs	2	635	0
13. Loading containers onto the vessel	0.25	2600	0
14. Maritime transport	14	0	6054.188
15. Prepare Documents for Importation in India	2	1300.56	0
16. Send documents for Importation to Importers by Couriers	2	0	5920
17. Payment Process	35	0	0

# Time-Distance Analysis: Automobile Spare Parts Export from Thailand



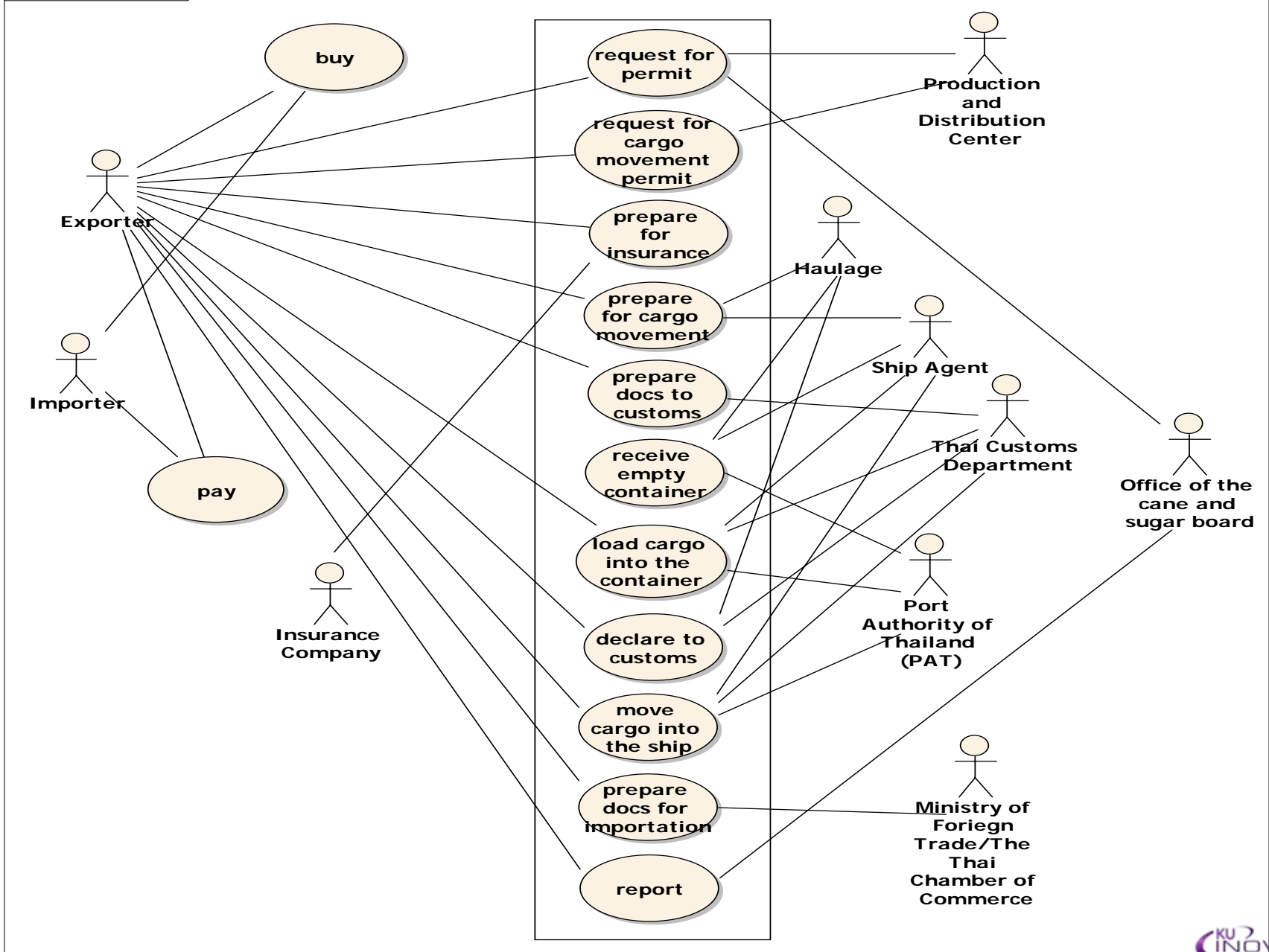


# Cost-Distance Analysis: Automobile Spare Parts Export from Thailand

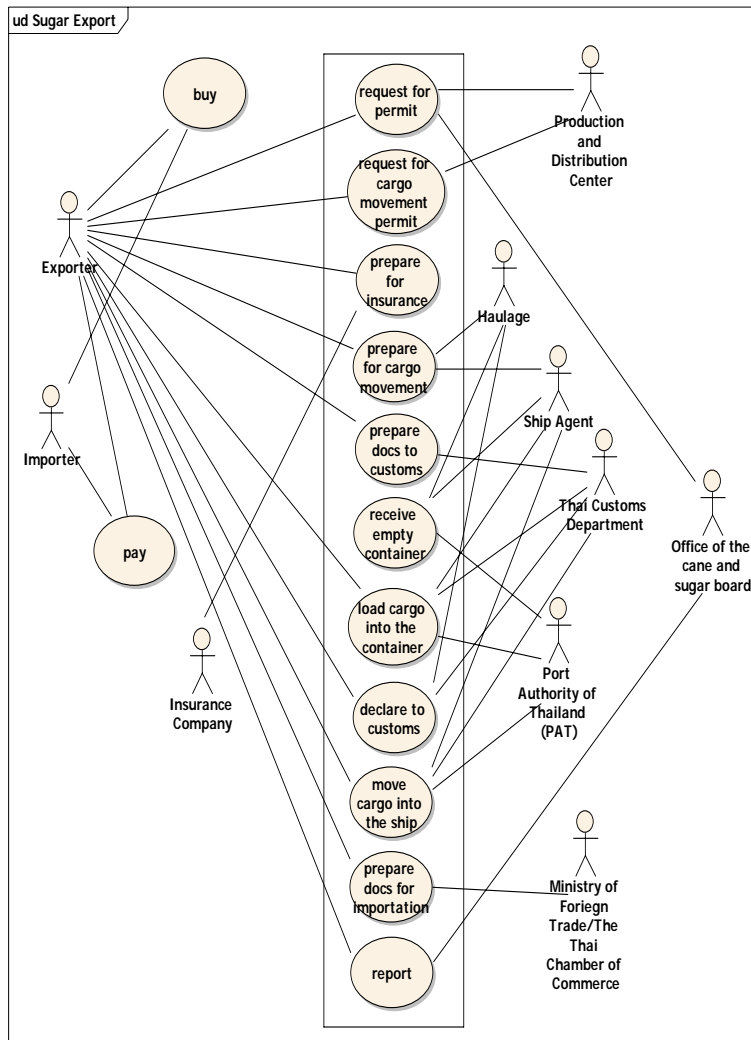


# Business Process Analysis of Sugar Export from Thailand

Business Process Analysis of Sugar Export



# Business Process Analysis of Sugar Export from Thailand



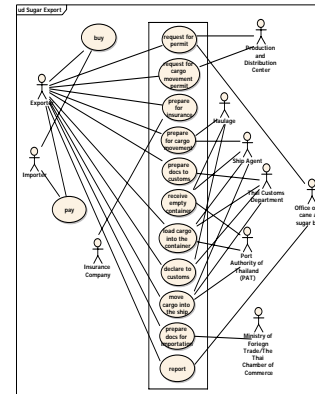
**13 Stakeholders** - involved in fulfilling procedural and documentary requirements

- 1) Exporter or representative
- 2) Importer
- 3) Exporter's bank
- 4) Importer's bank
- 5) Suppliers
- 6) Inland haulage service
- 7) Carrier (shipping agent)
- 8) Office of the Cane and Sugar Board
- 9) Port Authority of Thailand
- 10) Terminal Operator
- 11) Department of Foreign Trade
- 12) Royal Thai Customs Department
- 13) Insurance Company

# Business Process Analysis of Sugar Export from Thailand

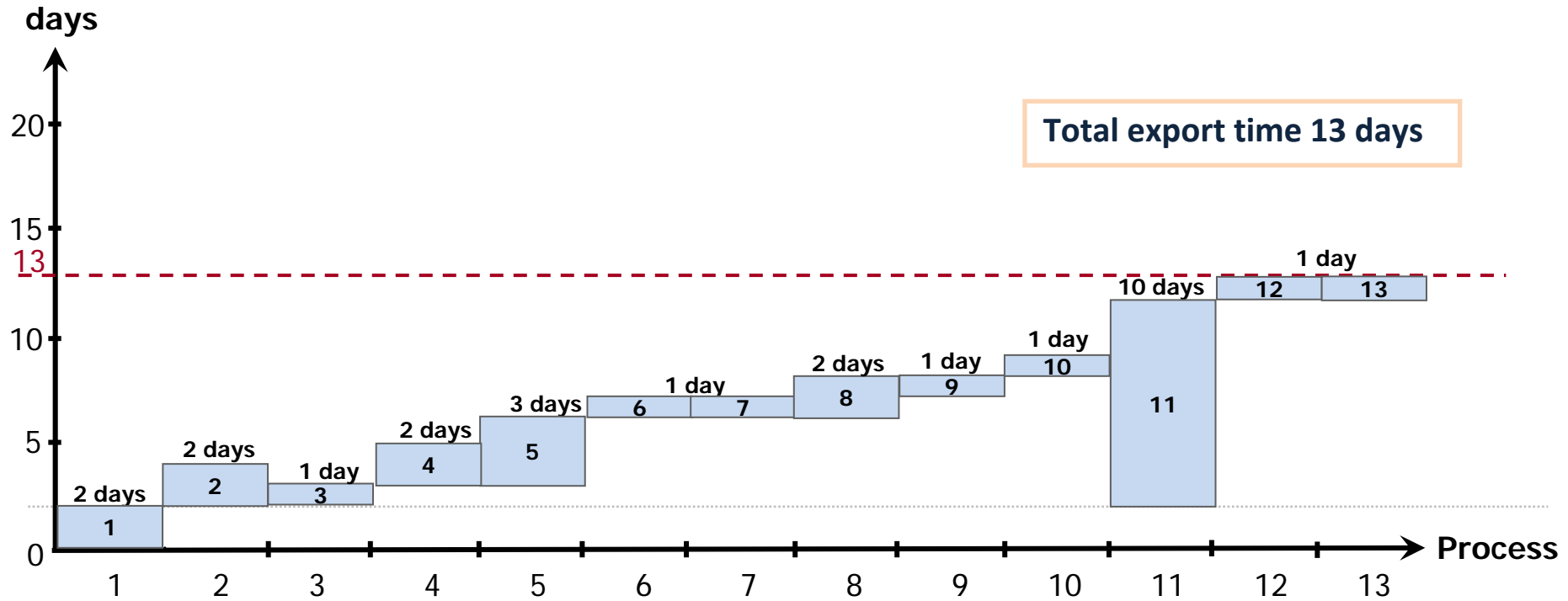
## 31 related trade documents (approx.)

- 1) Proforma Invoice
- 2) Application for Permission to Export Sugar (KP. 9)
- 3) Application for Collection of Permit for Sugar Export (A 3)
- 4) Draft Permit for Sugar Export (A. 4)
- 5) Permit for Sugar Export (KN 10)
- 6) Purchase Order
- 7) Sales Contract
- 8) Notification of Quota Deduction
- 9) Application for Permission for Sugar Movement (KN 5.1)
- 10) Permit for Sugar Movement (KN 6.1)
- 11) Cargo Insurance Application Form
- 12) Commercial Invoice
- 13) Packing List
- 14) Letter of Credit/Telegraphic Transfer
- 15) Insurance Policy
- 16) Bill of Lading
- 17) Booking Request
- 18) Booking confirmations for inland and cross-border transportation
- 19) Export Declaration
- 20) Empty Container Movement Request
- 21) Permit for Empty Container Movement (KBT.05)
- 22) Goods Transition Control List
- 23) Request for Permission for Container Movement to the Port Area (TKT 308.2)
- 24) Request for Container Labels
- 25) Equipment Interchange Receipt (EIR)
- 26) Container Loading List
- 27) Manifest
- 28) Outward Container List,
- 29) Application for Certification of Origin
- 30) Certification of Origin
- 31) Report of Details of Sugar Export (KN 11)



# Business Process Analysis of Sugar Export from Thailand

## Time-Procedure Chart

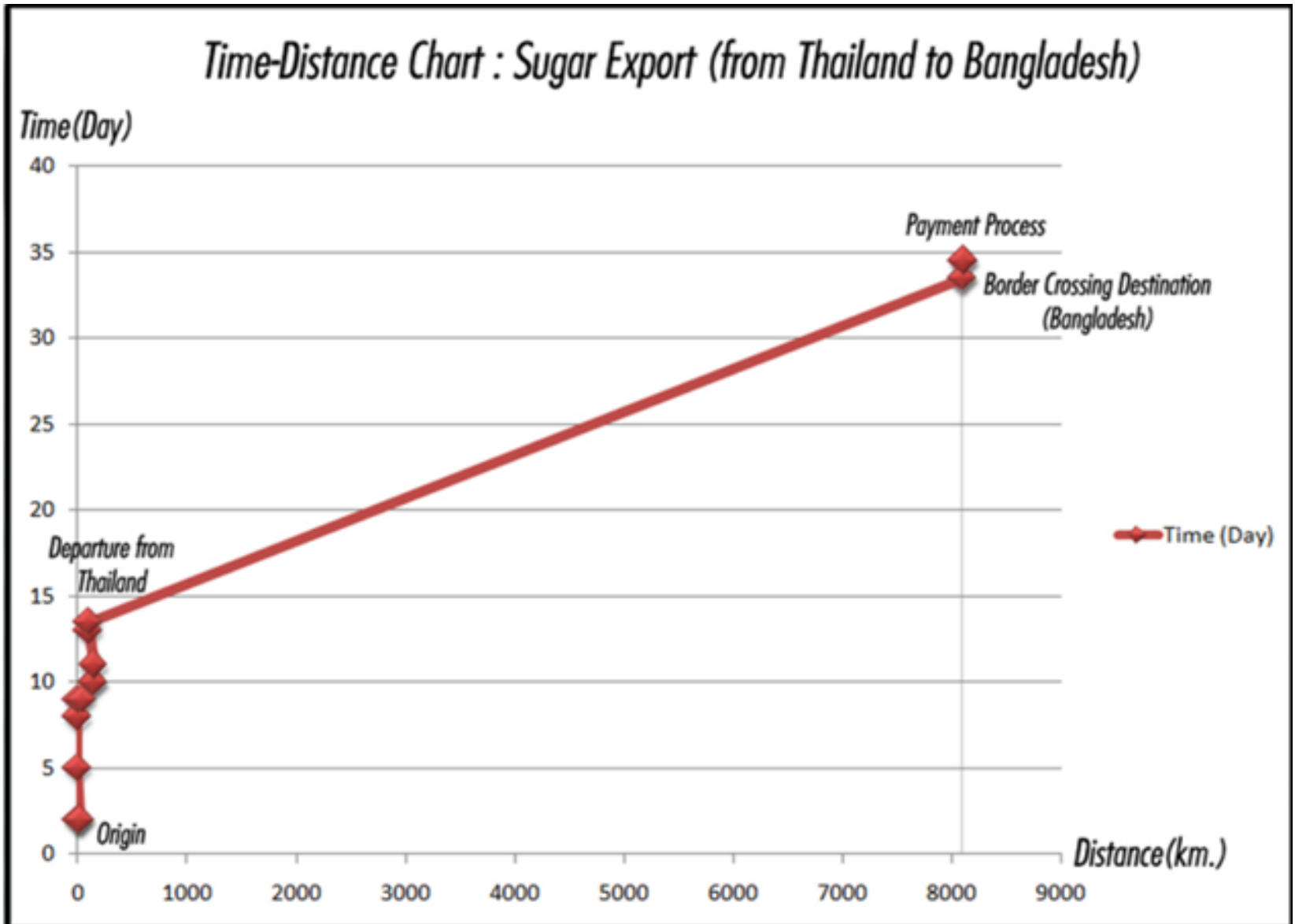


1. Buy - Conclude sales contract and trade terms
2. Ship - Obtain export permit
3. Obtain goods movement permit
4. Obtain cargo insurance
5. Arrange transport
6. Provide customs declaration
7. Collect empty container(s) from yard
8. Stuff container(s)
9. Clear goods through customs
10. Handle container at terminal and stow on vessel
11. Prepare documents required by importer
12. Verify the accuracy/authenticity of exported cargo
13. Pay - Claim payment of goods

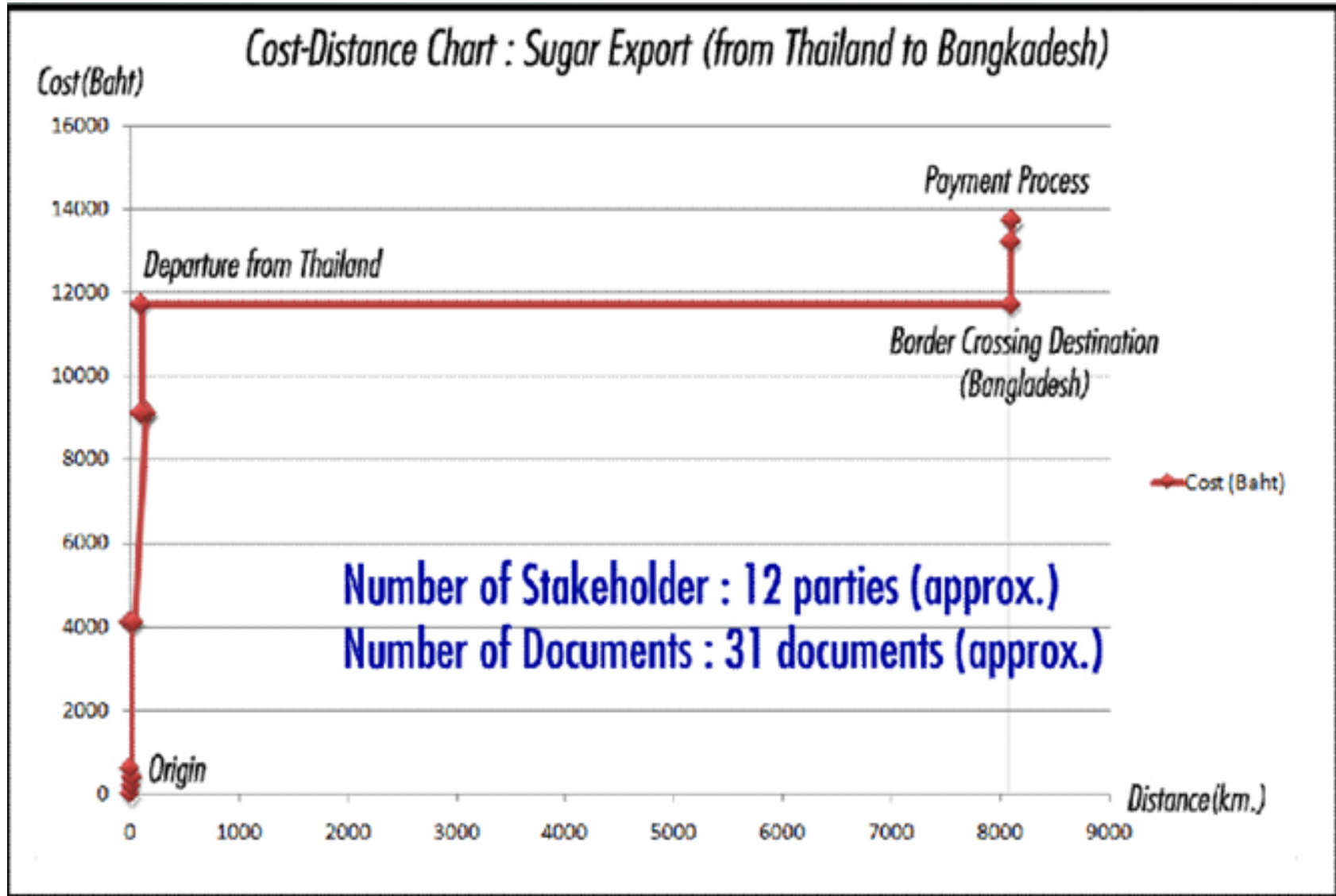
## Time/Cost-Distance Analysis: Sugar Export from Thailand

<b>Export Process</b>	<b>Time (Day)</b>	<b>Cost (Baht)</b>	<b>Distance (km.)</b>
1. Buy/Conclude sale contract & trade term	2	0	0
2. Request for export permit	2	200	11
3. Request for cargo movement permit	1	200	11
4. Prepare documents for insurance	2	200	0
5. Prepare documents for cargo movement	3	3500	0
6. Prepare documents for customs declaration	1	0	0
7. Receive empty container	1	0	20
8. Load cargo into the container	2	5000	100
9. Declare to Customs	1	0	5
10. Customs clearance	10	0	3
11. Waiting time before next ship departs	1	0	0
12. Loading containers onto the vessel	0.5	2600	0
13. Maritime transport	20	0	7253
14. Prepare documents for importation	10	1500	0
15. Report of sugar export	1	500	11
16. Payment Process	1	0	0

# Time-Distance Analysis: Sugar Export from Thailand



# Cost-Distance Analysis: Sugar Export from Thailand





## Implications from case studies of sugar and automobile spare parts export

- High costs for preparing, sending and receiving documents and inland transport
- Data inconsistency and duplicated information in trade documents for many stakeholders
- Some processes of sending and receiving documents are manual.
- In the case of sugar export, many procedures involving several stakeholders can be reduced and simplified.
- In the case of automobile spare parts export, as the concerned companies are normally large and take part in both import and export, several procedures and documents requirements can be further automated and streamlined as part of the Thailand National Single Window (NSW) development.

## Recommendations

- Duplicated processes and data for export of both selected products should be defined and eliminated.
- The information technology (IT) systems of related government agencies and business sectors and also with National Single Window System should be integrated.
- Open and international standards to ensure technical interoperability within and across borders should be adopted

# Thank you

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