

## Business Process Analysis (BPA): Introduction and foundation

### Workshop on National Trade Facilitation Strategy of Kyrgyzstan and Business Process Analysis (BPA) Foundation Training 14 June 2013, Kyrgyzstan

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## Agenda

1. Business Process Analysis for Trade Facilitation
2. Introduction into Unified Modeling Language (UML)
3. Experiences of applying BPA in ESCAP member countries
4. Way forward: An integrated and sustainable trade facilitation performance monitoring systems



2

## What is..

- ..a Business Process?
- A Business Process is a collection of related, structured activities or tasks that produce a specific service or product

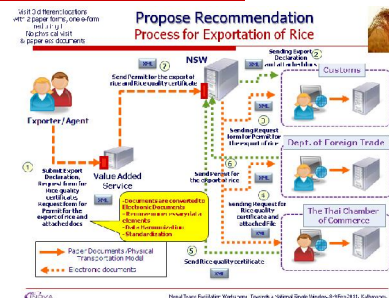
### Example

- Ordering a
- Issuing a C
- Customs c



put the cart before the horse

## Business process in the context of trade facilitation can be complex



## Documents related to Exportation of Rice (Thai case)

(from purchase order until the cargo container leaving the sea port)  
36 Documents involving 15 parties, and more than 1,140 data elements to be filled in

Buy/Pay Docs	Regulatory Docs
1. Proforma Invoice (39)	21. Master Sea Cargo Manifest (17)
2. Purchase Order (39)	22. House Sea Cargo Manifest (27)
3. Commercial Invoice (51)	23. Export Declaration (114)
4. Application for Letter of Credit (24)	24. Good Transition Control List (27)
5. Letter of Credit (32)	25. Application for Permission to Export Rice (KP, 2) (24)
6. Packing List (25)	26. Sales Report (KP 3) (21)
7. Cargo Insurance Application Form (20)	27. Application for the Collection of the Permit for the Export of Rice (A, 3) (35)
8. Cover Note (23)	28. Permit for the Export of Rice (A, 4) (35)
9. Insurance Policy (24)	29. Application for Certificate of Standards of Product (MS, 15/1) (44)
10. Booking Confirmation - Border Crossing (30)	30. Certificate of Analysis (17)
11. Booking Confirmation - Border Crossing (30)	31. Certificate of Product Standards (MS, 24/1) (45)
12. Booking Request Form - Inland Transport (16)	32. Certificate of Fumigation (21)
13. Booking Confirmation - Inland Transport (18)	33. Application for Phytosanitary Certificate (PG, 9) (29)
14. Bill of Lading (42)	34. Phytosanitary Certificate (33)
15. Empty Container Movement Request (TKT 305) (26)	35. Application for Certificate of Origin (42)
16. Request for Port Entry (TKT 308.2) (27)	36. Certificate of Origin (38)
17. Equipment Interchange Report (EIR) (24)	
18. Container Loading List (28)	
19. Container List Message (32)	
20. Outward Container List (34)	

\* Number in parenthesis is the no. of data elements



## Why conduct a Business Process Analysis?

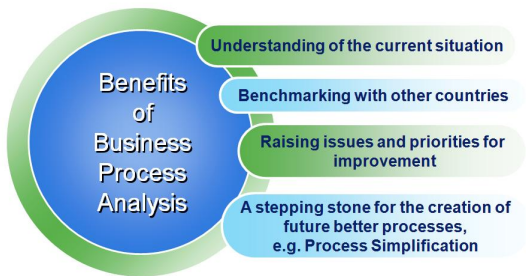
Business Process Analysis is a practical study

- to understand attributes of business processes, and their relationships

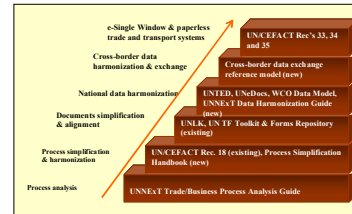


6

## What are benefits of Business Process Analysis?



## BPA is the basis for implementing other trade facilitation measures



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## Business Process Modeling (1)

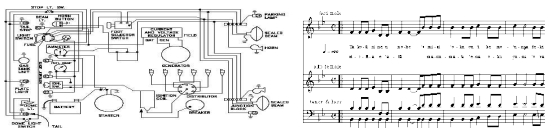
### What

- A technique for documenting a business process and its attributes
  - Activities that come in a specific order and decision points
  - Actors who perform those activities
  - Defined inputs and outputs of each activity
  - Criteria for entering and exiting the business process
  - Relationships among actors
  - Information flow
  - Associated rules and regulations
  - Quantitative indicators such as number of steps as well as time and cost required to complete a particular business process

## Business Process Modeling (2)

### Why

- Modeling helps quickly clarify complex problems and scenarios
  - Would you build a house without a plan or design?
- To establish a common understanding about a business process

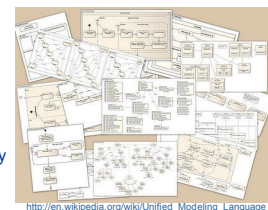


A common language for electrical engineer

A common language for musician

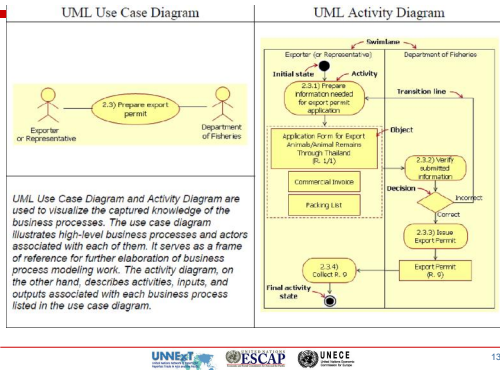
## Unified Modeling Language (UML)

- A set of standard graphical notations for documenting a business process and business requirements
  - Is widely recognized and used among practitioners in business community as well as those in IT and software industry
  - Allows business domain experts to communicate procedural and documentary requirements with IT implementation or software development team

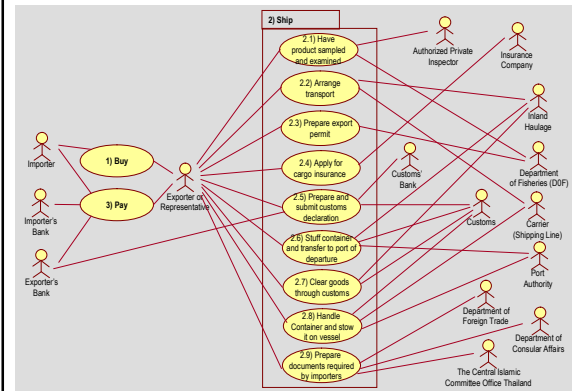


[http://en.wikipedia.org/wiki/Unified\\_Modeling\\_Language](http://en.wikipedia.org/wiki/Unified_Modeling_Language)

## UML Diagrams for BPA



## Thailand's Export of Frozen Shrimp



## UML Notations for Use Case Diagram

Notation	Description
	Actor <ul style="list-style-type: none"> <li>Represents a role in a particular business process</li> <li>Is labeled with a role name</li> </ul>
	Use Case <ul style="list-style-type: none"> <li>Represents a business process</li> <li>Is labeled with a descriptive verb phrase</li> </ul>
	Relationship Association <ul style="list-style-type: none"> <li>Link actors with business processes that they participate in</li> </ul>
	Subject Boundary <ul style="list-style-type: none"> <li>Represents a process area</li> <li>Includes the name of a subject boundary on top</li> </ul>

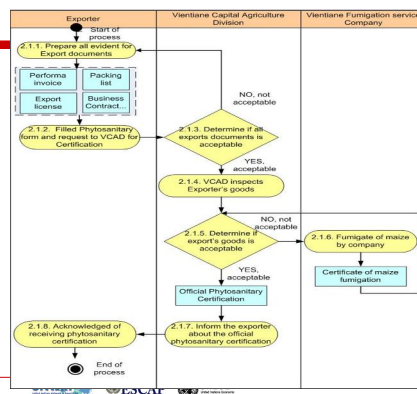
## UML Notations for Activity Diagram

Notation	Description	Notation	Description
	Initial State <ul style="list-style-type: none"> <li>Represents the beginning of a set of activities</li> </ul>		Swimlane <ul style="list-style-type: none"> <li>Is used to break up individual actions to individuals/ agencies that are responsible for executing their actions</li> <li>Is labeled with the name of the responsible individual or agency</li> </ul>
	Final Activity State <ul style="list-style-type: none"> <li>Indicates the completion of the business process</li> </ul>		Activity <ul style="list-style-type: none"> <li>Represents a non-decomposable piece of behavior</li> <li>Is labeled with a name that 1) begins with a verb and ends with a noun; and 2) is short yet contain enough information for readers to comprehend</li> </ul>
	Final Flow State <ul style="list-style-type: none"> <li>Indicates that further activities cannot be pursued</li> </ul>		Transition Line <ul style="list-style-type: none"> <li>Indicates a sequential flow of actions and information in an activity diagram</li> </ul>
	Fork (Splitting of Control) <ul style="list-style-type: none"> <li>Visualizes a set of parallel or concurrent flow of actions</li> </ul>		Join (Synchronization of Control) <ul style="list-style-type: none"> <li>Indicates the end of parallel or concurrent flow of activities</li> </ul>
	Object <ul style="list-style-type: none"> <li>Represents a document or information that flows from one activity to another activity (labeled with the name of a document)</li> </ul>		Decision <ul style="list-style-type: none"> <li>Represents the point where a decision has to be made given specific conditions</li> <li>Attached with labels addressing the condition on each transition line that comes out of an activities and connects to a decision point or vice versa</li> </ul>

**Exercise:**  
You may work alone or with someone sitting next to you

Look at this activity diagram, please tell:

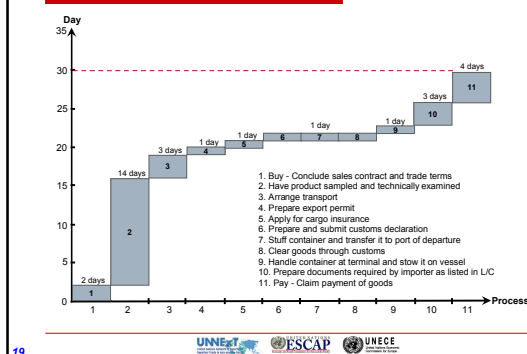
- Who are the actors involved in business process?
- How many documents are submitted/circulated?



## Output of BPA

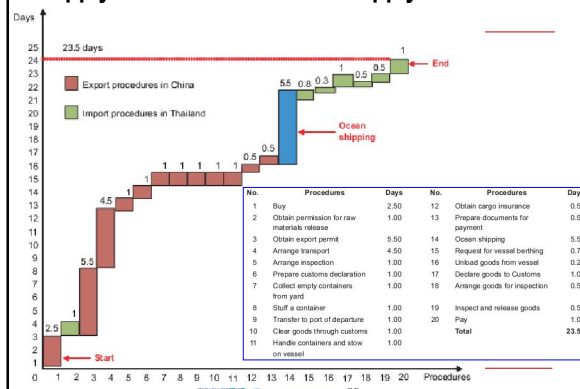
Category	Outputs
As - is	<ul style="list-style-type: none"> <li>Use 'case diagram' showing the scope of the business process analysis project</li> <li>Activity diagrams</li> <li>Process descriptions, including a list of trade forms and documents, as well as a list of trade-related laws, rules and regulations</li> <li>Integrated activity diagram</li> <li>Time-procedure chart</li> </ul>
Diagnosis	A list of identified bottlenecks
Recommendations	Recommendations to improve the business process

## Apply BPA to supply chain within a country



19

## Apply BPA to cross-border supply chains



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21

## ARTNeT\* Regional Study of Import and Export Processes

	Export Processes						
	Bangladesh	China	India	Japan	Nepal	Sri Lanka	Thailand
Import Processes	Bangladesh		Cotton Yarn				Sugar
	China			Fabrics*, Auto parts	Vegetable ghee (fuel)*		
	India	Garments*			Vegetable ghee*, Fabrics*	Rubber tyres	Auto parts*
	Japan	Shrimp*	Garments			Tea	
	Nepal		Textile & clothing*				
	Sri Lanka		Fabrics**	Used cars			
	Thailand		Electronics				

Notes: \* indicates import processes excluded from analysis; \*\* indicates export processes excluded from analysis.

Asia-Pacific Research and Training Network on Trade

## SATNET Asia Project

- ✓ Network for Knowledge Transfer on Sustainable Agriculture Technologies and Improved Market Linkages in South and Southeast Asia – SATNET Asia
- ✓ Countries involved: Bangladesh, Cambodia, India, Lao PDR, Myanmar, Nepal



## Diagnostic Studies for Five Countries in South and Southeast Asia

Bangladesh	Business (Trade) Process Analysis: Export of Jute Bags to India and Import of Wheat from India
Cambodia	BPA for Export of Maize and Cassava from Thailand and China
Lao PDR	BPA for Export of Maize to Thailand and Import of Animal Feed from Thailand
Myanmar	Export of Mango and Rice to China, Import of Palm Oil from Malaysia
Nepal	Export of Cardamom to India and Import of Rice from India

### Purpose of National Stakeholder Consultation and Expert Group Meetings

- Verification of data and trade process and procedures
- Discussion of the bottlenecks of the trade procedures or processes
- Recommendations for simplification of procedures or any other measures to facilitate trade.



### Corridor 1: Kakarvitta-Panitanki-Fulbari-Banglabandha



A joint project with Asian Development Bank



### Corridor 2: Phuentsholing-Jaigaon-Hasimara-Changrabandha-Burimari



A joint project with Asian Development Bank



### Corridor 3: Kathmandu-Birgunj-Kolkata



A joint project with Asian Development Bank



One of many successful stories:

预览已结束，完整报告链接和二维码如下：

[https://www.yunbaogao.cn/report/index/report?reportId=5\\_6963](https://www.yunbaogao.cn/report/index/report?reportId=5_6963)

