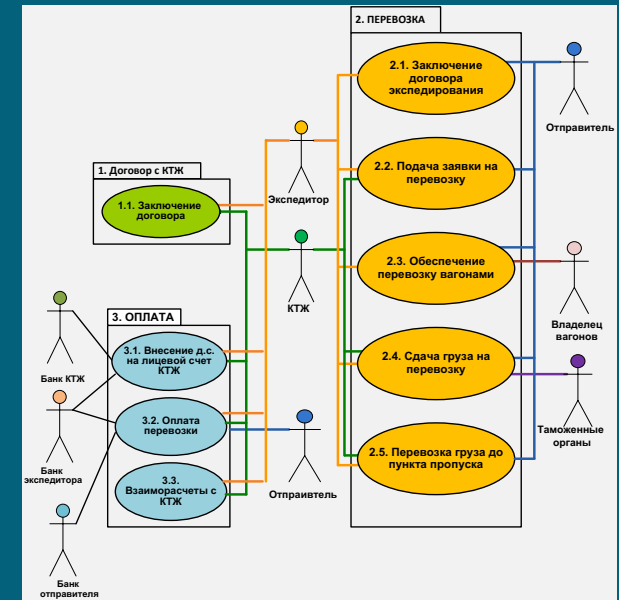




Workshop on CAREC CPMM 25 – 26 July 2018 Baku, Azerbaijan



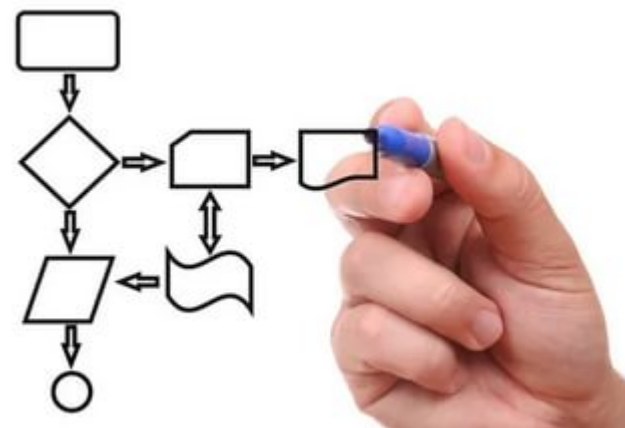
EXPERIENCES OF THE BUSINESS PROCESS ANALYSIS (BPA)

Yelena Vassilevskaya – KFFA Deputy Director of Project Implementation

BASIC DEFINITIONS

Methodology "Business Process Analysis" (BPA) is developed UNECE-UNESCAP

- **Business process** – sequence of measures taken with a given goal.
- **Modeling of business processes** – method of displaying business processes, in which each element of the business process is represented by a graphic symbol. This can be a simple drawing created with a pencil and paper or computer program (for example, MS Visio).
- **Business process model** – graphical representation of the business process





BPA MODELING LANGUAGE

- The **Unified Modeling Language (UML)** has a number of standard graphical symbols for modeling business processes
- UML is widely used in business circles, in the development of information technology and software.
- Due to the uniformity of the modeling methods, the results are easily perceived, analyzed and confirmed.





BUSINESS PROCESS MODEL

Each business process model shows::

- The actions that follow in a certain order and have clear decision-making nodes;
- "Subjects" that perform these actions;
- certain initial resources and the results of each action;
- criteria for starting and completing a business process;
- the relationship between "subjects";
traffic information in the business process;
- relevant rules and regulations;
- quantitative indicators, such as: the number of stages and time and costs required to complete a particular business process.



FORMS OF GRAPHIC IMAGE BPA



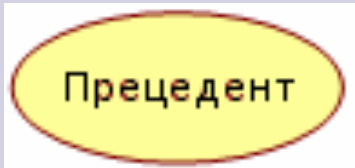

- **The use case diagram** – graphical overview of the main business processes that are subject to further in-depth research. It indicates all parties involved in these business processes and all the actual links between these processes and the parties involved
- **The action diagram** – displays in detail each business process shown in the use case diagram. It depicts the sequence of actions and information flows from one responsible party to another. It informs users not only about who does what and in what order, but also about the source documents that serve as a prerequisite for action, and about the final documents that can be obtained upon completion of actions.
- **Description of the action diagram** – table in which a description of the action diagram by the standard structure is presented (subjects, steps, documents, etc.)



BPA RESULTS




- The result of the BPA study is report, which includes:
 1. use case diagram (s) showing the scope of a project for analyzing business processes;
 2. action diagrams;
 3. description of the processes, including a list of documents, as well as a list of relevant laws, regulations and instructions;
 4. joint action diagram;
 5. time / procedure chart;
 6. cost / procedure chart
 7. list of identified bottlenecks;
 8. recommendations for optimizing the business process and / or advanced business process models

SYMBOLS USED FOR USE CASE DIAGRAMS

SYMBOLS	DESCRIPTION AND EXPLANATIONS FOR USE
	Object border: <ul style="list-style-type: none"> □ represents the "process area"; □ includes the name of the object at the top of border
	"Subject" (actor, Stakeholders): <ul style="list-style-type: none"> □ represents the role performed in a particular business process □ it may be a person, an organization, department, etc .; □ it is called by an executable role; □ it is placed outside of the object border.
	Use-case (Precedent): <ul style="list-style-type: none"> □ represents the main business process; □ is called by descriptive phrase from the verb and the noun.
	Association of relationships: <ul style="list-style-type: none"> □ connects "subjects" with precedents (hereinafter business processes) in which they participate.



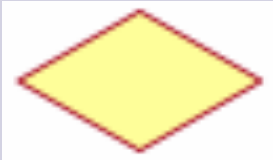


ОБОЗНАЧЕНИЯ, ИСПОЛЬЗУЕМЫЕ ДЛЯ ДИАГРАММЫ ДЕЙСТВИЙ

SYMBOLS	DESCRIPTION AND EXPLANATIONS FOR USE						
	"Initial state" of the action: <ul style="list-style-type: none"><input type="checkbox"/> represents the beginning of a series of actions;<input type="checkbox"/> for each action diagram.						
	"Final state" of the course of action: <ul style="list-style-type: none"><input type="checkbox"/> It is Used to show when action have to be stop (cancel)<input type="checkbox"/> Indicates that further actions can not occur in the described context.						
	Final state of the action: <ul style="list-style-type: none"><input type="checkbox"/> Used to indicate the completion of a business process.						
<table border="1"><tr><td>Участник 1 процесса</td><td>Участник 2 процесса</td><td>Участник n процесса</td></tr><tr><td> </td><td> </td><td> </td></tr></table>	Участник 1 процесса	Участник 2 процесса	Участник n процесса				"Track": <ul style="list-style-type: none"><input type="checkbox"/> It is used to separate actions on individuals / institutions responsible for the performance of their actions;<input type="checkbox"/> is called by the name of the person in charge, organization or department.
Участник 1 процесса	Участник 2 процесса	Участник n процесса					


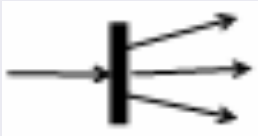



ОБОЗНАЧЕНИЯ, ИСПОЛЬЗУЕМЫЕ ДЛЯ ДИАГРАММЫ ДЕЙСТВИЙ (продолжение)

SYMBOLS	DESCRIPTION AND EXPLANATIONS FOR USE
	<p>"Action":</p> <ul style="list-style-type: none">❑ represents an inseparable fragment of behavior; is called by name, which:<ol style="list-style-type: none">1) begins with the verb and ends with the noun;2) bears a short title, but contains enough information to be understandable to reader
	<p>"Object":</p> <ul style="list-style-type: none">❑ It represents the document or information, which passes from one activity to another;❑ It is called by the name of the document.
	<p>"Decision":</p> <ul style="list-style-type: none">❑ represents a node where, depending on the result of a particular previous action, a decision must be made;❑ has a number of transition lines originating from the decision node and connected to various actions;❑ joins with the markers defining the condition on each line of the transition, coming from some action and connecting with the decision node or vice versa.



ОБОЗНАЧЕНИЯ, ИСПОЛЬЗУЕМЫЕ ДЛЯ ДИАГРАММЫ ДЕЙСТВИЙ (продолжение)

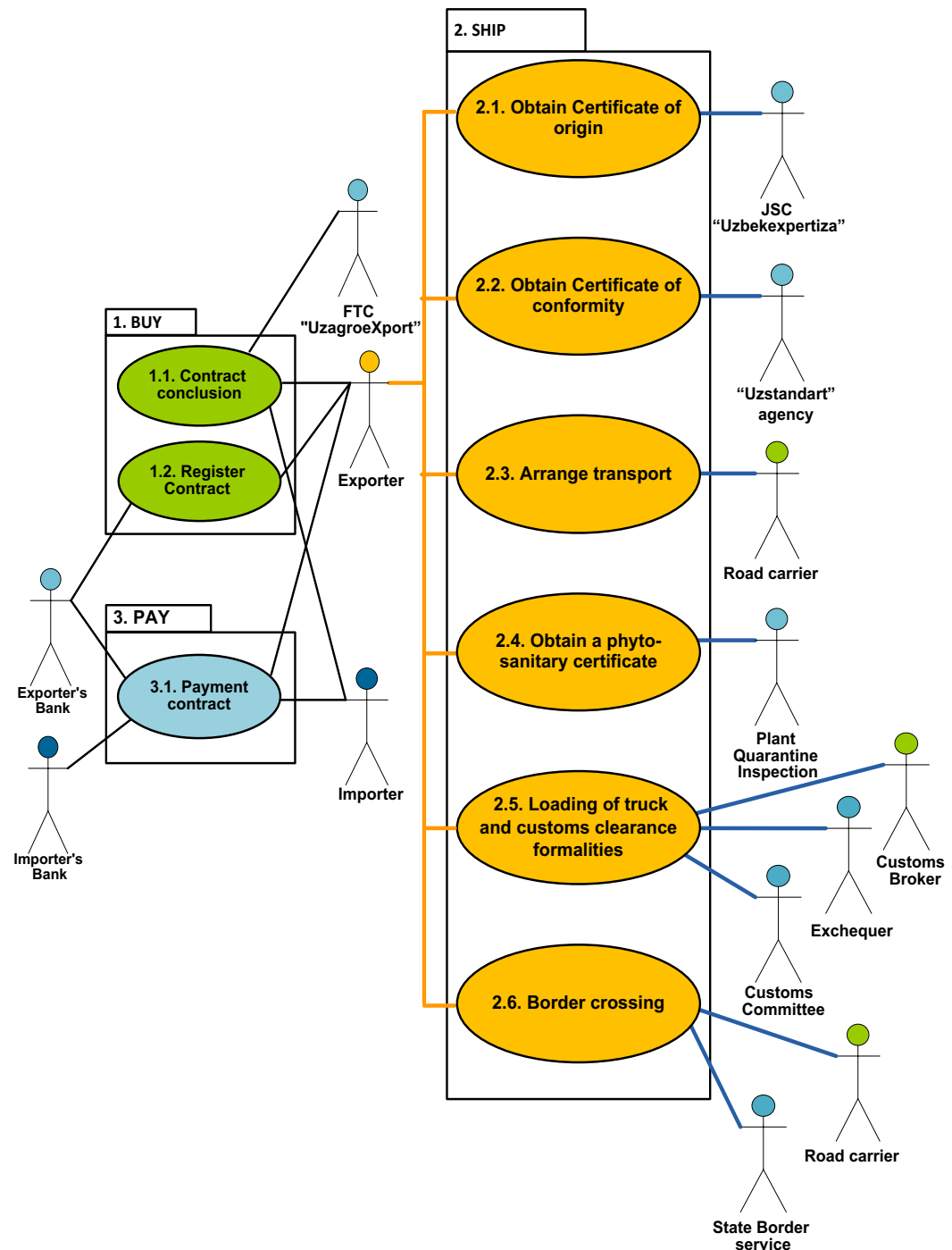
SYMBOLS	DESCRIPTION AND EXPLANATIONS FOR USE
	“Transfer Line”: <input type="checkbox"/> indicates a sequential course of action and information flows in the action diagram
	“Fork” (Branching control): <input type="checkbox"/> Used to visualize several parallel or simultaneous actions.
	“Connection” (Synchronous control): <input type="checkbox"/> It is used to indicate the place of termination of a number of parallel or simultaneous actions

Example of a Use-case diagram: EXPORT OF IZMAMS FROM UZBEKISTAN

3 области процесса цепочки поставок:
3 areas of the supply chain process:

- **BUY** – 2 business processes
- **SHIP** – 6 business processes
- **PAY** – 1 business process

13 subjects (actors)



Example of Activity diagram of business process 1.1.: "CONCLUDE OF THE COMMERCIAL CONTRACT"

Stakeholders:

- Exporter
- Importer
- Foreign Trade Company "Uzagroexport"

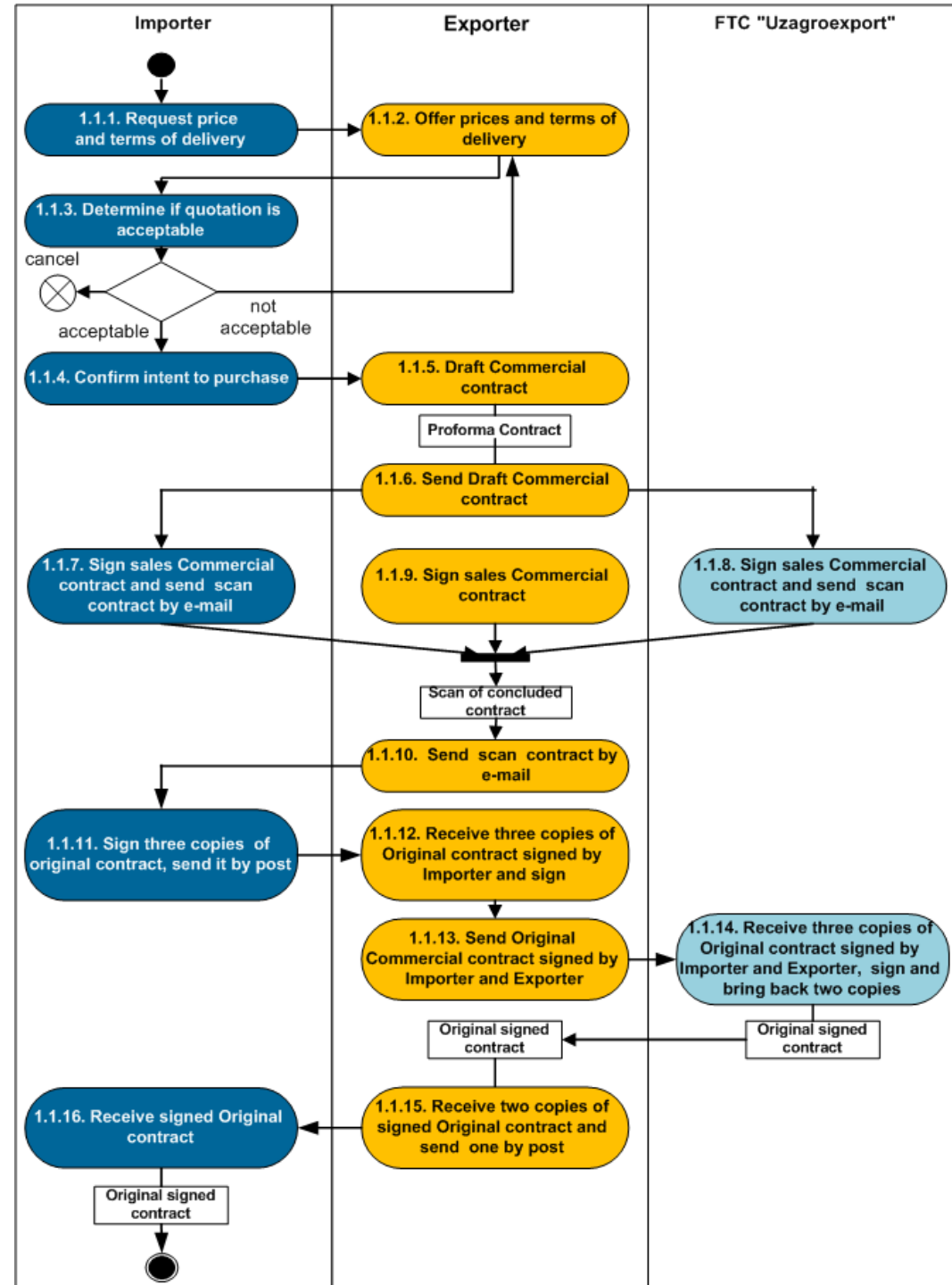
Consists of 16 steps

Average time required: 2 days to get scan of contract, 6-8 days - original

Cost: 0,7-1% of contract value + 10 \$US for postal

Output: Exporter and Importer concluded a contract

Regulation: 4regulatory documents



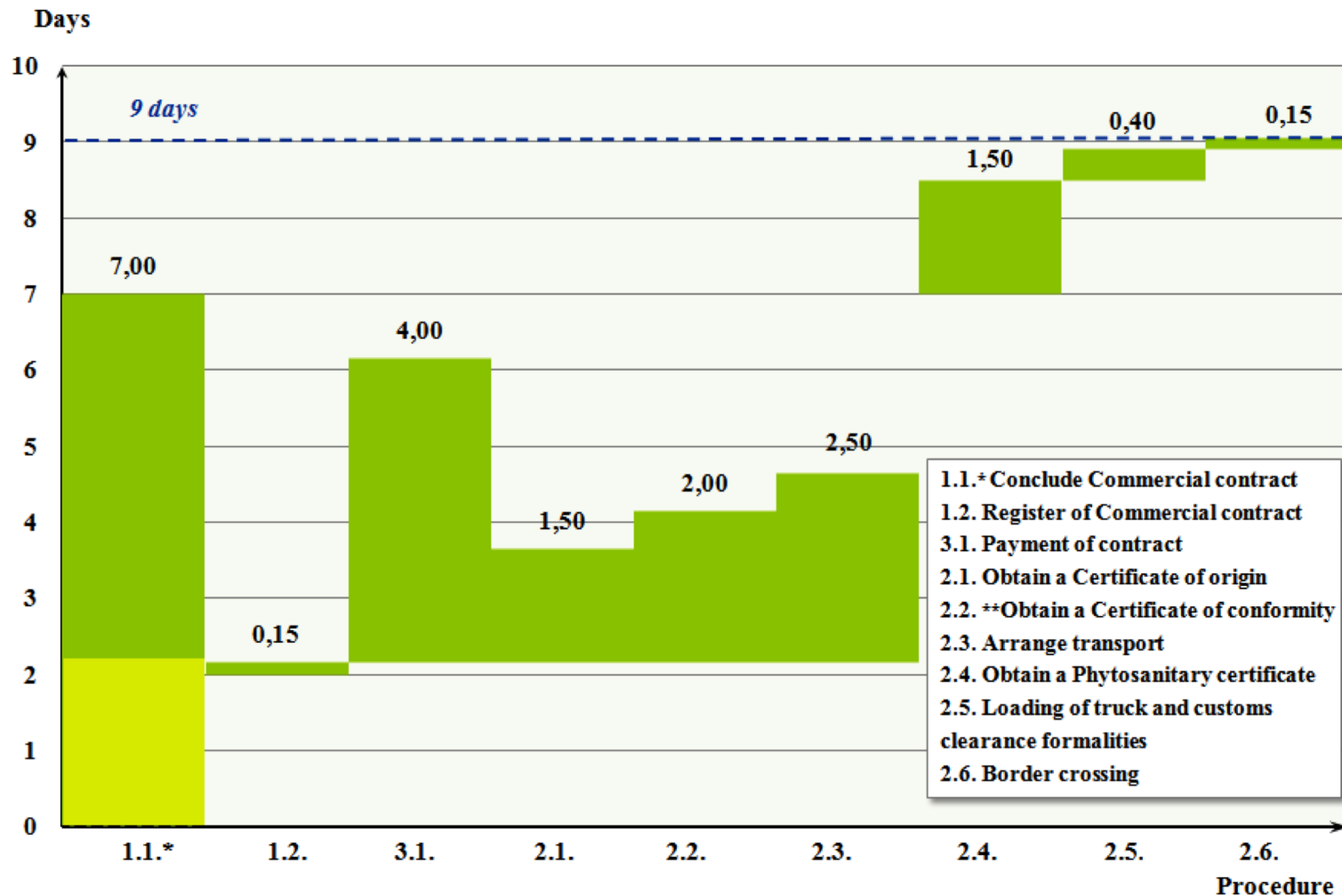


Example of an accompanying description of the action diagram

The name of a process area which this particular business process belongs to	<u>2. Ship</u>
The name of a business process	2.3. Arrange transport
Related rules and regulations	<ul style="list-style-type: none"> Law of the Republic of Uzbekistan On Highway Transport No.674-I dated 29.08.1998.
The name of responsible parties	<ul style="list-style-type: none"> Exporter Road Carrier
Input and criteria to enter/begin the business process	<ul style="list-style-type: none"> Exporter signed the commercial contract and has the date of receipt of its original, has enough funds to pay for road carrier services; Road carrier has: the license for international transport of goods, entry permissions of countries on the route of delivery, isothermal vehicles of required capacity.
Procedures and associated documentary requirements to complete the process	<p>2.3.1. Exporter requests the price for transportation on the required route in planned dates of delivery;</p> <p>2.3.2. Road carrier offers a price;</p> <p>2.3.3. If the offered price for transportation are satisfactory for the Exporter, he agrees the date of fumigation of the vehicle, fills in the consignment note (CMR);</p> <p>2.3.4. Road carrier signs and seals the CMR form and, delivers the empty truck at the specified date for fumigation and loading; Road carrier delivers the goods to the country of destination specified in the consignment note (CMR);</p> <p>2.3.5. After delivery the road carrier issues the invoice and sends it to the Exporter;</p> <p>2.3.6. Exporter pays for the freight.</p>
Output and criteria to exit the business process	<ul style="list-style-type: none"> Exporter gets the vehicle for loading and delivery of goods; Exporter receives the consignment note for customs formalities; Road carrier transports the goods to the destination point and receives the payment for services.
The average time required to complete the process	Conclusion of the transportation contract – 1-2 days. Delivery of goods depends on destination (not reviewed)

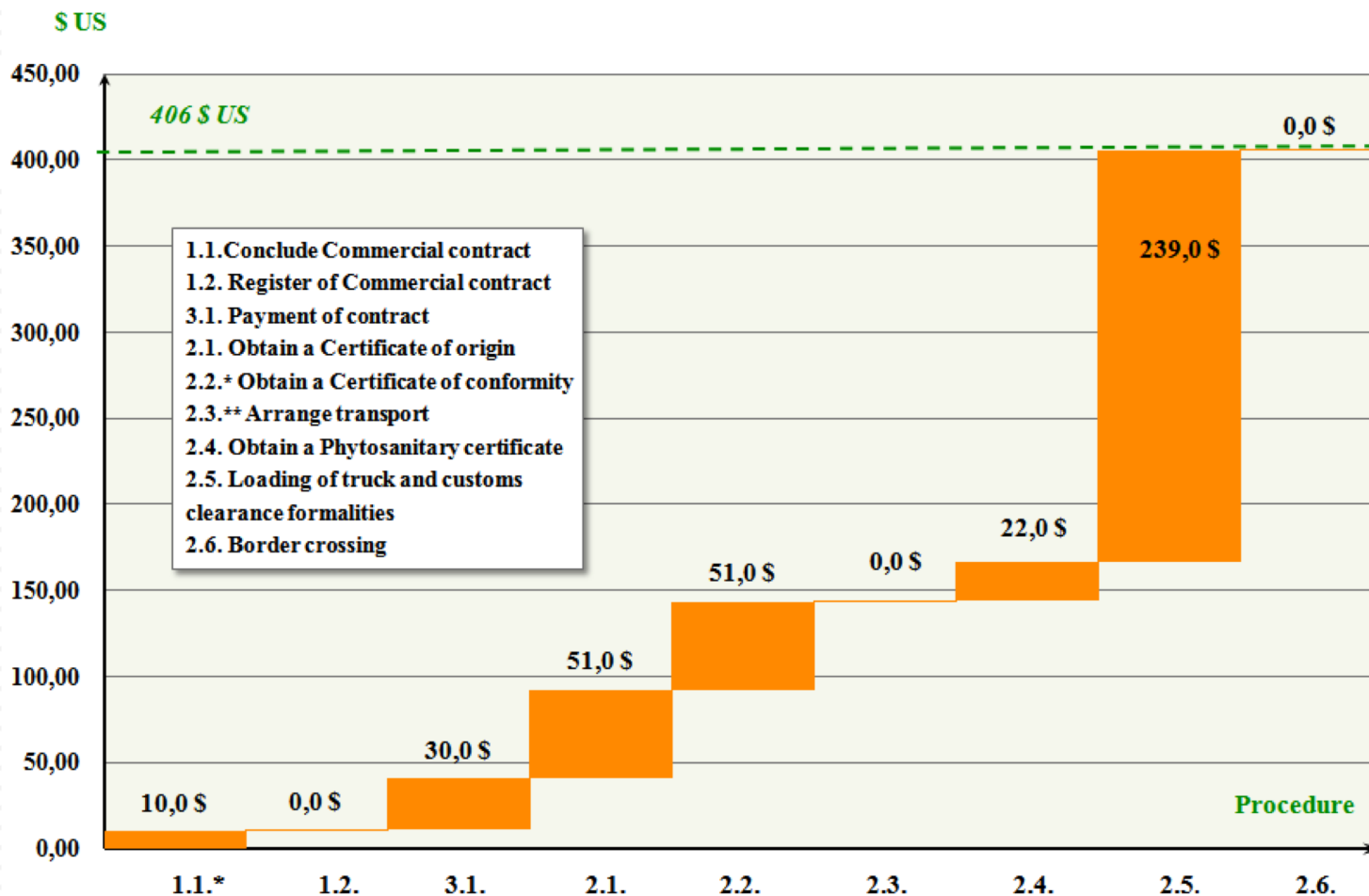


Example diagram: «TIME-PROCEDURE»





Example diagram: «COST-PROCEDURE» CHART





Completed BPA projects:

- In 2014-2015 - two BPA projects on export and import of dry fruits from Kyrgyzstan to Kazakhstan and export of cereals from Kazakhstan to Azerbaijan, the results are presented at the seminar on simplification of procedures Almaty, Kazakhstan, May 4-6, 2015.
- In 2016 - a study of BPA on the export of dry grapes from Uzbekistan, the results of the study are presented at a conference in Tashkent (Uzbekistan, July 2016)
- Under the order of the State Agency of Kazakhstan for Export Support (KAZNEX INVEST) from 2010 to 2017, 7 projects were implemented to develop a manual for Kazakhstan exporters (50-100 products, in 10 countries), since 2014 BPA methodology has been applied.
- Within the framework of the program "Supply Chain Management FIATA, a course of lectures on the methodology of BPA;
- This year, on the request of STK KAZLOGISTICS, a project is being implemented to analyze forwarding activities, which uses the BPA methodology



On the website of the
training center of KKFA -
www.clog.kz, there is a link
to the free online courses of
**UNESCAP BUSINESS
PROCESS ANALYSIS (BPA)**



**I wish you success and
prosperity!**

vassilevs@bk.ru