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DEUTSCHE ZUSAMMENARBEIT

CEFTA
Central European Free Trade Agreement

Business Process Analysis Methodology to Simplify Trade Procedures

Summary

Over the past few decades, while there has been a dramatic increase in trade liberalization, there has also been a rise in non-tariff measures (NTMs). To some extent these are offsetting the benefits that one normally would associate with freer trade. NTMs often reflect the best policy intentions of consumer, animal and environmental protection but they can also be a deliberate government strategy to protect import-competing domestic production and to compensate for diluted or lost protection following tariff liberalization. Regardless of policy objectives, NTMs impose real and yet avoidable export and import compliance costs that have negative impacts on trade competitiveness, particularly for small and medium-sized enterprises (SMEs) in emerging and developing countries. Therefore, there is a delicate balance that has to be attained between the legitimate policy objectives of the governments and the equally justifiable needs of businesses (business-friendly policies and low compliance costs).

ITC’s NTM Business Surveys reveal that over 75% of the barriers to trade, resulting from NTMs, are not due to strict regulations but due to the business procedures used to implement the measures. In order to pinpoint the specific procedures and agencies responsible for procedural trade obstacles, a detailed quantitative analysis of trade transaction processes is required. ITC uses tools such as business process analysis (BPA) and time release studies (TRS) to breakdown the costs and delays of import and export transactions and precisely identify the bottlenecks and inefficiencies to be addressed.

The activities of Business Process Analysis (BPA) studies typically focus on simplifying and streamlining business procedures. These studies can provide the evidentiary basis for advocacy, public private dialogue (PPD), and trade policy reform, including intra-regional trade policies. In particular, BPA studies include a simple methodology to elicit, document, and analyze the existing “as-is” business processes involved in international trade, as well as aid in developing recommendations for further improvement. They will suggest a set of practical steps and activities, from setting the scope of the business process analysis project; planning its implementation; collecting relevant data; and presenting it in an easily understandable manner, to analyzing the captured data in order to identify bottlenecks and develop recommendations for improvement.

The BPA intends to serve practitioners and policymakers from government agencies and the private sector involved in international trade by improving the business environment, simplifying the trade procedures and requirements, reducing the cost of trading and enhancing the competitiveness of the trading community in regional and global markets.

Implemented by:

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International Trade Centre

Introduction to BPA

A business process is a sequence of steps, with a beginning and an end, performed for a given purpose. Based on this generic definition, a business process considered within the framework of trade facilitation can be defined as: A chain of logically connected activities to move goods and related information across borders between buyer and seller and to provide related services.

Business process analysis is a study of existing business processes within one or across several organizations, both in normal operation and in exceptional situations. Its primary goal is to understand attributes of business processes and relationships among them. The results of the business process analysis may serve as a baseline for implementing trade facilitation measures such as:

- Simplification of trade procedures (may be applied to any of commercial, transport, regulatory and financial procedures);
- Simplification of documentary requirements and their alignment with international standards; and
- Automation of international trade transaction and its associated electronic documents for Single Window and paperless trade systems.

Business Process Modelling

Business process modelling is a technique, using unified modelling language (UML), for documenting business processes where each element of the business process is represented by graphical notations. The resulting graphical representation of a business process is known as a business process model. Each business process model illustrates:

- Activities that come in a specific order and decision points;
- Actors who perform those activities;
- Inputs and outputs of each activity;
- Criteria for entering and exiting the business process;
- How actors relate to one another;
- How information flows throughout the business process;
- Associated rules and regulations; and
- Quantitative indicators such as number of steps, as well as time and cost required to complete a particular business process.

The documentation of existing business processes in simple diagrams and brief descriptions helps create a common understanding on working norms and operational procedures among relevant stakeholders as well as increase stakeholders' knowledge about the business processes. Additionally, it serves as a basis to identify areas for the optimization of business processes. It thus helps policy makers to redesign processes, make necessary modifications in an informed and targeted manner as well as justify those changes. The BPA provides also insights into how certain policies will improve operational efficiency, transparency, and effectiveness.

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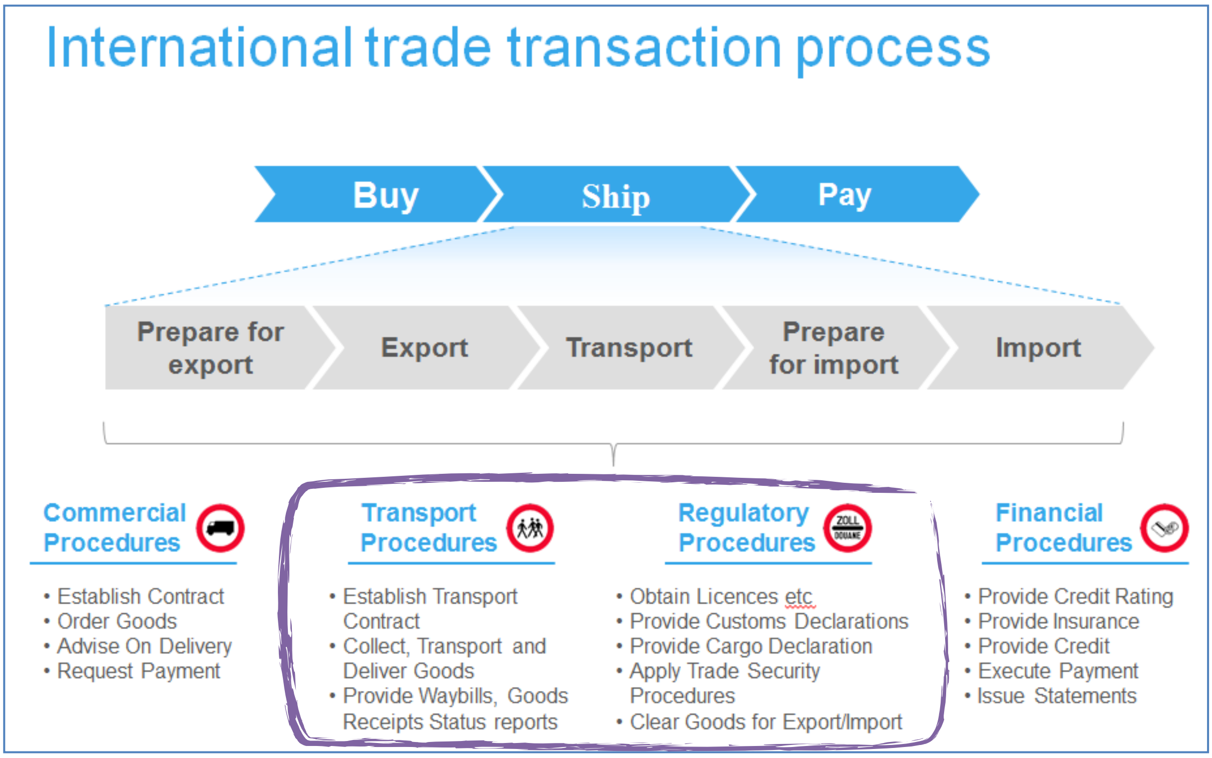
Methodology

UN/CEFACT Recommendation No. 18 illustrates a simplified view of the international supply chain in the Buy-Ship-Pay model (see the picture below). The model suggests “a series of fragmented activities” that are carried out throughout the international trade transaction. In addition, there are various key actors in the international supply chain associated with different activities within them such as government agencies, intermediaries (i.e. service providers), and traders.

In the context of the CEFTA project, the BPA will mainly focus on the procedural trade obstacles related to transport and regulatory procedures in the international trade transaction process and not necessarily on the commercial and financial procedures.



In a nutshell, the BPA methodology strives for the:

- Identification of problematic business processes that are perceived to be inefficient to set the scope.
- Collection of information through desk research, field visits, questionnaires, surveys etc. of detailed steps of all business processes and administrative procedures etc. The information will include all applicable documents, legislations, regulations, agencies as well as the time and cost of each step.
- Identification of bottlenecks and inefficiencies. This is typically done by mapping out all information collected in the step above to determine the as-is situation and

determine the detailed steps where the inefficiencies are taking place. It can be used to pinpoint the root cause of delays, high costs, high number of agencies or documents or any other variable collected in the data.

- Development of recommendations to resolve bottlenecks. The problematic steps will be further analyzed (including the analysis of relevant legislations, agencies) to identify the root cause and the appropriate options for resolution. While most solutions are available through the implementation of TFA, the BPA also provides many other options to optimize business processes including: re-sequencing activities, eliminating redundant steps/documents, harmonizing requirements, enhancing information sharing etc.

The rest of this Chapter will discuss the three phases of the business process analysis, detailed steps involved in each phase and activities necessary to complete the steps.

The business process analysis consists of three phases that have to be carried out in sequence:

Phase I: Scope setting	
Step 1 - Define a project scope	**Step 2** - Develop a detailed work plan

Phase II: Data collection and process documentation	
Step 3 - Acquire background information	**Step 4** - Conduct interviews and document captured data

Phase III: Process analysis and recommendations development	
Step 5 - Analyse the 'as-is' processes	**Step 6** - Develop and propose recommendations

Phase I: Scope setting

The objective of this phase is to establish a baseline for the implementation and management of a business process analysis project. It consists of two steps:

- Step 1 - Define the project scope
- Step 2 - Develop a detailed work plan

Step 1 – Define the project scope

Step 1 aims at identifying a frame of reference for further detailed business process modelling work. The frame of reference illustrates the high-level business processes and actors associated with each of them.

During this step, “a business domain” of interest is identified. A business domain is usually the name of the industry (such as export of wines) or service (such as customs clearance) whose business processes are subject to the business process analysis exercise.

To initiate a BPA, it is crucial that the following are clearly specified:

- The process or set of procedures that are to be analysed – e.g. only customs clearance or payment process; or the entire set export procedures from factory floor to the port (along with the procedures for import of inputs)..
- The environment and conditions in which the industry of interest operates and which shall be included in the BPA; i.e. mode of transport, terms of delivery, terms of payment, and country of destination (given that regulatory requirements vary from one country to another).

In the context of the CEFTA project, the scope of the BPA will be determined by the sectors selected and a value chain analysis of those sectors (including the import of inputs and trade of intermediary products). The scope may further be strengthened by the perceptions of the private sector captured in the national orientation meetings as well as any relevant background research done by GIZ and other international organizations. The value chain analysis will be particularly important as it will specify the segments in which different CEFTA parties operate and determine the exact export, import, transit or agency procedures that need to be analyzed in detail by the BPA.

A use case diagram is typically used in this step as it serves as a project's frame of reference. Its purpose is to present a graphical overview of core business processes that are subject to further examination at a greater depth. It indicates all stakeholders involved in these business processes and demonstrates all actual associations between these business processes and the stakeholders.

Step 2 – Develop a detailed work plan

The objective of this step is to develop a detailed work plan that guides and manages the implementation of the business process analysis. The work plan should be based on the use case diagram developed in Step 1. Based on the use case diagram, the work breakdown structure can be developed. An output oriented description of project tasks as summarized in the work breakdown structure then serves as a basis for project time, cost, and effort estimation.

Typically, the activities in this step include:

- Identification and sequencing of tasks;
- Development of project schedule and estimation of efforts; and

- Development and approval of a detailed project plan.

In the context of the CEFTA project, this step has already been completed as the rough (estimated) timelines of the BPA studies have already been established as per the project work plan.

Phase II: Data collection and process documentation

The knowledge about existing business processes is normally embedded in government or private sector employees who routinely carry them out. The know-how aspect of those business processes is usually not documented and the lack of process documentation makes it impossible to analyze and improve existing business processes further. The purpose of Phase II is to make the knowledge of these business processes readily available through documenting them. The documentation then can serve as a baseline to improve the existing business processes.

Phase II includes two steps:

- Step 3 - Acquire background information
- Step 4 - Conduct interviews and document captured data

Step 3 - Acquire background information

It is important that process analysts acquire at the outset as much background information on the business processes under examination as possible, prior to the face-to-face interviews. Background information could be obtained via desk research through information publicly available on the Internet, information portals, and at inquiry points of the agencies or businesses involved in the business domain of interest.

The background information provides process analysts with useful leads to the preparation of interview questions and makes them better prepared to conduct face-to-face interviews. It also allows process analysts to effectively and efficiently capture the information to be collected during the face-to-face interviews and put it into a broader context.

Step 4 - Conduct interviews and document captured data

The purpose of Step 4 is to conduct the face-to-face interviews with process participants / business domain experts. Face-to-face interview is the most commonly used data collection method for the business process analysis exercise. This process aims to confirm the accuracy of the previously collected background information and to gain an in-depth understanding of each use case or core business process in question. Such comprehensive information is necessary for creating a visual representation and descriptive explanation for each use case.

Once the face-to-face interviews with the relevant business process participants have been conducted, process analysts consolidate all inputs from interviewees and document them. There are four main outputs that may be delivered under Step 4:

1. A set of activity diagrams
2. A set of process descriptions
3. An integrated activity diagram
4. A time-procedure chart

Phase III: Process analysis and recommendations development

A better understanding of the “as-is” processes is obtained once the processes are defined and systematically documented. Activity diagrams, process descriptions listing all documentary requirements, associated laws, rules, and regulations as well as time-procedure chart provide the stakeholders with an overall and integrated view of the current situation and facilitate the discovery of problem areas. Based on these inputs, recommendations for improvement can be developed. International recommendations on trade and transport facilitation, best practices, and standards should be considered and applied. The logical steps in this phase include:

- Step 5 – Analyse the “as-is” processes
- Step 6 – Develop and propose recommendations

Step 5 – Analyse the “as-is” processes

The purpose of Step 5 is to identify the bottlenecks and opportunities to improve the “as-is” processes described in the activity diagrams, the process descriptions, and the time-procedure chart. It aims at developing a set of observations related to the current business processes that have potential for improvement, such as the identification of duplicated and redundant procedural and documentary requirements which cause delays. The same charts can be applied to cost, number of documents and any other factor to be assessed.

Step 6 – Develop and propose recommendations

The objective of this step is to develop and propose recommendations that help eliminate bottlenecks and inefficiencies of procedures and documentary requirements in the examined business process. Such recommendations should also aim at enhancing transparency in trade and border procedures in a way that does not impede trade facilitation. The measurable benefits of implementing those recommendations may include improved trade competitiveness resulting from a reduction in trade transaction cost, increased foreign direct investment due to the advent of more business-friendly environment, and greater participation of SMEs in the international trade.

Using a set of observations listing bottlenecks and opportunities to improve "as-is" business processes as an input, process analysts develop recommendations for each bottlenecks and improvement opportunities identified. The recommendations may be accompanied by a set of activity diagrams illustrating "to-be" processes.

In addition to technical trade policy and trade facilitation solutions, business process improvement can take various forms. General recommendations may include the following measures:

- Re-sequence of activities in a more appropriate order (including in parallel to attain maximum business process efficiency)
- Elimination of redundant procedures
- Eliminate business processes or activities that do not add any value to the delivery of goods, the collection of national revenue, the enhancement of border security, the protection of public health and safety
- Integrate business processes that have similar objectives by fostering collaboration between all concerned parties
- Merge of some procedures that may also lead to the elimination of duplicate or unnecessary documentary requirements
- Eliminate redundant data and unnecessary documentary requirements
- Harmonize data requirements with the international standards
- Enhance information sharing among concerned parties through automation such as the automation of paper-based transactional operations, either in a full-scale trade and transport information exchange among stakeholders (paperless trade) such as what has been implemented under the CASSANDRA project11 or partly for customs clearance systems such as ASYCUDA
- Eliminate outdated laws, rules, and regulations
- Privatize quality control related tasks
- Modify existing or create new laws, rules, and regulations to support the implementation of recommendations
- Incorporate appropriate international best practices and standards where possible

Concluding remarks

This methodology offers detailed insights on how to conduct a business process analysis. The BPA is a useful tool to analyze various business processes in different product-specific trade procedures such as export, import, or related logistics. The results of the BPA can be used to induce policy change through the provision of a clear and precise "as-is" condition analysis. Bottlenecks and inefficiencies in trade procedures and processes can be identified more easily and used as the basis for the development of well-targeted policy recommendations.

The benefits of using this methodology are obvious: through using a unified modelling language (UML), processes and procedures become comparable not only between products (of the same country) but also between countries. In addition, it allows re-constructing and analysing supply chains across various countries by combining the BPA results for the production for one specific product across trading partners (e.g. from the import of raw materials or parts and components, to the export of the final product).

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The BPA methodology is based on the 'Business Process Analysis Guide to Simplify Trade Procedures' developed by UN Economic and Social Commission for Asia and Pacific (ESCAP), UN Economic Commission for Europe (UNECE) and UN Network of Experts for Paperless Trade in Asia and the Pacific (UNNExT). A full version of the BPA Guide is available at: http://www.unescap.org/sites/default/files/0%20-%20Full%20Report_6.pdf

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