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GEORGIA TRADE EXCHANGE (GTX)

HIGH-LEVEL REVIEW FOR THE IMPLEMENTATION OF A GEORGIAN TRADE EXCHANGE PORTAL

FINAL

Friday, March 9, 2012

This publication was produced for review by the United States Agency for International Development. It was prepared by Deloitte Consulting LLP.

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FINAL

USAID ECONOMIC PROSPERITY INITIATIVE (EPI)

CONTRACT NUMBER: AID-114-C-10-00004

DELOITTE CONSULTING LLP

USAID/CAUCASUS

FRIDAY, MARCH 9, 2012

DATA

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Name of Component: Business Enabling Environment

Practice Area: Trade Facilitation

Key Words: Customs, logistics, transport, GTX, TradeNet, single window, trade facilitation

ABSTRACT

Due to its strategic location between the Black and Caspian Seas, its advantages over several countries in the region as a place to do business, and its desire to become a regional service hub, Georgia has growing, but still nascent, logistics and transportation sectors. Despite the economic downturn and war in 2008, value of the Georgian transportation sector has continued to increase; it has grown six-fold since 2000. Improvements in the competitiveness of agriculture sectors, nonagricultural sectors, such as tourism, and transportation infrastructure and air routes will simultaneously enhance transportation and logistics and other sectors. Transport and logistics can be pivotal and catalytic to a broad segment of the economy and have been identified as crosscutting sectors that Economic Prosperity Initiative (EPI) will focus on. In order to fully understand their potential impact on the economy, it is critical to understand the importance that transport and logistics add to the other sectors that EPI has targeted.

The building blocks are in place and some of the industries have the maturity to utilize the functionality of the Georgian Trade Exchange (GTX). The GTX will be a set of interface specifications for the interaction between various government and trade systems. These interface specifications should be open and public, and competition among suppliers of different solutions will be encouraged, which further drives down the costs for the ultimate users. There will be no need to impose single system architecture on trade — any style of system and distribution of operations should be acceptable as long as it complies with the data definitions and other protocol specifications set by the lead government agency. Changing the legacy systems of industry would not be a benefit; it is the interface among the legacy systems that should be changed. Information will be sent and received from these systems and the GTX.

ABBREVIATIONS

ASYCUDA	Automated System for Customs Data
CTC	Caucasus Transit Corridor
DEA	Data Exchange Agency
EPI	Economic Prosperity Initiative
GTX	Georgian Trade Exchange
GDP	Gross Domestic Product
ICT	Information and Communications Technology
IT	Information technology
JIT	Just-In-Time
PMO	Project Management Office
QR	Quick Response
TX	Trade Exchange
TN	Trade Network
SAD	Single Administrative Document
SW	Single Window
SDLC	System Development Life Cycle
UN/CEFACT	United Nations Centre for Trade Facilitation and Electronic Business
UNECE	United Nations Economic Commission for Europe
3PL/4PL	Third- or Fourth-Party Logistics Companies

CONTENTS

I. EXECUTIVE SUMMARY

The paper puts forth the recommendation to proceed in moving trade facilitation in Georgia to the next level, which is the development of the Georgian Trade Exchange (GTX). This will bring together all of the players — small, medium, and large — involved in trade into one central system of information sharing and processing. It is the logical next step for the government of Georgia to pursue, because the overall feeling is this has been a long time in coming, and will have a very positive impact on trade facilitation.

The United Nations Centre for Trade Facilitation and Electronic Business (UN/CEFACT) defines a Single Window (SW) as "a facility that allows parties involved in trade and transport to lodge standardized information and documents with a single entry point to fulfill all import, export, and transit-related regulatory requirements."[1] It is a one-stop service portal providing an integrated electronic gateway that enables trade-related information and documents to be submitted by exporters, importers, customs brokers, freight forwarders, shipping agents, and other players in the international trade chain only once at a single entry point. This information and documents are then transmitted to customs, quarantine, licensing, port, and other government authorities, as well as to insurance companies, banks, and all other private agencies involved in international trade. An SW can also facilitate the payment of duties, taxes, fees, and commercial invoices and the use of various value-adding services, such as e-training and e-marketing.

As specified in UN/CEFACT Recommendation No. 33, the SW concept refers to a facility that allows parties involved in trade and transport to lodge standardized information and documents with a single entry point to fulfill all import, export, and transit-related regulatory requirements. If information is electronic, then individual data elements should only be submitted once.

The building blocks are in place, and some of the industries have or are in the process of becoming mature enough to utilize the functionality of an SW. The SW will be a set of interface specifications for the interaction between various government and private trade systems. These interface specifications should be open and public, and competition among suppliers of different solutions will be encouraged, which further drives down the costs for the ultimate users. There will be no need to impose single system architecture on Trade — any style of system and distribution of operations should be acceptable as long as it complies with the data definitions and other protocol specifications set by the lead government agency.

The successful introduction and implementation of an SW concept depends to a considerable extent on certain preconditions and success factors that vary from country to country and from project to project. Some of these conditions are as follows:

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[1] Recommendation No. 33, *Recommendation and Guidelines on Establishing a Single Window to Enhance the Efficient Exchange of Information Between Trade and Government*; Economic Commission for Europe United Nations Centre for Trade Facilitation and Electronic Business (2005), at 3.

- Political Will
- Strong Lead Agency
- Partnership Between Government and Trade
- Establishment of Clear Project Boundaries and Objectives
- International Standards and Recommendations
- Communications Strategy
- Identification of Possible Obstacles

As mentioned previously, many of these conditions are part of the mindset in Georgia; more specifically, the first three are very positive conditions as they relate to Georgia. These three are the main conditions that, if negative, can impede any project of this size and scope to begin at all. Many of the others are typical of a large project and will need to be addressed when and if they occur at all. But with the first three conditions being positive, any negative conditions can be addressed with a solution.

In order to develop the GTX, there needs to be a sponsor who is a nonparticipant, preferably a government agency. There is a government group that is willing to be the sponsor or lead organization in Georgia, and this is the Data Exchange Agency (DEA). They are setting the standards involved in the processing of the data and also in the developing of the infrastructure to process the data.

Implementation of the GTX requires process change and process improvement. Implementing software solutions without first reviewing and improving the processes performed is not the correct way to proceed. Software solutions by their own are not the solution, and many times it makes things worst. This is a union between process improvement and technology implementation. Together, they are a powerful combination that can assist any business or industry get to the next level. It does not always mean that high-tech solutions ICT be applied in order to achieve global standards in trade facilitation.

One other point is that the implementation should be gradual and progressive, where early benefits can be demonstrated and thereby grow the appetite both in the trade and government for continued development. One needs to show progress and, more importantly, a commitment to the concept of the GTX. Phase I in any major project like this one is the most important phase. It is important that Phase I address any concerns related to the concept of the Trade Exchange (TX). But it also has to provide functionality that can be used in the daily processing of cargo because not providing any type of functionality will lead to the same problem as providing technology that does not work.

II. APPENDICES

A. BACKGROUND

B. METHODOLOGY

C. FINDINGS

D. RECOMMENDATIONS

E. ADDITIONAL INFORMATION

A. BACKGROUND

SCOPE

Due to its strategic location between the Black and Caspian Seas, its advantages over several countries in the region as a place to do business, and its desire to become a regional service hub, Georgia has growing, but still nascent, logistics and transportation sectors. Despite the economic downturn and war in 2008, value of the Georgian transportation sector has continued to increase; it has grown six-fold since 2000. Improvements in the competitiveness of agriculture sectors, nonagricultural sectors, such as tourism, and transportation infrastructure and air routes will simultaneously enhance transportation and logistics and other sectors. Transport and logistics can be pivotal and catalytic to a broad segment of the economy and have been identified as crosscutting sectors that EPI will focus on. In order to fully understand their potential impact on the economy it is critical to understand the importance that transport and logistics add to the other sectors that EPI has targeted.

As the EPI targeted value chains grow, there will be increased needs for expanded technology and communications. The complexity of the Caucasus Transit Corridor (CTC) distribution network, both domestic and international, will require new levels of information sharing, product visibility, and data velocity. The challenge of this consultancy is to assess the current use and availability of logistics technology tools in Georgia and to show how they can strengthen competitiveness, increase sales, and improve service reliability, visibility, and information velocity.

OBJECTIVE

The objective of this document is to develop the initial high-level action plan for the implementation of the GTX. Determine the applicability and feasibility of implementing such technologies in the Georgian logistics community. Implementation of the GTX is extremely feasible and plausible with the level of business in Georgia. Many of the sectors interviewed were very open and willing to at least participate. Most of the major players in this sector have exposure to this type of processing since it is very prevalent throughout the world. Participation should not be a problem with the major players within this area.

APPROACH

This document has been prepared with the aforementioned concepts, objectives, and observations in mind. The subject matter addressed is relevant to realizing the benefits of utilizing technology for enhancing trade facilitation in Georgia. The approach taken in large part was to assess the current state of trade facilitation as related to technology. This is the first step to determine the feasibility of implementing technology. But it also provides background information on the willingness to move forward using technology.

In order to determine this current state, first a list was developed of major stakeholders was compiled for consultation, including government agencies and private sector stakeholders involved in the business of trade or in the facilitation of trade. All modes of transportation were involved — air, sea, and rail. Representative associations were included as well, such as the Freight Forwarders Association and the Logistics Association.

UNIFIED AND COORDINATED APPROACH

In order to perform a paradigm shift in any industry, there needs to be a unified and coordinated approach to developing among the three key stakeholders. Without this unified and coordinated approach, the development of such a large undertaking will not be successful. The disciplined and coordinated approach with improvement in the three areas (Government, Trade, and Customs) will provide the roadmap to accomplish the following:

- Establish priorities to realize the best return on investment
- Align stakeholders with the strategic plan
- Establish a standardized process of identifying needs and managing the appropriate investment
- Create a unified direction of initiatives, which will enhance support from all stakeholders and participants
- Establish a baseline over which improvement can be measured

The following Figure 1 depicts how the use of information technology (IT) is the central point once the processes have been standardized and simplified. Technology is an integral part, but if the overall processes are not simplified and standardized, implementing technology will serve no purpose. In the long run, it will frustrate both internal and external users, and eventually, the project will be stopped. Most projects of any size fail because they spend very little time in performing an analysis of the current state. Before moving onto how a future state should operate, one needs to understand the current state.

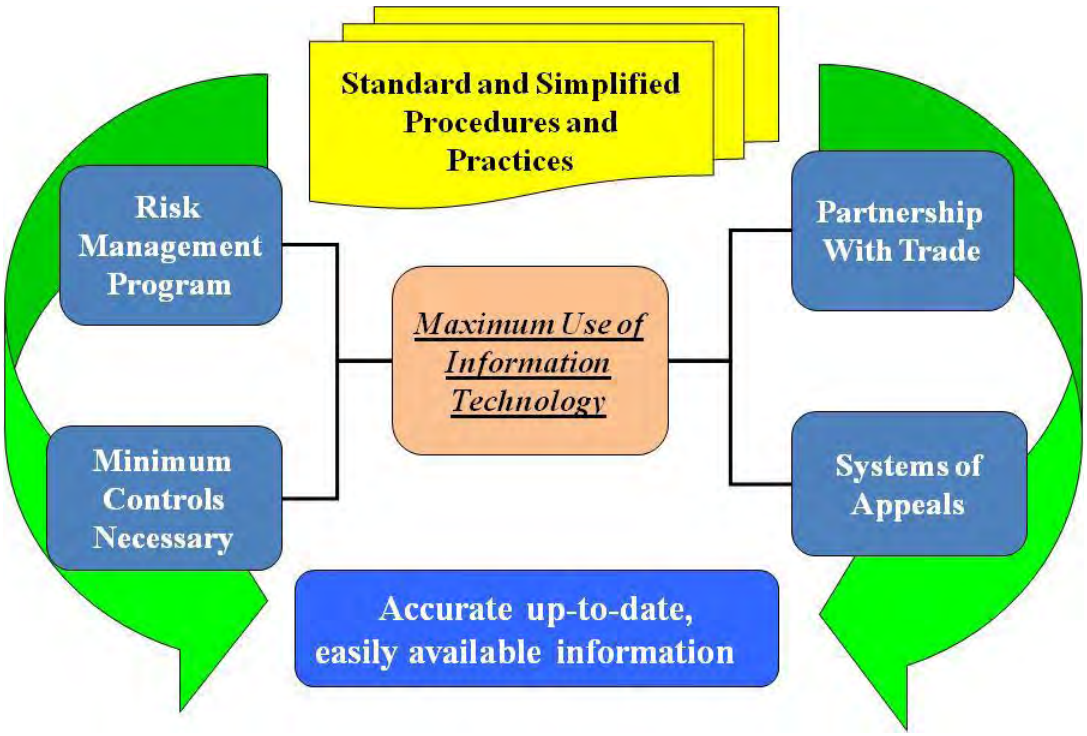

Figure 1: Procedural Best Practices – Revised Kyoto Convention

B. METHODOLOGY

A ROADMAP FOR SUCCESS

The roadmap for success is long, but more importantly it is a complex undertaking. It will take extensive coordination between the various stakeholders but will yield greater benefits to all stakeholders. All should have an understanding of the final objective in mind when they are moving along the roadmap.

A strategic plan creates a vision for how IT and business are partners in the process. But it also defines high-level goals to establish as a foundation for long-term technology development, enhancement, and operations. Figure 2 is a high-level strategic map on the process that could be followed by the various groups within EPI in order to achieve the ultimate goal for implementation of the GTX. It provides a visual depiction of how strategic planning works and the steps that need to be followed for success. Skipping steps is not an option, since completing a step is dependent upon completing the previous one. This is a long road with many different and diverse groups working together in order to achieve the final destination. There are differences between a strategic plan and an implementation plan, but each one has its unique features for success.

When developing a project like the GTX, which requires conducting phases over a period of time, the strategic plan becomes even more important because of the length and duration of the project. Each new phase should follow the same process as that of the previous phase. This gives each phase consistency in planning, development, and implementation. This should become second nature as more and more phases of the GTX are implemented.

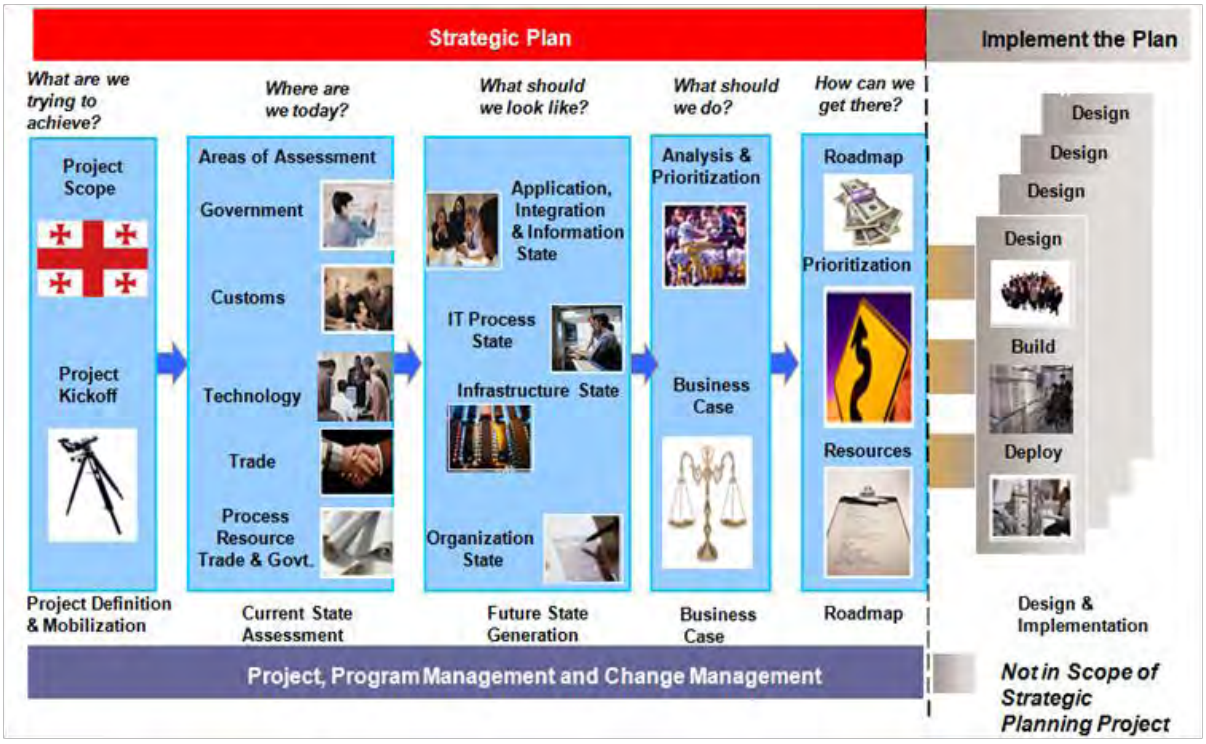

Figure 2: Roadmap to the Future

PROCESSING TODAY

Peter F. Drucker (1986):

"There is nothing more useless than to do efficiently that which shouldn't be done at all."

The above quotation from Peter F. Drucker was a result of observing that technology was primarily used to automate or expedite existing manual processes without improving the processes at all. Basically, the processes were faster, but mostly left unchanged and still inefficient.

Figure 3 below is a depiction of the processing involved today to clear cargo; it is not continuous or integrated. Rather, it involves many functions that are performed independently of each other and not performed efficiently. It involves a great deal of manual intervention in order to make the process work. Automation is a part of the process, but a majority of the changes will be related to modifying processing. The development of the GTX will force organizations involved into documenting their current processes. But more importantly, it will lead the organizations to modify their processing to the current technology and international standards of cargo processing.

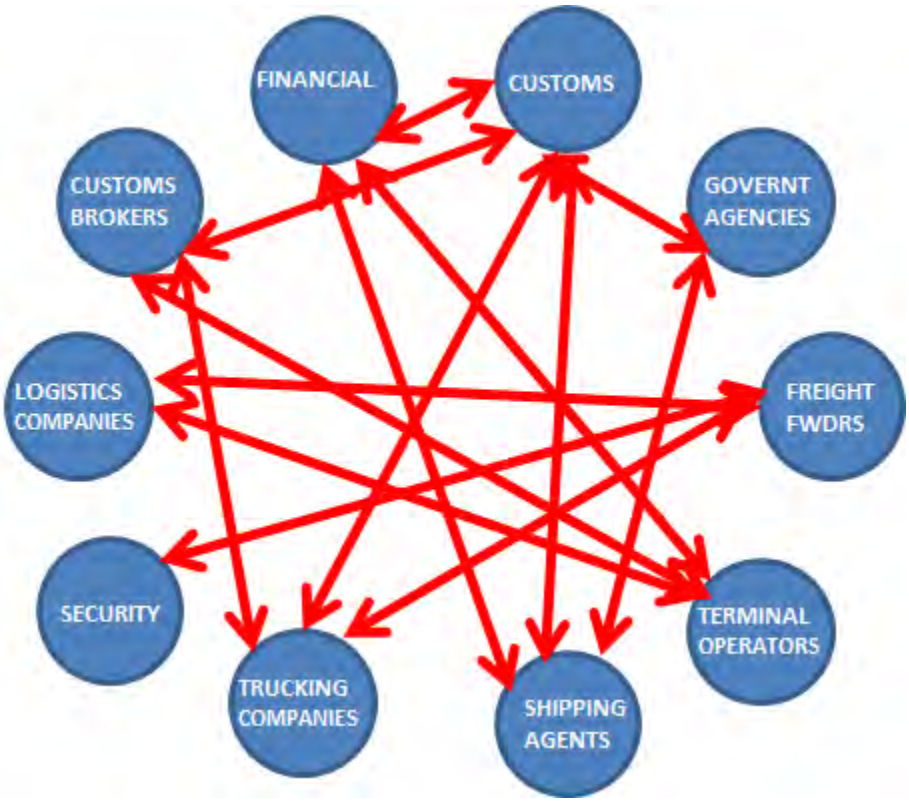

Figure 3: Current Connections

FUTURE PROCESSING

Figure 4 shows the processing of the future, with all involved parties connected together as one. With one process finishing and another one automatically beginning to be kicked off, the processes are tied to each other and are triggered by their individual completion. This eliminates the need for manual intervention and any delays that can occur when manual processing is making the decisions on when to start the process.

The GTX should process requests for information to the proper party and, in addition, let parties know when processing is complete. This is electronic processing, and many of the functionalities may be performed without manual intervention. Interfaces will determine when processes begin and end. One extremely important note that needs to be stressed to all participants is that no users will have the capability to log or look into other organizations' systems. Information will be requested, and business rules will be followed in providing information about the cargo. They can only request information and obtain the desired information, which will eliminate the necessity to log into multiple systems in order to obtain information or to submit information directly. Security for the GTX is extremely important because a failure in security between participants will bring the implementation to an early termination.

Figure 4: Future Connections

The GTX allows for the logistics process to be a continuous processing of information. It functions so high volumes can be processed very quickly and efficiently, which results in

lowering the processing times and eventually the costs of cargo movement. Many industries, such as manufacturing, use this concept because it allows for the lowering of the manufacturing costs by eliminating downtimes on a production line.

Figure 5 depicts how a continuous process involved in the logistics process should be performed. All the functions in the processing of logistics need to be continuous and interconnected. The GTX assists in developing this continuous processing by connecting all of the required parties in the logistics process. But all functionalities should and cannot be part of the initial phase of implementation. This will make for a longer more frustrating Phase I, and it would have a major negative impact if it failed on the development of future phases.

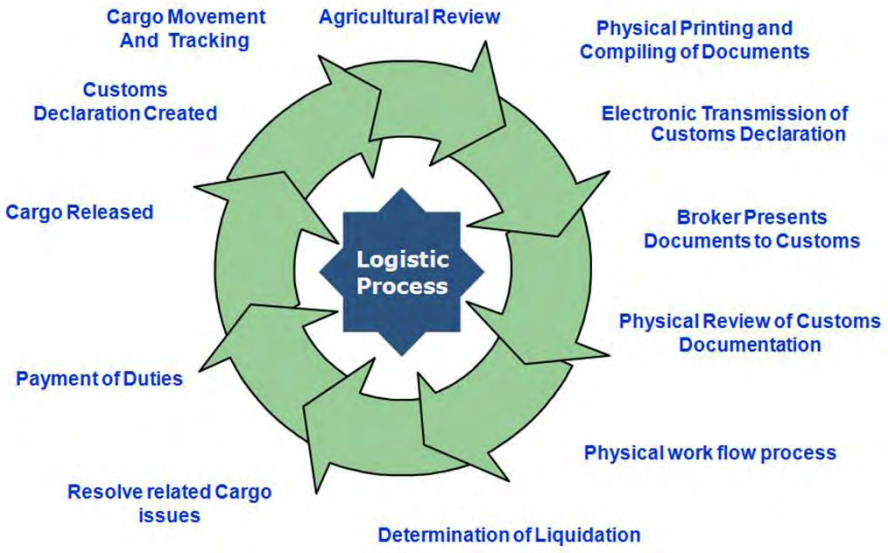

Figure 5: A Continuous Process

C. FINDINGS

The initial observation and assessment of the major stakeholders (Customs, Trade, Government, and Technology) is first rate, and on par in some areas with many countries in the world. It is not the norm to see the advancement of Government and Customs along with the Trade. In most of the world it is the Trade that drives for changes and advancements in the area of technology assistance. In Georgia all have the same vision in that all need to move ahead with the implementation and advancement of technology.

The building blocks are in place to expand the use of technology in a more coordinated approach. Many of the government agencies involved in the logistics industry are using technology. Georgian Customs uses the latest software ASYCUDA World which is internet based. Information on cargo can be entered into the system and the clearance can be performed totally online. In addition, financial institutions are also using technology to assist in payments from logistics providers. So the major players involved in trade facilitation are connected with technology and can easily be connected as a group via the GTX.

The following list is a synopsis of the information from the interviews performed. As you can see there were five areas where many of the interviewees mentioned should be addressed and a concern for the future.

High-Level Repeating Themes

- Lack of consistent data on a real-time basis
- Need for more automation (logistics related)
- A more integrated system
- Smaller organizations lack and ability to use technology
- Expansion of customs functionality
- Standardized processing of information

These findings came from the initial process performed earlier in the year where all areas that were part of trade facilitation within Georgia were interviewed. This provided the basis for the idea of developing the GTX. The following is a list of the benefits the GTX can provide from the perspective of the Trade.

GENERAL SAVINGS

The GTX is intended to reduce the number of transactions to a minimum, reduce error rate, speed up clearance time, and drastically reduce the face-to-face contact between traders and government agents so as to enhance transparency. *(Luc De Wulf , International Trade Department, World Bank)*

The key to developing the GTX is improving the procedures in order to utilize modern technology, while improving and streamlining of these procedures. This is the most important impact because this is the main thread in a successful TX. The benefits from improving procedures impacts anyone involved with international trade. Importers in the economies that have implemented the reforms and exporters that are selling their goods to those economies have documented the benefits they have seen from these improved

procedures. Figure 6 depicts a short list of savings that can be derived from implementing the GTX.

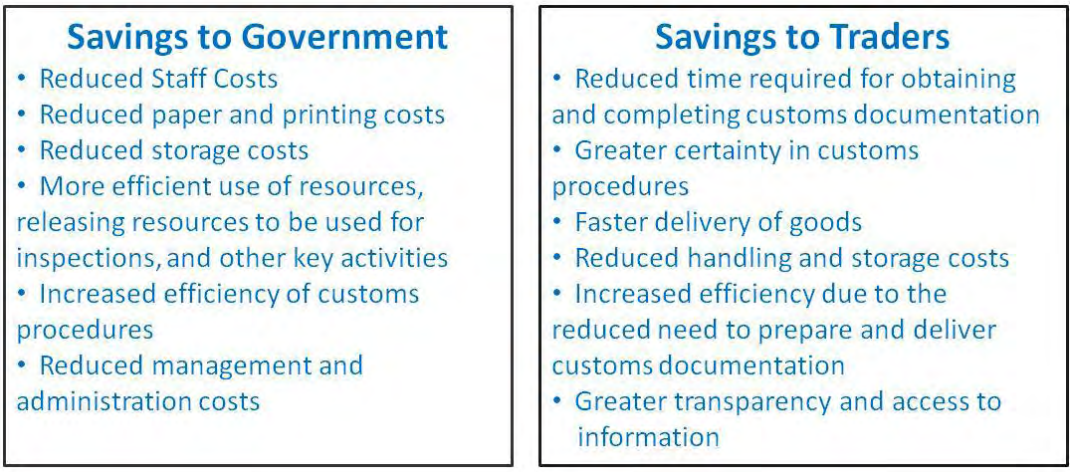

Figure 6: Savings for Government and Traders

BENEFITS FOR TRADE

- Acceleration of cargo clearance;
- Minimization of commercial information required;
- Simplification of approval procedures by controlling agencies;
- Facilitation of quick response (QR) and Just-In-Time (JIT) strategies;
- Optimum use of standards for information formats and layout, for codes and for procedures;
- Co-ordination of the provision of information to different government agencies concerned with import and export;
- Rationalization of controls and verifications;
- Elimination of multiple document submissions;
- Remote filing;
- Seamless integration of transactions between exporting and importing agencies;
- Improvement of access to information (data);
- Seamless integration of transactions between exporting and importing agencies;
- Improvement of access to information (data);
- Efficient, secure and timely settling of trade transactions and customs duty payments;
- Access to export markets that are now increasingly requiring all trade transactions to be undertaken electronically:
- Improved customer satisfaction through the availability of 24/7 web-based information services;

- Reduced labor costs through the replacement of labor intensive tasks with an automated electronic communication system;
- Reduced risk of error;
- Reduced inventory requirements and inventory carrying costs, and improved cash flow;
- Efficient, secure and timely settling of trade transactions and duty payments;

These benefits are highlights and have been derived from the various TN that have been successfully implemented since the 90's around the world. The above benefits are just a sampling of the possible benefits one can derive from a TN.

The GTX can simplify and facilitate the process of providing and sharing the necessary information to fulfill trade-related regulatory requirements for both traders and government authorities to a considerable extent. The use of such a system could result in improved efficiency and effectiveness of official controls and a reduction of costs for both traders and governments due to better use of resources.

To further show what TNs can provide when they are implemented two TNs have been selected that have been in production for many years to show the benefits they have provided. One is the original TradeNet in Singapore and the other is one implemented in Thailand. The following tables (Table T-1 and Table T-2) lists the characteristics and show what the manual processes that were performed. The last column displays the benefits that were derived from implementing the portal.

Table T-1: Singapore Trade Network

CHARACTERISTICS	MANUAL PROCESSES	PORTAL BENEFITS
Submission of documents	**Via expensive courier/dispatch clerks**	**Electronically from the office or home**
Times of Submission	**Within office hours**	**Available 24 hours**
Trips per controlling office	**At least two trips or more**	**No trips**
Copies of documents	**Multiple copies**	**Single copy**
Turnaround time for approval	**From 4 hours to 2-7 days**	**Within 10 minutes**
Dutiable goods handling	**Separate documents for customs processing**	**Same electronic document routed to customs for processing**
Controlled goods handling	**Separate documents sent to different controlling agencies for processing**	**Same electronic document routed to controlling agencies for processing**
Customs duties collected	**By check**	**Automatic bank account deduction**

Table T-2: Thailand Trade Network

CHARACTERISTICS	MANUAL PROCESSES	PORTAL BENEFITS
Document submission	**Via customs officer**	**From comfort of office**
Time of Submission	**Within office hours only**	**Available 24 hours daily**
Trips to customs, shipping agents, etc.	**Three trips**	**No trips required**

Copies of documents	**Five copies**	**Single copy**
Time to complete processing	**Up to three days**	**Less than one day**
Verification of declaration form against the invoice or the cargo manifest	**Via customs officer**	**Automatic**
Customs duties collected	**Prepare cash or tax card or check, and pay at the Cashier Division**	**Electronic Funds Transfer**
Customs duties collected	**By check**	**Automatic bank account deduction**

Table T-3 provides a high-level description of the economic impact a Trade Network (TN) can have on a country's Gross Domestic Product (GDP) and income. All of these TXs have provided a positive impact to each of the countries. If the GTX is implemented correctly and is utilized by the various participants it can have a positive economic impact for all involved.

Table T-3: Trade Network numbers

PROJECT	EXPANSION OF GDP %	CHANGE IN ANNUAL INCOME US$ MILLION
Singapore's Trade Net	**0.25**	**2,330**
Thailand's EDI	**0.16**	**1,225**
Philippines	**0.09**	**376**

D. RECOMMENDATIONS

The World Bank Doing Business provides country-specific data on document requirements for export operations, informing of opportunity costs induced by trade document processing. Data shows that in many developing countries the costs for document preparation are the biggest cost factor in the export process. Costs for document preparation in a country with highly simplified and automated processes are lower due to the elimination of many of the manual processing. The data indicates that for developing countries and transition economies document simplification and automation is an important instrument to increase competitiveness at competitively low investment costs.

This is the foundation on which the TN is built on; it will bring down the costs of document processing which is the biggest cost. It will perform these functions electronically and then connect the various participants involved in the process together. The TN is the natural progression of a country wanted to expand trade on the global basis.

CONCEPT OF A TRADE NETWORK

As mentioned basically TN will bring together the various participants involved in the process of import, export, and transshipment of cargo. But remember this is not a onetime system development effort but one that evolves over time to include many other functions such as training, obtaining permits, new laws being implemented, legislation, broadcasts, and financial information. Figure 7 below provides a high-level view of how the GTX could work.

There is no set layout or process involved in developing the GTX it has many variations and has no real rules on what can or cannot be included. Over the years newer TNs have expanded the functionality and the initial concept has been also expanded into new areas. It should not be the goal of any Phase I to implement all of the functions but to build a foundation with some functionality. While all subsequent phases building on that foundation with more functionality. Trying to do too much in Phase I can be a disaster if cannot be successfully implemented. But with more processes implemented in the GTX there will be a need for more maintenance over the years. This is a true balancing act implementing new functionality knowing it will require maintenance. But if new functionality processing is not implemented the GTX will become obsolete and eventually will not be utilized by the Trade or Government.

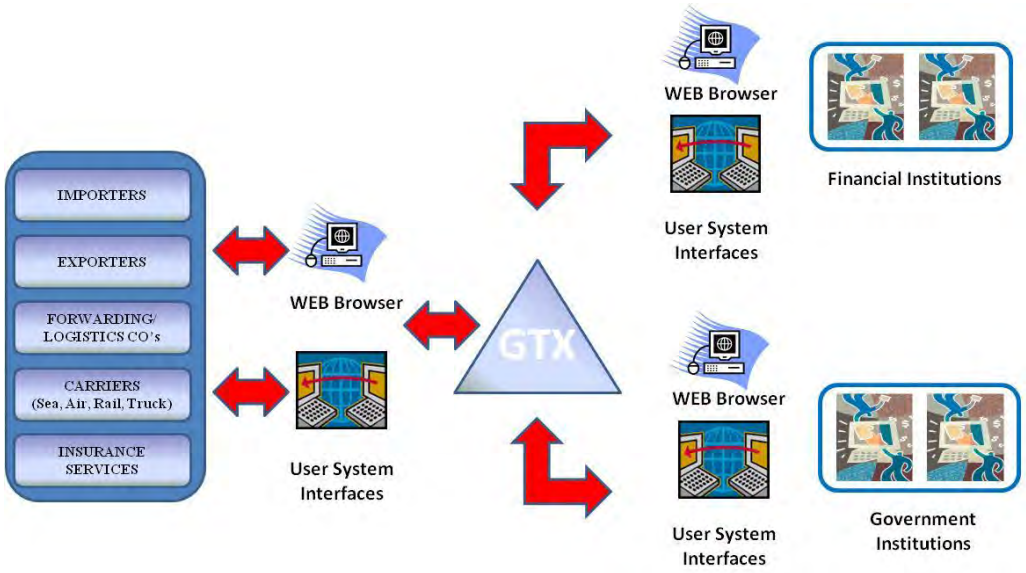

Figure 7: GTX Concept

A TN aims to expedite and simplify information flows between trade and government and bring meaningful gains to all parties involved in trade. The lead agency should assume the function to channel the relevant information to the appropriate (concerned) governmental authorities and agencies in order to support the coordination of controls. Basically what the process is a trader, or agent submits standard information electronically, which an automated system processes and distributes to the concerned government agencies. So now the government agencies are connected together and this streamlines procedures. Once each of the agencies processes the request it will automatically be sent back to the party that submitted the request. All concerned parties are connected and can now work as on a submission. This has a major influence on cutting the number of days required to process the submission. There is no need to physically visit each of the government agencies to get the proper clearance. This will provide a major benefit to begin cutting time and costs of processing cargo clearance.

In addition, many TN's also provide facilities for payment of relevant duties, taxes and fees. They also can expand into various value added service such as training for parties involved in trade, and also posting future changes in trade laws. All of this type of functionality can eventually be implemented in future phases of the GTX. As it is mentioned various times in this paper the GTX is very flexible in functionality. With the increasing competitive global economy the GTX will provide trade and government a competitive advantage in expanding the business of trade.

HARMONIZED DATA

Many projects fail to perform the process of data harmonization, which is to remove the same redundant information from being stored and processed. This is inefficient and in the long run causes confusion along with the expense of tracking and storing of this data. With multiple agency involvement it is important to keep the number of data requirements as small as possible, the intent is to include in the standardized the information which the agencies are currently allowed to collect, the "need-to-have-list" of information requirements. The discovery of redundancy of data that would be revealed during the data harmonization

process and the ensuing standardization, often results in reduction of data requirements. Another benefit is the stability a standardized data requirement provides. The outcome of the data harmonization must be a maximum set of data requirements for the export, transport and import of goods when crossing borders. Governments should not require any information outside of the standard data information.

The objective of data harmonization is to eliminate redundancies in required data and duplication in the submission of trade data to Government authorities such as Customs and other regulatory agencies. The ultimate outcome should be one set of standardized data requirements and standardized messages that fully comply with the export or import of goods. The Trade should provide the required data elements by submitting standardized messages to meet government requirements for, export, transit and import. This will facilitate trade, reduce costs and make it feasible to provide more timely and accurate information.

The following two figures (Figure 8 and Figure 9) show the difference between a nonintegrated form and a fully integrated form. Figure 8 shows the typical nonintegrated process which requires a document from each of the agencies involved. Much of the data information is the same but it is still required by each independent organization/agency. In Figure 9 it shows the process when the data on forms are integrated and what the benefits are of harmonizing the data from all of the various organizations. Much of the information required by the various organizations and government agencies has a great deal of data that is the same information. The only difference is that the data is on different forms that are unique to the organization or government agencies.

Harmonization of data begins Phase I but it becomes a very integral part of Phase 2 or Phase 3 since there will be more harmonization with the implementation of other industries. But it should be discussed and begin the process of laying the foundation for harmonizing of data when developing Phase I. The process of harmonization of data requires a coordination of many different agencies and also involves the coordination of implementing harmonization with the trade. As mentioned previously the benefits of harmonizing of data will have long lasting implications on subsequent phases being developed.

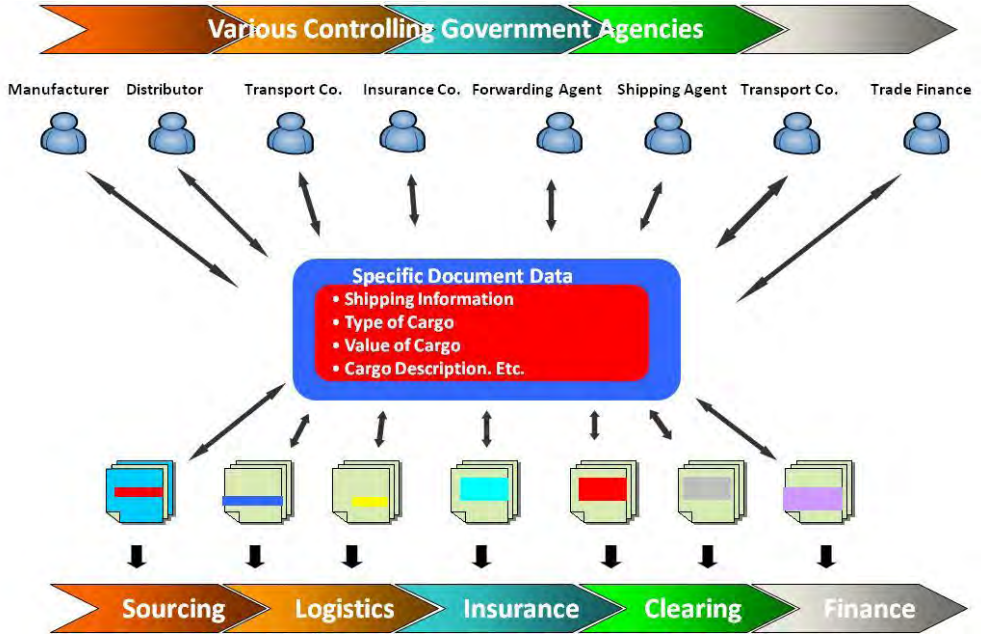

Figure 8: Data Flow through Nonintegrated Forms Process

By harmonizing the information on the various diverse documents allows an information flow that is much more efficient. Also the information is presented once and used many times, since there is no need to keep sending the same information. This builds a very stable foundation to continue developing functionality, integrating the functionality in the future phases and causing the development time to be shortened.

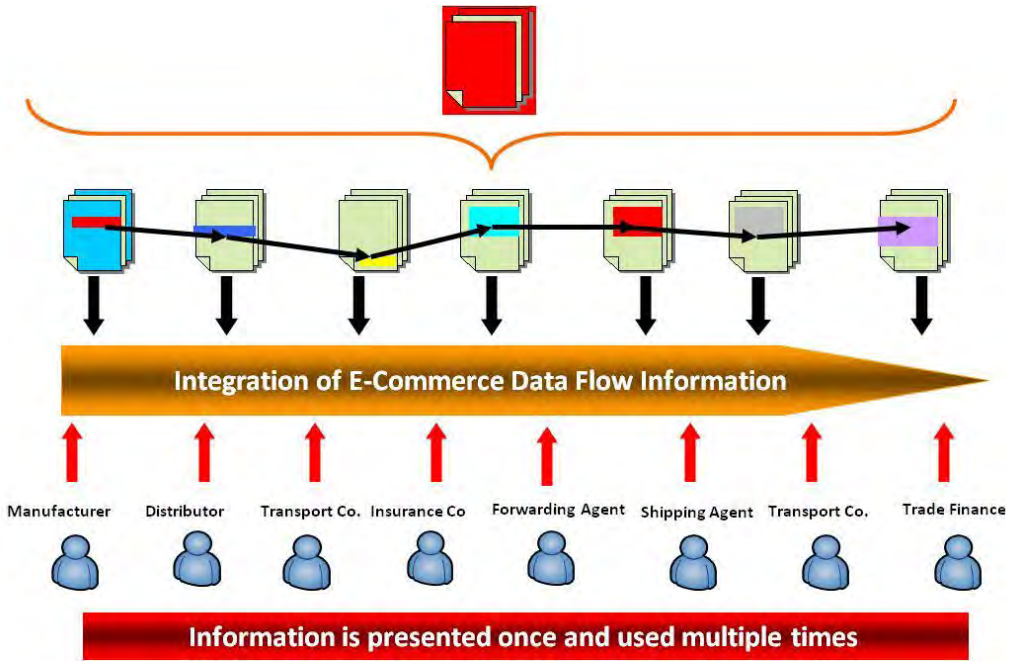

Figure 9: Data Flow through Integrated Forms Process

IMPACT OF COSTS ON TRADE

From the initial Doing Business 2011: Making a Difference for Entrepreneurs (all countries). "The 10 economies that made the largest strides in making their regulatory environment more favorable to business are **Georgia**, Rwanda, Belarus, Burkina Faso, Saudi Arabia, Mali, the Kyrgyz Republic, Ghana, Croatia and Kazakhstan. All implemented more than a dozen Doing Business reforms over the 5 years. Several—including **Georgia**, Rwanda, Belarus, Burkina Faso, the Kyrgyz Republic, Croatia and Kazakhstan—have also been recognized as top 10 Doing Business reformers in previous years." Georgia in the last five years has made great strides in developing a favorable environment for doing business moving to 11th in the world, which is very impressive numbers since it is difficult to move up once you are part of the top tier.

But more importantly and related to the benefits for the development of the GTX comes from The World Bank Doing Business in Georgia Report for 2011 "In Georgia, reducing customs clearance time by a day has led to operational savings of an estimated $288 per truck, or an annual $133 million for the country's whole trading community given the growing amount of cross-border trade in recent years." The GTX will provide the ability to reduce clearance times by connecting the various government agencies electronically, reducing the manual intervention that adds to the days for importing or exporting.

The following two tables (Table T-4 and T-5) provide the per container costs for exports and imports. This information comes from the current Doing Business in Georgia Report, with the data reflecting 2010. It compares Georgia to some of the world economies and also to the countries within the region. As you can see from Table T-5 Georgia lost four positions in rankings falling from 31 to 35, this is comes from the analysis performed on Trading Across Borders. This number should stabilize and improved upon with the implementation of the GTX.

Good Practice Economies	Docs to Export (No.)	Time to Export (Days)	Cost to Export (US$ per cnt)	Docs to Import (No.)	Time to Import (Days	Cost to Import (US$ per cnt)
Denmark	**4**	**5**	**744**	**3**	**5**	**744**
France	**2**	**9**	**1078**	**2**	**11**	**1248**
Malaysia	**7**	**28**	**450**	**7**	**14**	**450**
Singapore	**4**	**5**	**456**	**4**	**4**	**439**
Selected Economy						
Georgia	**4**	**10**	**1329**	**4**	**13**	**1316**

Table T-4: Trading Across Borders Comparison

Comparator Economies						
Armenia	**3**	**13**	**1665**	**6**	**18**	**2043**
Azerbaijan	**9**	**43**	**2980**	**14**	**46**	**3480**
Belarus	**8**	**15**	**1772**	**8**	**20**	**1770**
Bulgaria	**5**	**23**	**1551**	**7**	**21**	**1666**
Romania	**5**	**12**	**1275**	**6**	**13**	**1175**
Turkey	**7**	**14**	**990**	**8**	**15**	**1063**

Table T-5: Trading Across Borders in Georgia

Trading Across Borders Data	Doing Business 2008	Doing Business 2009	Doing Business 2010	Doing Business 2011
Rank			**31**	**35**

Cost to Export (US$ per cnt)	**1305**	**1380**	**1270**	**1329**
Cost to Import (US$ per cnt)	**1305**	**1340**	**1250**	**1316**
Documents to Export (number)	**8**	**8**	**4**	**4**
Documents to Import (number)	**7**	**7**	**4**	**4**
Time to Export (days)	**12**	**12**	**10**	**10**
Time to Import (days)	**14**	**14**	**13**	**13**

The effort over the past few years was on improving the ease of doing business, now it is important that Trading Across Boarders should follow naturally. One is complementary to the other by improving the ease of doing business it is logical now you will need to improve the process/procedures for doing the business.

In order to bring the cost per container down the number of days to perform the function should be reduced. Table T-6 shows the costs for each of the procedures involved in exports and imports. If the GTX can cut the days for each process by half the savings would have a very positive impact on trade facilitation in Georgia. By cutting this processing by 50% with the number of days to process exports from 10 to 5, the cost per container could go from $1329 to $665. This places the cost within the amounts that are calculated in the top economies, check information on Table T-4. But more importantly within the region it will be the least expensive and business is always looking to cut costs especially on costs related to transportation.

The same calculation could be performed on the imports but there are some variables because some of the information required comes from other countries. Also there may be more manual documentation. But we can safely assume we can cut processing days here in Georgia with the GTX by at least 25% this would also result in per container cost savings. This initial cut can bring down the number of days from 13 to 10, but more importantly it could bring the cost of a container from $1316 to $987. This is significant because again it brings the costs closer to the major economies, but more importantly it makes it the most inexpensive country within the region for importing of containers. This cost savings has a very positive impact on the bottom line of businesses.

Table T-6: Procedures to Import and Export a Standardized Cargo of Goods

Nature of Export Procedures (2010)	Duration (days)	US$ Cost
Document Preparation	**4**	**255**
Customs Clearance and Technical Controls	**2**	**39**
Cost to Import (US$ per cnt)	**2**	**235**
Documents to Export (number)	**2**	**800**
TOTALS	**10**	**1329**
Nature of Import Procedures (2010)	**Duration (days)**	**US$ Cost**
Document Preparation	**8**	**255**
Customs Clearance and Technical Controls	**1**	**111**
Cost to Import (US$ per cnt)	**2**	**250**
Documents to Export (number)	**2**	**700**
TOTALS	**13**	**1316**

As you can see implementation of the GTX has benefits of possibly increasing more imports and exports. That has a direct impact on helping the existing business increase profits that have a positive influence on the economy of Georgia. Another possibility is existing businesses begin investing in their business and also as important new investors become interested in Georgia.

USER FEES

An important point that needs to be discussed is whether there will be user fees for using or joining the GTX. Many have initial fees to become a member of the network, and then a usage fee. A usage fee is one of the fairest methods because it charges the larger users more than the smaller user. But all types of users small, medium and large have the same exposure on the network. These charges provide income to assist in offsetting the costs of maintenance and development. This discussion on the possible fees should be part of any TN development and needs to be agreed upon before the GTX goes into production.

The processing fees varies as much as the functionality provided in the various TNs that have been implemented around the world. The following table (Table T-7) shows some of the various fees imposed on various TNs.

Table T-7: User Fee Examples

PROJECT	USER FEE DESCRIPTION
Singapore's Trade Net	**$50 Registration fee $20 per user fee $2.88 for each declaration**
Mauritius TradeNet	**$1,300 Software usage fee $5.00 per declaration**
Port of Hamburg	**Pay yearly fee to become a participating shareholder Users then sign a one year contract with shareholder**
Nigeria Trade Network	**Calculated on a monthly basis 0.65% fee Free on Board Value of Transit Import Export 0.45% on Gas and Oil Value of Import Export**

As you can see from Table T-7 the variations are very wide in how user fees are calculated. In some of the cases above like Nigeria they suspended their charges for a period of time. Some have allowed new users a grace period before becoming a member and using the system. Singapore does the basic with a registration fee, per user fee, and a per declaration fee. Others use a monthly usage fee on the value of the goods processed. There are a few unique types as charging a software usage fee, and then a per declaration fee.

User fees are very important because they provide the funding for future development and maintenance. If the GTX is to be successful for years to come it needs to be upgraded and improved upon. This is a balancing act to know where the businesses in each country see the value they derive from using the TN. The key point is what charges are the correct charges because if they are too high then no one will use the system. There needs to be value along with accelerating the process, and cutting costs when one joins a TN. Users will pay fees if they see value being added to their bottom line, it is viewed as an investment, and they would want to see a return on their investment.

CRITICAL SUCCESS FACTORS FOR IMPLMENTATION

There are many factors to take into account when such a major change as a TN is being considered for development/implementation within a country. But in Georgia many of these critical success factors are not an issue for the implementation of the GTX. Most projects of this magnitude first need to have many of the stakeholders convinced that it is the right thing to do. But the mentality and position of the government, customs and trade stakeholders is already positive too idea of the GTX being developed and implemented. Many say it has been a long time in coming, and are excited about the project and are anxiously waiting for

Phase I. Now it is important to control the expectations of the stakeholders involved now and those who will be involved in the future. The communications on what functionality is being addressed in Phase I need to be communicated to all. This is a long-term project with multiple phases to be developed. It seems this is always brought out in the document but it is extremely important to maintain the expectations of the stakeholders. If this is not done the project expectations will be so high that Phase I will be thought of as a failure because expectations were not controlled.

The list below displays the main factors that should be considered when deciding on proceeding with the successful development and implementation of the GTX. These factors can be applied to any large project that is changing the way business is being performed. In this case, the GTX is a large project with a major impact on the way we perform the business of Trade.

POLITICAL WILL

The existence of strong political will on the part of both government and business to implement the GTX is one of the most critical factors for its successful introduction. Achieving this political will requires proper dissemination of clear and impartial information on objectives, implications, benefits and possible obstacles in the establishment of the GTX. The availability of resources to establish the GTX is often directly related to the level of political will and commitment to the project. Establishing the necessary political will is the foundation stone upon which all the other success factors have to rest.

STRONG LEAD AGENCY

Related to the need for political will is the requirement of a strong, resourceful and empowered lead organization both to launch the project and see it through its various development stages. This organization must have the appropriate political support, legal authority, human and financial resources, and links with the business community. In addition, it is essential to have a strong individual within the organization who will be the project champion. In Georgia, a DEA expressed will to be a leady agency.

PARTNERSHIP BETWEEN GOVERNMENT AND TRADE

The GTX is a practical model for co-operation between agencies within government and also between government and trade. It presents a good opportunity for a public-private partnership in the establishment and operation of the system. Consequently, representatives from all relevant public and private sector agencies should be invited to participate in the development of the system from the outset. This should include participation in all stages of the project, from the initial development of project objectives, situational analysis, and project design through to implementation. The ultimate success of the GTX will depend critically on the involvement, commitment and readiness of these parties, to ensure that the system becomes a regular feature of their business process.

APM terminals who recently invested in development of Poti sea-port, are open to deep and comprehensive partnership with Government. APM ready to contribute recources to development of trade facilitation portal.

ESTABLISHMENT OF CLEAR PROJECT BOUNDARIES AND OBJECTIVES

As with any project of this size and length establishing clearly defined goals and objectives at the outset is extremely important for a successful project. These should be based on a careful analysis of the needs, aspirations and resources of the key stakeholders, and also on

the existing infrastructure and current approaches to the submission of trade-related information to government. As stated previously, this analysis should involve all key stakeholders from both government and trade. The GTX should generally be perceived as part of a country's overall strategy to improve trade facilitation.

INTERNATIONAL STANDARDS AND RECOMMENDATIONS

The implementation of a TN generally entails the harmonization and alignment of the relevant trade documents and data sets. In order to ensure compatibility with other international systems and applications, these documents and data models must be based on international standards and recommendations. This is true even if the TN is designed to operate without using electronic data communications.

Whenever electronic data interchange is involved, the harmonization, simplification and standardization of all data used in international trade are an essential requirement for smooth automatic operation of the TN. The harmonization of data used by different participants in their legacy system can be one of the biggest challenges for automated TN implementation.

COMMUNICATIONS STRATEGY

Establishing a proper mechanism for keeping all stakeholders informed on project goals, objectives, targets, progress (and difficulties) creates trust and avoids the type of misunderstanding that can lead to the undoing of an otherwise good project. Within this context, it is extremely important to handle stakeholders' expectations properly, and it is worth remembering the business adage of promising less and delivering more (rather than the other way round). It is also important to remember that stakeholders often do not expect miracles solving simple practical problems can generate significant goodwill to carry the project through difficult patches along the development path.

IDENTIFICATION OF POSSIBLE OBSTACLES

It is possible that all players in government and/or trade may not welcome the implementation of a TN. In such cases, the specific concerns of opponents should be identified and addressed as early as possible in the project. Identified obstacles should be considered individually, taking into account the local situation and requirements. Clearly, cost can be a major obstacle but this must be balanced against future benefits. However, it is important to be clear about the financial implications of the project so that the decision regarding full or phased implementation can be made. Legal issues also constitute a significant potential problem area.

PHASED APPROACH AND ACTION PLAN

As was mentioned previously the process to develop and implement the GTX should be performed in phases over a period of time. Each of the phases should have distinct functions/processes to address, and should build on the previous phase without having functions/processes become obsolete in subsequent phases. This is similar to the design and construction of a large office building. One cannot begin on the top floor and work down, but you start out by digging the hole so the building will have a strong foundation in order to support the various floors above it.

Figure 10 is a graph on how the phased approach would be broken down at a high level. As the graph shows phases can overlap somewhat at the end of one phase and the

beginning of next phase. But also you will see that EPI Georgia will be part of the initial Phase I and the start of Phase II. This would be more of an advisory role to assist in establishing the foundation for the development of future phases. It is important to have EPI provide advice so that the project gets off to a good start. This would make all subsequent phases easier to implement, because if there are major problems with this initial phase it will make it difficult to continue with subsequent phases. So EPI can assist early to get through the issues or concerns that come early from any project of this size. It also guarantees that implementing of a standard iterative development processes in Phase I will continue in all of the subsequent phases.

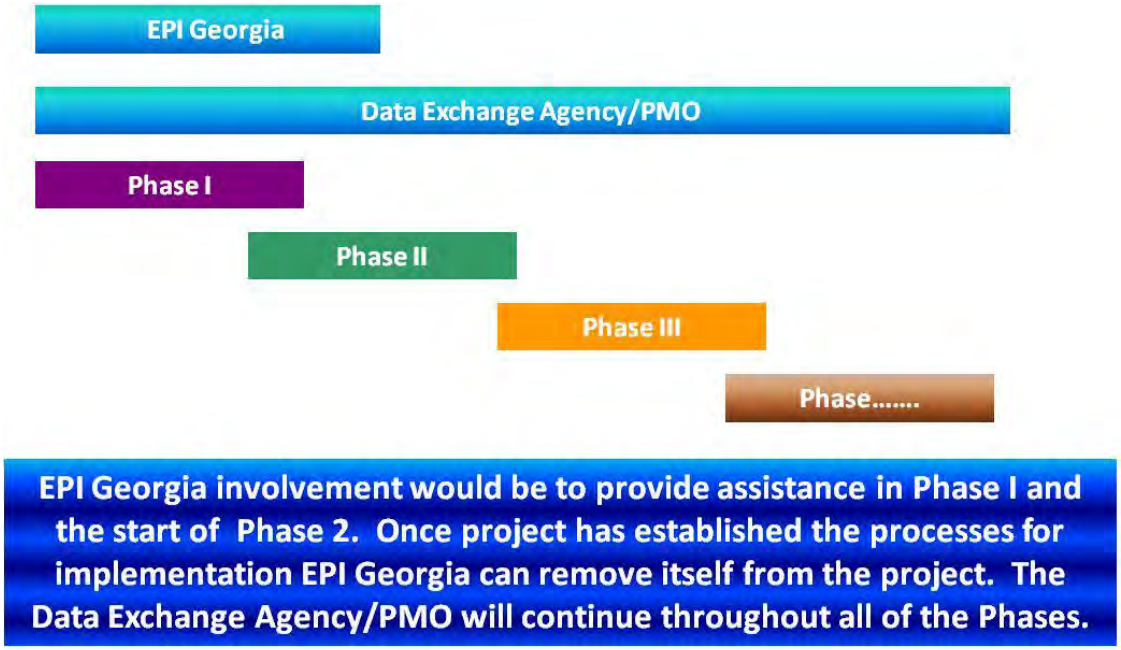

Figure 10: Phased Approach to Development

PHASE I – THE FOUNDATIONS BUILDER

This is a long-term project that will take time to fully implement all of the functions and Phase I is very important to get the project off to a good start. As mentioned previously Phase I will build the foundation that all subsequent phases will be built on. So it is extremely important and crucial that this phase be implemented correctly and with a pilot industry that is open to the possible issues of development. Georgia Customs is a major stakeholder, without their very important participation the project cannot begin and definitely will not have a chance of success.

The GTX revolves around improving the procedures related to processes involved in the clearance of cargo. All stakeholders involved need to review its current processes and determine how they can develop future processes that are more automated than current processing. More importantly what are the data requirements that will be needed to satisfy the clearing of cargo? Much of this new processing will involve electronic transmission of data to assist in automating functionality.

SELECTING THE RIGHT INDUSTRY

It is very important to select an industry that is prepared to accept this project and changes that will occur. Especially during Phase I the selection of an industry that is willing to work as a partnership is extremely important. Of the various industries involved in trade facilitation air, rail, sea and truck. The industry that has the best fit for Phase I would be sea. They are the most advanced when it comes to the use of technology and are open implementing new processes. But these processes need to show that they will have a positive impact on the movement and clearance of cargo. The shipping industry uses technology in most of their functions within their ports, especially when they interface with customs, terminal operators and other TNs in various countries. They are very open to the acceptance of new ideas but more importantly provide valuable insight into the development of a TN. Reason being is they have been involved with TNs for years all over the world, and have a very good understanding on their development.

Most reasonable scope of the GTX for the Phase I, would be defined in the area of conteinerized shipments moving through the sea.

An important point needs to be mentioned when working various levels of stakeholders related to technology. When going live some of these stakeholders may not be ready to participate. This will occur throughout the project some stakeholders will be ready on the go live date, but others will require more time and some will be forced to move up. Most of the initial implementation phases will be a hybrid, which is a combination of old and new systems. This is very normal situation especially when you are dealing with a major change in the way business is being performed. So you need to account for both types of processing for a period of time, and this time should be for a limited timeframe. If this is not done the businesses will continue to process the old way, and will never move to the newer system. Causing extra processing and lower savings because you will need to first determine who processes the information the old way and change to a more manual process. Instead of the new more automated processing, this causes fewer savings for the businesses involved.

DETAILED ACTION PLAN AND TIMEFRAMES

To begin any project a Detailed Action Plan with detailed activities needs to be developed. The purpose behind this section is provide the initial Action Plan with timeframes. This is a project that involves many stakehokders and it is extremely important that the schedule is monitored closely for any delays in the various activities.

There are two figures following (Figure 11 and 12) that display the Detailed Action Plan with timeframes. Figure 11 is the compressed version of the Action Plan and does not show the detailed action items. It is used to show the length and sequence in which the actions should be performed. As you can see from the compressed plan many actions occur simultaneously and are not required to be performed sequentially. This is typical of any project and this is how time can be compressed in the plan. The Action Plan is set for a full year with a go live date of one year from the start date. This final date can be adjusted but it all depends on the resources used and the efficiency of staying to the schedule.

Figure 12 is the Detailed Action Plan for the development of the GTX Phase I. This is a first cut at the Action Plan and it should be discussed with the concerned parties before it is agreed upon to follow. Like all Action Plans it will be in constant change and updating to reflect certain modifications in the plan. It displays all of the activies required for the development of the GTX. As mentioned previously this also displays the full 12 month development schedule. But the schedule could be compressed if there are more resources added. The schedule is a very tight and any delays can have an impact on the final go live date causing it to be pushed further out. All schedules and activities are negotiable and

should be discussed and agreed upon before the start of the project. This Detailed Action Plan is the basis for the creation of the Project Plan that is a further breakdown of the details presented here. More specific tasks need to be defined, timeframes for completion and also resources assigned to the individual tasks. The Project Plan will be the Development Plan that will be followed, and updated by the Project Management Office (PMO) for the implementation of the GTX.

GTX Detailed Action Plan with Timeframe

ACTVITY	ASSIGN/ STATUS	DAYS	TIMEFRAME IN MONTHS											
			1	2	3	4	5	6	7	8	9	10	11	12
Georgia Trade Exchange (GTX)	DEA & EPI - Completed	1												
Approval for the GTX	DEA, EPI	2												
Project Sponsor or Lead Government Agency	DEA, USAID	2												
Program Management Office with participation from involved stakeholders	DEA	10												
Develop high level system functionality requirements/conceptual design document	DEA, EPI	15												
Project Plan for Trade Exchange System	PMO	10												
Establish GTX Task Force		10												
Conduct assessment of technology/processes for Project Scope		20												
Develop/Document Future Business Processes		25												
Legislation Policy Modification		10												
Trade Exchange System Requirements		10												
Interface requirements for legacy systems		10												
Development of the Infrastructure/system processing for the Trade Exchange		40												
Develop system interface specifications		10												
Vendor Selection		20												
Development of the Interfaces/edits		10												
Initial Development of Trade Exchange System		60												
System Testing		10												
Phase I Closeout		5												
Trade Exchange Training		10												
Preparation for Production		10												
GO LIVE!														

Total Days	300

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Figure 11: Compressed Detailed Action Plan

GTX Detailed Action Plan with Timeframe

ACTVITY	ASSIGN/ STATUS	DAYS	TIMEFRAME IN MONTHS											
			1	2	3	4	5	6	7	8	9	10	11	12
Georgia Trade Exchange (GTX)	DEA & EPI - Completed	1												
Develop presentation on the Georgia Trade Exchange concept														
Develop/publish the high level action plan for GTX														
Approval for the GTX	DEA, EPI	2												
Conduct meeting with authorities														
Agree on general systems operations and cost recovery														
Gain approval to continue with GTX from USAID and GoG														
Project Sponsor or Lead Government Agency	DEA, USAID	2												
Determine Project Sponsor or Lead Agency														
Develop/publish responsibilities of the Sponsor														
Program Management Office with participation from involved stakeholders	DEA	10												
Create a PMO from Lead Agency and various stakeholders														
Develop/maintain the project schedule														
Develop high level system functionality requirements/conceptual design document	DEA, EPI	15												
Conduct interviews with Government Agencies and other stakeholders on requirements/capability														
Determine overall functionality to be implemented (Process Scope)														
Establish initial baseline schedule of phase with functionality being addressed														
Determine/develop schedule of stakeholders participation in the initial pilot														
Determine/develop initial security requirements for Trade Exchange														
Create Project Scope for Trade Exchange Phase I														
Share Project Scope with impacted stakeholders														
Project Plan for Trade Exchange System	PMO	10												

GTX Detailed Action Plan with Timeframe

ACTVITY	ASSIGN/ STATUS	DAYS	TIMEFRAME IN MONTHS											
			1	2	3	4	5	6	7	8	9	10	11	12
Create detailed Project Plan for the Trade Exchange														
Publish the detailed Project Plan														
Establish GTX Task Force		10												
Determine representation from the various stakeholder's														
Establish and confirm Task Force members														
Conduct assessment of technology/processes for Project Scope		20												
Interview stakeholders organizations involved														
Document the As-Is processes and assessing the current business environment														
Review manual processes for possible quick hits on processes														
Align project goals and objectives of the Project Scope with the current business processes														
Assessment of the current technical infrastructure														
Review/confirm the current As-Is for stakeholder's related to Phase I functionality														
Develop/Document Future Business Processes		25												
Setup GTX Task Force meetings schedule to review/determine future To-Be business processes related to Project Scope														
Develop/document the To-Be processes both manual and automated related to Project Scope														
Receive agreement from GTX Task Force on new To-Be processes														
Determine short and long term process improvements														
Determine schedule for implementation and communications process														
Review/determine the number of documents impacted by Phase I														
Rationalize the amount of information and standardize the required data														

GTX Detailed Action Plan with Timeframe

ACTVITY	ASSIGN/ STATUS	DAYS	TIMEFRAME IN MONTHS											
			1	2	3	4	5	6	7	8	9	10	11	12
Harmonize the combination of information/documents that are redundant														
Legislation Policy Modification		10												
Determine/document legislation framework with Government Stakeholder's														
Review new/updated legislation framework with Government Stakeholder's														
Publish new/updated legislative policies														
Trade Exchange System Requirements		10												
Outline the business and functional requirements														
Outline the flow of events and processes														
Develop/Publish Requirements Document														
Interface requirements for legacy systems		10												
Discussion with pilot participants on interface requirements														
Review possible interface requirements modifications														
Publish updated interface requirements														
Discussion on schedule for implementation														
Development of the infrastructure/system processing for the Trade Exchange		40												
Review To-Be business processes involved in business rules														
Review processes with Data Exchange Authority														
Develop the automated business procedures for processing information														
Internal testing of variations in the processing of data														
Stress test system with high data volume														
Document the processes/procedures developed														
Develop system interface specifications		10												
Develop standardized interface required by all participants														

GTX Detailed Action Plan with Timeframe

ACTVITY	ASSIGN/ STATUS	DAYS	TIMEFRAME IN MONTHS											
			1	2	3	4	5	6	7	8	9	10	11	12
Design the interface, the edits performed and placement														
Review interfaces with stakeholder's for concurrence														
Vendor Selection		20												
Create/publish RFI/RFP requesting vendor participation														
Interview potential technology companies with requirements														
Submission of contract requirements by interested technology companies														
Review/select the technology company														
Initial Development of Trade Exchange System		60												
Review To-Be business processes														
Initial design/development meetings														
Develop high level system design														
Create development plan/schedule for system														
Develop the system														
Develop/deliver system training documentation														
Develop/deliver user training documentation														
Development of the Interfaces/edits		10												
Internal testing of the interfaces/edits														
Stress test system with high data volume														
Document edits functionality for the interfaces/users														
Publish interface standards to be utilized														
Implement in the production environment														
System Testing		10												
Prepare testing environment														
Functionality Testing														
System Test														
Stress and performance testing														

GTX Detailed Action Plan with Timeframe

ACTVITY	ASSIGN/ STATUS	DAYS	TIMEFRAME IN MONTHS											
			1	2	3	4	5	6	7	8	9	10	11	12
Data testing														
Phase I Closeout		5												
Update the system documentation with required information														
Review open issues for possible closeout or resolution														
Interview/document feedback from stakeholder's														
Create a Phase I Lessons Learned Document														
Meet with stakeholder's to review Lessons Learned from Phase I														
Discussion on the business plan for possible user fees														
Review/update any legislation framework														
Create Phase I Close Out Document														
Trade Exchange Training		10												
Review/update system administration training documentation														
Review/update user training documentation														
Develop training schedule														
Perform system administration training														
Perform user training														
Preparation for Production		10												
Prepare production environment														
System Configuration														
Data migration														
Pilot testing and trial runs														
GO LIVE!														

Total Days	**300**

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Figure 12: Detailed Action Plan

E. ADDITIONAL INFORMATION

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Table T-8: List of References

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