



# TRANSPORT & LOGISTICS STRATEGY: ANALYSIS & ASSESSMENT

FINAL

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# **TRANSPORT & LOGISTICS STRATEGY: ANALYSIS & ASSESSMENT**

VC TRANSPORT & LOGISTICS ANALYSIS

REGIONAL TRANSPORT & LOGISTICS ASSESSMENT

TRANSPORT & LOGISTICS ACTION PLAN

FINAL

USAID ECONOMIC PROSPERITY INITIATIVE (EPI)

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# ABSTRACT

Georgia's strategic location between the Black and Caspian Seas make it an ideal location for global trade between the Caucasus and Central Asia. In line with the Government of Georgia's plans for developing a 'transit corridor,' this Action Plan, developed by EPI's transportation and logistics team, uncovered a number of potential opportunities that could bring tangible economic impact to Georgia's economy.

The Action Plan is designed to be catalytic in nature and is built around two complementary perspectives: The Pan Caucasus-Central Asian perspective and linking logistics and transportation into the Georgian value chains. The team looked at seaports, railways, road networks, air transport, and the Poti free industrial zone to ensure these industries are market driven and focused around Georgia's assets. Given the urgency of moving ahead with the Action Plan, it is divided into two sections: 1) activities that need to be undertaken with the next six months and 2) components for longer-term activities, clustered around six thematic areas: market access and partnerships; product and service development; infrastructure development and technology; workforce enhancement; certifications and standards development; and business management improvement.

# ABBREVIATIONS

ACT	Azerbaijan Competitiveness and Trade
B2B	Business to business
CIS	Commonwealth of Independent States
CTC	Caucasus Transport Corridor
EPI	Economic Prosperity Initiative
EPZ	Export processing zone
ERP	Enterprise Resource Planning
EU	European Union
FEU	Forty-foot equivalent unit
FIZ	Free industrial zone
FTZ	Free trade zone
GAC	Georgia Agriculture Corporation
GoG	Government of Georgia
IGM	Import General Manifest
LNG	Liquefied natural gas
MT	Metric ton
ODCY	Off-dock container yards
POL	Petroleum, oil and lubricants
SCC	Supply Chain Council
SCOR	Supply Chain Operations Reference
STTA	Short-term technical assistance
TEU	Twenty-foot equivalent unit
TMS	Transportation Management Systems
TRACECA	Transport Corridor Europe, Caucasus, Central Asia
USAID	U.S. Agency for International Development
VAT	Value Added Tax
VC	Value chain

WMS Warehouse Management Systems  
WTO World Trade Organization

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# I. EXECUTIVE SUMMARY

Georgia's strategic location, its Black Sea ports, the petroleum pipelines threading through the country and its railway system connecting the former Soviet Union provide the foundations for Georgia to become an integral player in regional and global trade. The Government of Georgia has long desired to develop this 'transit corridor' and take advantage of its geographic location of being a land bridge, making it an integral part of the shortest route between Europe and Asia. Transport-related industries aided the significant growth of Georgia's transport and logistics industry. Over 20% of all FDI into Georgia in 2009 was directed into transportation-related industries, thereby demonstrating the sector's potential for expansion and its key links throughout the economy.

The Transport and Logistics Analysis conducted by EPI's transportation and logistics team uncovered a number of potential opportunities that, if seized, would bring tangible economic impact to Georgia's economy. The team also uncovered several roadblocks and potential issues that may hinder this growth, unless there is active intervention soon. The research focused on supporting the selected value chains currently being studied in the EPI program as well as how Georgia could develop its potential to become a world class transport corridor for shipments through Central Asia, Black Sea, Europe, the Middle East and beyond.

## ACTION PLAN

Georgia's logistics and transportation sector is poised for growth in the coming years. With the right strategy and resources, this growth can be expeditious and significant. Improvements in the competitiveness of some of the agriculture and non-agricultural value chains targeted by EPI will require a robust transportation and logistics sector. This is required in order to improve access to critical supply chains, raw materials and improved access to regional and global markets. The Action Plan laid out in this report is designed to be a catalyst for growth for these value chains and for the transport and logistics sector as a whole. The logistics industry also has the potential to create significant employment if Georgia develops competitive regional transportation niches and takes advantage of the complementary and ancillary business.

This Action Plan was designed under the premise that Georgia also has the potential to become the most important trade outlet for the landlocked countries of the Caucasus and Central Asia. Georgia's liberalized economy and corruption-free transit offers a smooth state-of-the-art logistics and transportation corridor to and from the Black Sea for all of these countries. This corridor will also be an alternative to other, often more difficult transit routes, mainly those through Russia, China and Iran.

The Action Plan is focused around two complementary perspectives:

1. **The Pan Caucasus-Central Asian perspective** is focused on developing Georgia as a globally significant transport corridor, and
2. **Linking Logistics and Transportation into the Georgian Value Chains**, which is a more localized perspective, focused on how logistics and transportation will support the Georgian Value Chains and the initiatives planned by EPI.

The Transport and Logistics Action Plan implementation supports these two strategic perspectives. The implementation builds the roadmap to address policy and regulatory

improvements, infrastructure development, workforce enhancement, logistics standards establishment and improvements, market access, partnerships and logistics product and services development. An additional theme that applies to all of the supply chain actors is transportation and logistics technology awareness, establishment of supply chain visibility tools and market communications.

Finally, this Action Plan is designed to be largely market driven. It can only be implemented if there is sufficient market demand for the emergent freight transport requirements in the region while supporting Georgia's domestic value chains. Many of these value chains are poised to expand internationally.

The Action Plan is a multi-year vision for the implementation of a Caucasus Transport Corridor (CTC) and logistical support for the development of critical domestic value chains. Each component of the plan in this document includes a description with:

- A detailed description of each component,
- The objective of each component, and
- The roadmap action required to deliver the component

There are immediate Action Plan components that must begin upon approval of the Action Plan. These activities will serve as the foundation on which to build lasting momentum for growth. Also included is a discussion of the longer term Action Plan components, which will leverage initial results and will support the fulfillment of the vision.

## METHODOLOGY

At the outset of the project, the team's activities revolved around the collection of current information on the business environment as well as specific current data gathered from supply chain actors in the market, statistical data provided by GoG officials, and where available, open source information from international organizations and trusted sources on the internet. These included, inter alia:

- EPI Sector Assessment Report – January 2011
- The World Bank – Trade and Transport Facilitation in the South Caucasus, November 2003
- Economist Intelligence Unit – Georgia Country Report, December 2010
- The World Bank – Logistics Performance Index, 2010
- Deloitte Viewpoint – Logistics Services in the CIS and CEE region, September 2009
- United World Ltd via USA Today – Turkey, A Global Contender, October 2010.

This study took an in-depth look at the Black Sea ports, roads, railways and air transportation. The team also held meetings with a variety of government officials and supply chain actors throughout the marketplace. They conducted assessments and interviews at facilities that provide logistics services in the country, such as dry warehouses, distribution centers and frozen storage facilities.

Transport and logistics can be pivotal and catalytic for a broad segment of the economy. They have been identified as crosscutting sectors that EPI will focus on. In order to fully understand their potential impact on the economy, it is also critical to understand their

importance to the other sectors that EPI has targeted. The team is also taking an in-depth foundational study to quantify the timing, costs, availability, quality and reliability of transportation and logistics between border posts, major cities, major towns and a sampling of smaller towns in Georgia.

The objective of this factual analysis is the design, development, and implementation of a statistically relevant methodology for baseline measurement of transport and logistics-related factors between specific transport nodes within Georgia and between relevant international destinations. This baseline will be the base measurement used to quantify growth, opportunities and alternative scenarios, while supporting the targeted EPI value chains.

## II. INTRODUCTION

Georgia is strategically situated on the original and historic Silk Road, which was the shortest route from Europe to Asia. Located at the nexus between Europe and Central Asia, Georgia connects several economic zones totaling more than 850 million people, including the European Union (EU), Commonwealth of Independent States (CIS), Turkey and the Caucasus Region. Georgia is an important link in the transit route between Europe and Central Asia for transportation of dry cargo as well as petroleum products. The country’s oil and gas pipelines, its Black Sea ports, and railway system that link with the the former Soviet Union provide the foundations for Georgia to be an integral player in global trade.

In the past decade, Georgia’s transport and logistics industry grew significantly. Georgia is poised for even greater gains as the country’s economic outlook shows upward trends. Transportation itself is one of the fastest growing industries in Georgia and offers significant opportunities for growth. In 2009 alone, more than 20% of all foreign investment going into Georgia was directed into transportation-related industries, demonstrating the sector’s potential for expansion. Figure 1 below demonstrates this by showing the growth in TEU traffic at the Poti port over the last decade. Even though 2009 was a down year due to the the aftermath of the 2008 war with Russia and the global financial crisis, final numbers for 2010 reversed this one-year downward trend as traffic just barely exceeded counts achieved for 2008.

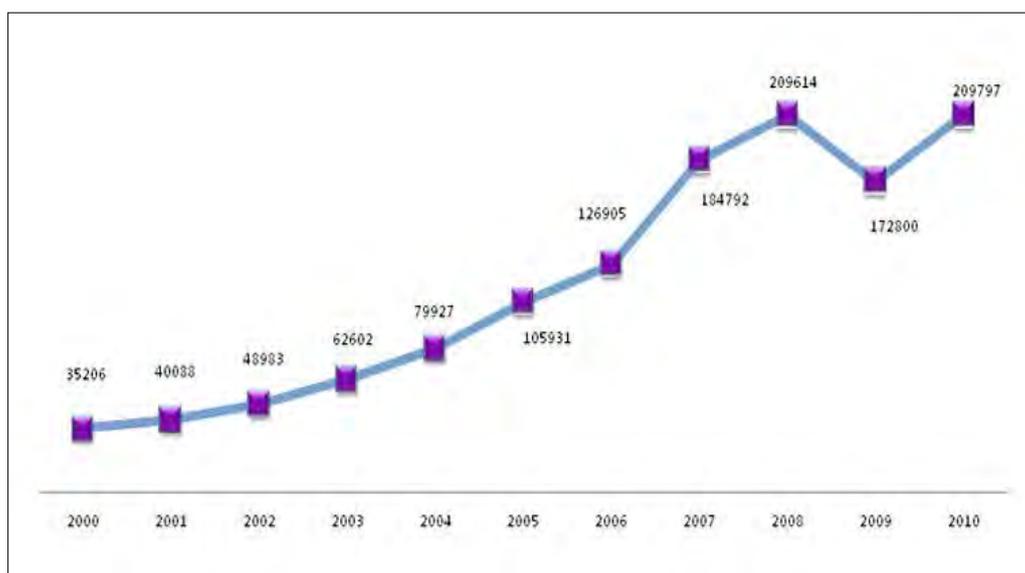


Figure 1 – Total Throughput (TEU) at Poti Port, 2000-2010<sup>1</sup>

<sup>1</sup> Source: Poti Port, LLC

As the single enabler of goods moving in and out of Georgia, the collective transport and logistics capabilities of its private sector providers as well as GoG entities must keep pace with the growth and scale of the needs of its indigenous industry, as well as those from other countries. Improved transportation and logistics performance closely relates to better economic growth, enhanced levels of foreign direct investment and overall standards of living in emerging markets like Georgia, all of which further underscore the need for Georgia to work assiduously to turn this dream into a reality.

The following maps show the global flow of transported trade. Growth rates of greater than 20% between 2000 and 2008 are displayed on the map. The thicker lines depict the larger values of exports of manufacturers. Where there is no line, transport flows did not increase by more than 20%, but it does not mean that trade between two particular regions did not take place.

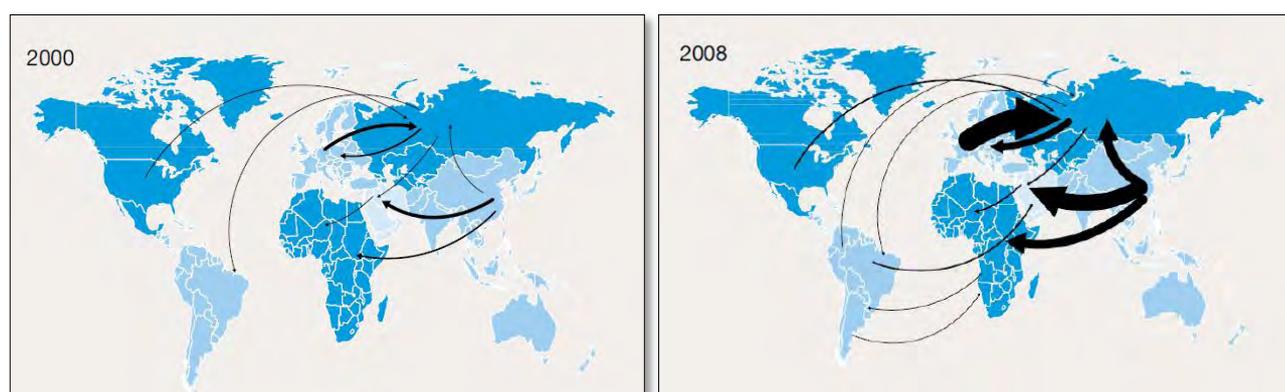


Figure 2 – Global Trade Flows Comparison: 2000/2008<sup>2</sup>

## GEORGIA IS A LOGISTICS KEY TO CENTRAL ASIA

According to the World Bank's *Logistics Performance Index: Connecting to Compete 2010*, developing countries that are landlocked are at a significant disadvantage compared to countries on the coast with direct access to the world's shipping lanes. For instance, it typically takes as much as an additional week to import goods into a landlocked developing country than into a coastal country. As a vital outlet to the Black Sea for Central Asia's landlocked countries, Georgia has a special responsibility and opportunity to help unlock these countries from their geographic positioning. Georgia can therefore play an integral role in the development of these countries. Georgia can be instrumental in enhancing regional cooperation and implementing efficient logistics systems along its transit corridor, facilitating an enhanced flow and speed of goods into Central Asia from its Black Sea ports. In this scenario, Georgia would gain both economically and diplomatically.

By exploring and implementing value-added services, supporting the enhancement of a transportation corridor, and expanding capacities at points along the corridor, EPI can support Georgia in becoming a vital corridor for the modern Silk Road. This Action Plan lays out a vision for Georgia that focuses on becoming the transportation corridor of choice between Central Asia and the Middle East and Europe while developing a transport and

<sup>2</sup> Source: WTO, International Trade Statistics 2009, PwC, <http://www.hktdc.com>.

logistics sector that effectively supports the value chains that are growing and competing in the regional and global markets.

## THE CURRENT STATE OF GEORGIAN LOGISTICS AND TRANSPORTATION

Georgia's transport and logistics systems and infrastructure are undergoing refurbishment and development at an uneven pace. Parts of the road and rail systems have been brought up to international standards yet there are sections that are woefully inadequate to deal with the traffic, causing bottlenecks that dramatically slow the system. The newly created customs terminals at the Batumi-Turkish border, Poti seaport and near Tbilisi airport are state of the art and are near the best in international standards, yet the seaports need significant investments in infrastructure and systems. The results are borne out in the 2010 Logistics Performance Index<sup>3</sup> final report, which ranks Georgia 93<sup>rd</sup> out of 155 countries surveyed. Its score of 2.61 was 51.8 % of the highest performing country, Germany, tied with Russia and Egypt and was just below Kyrgyzstan, one of the 'landlocked' Central Asian countries discussed previously. Clearly this offers Georgia an opportunity to improve its standing significantly and thereby enhance its attractiveness as a transit corridor.

However, according to many people interviewed for this report, there are many recent significant advancements in transport that have been recognized by the private sector. These include:

- Reasonable road that continue to improve;
- Police that are no longer corrupt, ceasing to stop trucks on the road to collect unofficial taxes and fees;
- Customs that dramatically improved the process for importing and exporting goods, staffed with well-qualified, very helpful people; and
- Stable internet that allows for smooth, more efficient transmission of data and money.

Georgia can act as a transit corridor/logistics hub and gateway for both imports to and exports from neighboring countries. However, the primary role for exports would be to provide an efficient transit route and seaport. The value-added in this case would primarily be storage and consolidation of the goods at the port. The development of an efficient transport corridor across Georgia for goods in transit to and from the Caucasus and Central Asia requires three basic elements:

- First, efficient connectivity to major markets, which in the case of Georgia refers to moving goods along the transit/trade corridor between Baku and Poti, and onward to regional, European and global markets;
- Second, placement of value added logistics/services at strategic points along the corridor such as repacking, kitting, labeling, invoicing, etc., which are expected to be important contributors to job growth and revenue for trade corridor activity in the future; and
- Third, efficient and transparent border procedures that allow shipments of cargo destined for neighboring countries to move without delay, not only across Georgia

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<sup>3</sup> "Connecting to Compete – Trade Logistics in the Global Economy"; The World Bank, Washington, DC. 2010

but also to intermediate points along the corridor where the goods can be stored, processed and then re-exported to neighboring/regional countries.

Figure 3 shows a high level view of the transit routes in and out of Georgia with its neighboring countries. The routes in and out of Russia, through Abkhazia and South Ossetia are currently blocked to Georgian goods and transport.



Figure 3 – Trade Corridor, Poti to Baku<sup>4</sup>

## SEAPORTS

Georgia has three major seaports, all of which are privately managed under concession/lease arrangements by foreign companies. These include:

- Poti Seaport, recently acquired by AP Moeller on April 6, 2011<sup>5</sup>, is currently under management transition from the former management Poti Ports Ltd, owned by RAKIA (Ras Al Khaimah Investment Agency) to a joint venture between APM and RAKIA. The port handles container and breakbulk cargo as well as semi-bulk and dry bulk cargoes being exported from or imported into Georgia;
- Batumi, which is managed by JSC KazTransOil, handles primarily petroleum, oil and lubricant (POL) exports as well as some containers, with petroleum products accounting for about 90% of the port's total turnover;
- Kulevi port, which is owned and operated by the Black Sea Terminal Ltd., a subsidiary of the State Oil Company of Azerbaijan, is an export port for crude and POL delivered by rail from Azerbaijan.

<sup>4</sup> Source - TRACECA

<sup>5</sup> APM Terminals acquired 80% share in Poti Seaport from RAKIA. Source: [www.potiseaport.com](http://www.potiseaport.com)



Figure 4 - Aerial View of Poti Sea Port with FIZ and Planned New Infrastructure<sup>6</sup>

Poti is an old port dating back to 1858 with 13 berths configured in a dock structure. Ten berths are designed to handle general cargo with alongside depths of 8-8.5m. One is for dry bulk vessels with 12.5m alongside depth. Two of the general cargo berths are used to handle containers but the port lacks ship-to-shore container cranes and a container storage yard. Berth productivity is low because of the lack of dedicated container cranes. However, due to a berth alongside depth of 9.75m, the vessels are small (1,200 TEU or less) so turnaround time is generally less than 24 hours. Although the depth at the berths limits the size of vessels, especially container vessels, the container traffic grew from 35,000 to 210,000 TEU over the last decade. There is a plan to develop a new container berth by the end of 2014.

In Batumi port, most of the exports are crude and petroleum products loaded at the three berths and one offshore mooring. The port also has two multi-purpose berths used for handling containers, a railway ferry terminal and a passenger terminal. The **container operations have been** concessioned to **Batumi International Container Terminal LLC**, a subsidiary of the Philippine company International Container Terminal Services Inc.

Kulevi terminal is a new port with two berths and one mooring point used for loading crude and POL shipped by rail from Azerbaijan. There are plans to develop a liquefied natural gas (LNG) facility in the port, with gas delivered by pipeline from Azerbaijan.

While Georgia has significant bulk handling facilities, its container facilities are among the smallest in the Black Sea. This will change with the new terminal, which will eventually have a 1,000 meter wharf with a depth of 14 m. The initial 500 meters of wharf and extension of the breakwater is under construction.

<sup>6</sup> Source: Poti Sea Port

**Table 1 – Black Sea Container Facilities<sup>7</sup>**

Port	Container Facilities					Traffic 2008
	Berths	Length	Draft	Area	SSGs+	
		m.	m.	ha.		000 TEU
Ambarli++	13	341	11.0-14.5	224	4	2,262
Constanza	2+5 mp	1072	10.6-14.5	66	3	1,381
Odessa	4	112	11.5-12.3	58	0	572
Illichyisk	3	1120	9.7-13.5	65	5	539
Novorossiysk	8+2 mp	1910	9.3-13.9	66	3	428
Poti	1 mp*	211	9.75		0	210
Varna	3	540	7.4-8.7	16.7	3	155
Batumi	2 mp	200	11	13.6	0	44

+ Ship-to-shore gantry cranes, mobile container cranes not listed

++ Istanbul

\* mp = multi-purpose

## RAILWAYS

Georgian Railway, which is a 100% government owned joint stock company, has a fleet of 98 locomotives and about 11,000 wagons, of which about 2/3 are operational. It is responsible for track maintenance and train operations but allows private sector users to provide wagons and to organize unit train movements. The rail network has some 1,575 kilometers of standard Russian gauge (1.52 m.) track. The main line from Samtredia to the Azerbaijan border is double track (294 km) where it connects with the Azerbaijan Railway line. The rest of the network is single track, including the branch lines to Poti and Batumi. The planned extension from Samtredia to the Turkish border will complete the double track line connection to Baku. Because of the difference in gauge, there will be an exchange of bogies at the border allowing wagons to continue through Turkey to the EU.

Georgian Railway transported 17.1 million tons of freight in 2009, of which 65% was transit goods, primarily petroleum products moving from Azerbaijan and Central Asia to the Georgian seaports of Batumi and Kulevi. It operates a unit container train daily from Poti with an average of 30 wagons, with each wagon having a capacity of 3 TEU. The capacity of the mainline is limited due to a fixed block train control and low average speeds of 60 kph for freight trains and 80 kph for passenger trains. However, improvements in train control are expected to allow these speeds to increase. The initial capacity of the line to the Turkish border is estimated to be five million tons per year with up to 15 million tons per year with additional investment in cars, locomotives and terminal expansions.

<sup>7</sup> Source: Containerization International Yearbook 2010, Fairplay Ports of the World

The connection through Azerbaijan and across the Caspian Sea by rail ferry to Central Asia is done using a combination of Georgian Rail rolling stock, private wagons and wagons from the CIS pool. The latter allows the member countries to use wagons from the pool (except for domestic movements) based on a per diem charge. Figure 5 below shows the current rail map of Georgia.

The development of efficient and in-demand rail transport requires quick passage across the land borders with neighboring countries and Central Asia and a quick transfer between land transport and ferry services crossing the Caspian. Because of the uncertainties involved in transport beyond Baku, it is necessary to plan movements close to the time of onward shipment from the port for imports. For the same reason, it is necessary to have a storage location where exports can be consolidated and stored prior to loading on the vessel.

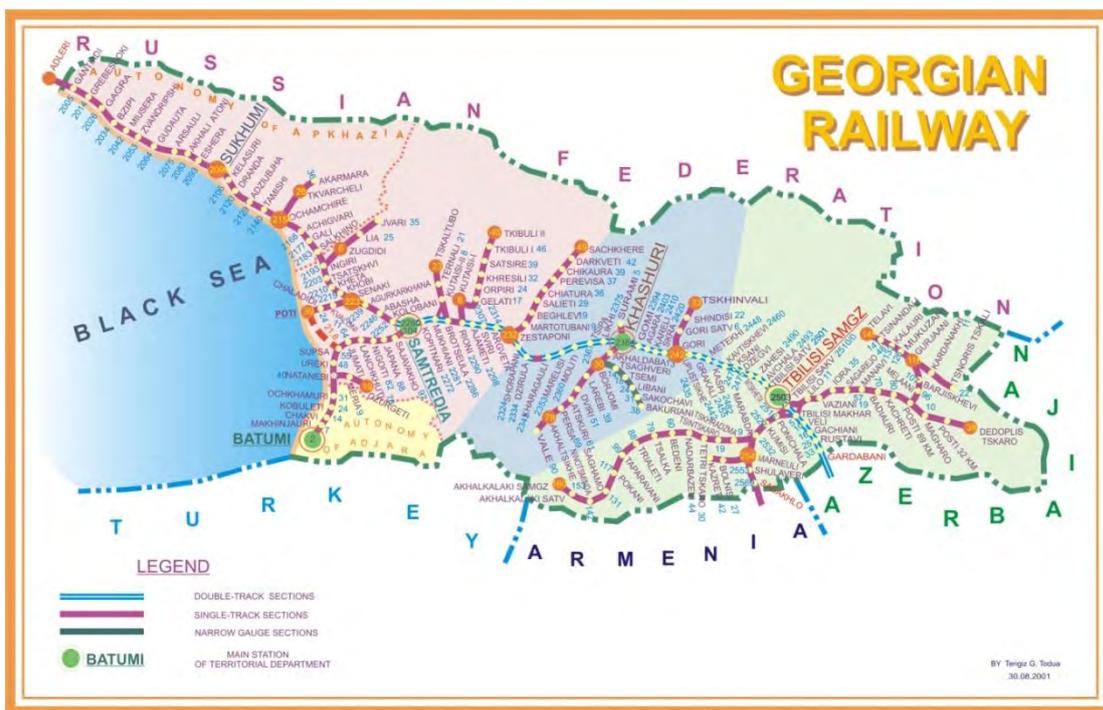


Figure 5 – Map of Georgian Railway Network<sup>8</sup>

Transport across the Caspian is unreliable because there is only one provider; Azerbaijan State Shipping Co. and their vessels do not operate to a fixed schedule. Typically there is a daily sailing to Turkmenbashi which is 306 km from Baku on a 4,000 DWT (Deadweight Tonnage) vessel having a capacity of 27 railcars. For Aktau, there is a sailing about every other day depending on demand. There is also a RoRo (Roll on – Roll off) vessel (6,000 DWT) with a capacity of 102 TEU that sails between Baku and Aktau (102 TEUs).

## ROAD TRANSPORT

<sup>8</sup> Source: Georgian Railway

The Roads Department of Georgia is responsible for the 1,495 kilometres of national highways, of which about 93% is asphalt-concrete and most are two lanes. Table 2 shows the latest public statistics from the GoG on the Roads Network in Georgia. There are no operating toll roads in Georgia and the technical specifications used in Georgia are similar to those used in the European Union. The principal road rehabilitation project involves upgrading the Batumi-Poti-Tbilisi-Azerbaijan road in sections as funding becomes available. The Roads department reported to the project team that all major road projects are to be completed in 2013. However, some stakeholders, with whom the team met openly, speculated that this goal would not be achieved. The average speed for freight transport along Georgian roads is limited by various chokepoints in the mountainous terrain as well in the sections passing through the urban areas. The current transit time between Poti and the border with Azerbaijan is about eight hours with constant speeds between 60 and 100 KPH possible in some stretches. Figure 6 is a map showing various distances to selected destinations from Tbilisi.

**Table 2: Road Network as of 2006<sup>9</sup>**

#	Road	total length km	complete pavement				pavement of gravel and crushed stone		roads of virgin soil	
			total		among then asphalt-concrete		km	%	km	%
			km	%	km	%				
1	International	1495	1432	95.8	1385	92.6	63	4	--	--

Traffic in the mountainous regions connecting the Black Sea ports of Poti and Batumi with Tbilisi can be severely slowed in the winter months. At times, the only east-west road, the M1, can be closed to traffic for several days pending snow cleanup through mountain passes.

Traffic congestion could be alleviated by building temporary passing lanes in sections of the main road. Passing lanes are typically built in secondary country roads. Their main purpose is to allow private vehicles and smaller buses to safely pass freight trucks without slowing down the flow of traffic. Building such passing lanes in Georgia would improve mobility (traffic flow) by reducing the length of traffic queues, or platoons, caused by the lack of passing opportunities. Specifically in the mountainous region in Western Georgia, numerous short uphill grades, agricultural equipment and livestock, and large trucks, lead to vehicles spending much of their time behind slower-moving traffic. Safe passing is also limited by oncoming traffic and through traffic is often times delayed by left-turning traffic in smaller towns.

Long haul domestic and regional road transport is provided using articulated trucks with a maximum gross vehicle weight of 44 tons. The truck standards are the same as those in the

<sup>9</sup> Source: [www.georoads.ge](http://www.georoads.ge), Roads Department of Georgia

EU. Most of the trucks are provided by independent operators. Fewer than 20 transport companies providing common carriage have fleets of more than ten trucks, with the largest fleet being slightly more than 75 trucks.

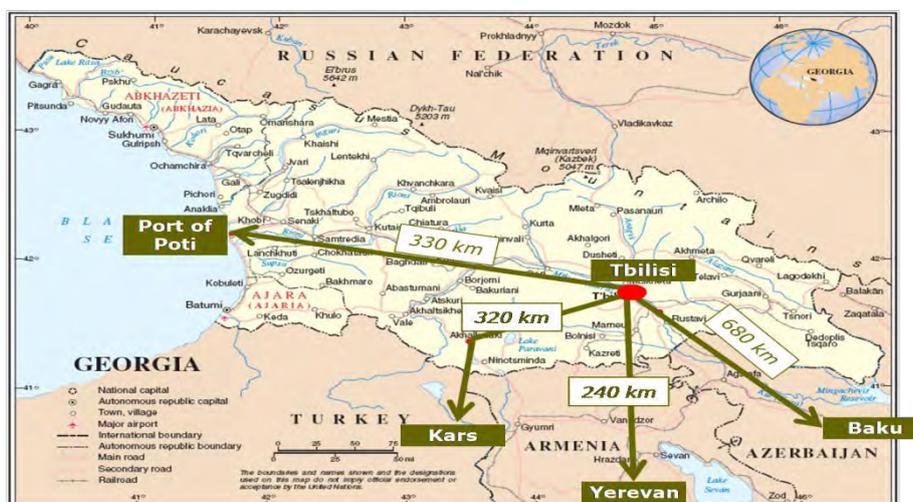


Figure 6: Average Distances to Border Points<sup>10</sup>

Currently, about 400 trucks per day cross over the border from Turkey. It is estimated that about 60% of these trucks are carrying transit cargo from Europe, mostly in Turkish trucks. The additional trucks carry import cargo destined to various points within Georgia. Exports from the region move by road or rail; to Asia, movements by road through Bandar Abbas, to Western Europe through Poti, and to Eastern Europe through Turkey.

International road transport traffic into and through Georgia has several restrictions. There are quotas on the share of Georgian trucks carrying cargo in trade with Azerbaijan and Turkey and a 10% tax on the freight rates for non-Georgian transporters carrying Georgian cargo. Another restriction is transit time to Western Europe, which is about one week. The time to transit to Central Asia is even longer, due to delays and constraints when crossing the Azerbaijan border and the Caspian Sea.

### AIR TRANSPORT

There are three international airports in Georgia: Tbilisi, Batumi and Kutaisi International Airports. Tbilisi’s new international terminal opened in February of 2007 with a 3,000 meter runway. Four national and 16 foreign airlines serve Georgia including Austrian Airlines, BMI, Lufthansa, Air Baltic and Turkish Airlines etc. Batumi’s new airport also opened in 2007 and has a runway of 2,420 meters. Kutaisi Airport has a 2,500 meter runway.

As of this assessment, reports of a potential sale of the Kutaisi Airport had been published. The reports quote the potential sale and is an effort by the GoG to boost tourism and attract foreign investment. While the intent of the sale is for the right reasons, it is advisable to

<sup>10</sup> Source: Tbilisi Logistics Centre, December 2010

structure such a transaction in a manner that it will support maintaining control and sovereignty over this type of national asset.

Passenger services to Georgia benefit from Open Skies agreements with the EU, United States, the United Kingdom, and various other countries. Although passenger traffic is limited, Tbilisi is able to attract services from 11 foreign airlines. Two of the major carriers, Turkish Airlines and Lufthansa, provide daily services. All of these services use narrow body aircraft.

Although the Tbilisi International Airport has the capacity to receive three million passengers a year, it only received 821,860 in 2010. Volumes have been increasing, however, they have not materialized as expected after the airport's terminal remodel effort. The table below demonstrates the total number of passengers for both of Georgia's main airports in terms of passengers, flights, and cargo handling.

Georgian International Airports	Passenger, Cargo, Flight	2008	2009	2010	Growth y-o-y (%)
Total	Passenger, unit	801,259	770,057	917,182	19%
	Cargo, thousand	17.0	12.2	15.3	26%
	Flight, Unit	7,170	6,489	8,844	36%
Tbilisi International Airport	Passenger, unit	713,565	702,073	821,860	17%
	Cargo, thousand	16.8	12.2	15.2	25%
	Flight, Unit	6,362	5,951	7,837	32%
Batumi International Airport	Passenger, unit	79277	67984	88101	30%
	Flight, Unit	699	538	916	70%

**Figure 7 – Georgian International Airports Statistics<sup>11</sup>**

One reason attributed to this slow growth in passenger traffic is the charges imposed by the airport's operator, Turkish company TAV Georgia, which are significantly higher than airports in the EU, or comparable airports in Turkey.

<sup>11</sup> Source: Transportation Policy Department, Ministry of Economy and Sustainable Development of Georgia

Runway Charges	TBS (01/10)	MUC (01/11)	LHR (04/11)	IAD (01/10)	IST (01/11)
Landing	3,391.75	1,501.33	2,197.50	1,438.35	2,184.35
Noise & Emissions	0.00	796.60	351.45	0.00	0.00
Terminal Nav.	0.00	743.90	549.29	0.00	61.33
<b>Terminal Charges</b>					
Infrastructure	339.17	0.00	0.00	0.00	67.26
<input checked="" type="checkbox"/> Airbridge	0.00	0.00	0.00	0.00	563.74
Aircraft Parking	0.00	0.00	0.00	0.00	0.00
<b>Airport Charges</b>	<b>3,732</b>	<b>3,042</b>	<b>3,098</b>	<b>1,439</b>	<b>2,876</b>
Average Per Pax	0.0	0.0	0.0	0.0	0.0

Figure 8 – Airport Charges Benchmark example <sup>12</sup>

These costs are typically reflected in passenger air ticket prices, and are a significant contributor to the low volumes of passenger traffic. The impact is higher in tourist traffic, since there are less expensive locations and less frequent tourism in a tight economy.

Georgian Airways (Airzena) provides some local flights between Batumi and Tbilisi and international services to Europe and elsewhere as shown below. Because of the relatively short distances, it is difficult to provide cost-effective services within the country. On the other hand, there appears to be no limit on the development of international traffic.

Georgian Airways Destinations:

- Amsterdam
- Athens
- Frankfurt
- Paris
- Vienna
- Dubai
- Kharkov
- Minsk
- Moscow
- Tehran
- Tel-Aviv

From an Air Cargo perspective, we believe Georgia has significant available capacity for freight via its main three airports. However, the lack of available infrastructure to handle this cargo will make it difficult to capitalize on this surplus capacity. Although the Tbilisi International Airport does have some facilities, both Batumi and Kutaisi have little to no parking facility, storage, or equipment to handle air freight. Substantial investments will be needed to realize usable capacity to support exports coming from growing value chains.

Air freight is carried primarily as belly cargo, even though the capacity in the narrow-bodied aircraft is limited. Airfreight services are limited to Cargolux, which has a weekly stop on its flight between Europe and Baku. It is expected that both the passenger and cargo traffic will

<sup>12</sup> Source: Airportcharges.com

continue to increase at a steady rate. The airports have sufficient capacity to serve this growth for the foreseeable future.

### FREE INDUSTRIAL ZONE AT POTI

In order for companies or countries to compete in the provision of value-added services for goods en route between the point of production and the point-of-sale, it is necessary to have a location near major trade routes. It is also important to offer a range of transport and logistics services to meet the supply chain requirements of the different types of goods moving along the trade route. A cluster of such services is generally organized by establishing a Free Trade Zone (FTZ), Export Processing Zone (EPZ), Free Industrial Zone (FIZ), or something that allows for goods to remain in transit even while receiving value added services. This zone should be located near a modal interchange, e.g. seaport, airport or border, or a major market. The competitiveness of these zones with others in the same country or region depends on several factors:

- Location relative to major transport/trade corridors,
- Availability and cost of resources including labor, utilities, and land,
- Ease of doing business, and
- Tax and regulatory regime.

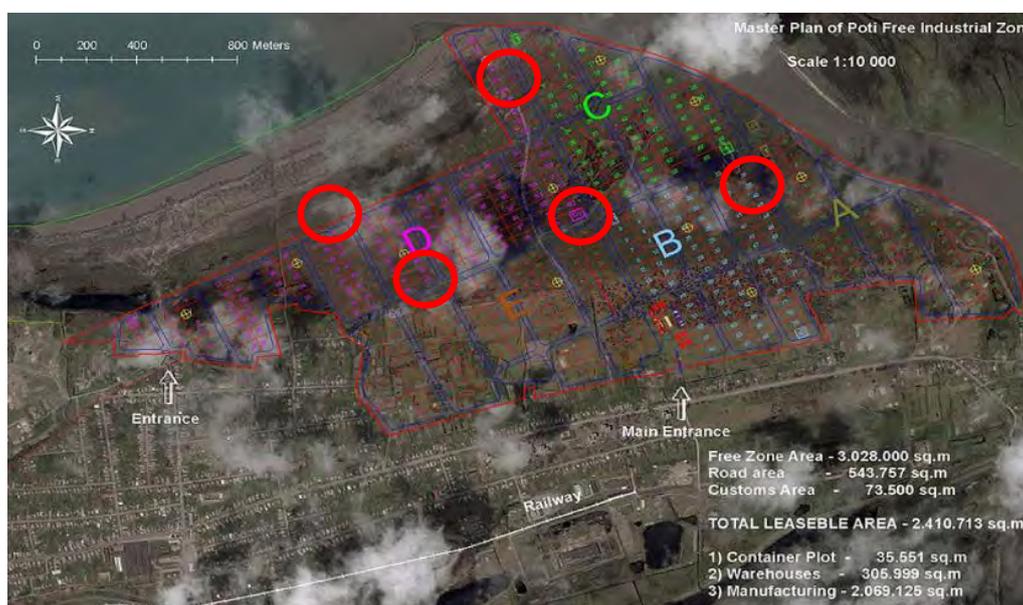


Figure 9: Aerial View of Poti Sea Port and Planned FIZ Layout<sup>13</sup>

While the success rate for these zones around the world has not been high, it is improving. The FIZ in Poti, which is shown on the map in Figure 9, is a good example of the difficulties these zones can experience the moment they are conceived. The Poti FIZ has had a slow takeoff due to external economic and political conditions, but also due to its basic value proposition. For instance, its offerings in terms of tax exemption, land and utility costs are

<sup>13</sup> Source: Poti Sea Port

relatively standard. The Zone is targeting industrial manufacturing, but its connectivity to raw materials or final markets is limited. It provides access to a pool of relatively low cost labor. However, most of the manufacturing activities are capital intensive, thereby limiting the need for low cost labor. The legislation under which the Zone operates limits the ability of tenant producers to sell their output into the domestic market. As a result, the zone has developed relatively slowly over the last three years and most investors have thus far chosen to locate outside the zone.

## III. ACTION PLAN

Georgia's logistics and transportation sector has been growing despite the economic challenges posed by the war in 2008 and the recent global financial crisis. Improvements in the competitiveness of some agricultural and non-agricultural sectors initially targeted by EPI will necessitate additional growth in transportation and logistics to improve access to secure supply chains and raw materials and improve access to regional and global markets. Transport and logistics should be considered as 'catalytic enablers' to the EPI-supported value chains. This Action Plan is designed to do just that. The logistics industry also has the potential to create significant employment opportunities as Georgia develops competitive regional transportation niches and takes advantage of complementary and ancillary business generated.

Georgia also has the potential to become the most important trade outlet for the countries of the Caucasus and Central Asia, all of which are landlocked. Georgia's liberalized economy and corruption-free transit can offer a smooth state-of-the-art logistics and transportation corridor to and from the Black Sea for all of these countries as an alternative to other, often more difficult routes, mainly through Russia, China and Iran.

The transportation and logistics Action Plan is focused around two perspectives: the Pan Caucasus-Central Asian perspective and Linking Logistics and Transportation into the Georgian Value Chains.

### **THE PAN CAUCASUS-CENTRAL ASIA PERSPECTIVE – THE CAUCASUS TRANSIT CORRIDOR (CTC)**

The Caucasus Transit Corridor (CTC) strategy will lay the foundation for creating a framework and approach for ensuring the movement of goods via a variety of transportation modes through Georgia, while attracting significant foreign and domestic investment that will complement the transit of goods through Georgia. The goal is to develop the CTC as an efficient transport corridor with close regional cooperation between Georgia, Azerbaijan, Turkey, Armenia and all of the stakeholder countries of Central Asia including Kazakhstan, Uzbekistan, Tajikistan, Kyrgyzstan and Turkmenistan.

The strategy is framed around the creation of a Corridor Management Unit which would be a single point of coordination designed to better deal with the diversity of stakeholders and the large number of government agencies that oversee different activities within a corridor. Creating a public-private partnership to address a wide range of problems including investment in infrastructure, regulation of transport and trade, facilitating the improvement in private sector transport and logistics has proven to be an effective structure for handling these issues.

In addition, there are a number of public policy, infrastructure, market access issues and action items that go into making this a robust and forward thinking strategy for development of a modern transportation and logistics sector in Georgia.

## **LINKING LOGISTICS AND TRANSPORTATION INTO THE GEORGIAN VALUE CHAINS**

Value chain linkages are a more localized perspective focused on how logistics and transportation will support Georgian value chain development and the initiatives planned by EPI to grow these markets. Improvements in the competitiveness of some of the value chains targeted by EPI will require a transportation and logistics sector that is relevant and growing. Such a transportation and logistics sector is needed in order to improve access to supply chains and raw materials, to grow these industries and to deliver improved access to regional and global markets.

This Action Plan was devised to be a catalyst for the growth of these value chains and of the transport and logistics sector. The transport and logistics industry also has the potential to create significant employment if Georgia develops competitive regional transportation niches and takes advantage of the complementary and ancillary businesses that this generates. The plan was designed with the understanding that Georgia has the potential to become the most important trade outlet for the region. This being the case, Georgia's current industry value chains should have a plan to take advantage of the expected flow of semi-finished goods and commodities that will increasingly flow through Georgia.

These two perspectives are clustered around six thematic areas:

- Market Access and Partnerships
- Product and Service Development
- Infrastructure Development and Technology
- Workforce Enhancement
- Certifications and Standards Development
- Business Management Improvement

### **ACTION PLAN COMPONENTS – NEXT STEPS**

The transportation and logistics Action Plan and implementation roadmap for EPI is laid out below and discussed around the two perspectives and six themes. Such a plan can only work and be implemented if there is sufficient market demand for the growing freight transport requirements in the region, while supporting the development of Georgia's domestic value chains, many of which are poised to expand internationally.

This Action Plan sets out a multi-year vision for the implementation of the CTC and support for domestic value chains, while outlining the next steps that need to be taken by EPI (and others, where applicable) in short-to-medium-term Action Plans.

Longer term Action Plan components to be started or carried out beyond the initial six months presented in this document are described in Section 5.10.

Short-to-medium-term Action Plan components are defined as those plans to be carried out or started within the next six months following the approval of the Action Plan. The following Action Plan components are discussed in this section:

THEME	ACTION PLAN COMPONENTS
Market Access and Partnerships	<ul style="list-style-type: none"> <li>Trade and Transit Analysis</li> <li>Competitive Analysis of CTC</li> </ul>
Product and Service Development	<ul style="list-style-type: none"> <li>Agriculture Product &amp; Food Logistics Hub Pre-feasibility Study</li> <li>Logistics Technology Service Offering</li> </ul>
Infrastructure Development and Technology	<ul style="list-style-type: none"> <li>International Trade Route Connectivity Assessment</li> <li>Current Logistics Technology Assessment</li> </ul>
Workforce Enhancement	<ul style="list-style-type: none"> <li>Logistics Technology Training Program Development</li> <li>Event: Logistics Technology Training – 1<sup>st</sup> Session</li> </ul>
Certifications and Standards Development	<ul style="list-style-type: none"> <li>Supply Chain Operations Reference Model (SCOR) Certifications and Metrics Package</li> </ul>
Business Management Improvement	<ul style="list-style-type: none"> <li>CTC Supply Chain Council (SCC) Chapter</li> </ul>

## MARKET ACCESS AND PARTNERSHIPS

### TRADE AND TRANSIT ANALYSIS

**Description:** The Trade and Transit Analysis will focus on a detailed understanding of understanding of cargo flows through the Caucasus Transit Corridor (CTC). The perception of a 60/40 split between transit and local imports is not well defined. Information available tends to be anecdotal. This masks the issue of locally produced products being imported and missed opportunities for products to be produced and exported from Georgia. The challenge of this consultancy is to develop a statistical analysis of the current cargo flows by product groups for imports and exports. The baseline cargo flows and transit data will provide the logistics and transportation information necessary to develop value chain supporting scenarios as well as growth requirements needed to support the CTC cargo flows.

**Purpose:** The objective of this component is to develop a report which analyzes import and export volumes for the top 20 product groups including origins and destination for imports and exports respectively.

**Action Plan:** Specific activities in this component include the following:

- Collect detailed statistical data on cargo flows through CTC
- Identify product groups for export, import and transit categories
- Identify top 20 product groups potentially competing with local products

- d. Identify export products groups that could benefit the most from value chain growth
- e. Identify potential product groups that could result in the identification, development and promotion of currently underdeveloped value chains
- f. Conduct time phase analyses to show trends in imports and exports showing a wide timeframe to depict VC growth or decline over time

## COMPETITIVE ANALYSIS OF CTC

**Description:** In an effort to understand the potential for development of the Caucasian Transport Corridor, it is necessary to determine both the potential cargo flows that would use the corridor and the competitive position of alternative routes to service these flows. The potential flows are to be determined through an analysis of the trade of the Caucasian and Central Asian Countries most likely to utilize the corridor. The challenge of this consultancy is to identify the values and volumes for the main product groups being imported by origin, and exported to a destination. For imports, the analysis would include the relevant domestic production that could support value chain growth in domestic markets.

**Purpose:** The objective of this component is to conduct a study analyzing the potential amount of cargo that would use the corridor and the competitive positioning of the route through Georgia compared with routes through other corridors, namely Russia and Iran.

**Action Plan:** Specific activities in this component include the following:

- a. Perform analyses of the performance characteristics of the various routes used to deliver manufactured goods to the region for the major suppliers in Asia and Europe
- b. Perform analysis of a competitive position of the Caucasus Transport Corridor
- c. Identify and examine prices and transit time for the services on the Caucasian Transport Corridor
- d. Identify and examine prices and transit times for the services on the alternative routes through Russia, Baltic States and Iran
- e. Develop a model for evaluating the competitive position of the transit route through Georgia relative to other routes serving the region in terms of time, cost and reliability
- f. Apply the model to the manufactured goods with different competitive requirements
- g. Identify opportunities for increasing the share of cargo transporting through Georgian route
- h. Identify the potential cargo flows that would use the corridor and the competitive position of alternative routes to service these flows
- i. Identify the obstacles that limits cargo flow through Georgian route
- j. Based on the route analysis, identify trades the have a significant potential to divert to the Georgian trade corridor

- k. Conduct background research on the commodities to determine the trend in growth, the relative important of time/cost/reliability in selecting supply chains, and the value added processes provided in these supply chains
- l. Prepare market studies for these trades to determine shippers, current supply chain characteristics and competitive factors needed to divert cargo

## PRODUCT AND SERVICE DEVELOPMENT

### AGRICULTURE PRODUCT & FOOD LOGISTICS HUB PRE-FEASIBILITY STUDY

**Description:** This component is intended to support the agricultural value chains directly with transportation and logistics services via a dedicated Food Logistics Hub. The challenge of the consultancy is to research and identify an optimal solution for the Agriculture Products and Food Logistics Hub (APFLH) development and related infrastructure. This Food Logistics Hub must adequately support the current volumes and service requirements as well as be flexible and scalable to accommodate the projected growth of the EPI targeted value chains. Additionally, the study will examine proposed locations, institutional structure, required infrastructure, impact and return on investment.

**Purpose:** The objective of this consultancy is to develop a pre-feasibility study which we will summarize rationale, justification, best possible locations, ownership, emerging lessons learned, best practice, characteristics and importance of a conducive policy and regulatory environment; institutional arrangements for implementation, and relationship between central, regional, and local governments in Georgia and how that might impact the establishment and operation of a Logistics Hub.

**Action Plan:** Specific activities in this component include the following:

- a. Perform analysis of Georgian agricultural sector
- b. Identify policy and regulatory opportunities and constraints that, if seized or eliminated, will contribute to Georgia's success as a logistics hub in Agricultural products and food
- c. Collaborate closely with the Agricultural sector team to identify policies, priorities and key actors in Georgian agricultural sector.
- d. Identify best locations and ownership forms for Agriculture Products and Food Logistics Hub (APFLH)
- e. Research best international practices and emerging lessons learned that might be useful for development of logistics hubs in Georgia
- f. Identify institutional arrangements and relationship between central, regional, and local governments in Georgia and how that might impact the establishment and operation of a Logistics Hub
- g. Identify any other opportunities and/or constraints that if seized or eliminated, will enhance Agriculture Products and Food Logistics Hub development in Georgia

### LOGISTICS TECHNOLOGY SERVICE OFFERING

**Description:** As the various value chains grow, there will be an increased need for expanded technology and communications. The complexity of the distribution network, both domestic and international, will require new levels of information sharing, product visibility,

and data velocity. Technologies such as EDI and XML transactions are the standard for transport and logistics information being exchanged with trading partners around the world. The infrastructure, along with the technology systems required to implement these technologies will need to be introduced in the Georgia logistics providers' community. The challenge of this consultancy is to establish a case for the adoption, investment, and value of having these capabilities in order to increase logistics productivity, promote awareness to the outside world, and increase business-to-business (B2B) ecommerce as a means to grow volume and revenue.

**Purpose:** The objective of this consultancy is to conduct a survey of existing technology service providers and assess their willingness and readiness to develop their logistics service offerings and develop a customized business model appropriate for the Georgian market.

**Action Plan:** Specific activities in this component include the following:

- Assess the Georgia IT infrastructure and identify how well it can support logistics technology solutions deployed across multiple VC actors
- Assess technology human capital readiness
- Provide training as needed
- Research financing alternatives to facilitate the needed acquisitions
- Offer procurement and implementation services for VC Transport and Logistics providers seeking technology improvements in their organizations.
- Conduct multiple awareness training sessions with logistics service providers, potential technology services providers, and value chain key players
- Collaborate closely with EPI Georgia ICT manager
- Analyze current logistics technologies like:
  - EDI/XML Transacting – for transport tracking and tracing of cargo
  - eCommerce web portals – for providing up to date order statuses
  - TMS – Transportation Planning Systems, includes transport optimization
  - WMS – Warehouse Management Systems
  - ERP – Enterprise Resource Planning systems – order management, resource planning, customer management, finance and accounting
  - Distribution Network Planning – modeling and simulation, decision making tools
  - Social Media and Crowd Sourcing – customer collaboration and communication.

## INFRASTRUCTURE DEVELOPMENT AND TECHNOLOGY

### INTERNATIONAL TRADE ROUTE CONNECTIVITY ASSESSMENT

**Description** – The Customs Department in Georgia has made remarkable progress in reforming its procedures and facilitating trade. Not only has it been reorganized, but the structure of the tariffs has been simplified. Duties have been reduced to three bands (0%, 5%, 12%) and most commodities pay no duties, only VAT. Cargo clearance can be completed within one day in the ports and rarely requires more than two days. At the airport, cargo is cleared within hours. The introduction of new Georgian Export Zone customs clearance facilities, known as the GEZI terminals, has greatly simplified the process for filing declarations, assessing the documents and releasing goods. Tracking software is being introduced to speed certification by other government agencies.

Despite all of these advances, there are a number of areas in which Customs has not yet introduced change. For example, the vessel manifest (IGM) is still filed manually. Although this does not appear to delay the clearance of cargo, it limits options for pre-arrival processing. The procedures for establishing a bonded customs warehouse remain cumbersome with excessive regulations. The process for temporary admissions remains difficult. Customs has introduced a large number of changes, but has yet to develop a training program or way to inform stakeholders of the current procedures.

In addition, there are some areas in which reforms may have been overzealous. The practice of allowing several days for transit cargo to move across the country without supervision invites malfeasance. The process of issuing customs releases for automobiles before the shipping lines have issued a delivery order will discourage shipping lines from carrying this cargo. While Customs uses the Asycuda World's selectivity module for risk management and its Risk Management Department periodically reviews the risk parameters, there is no use of risk management software or business analytics. The Gold List system allows for automatic green channel clearance with a very small random inspection (1%), but so far this has been limited to 175 companies, which account for only about one third of the shipments.<sup>14</sup>

The introduction of a Logistics hub that includes one or more free zones, in which goods can be stored duty-free and receive value-added services, will create a challenge for customs. In addition there is a need to reduce the difficulties in establishing bonded storage in general. The EPI project already includes a component that will be examining customs procedures related to bonded storage and temporary admission. In addition, efforts should be made to identify changes in procedures needed for efficient operation of a Free Zone and for expansion of the activities permitted within that zone. Among these would be storage and trading of commodities, introduction of offshore banking, assembly, kitting and warranty repairs and machine and equipment rehabilitation.

**Purpose** – Improve the ability of customs to address the vast changes required to develop the Caucasus Transport Corridor by delivering technical assistance, training or providing grants to customs

**Action Plan** – Provide the services of a customs specialist to work directly with Georgian customs to specifically address the areas that were noted above which still require change so that Georgian Customs can better facilitate the increasing flow of goods that will result as the CTC attracts more cargo.

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<sup>14</sup> Initially the Gold List counted 210 companies, but 45 companies were recently removed from the list.

## CURRENT LOGISTICS TECHNOLOGY ASSESSMENT

**Description:** The complexity of the 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, improve service reliability, increase visibility, and expand information velocity.

**Purpose:** The objective of this component is to conduct a study and report on the current availability of technology services for the logistics industry in Georgia, including research of best practices and current technology trends in the United States, EU, and other active logistics centers that would leverage the CTC as potential logistics customers. This component will also review applicability and feasibility of implementing such technologies in the Georgian logistics community.

**Action Plan:** Specific activities in this component include the following:

- a. Perform analysis of current availability of technology services for the logistics industry in Georgia
- b. Identify key players in the IT sphere of Georgia which will support the development of modern technologies for transportation and logistics sectors
- c. Research best practices and current technology trends in the United States, EU, and other active logistics centers
- d. Identify how the above mentioned practices would leverage the potential logistics customers of the Caucasus Transit Corridor
- e. Review applicability and feasibility of implementing modern technologies in the Georgian logistics community
- f. Identify policy and regulatory opportunities and constraints that, if seized or eliminated, will contribute to establishment of new technologies in Georgia
- g. Analyze how transportation and logistics technology tools affect competitiveness, increase sales and improve service reliability
- h. Identify any other opportunities and/or constraints that, if seized or eliminated, will enhance the establishment of modern technologies in the transportation and logistics sectors

## WORKFORCE ENHANCEMENT

### LOGISTICS TECHNOLOGY TRAINING PROGRAM DEVELOPMENT

**Description:** Our initial research showed a lack of availability and understanding of the importance of modern transportation and logistics technology. The challenge of this consultancy is to demonstrate modern logistics technology being used abroad and to understand how they help businesses gain competitive advantages, increase productivity, sales and ultimately increase employment. Technology capabilities must be leveraged in order to compete in the global marketplace. For this reason, it is imperative that transportation and logistics actors in Georgia adopt, socialize, and gain this essential knowledge and experience.

**Purpose:** The objective of this component is to prepare and deliver multiple awareness training sessions for logistics service providers, potential technology services providers and value chain key players.

**Action Plan:** Specific activities in this component include the following:

- Prepare multiple awareness training sessions for logistics service providers, potential technology services providers and value chain key players
- Prepare information on current logistics technology being used abroad
- These technologies should cover:
  - EDI/XML Transacting – for transport tracking and tracing of cargo
  - eCommerce web portals – for providing up to date order statuses
  - TMS – Transportation Planning Systems, includes transport optimization
  - WMS – Warehouse Management Systems
  - ERP – Enterprise Resource Planning systems – order management, resource planning, customer management, finance and accounting
  - Distribution Network Planning – modeling and simulation, decision making tools
  - Social Media and Crowd Sourcing – customer collaboration and communication
- Demonstrate how these technologies help businesses gain competitive advantages, increase productivity, sales, and ultimately employment
- Prepare case studies for trainings
- Prepare simulation exercises for participants
- Identify key players in relevant sectors
- Prepare presentations, participant list and feedback reports

## EVENT: LOGISTICS TECHNOLOGY TRAINING – 1ST SESSION

**Description:** This component will follow the Logistics Technology Training Program Development. The sessions will include awareness presentations, case studies, demonstrations, and additional resources.

**Purpose:** The objective of this component is to conduct Logistics Technology Training sessions to participants ranging from logistics service providers, potential technology services providers, and value chain key players. Multiple sessions will be planned to be conducted in Tbilisi, Poti, Batumi, and other locations to facilitate attendance and keep costs down for participants.

## CERTIFICATIONS AND STANDARDS DEVELOPMENT

### SUPPLY CHAIN OPERATIONS REFERENCE MODEL (SCOR®) CERTIFICATIONS AND METRICS PACKAGE

**Description:** Further growth in transportation and logistics sectors for Georgian companies means relations with more customers and suppliers. From this standpoint, it is important for the logistics companies to accurately manage their operations and supply chains. Effective supply chain management means delivering the right product, at the right place, in the right quantity, in the right condition, with the right documentation and at the right time. To achieve this goal, an organization should have clear understanding of current supply chain and performance conditions. Managers should develop proper strategies to meet customer expectations and respond properly to market demand growth and changes. To help close operational gaps, the adoption and institutionalization of the Supply Chain Operations Reference (SCOR®) model will support Georgian Companies to identify and compare their supply chains and related operations against their companies, industry standards and best practices. The challenge of this consultancy is to provide detailed information and technical guidance on the SCOR model in order to open new markets and business opportunities.

The SCOR® model is published and maintained by the Supply Chain Council (SCC), a global, non-profit organization whose framework, improvement methodology, training, certification and benchmarking tools help member organizations make dramatic, rapid, and sustainable improvements in supply chain performance.

The SCOR® model is the world standard for supply chain management, a model that provides a unique framework for defining and linking performance metrics, processes, best practices, and people into a unified structure.

**Purpose:** The objective of this consultancy is to develop a Process Standards and Metrics package based on the SCOR® model, and facilitate training and awareness of SCOR® Certifications for logistics providers in Georgia.

**Action Plan:** Specific activities in this component include the following:

- a. Perform analysis of the Georgian Transportation and Logistics sector operations
- b. Provide detailed information and technical guidance on the SCOR® model
- c. Develop a Process Standards and Metrics package based on the SCOR® model
- d. Identify member companies of the SCC in order to open new markets and business opportunities.
- e. Conduct training and awareness of SCOR® Certifications for logistics providers in Georgia.
- f. Develop a Process Standards and Metrics package based on the SCOR® model and conduct training and awareness of SCOR® certifications for logistics providers in Georgia.

## **BUSINESS MANAGEMENT IMPROVEMENT**

### **CTC SUPPLY CHAIN COUNCIL (SCC) CHAPTER**

**Description:** One of the key advantages of the Supply Chain Council is its vast membership base, which includes chapters in North America, Europe, Latin America, Australia, China, South East Asia, Africa, Japan, and many other countries involved in transportation, logistics services, and international trade. To develop and establish the use of standards and best practices in Georgia, it will be invaluable to establish an SCC chapter in Georgia. The Supply Chain Council is a non-profit, independent, global organization with membership

open to organizations that want to apply and succeed in supply chain management. The Supply Chain Council develops and maintains the SCOR® model through its committees comprised of individual members.

**Purpose:** The objective of this consultancy is to coordinate and prepare the creation of an SCC chapter in Georgia for the CTC. This will be accomplished by leveraging an already established Georgia Logistics Association, which has in their plans seeking an international organization such as the SCC.

**Action Plan:** Specific activities in this component include the following:

- Collaborate with the Georgia Logistics Association to align mission with SCC chapter establishment
- Attend SCC conference to expose members to benefits and resources available
- Prepare Supply Chain Council documentation
- Coordinate and establish a Supply Chain Council for the CTC

**Longer Term Action Plan Components – Achieving the Vision**

Longer term Action Plan components are defined as those plans to be carried out or started beyond the six month period following the approval of the Action Plan. As our program evolves, these components will leverage the findings and results from the previous work carried out and, as new economic growth opportunities materialize, will reinforce the fulfillment of the Vision for the CTC.

The following longer term Action Plan components are briefly discussed in this section:

THEME	ACTION PLAN COMPONENTS
Market Access and Partnerships	<ul style="list-style-type: none"> <li>• CTC Conference Planning and Management</li> <li>• Event: CTC Conference</li> </ul>
Product and Service Development	<ul style="list-style-type: none"> <li>• CTC Corridor Management</li> <li>• FIZ and Bonded Storage Competitiveness Assessment</li> <li>• Firm Business and Investment Plans Development</li> <li>• Firm Financial Needs Assessment</li> </ul>
Infrastructure Development and Technology	<ul style="list-style-type: none"> <li>• Event: Logistics Technology Training – Subsequent Sessions</li> </ul>
Workforce Enhancement	<ul style="list-style-type: none"> <li>• CTC Conference Planning and Management</li> <li>• Event: CTC Conference</li> </ul>
Certifications and Standards Development	<ul style="list-style-type: none"> <li>• CTC Corridor Management</li> <li>• FIZ and Bonded Storage Competitiveness Assessment</li> <li>• Firm Business and Investment Plans Development</li> <li>• Firm Financial Needs Assessment</li> </ul>
Business Management Improvement	<ul style="list-style-type: none"> <li>• Event: Logistics Technology Training – Subsequent Sessions</li> </ul>

## **MARKET ACCESS AND PARTNERSHIPS**

### **CTC CONFERENCE PLANNING AND MANAGEMENT**

Another component is to develop plans to hold a CTC Transport and Logistics Conference in Georgia. The event would showcase Georgia logistics providers' services, technology services and increase awareness of the CTC capabilities. The conference would also highlight regional issues, plans, and accomplishments related to the transit corridor as well as EPI value chain logistics and transportation topics. It is expected that the conference would attract participants from Georgia and potential users of the CTC Transit Corridor in the region.

#### **EVENT: CTC CONFERENCE**

The objective of this component is the physical coordination of the CTC Transport and Logistics Conference. This includes coordination of venue, marketing and promotion, communications, exhibition hall, speakers and presentation, participant registration, and other activities to be carried out during the conference.

## **INFRASTRUCTURE DEVELOPMENT TECHNOLOGY**

### **CTC CORRIDOR MANAGEMENT**

The competitiveness of the CTC will rely on fast, efficient and integrated transportation across borders and along domestic transit routes. For such an important, complex effort to succeed, there must be a carefully constructed corridor management group with a coordinating and management function and an oversight capacity that is made up of people from stakeholder countries along the corridor. The primary goal is to create an instrument that can facilitate the provision of transport services along the corridor and that has the necessary level of credibility and access to public and private sector leaders, so that its views and decisions are accepted and endorsed by the stakeholders, ensuring fulfillment of the vision of the CTC.

In this context, close coordination between stakeholders is vital to the development and success of the corridor and with it, expanded regional trade. This means that officials from Georgia, Azerbaijan and Armenia should make up the first members of the corridor management group, with potential for bringing in members from Kazakhstan and other Central Asian nations, as well.

The objective of this component is to develop a Corridor Management group that would be tasked with guiding the design, implementation and branding of the CTC.

A key component of the branding message will be to attract investment in infrastructure, technology and systems designed to enhance inter-operability along the corridor, something which will only be successful if the message of the corridor is effectively disseminated to the correct groups. By garnering the financial and problem solving support for the CTC of the regional and national stakeholders the corridor becomes more viable and politically stronger to compete against rival transit routes.

### **FIZ AND BONDED STORAGE COMPETITIVENESS ASSESSMENT**

Although there is some warehousing established within the Poti FIZ, the Zone is not well suited to becoming a center for logistics services. A logistics hub should have high traffic

volumes relative to those of industrial zones. An industrial zone should also have a relatively simple flow of raw materials and intermediate or finished products that are relatively easy to monitor from a customs perspective. On the other hand, a logistics hub usually has a large number of service providers offering a wide variety of processes including packaging, deconsolidation, kitting, assembly and transformation. This makes it difficult to relate the inputs that enter the hub with the goods exiting the hub. A greater degree of coordination between the service providers and customs is required to ensure that there is no leakage into the economy while avoiding delays or excessive documentation. At the same time it is important to allow locators within the hub to collect goods produced locally and to distribute goods to the domestic economy, something that the Poti FIZ does not allow.

In a best case scenario, a logistics hub would be located next to a gateway, such as the Poti Port and FIZ. It is necessary to have a seamless process for moving goods between the Hub and Port/FIZ in both directions. Although the FIZ is to be laid out with separate areas for manufacturing and warehousing, the traffic flow within the FIZ would be confused because both manufacturing and warehousing would use the same traffic network and be subject to the same system of regulatory controls.

The objective of this component is to explore the possibilities of how the FIZ can be exploited on behalf of the Georgian economy and support the development of the FIZ so that it can become an engine of growth in the development of the Poti Sea Port. Alternatively, this component will also explore potential locations for a logistics hub that will provide the required services for both CTC transit cargo as well as EPI targeted value chains.

## **BUSINESS AND INVESTMENT PLANS DEVELOPMENT**

Business and investment plan development includes assistance in drafting business and investment plans.

## **FIRM FINANCIAL NEEDS ASSESSMENT**

Firm financial needs assessment includes an assessment of individual company financial needs such as equipment, cash flow, facilities, infrastructure and identifying potential financing mechanisms such as leasing, debt, equity, and loans.

## **WORKFORCE ENHANCEMENT**

### **EVENT: LOGISTICS TECHNOLOGY TRAINING – SUBSEQUENT SESSIONS**

The objective of this component is to conduct additional Logistics Technology Training sessions as needed. It is expected that through the involvement of the Georgia Logistics Association and the establishment of a Georgia SCC chapter that demand for logistics technology training as well as the SCOR model will grow and necessitate ongoing sessions. Locally trained facilitators will mainly deliver these sessions in several locations.

Facilitators will conduct multiple sessions in Tbilisi, Poti, Batumi, and other locations to facilitate attendance and keep costs down for participants.

## **VC LOGISTICS GROWTH ANALYSIS**

The main goal of this component is to give direct support to the EPI targeted value chains. Each of the industries targeted by the EPI program will have different and unique requirements in terms of logistics and transportation services. For each value chain in the

EPI program, one will conduct surveys of existing transportation and storage services availability and capacity. This component will determine future needs and gap analyses for each value chain. It will also conduct research and provide transportation, material handling equipment, and storage facility options to support each value chain. This component will also leverage Logistics Simulation Model software to develop future state models, requirements, and reporting.

## VC LOGISTICS INVESTMENT ANALYSIS

VC Logistics investment analysis will leverage the results from the Action above and develop an estimate of required investments needed to increase capacity for each of the value chains. This includes transportation in all modes: road, rail, sea, and air. Costs may also include warehousing, packaging, staging, labeling, and other services to prepare product to be exported or sold in the local market. For some value chains, these costs may involve the acquisition of specialized equipment such as flat bed trucks with integrated lifts, containers, pallets, or security services in the case of high-value items. The objective of this component is to develop a clear indication of costs, investments required, and the existing gap that will need to be remedied before significant growth can be accomplished.

# ANNEX A: CONTACT DETAILS FOR VALUE CHAIN ACTORS

Organization	Position	Name	Office Number	Mobile Number	E-mail	Office Address
Ministry of Economy of Georgia	Head of Transportation Department	Gogita Gvenetadze		895960350	<a href="mailto:ggvenetadze@economy.ge">ggvenetadze@economy.ge</a>	12, Chanturia str. Tbilisi
United Association of Transport and Logistics	President	Vakhtang Mikelaishvili	995-32-648736	899183311	<a href="mailto:vakhtang.mikelaishvili@gmail.com">vakhtang.mikelaishvili@gmail.com</a>	app.9TEMK,3MR, Tbilisi, Georgia
Georgian Railway	Head of Business Analyses Department	Giorgi Cimakuridze		891190251	<a href="mailto:gtsimakuridze@railway.ge">gtsimakuridze@railway.ge</a>	15, Tamar Mepe av. Tbilisi, Georgia
Bertling Georgia	Branch Manager	Steve Pipe	995-32-443356	8(99)557570	<a href="mailto:steve.pipe@bertling.com">steve.pipe@bertling.com</a>	9, Tarkhnishvili str. Tbilisi, Georgia
Cargo Logistics Georgia Ltd	Director	Suliko Chachava	995-32-205205	8(99)303202	<a href="mailto:info@clg.ge">info@clg.ge</a>	9, Vazha pshavela str. Tbilisi, Georgia
Caucasus Trans Express	Director	Gia Danelia	995-32-375715/16/17		<a href="mailto:manager@cte.com.ge">manager@cte.com.ge</a>	10.Tashkent str. Tbilisi, Georgia
Association of Freight Forwarders of Georgia	Secretary General	Zurab Shengelia	995-32-362939/940827	8(99)930917	<a href="mailto:z.shengelia@yahoo.com">z.shengelia@yahoo.com</a>	30. Bakhtrioni str. Tbilisi, Georgia
DHL	Director	Malkhas Papelashvili	995-32-699966/344826		<a href="mailto:kate.simonishvili@dhl.com">kate.simonishvili@dhl.com</a>	105,Tsereteli av. Tbilisi, Georgia
United Transport Administration	Head of Administration	Irakli Davitadze	995-32-510601		<a href="mailto:davitadze@uta.gov.ge">davitadze@uta.gov.ge</a>	12, Al.Kazbegi av. Tbilisi, Georgia
Roads Department of the Ministry of	Head of Department	Gogi Tsereteli	995-32-510615		<a href="mailto:press@mrddi.gov.ge">press@mrddi.gov.ge</a>	12, Al.Kazbegi av. Tbilisi, Georgia

Regional Development						
McDonalds	Manager of McD Logistics	Tamaz Megrelishvili	995-32-922942	8(77)907909	<a href="mailto:info@mcdonalds.ge">info@mcdonalds.ge</a>	1, Dzmebi Kakabadzeebi str., Tbilisi
Georgian Express Trans	Commercial Director	Otar Janelidze	995-32-438303	8(99)909996	<a href="mailto:gef26@ge-trans.com">gef26@ge-trans.com</a>	Ponichala, Tbilisi
Georgian Express Trans	Director	Badri Kiknadze	995-32-438300		<a href="mailto:get26@ge-trans.com">get26@ge-trans.com</a>	Ponichala, Tbilisi
Maersk	General Director	Nikoloz Gogoli	995-32-430810		<a href="mailto:geolinmn@maersk.com">geolinmn@maersk.com</a>	6,Khetagurovi str. Tbilisi, Georgia
LGM	Director	Ramaz Sartania		857346787		
Free Industrial Zone	Business Analyses Manager	Shalva Beraia	995-293-25251	899289848	<a href="mailto:s.beraia@rakiageorgia-freezone.com">s.beraia@rakiageorgia-freezone.com</a>	47, Agmashenebeli av. Poti, Georgia
Poti Sea Port	General Director	Rony Saab	995-393-20660	895929999	<a href="mailto:ronysaab@potiseaport.com">ronysaab@potiseaport.com</a>	52, Agmashenebeli str. Poti, Georgia
Catoni (agent of Hapag-Lloyd)	Operational Office Manager	David Janashia	995-393-70446	899194414	<a href="mailto:davidl@catoni.com.ge">davidl@catoni.com.ge</a>	47,Agmashenebeli str. Poti, Georgia
Polzug	Managing Director	Korneli Korchilava	995-393-21085	899539398	<a href="mailto:korneli.korchilava@polzug.ge">korneli.korchilava@polzug.ge</a>	47, Agmashenebeli str. Poti, Georgia
MSC	Managing Director	Barish Dilek		891116060	<a href="mailto:bdilek@mscgva.ch">bdilek@mscgva.ch</a>	50, Agmashenebeli str. Poti, Georgia
ASSA TransCaucasus	General Director	Eduard Machavariani	995-393-24549	899534656	<a href="mailto:transcaucasus@consultant.com">transcaucasus@consultant.com</a>	50, Agmashenebeli str. Poti, Georgia
TAV Batumi	Airport Operations Manager	Mert Kandiyeli		877999158	<a href="mailto:mert.kandiyeli@tav.aero">mert.kandiyeli@tav.aero</a>	Batumi Airport
Lasare Ltd	Director	Sergo Lasareishvili	995-32-948125	877401185	<a href="mailto:sergo@lasare.ge">sergo@lasare.ge</a>	Tbilisi International Airport

Eurex Airlines	Operations Manager	David Gvenetadze	995-90-999293	891915575	<a href="mailto:david@eurexairline.ge">david@eurexairline.ge</a>	16, Doessi str. Tbilisi, Georgia
Lilo	Director	Levan Gagua	995-32-244898	899508787		Khakheti Highway 112 Tbilisi, Georgia
Silk Road Group S.A.	Director	Alex Topuria	995-32-253581		<a href="mailto:info@silkroadgroup.net">info@silkroadgroup.net</a>	49a, Chavchavadze av. Tbilisi, Georgia
Georgian Food Group	Director	Nugzar Chichinadze	995-32-545715	87718881	<a href="mailto:info@advesa.ge">info@advesa.ge</a>	1 Shavishvili str. Tbilisi, Georgia
Nestle	Business Development Manager	George Tukvadze	995-92-110203		<a href="mailto:george.tukvadze@ge.nestle.com">george.tukvadze@ge.nestle.com</a>	5 taras shevchenko str. Tbilisi, Georgia
Georgian International Road Carriers Association	Secretary General	Gia Tsipuria	995-32-223987		<a href="mailto:girca@girca.org">girca@girca.org</a>	12a, Kazbegi av. Tbilisi, Georgia
Bank of Georgia	Head of Trade Finance Department	Ana Kavtaradze	995-32-444497		<a href="mailto:akavtaradze@bog.ge">akavtaradze@bog.ge</a>	3 Pushkin str. Tbilisi, Georgia
Georgian Railway Transcontainer LTD	General Director	Ramaz Japaridze	995-32-198812	891199199	<a href="mailto:rjaparidze@railway.ge">rjaparidze@railway.ge</a>	15, King Tamar av. Tbilisi Georgia
Georgian Logistics Association	Secretary General	George Doborjginidze		877473332	<a href="mailto:g.doborjginidze@transcare.tc">g.doborjginidze@transcare.tc</a>	1, Bakhtrioni str. Tbilisi, Georgia
UGT	Director of Consulting	Wouter Metz	995-32-220505	877401088	<a href="mailto:metz@ugt.ge">metz@ugt.ge</a>	17a Chavchavadze av. Tbilisi, Georgia
Alta Software	Executive Director	Irakli Tushishvili	995-32-368552	899535642	<a href="mailto:i.tushishvili@altasoft.ge">i.tushishvili@altasoft.ge</a>	66, Paliashvili str. Tbilisi, Georgia
Georgian Airways	President	Tamaz Gaiashvili	995-32-999130	877257777	<a href="mailto:tomac@airzena.com">tomac@airzena.com</a>	12, Rustaveli av. Tbilisi, Georgia

The Chamber of Transport of Georgia	Chairman	Alexander Shengelia	995-32-389252	877222530	<a href="mailto:al.danelia@transcorporation.ge">al.danelia@transcorporation.ge</a>	27, Mitskevich str, Tbilisi, Georgia
Apex	Director	Vladimir Tsitskishvili	995-32-221355	899558910	<a href="mailto:lado@apex.ge">lado@apex.ge</a>	12, Melikishvili av. Tbilisi, Georgia

# ANNEX B: DELOITTE SUPPLY CHAIN MODELING METHODOLOGY

Logistics in its purest definition is the movement of materials, money, and information up and down the value chains it supports. Performance of the logistics function is relative to its ability to deliver goods to its participants in a timely fashion and at reasonable costs, while maintaining a high level of visibility, security, and safety. This is accomplished around the world by Global Fortune 500 companies and sovereign countries following tried and true methods of improvement, best practices, and leveraging enabling technologies to support improved informational capabilities, product velocity, and accountability for inventories and transport performance.

The objective of the Deloitte Supply Chain Modeling methodology is to establish a framework that will support ongoing and future improvements in the transport and logistics industry as it pertains to the selected value chains. The framework must facilitate the development of performance baselines for the value chains it supports; i.e., agricultural and non-agricultural.

The Methodology for collection and analysis of cost, time, and service reliability of value chains involves the development of a model that will quantify cycle times, costs, and reliability at the present time and in the future. The ability to model future alternatives and scenarios will facilitate the decision making of investors and the GoG.

The figure below outlines at a high level the methodology and framework that has been established for the study. A modeling tool will be used to quickly assess a baseline of the current logistics environment for the various value chains. This baseline model will serve as a comparison basis for potential improvements, investments, and efforts to improve the performance of the value chains. The objective of the model is to aid in the decision making and establish an informed business case for each improvement option.

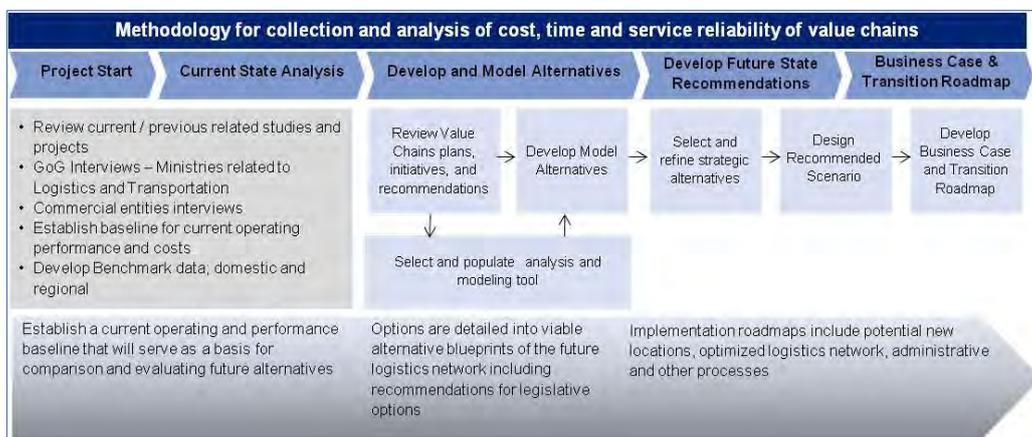


Figure 1 – Deloitte Supply Chain Modeling Methodology

The VC Transport and Logistics Analyses are being conducted following the framework prescribed in the modeling methodology. At the outset of the efforts, the project team's activities revolved around the collection of current information on the environment as well as specific current data gathered from supply chain actors in the market and statistical data provided by GoG.

# **ANNEX C: ADDENDUM REPORT ON PORT COMPETITIVENESS**

The addendum report on port competitiveness by Yvan Caceres follows.

# DATA

Author's Name: Yvan Caceres

Component Name: Non-Agriculture Sector Component

Practice Area: Transport and Logistics

Key Words: freight, road, air, trucking, Poti, Batumi, logistics, port, competitiveness

# ABSTRACT

This brief analysis was conducted at the request of the Office of the Prime Minister. The purpose was to consider the advisability of introduction of port tariffs at Poti and possibly Batumi. This analysis was conducted as part of a broader set of analyses to underpin a strategy to realize Georgia's longstanding dream of becoming "the" transportation corridor of preference between Western China and the Black Sea.

# ABBREVIATIONS

BOL	Bill of Lading
CCD	Customs Cargo Declaration
CMR	Convention Merchandise Routing
SED	Shipment Export Declaration
VAT	Value Added Tax

# I. EXECUTIVE SUMMARY

This brief analysis was conducted at the request of the Office of the Prime Minister. The purpose was to consider the advisability of introduction of port tariffs at Poti and possibly Batumi. This analysis was conducted as part of a broader set of analyses to underpin a strategy to realize Georgia's longstanding dream of becoming "the" transportation corridor of preference between Western China and the Black Sea.

From a competitiveness perspective, the analysis of port tariffs must not be considered alone due to a variety of cost and time factors affecting port advantage or attractiveness. On the contrary, the competitiveness of the entire route or routes being leveraged by particular ports must be the driving factor in making any determinations on the introduction of or changes to any single factor affecting the overall competitiveness of the trade route that Georgia wishes to expand.

## Findings:

- Competition between Georgian ports and other Black Sea ports is limited since inland transport costs determine which route is more advantageous.
- Additional taxes on port-related transport services will reduce Georgia's competitiveness as they reduce the efficiency of the delivery system since no productivity enhancing services or infrastructure is being provided in return.
- Existing constraints to Georgia's competitive position vis-à-vis other routes must be reviewed and eliminated.
- There is little competition between Poti and Batumi, but they have created a contestable market for container handling.
- The degree of contestability is likely to be reduced with the construction of Poti's new container terminal, which will provide services that Batumi cannot emulate.
- Government is not involved in the development or operation of the ports and does not collect any fees from port activities other than the normal VAT and duties collected from the cargo and lease payments and taxes collected from the operating company.
- The new terminals will bring significant efficiencies, but the impact on freight rates will be small.

## Recommendations:

- Additional taxes on port-related transport services are inadvisable because they will reduce Georgia's competitiveness as they reduce the efficiency of the delivery system since no productivity enhancing services or infrastructure is being provided in return.
- Existing constraints to Georgia's competitive position vis-à-vis other routes must be reviewed and eliminated if Georgia wishes to realize its longstanding dream of becoming the key transportation corridor between Western China and the Black Sea.

## II. METHODOLOGY

The factors considered in this document include the following:

- Port tariffs – port handling costs and fees
- Non-tariff trade costs, including taxes and licenses
- Transport costs beyond the port – road and rail transport

For the purpose of establishing competitiveness, the Black Sea routes that most likely compete for transit cargo are:

- Georgia – Ports of Poti and Batumi
- Turkey – Ports of Mersin and Istanbul
- Russia – Port of Novorossiysk
- Ukraine – Port of Odessa

Transit is defined as cargo being either imported or exported from these countries, or cargo transiting from points in the east of the Caspian Sea to Europe and beyond or from the west transiting to Kazakhstan and beyond. The four main Black Sea routes that may be considered as competing with Georgian ports are shown in Figure 1 below.



Figure 1 – Black Sea Routes competing with GTC

- The **GTC Route** transits through Georgia and through the ports in Poti and Batumi. Eastern transit points include Baku in Azerbaijan, the Caspian Sea, and Aktau in Kazakhstan
- The **Russia Route** transits through the port of Novorossiysk and joins the Russian rail to head east into Kazakhstan and points beyond

- The **Ukraine Route** transits through the port of Odessa and joins the Russian rail further north than the Russia Route
- The **Turkey Routes** include ports in Istanbul, Samsun, and Mersin. Cargo transits by road into and out of Georgia or joins the rail. Other points include Baku, the Caspian Sea, and Kazakhstan.

### III. PORT TARIFFS

Port Tariffs are often established by considering the charges of comparable ports even though these ports are not actually competitors. This form of comparison has always been difficult because the complex structure of setting tariffs makes it a challenge to compute comparable charges. For the purpose of this document, the comparison is being made using average costs.

Figure 2 below represents the minimum port costs associated with the handling of one 40' container. These are general, approximate costs; typically, there are a number of accessorial charges assessed for a variety of reasons. For the basis of this comparison, the total costs show that Georgian port costs are competitive and, in the case of Batumi, lower than the average.

NDN/GTC Port Costs Comparison							
40' FCL	Poti	Batumi	Istanbul (Izmit)	Istanbul (Gemlik)	Mersin	Novorossiysk	Odessa
Handling	\$105.00	\$70.00	\$165.00	\$150.00	\$165.00	\$165.00	\$155.00
Lift on/off	\$25.00						
Yard Transport	\$25.00	\$35.00			\$55.00		
<b>Total</b>	<b>\$155.00</b>	<b>\$105.00</b>	<b>\$165.00</b>	<b>\$150.00</b>	<b>\$220.00</b>	<b>\$165.00</b>	<b>\$155.00</b>

**Figure 2 – Black Sea Port Handling Costs Comparison**

Total handling figures include fee plus loading and unloading costs.

This comparison has become impossible with the advent of private cargo handling operations at ports in which tariffs are negotiated directly between cargo handling operations and shipping lines. The only tariffs that continue to be controlled by the government, and are thus available in the public domain, are those levied directly by the port and even these have diminished in importance in recent years.

One disadvantage faced by Poti and Batumi is the relatively shallow depth at the berth. This results in limited ship sizes that can use the port. This also translates into higher costs because shipping lines cannot take advantage of economies of scale provided by larger ships.

## IV. NON TARIFF TRADE COSTS – TAXES AND LICENSES

Non-Tariff Trade Barriers include licenses, quotas, standards, subsidies, and taxes (including VAT), among others.

	Georgia	Ukraine	Turkey	Russia	Region Average	OECD Average
<b>Documents for Export (# of documents)</b>	4	6	7	8	6.4	4.4
<b>Time Required for Export (days)</b>	10	31	14	36	26.7	10.9
<b>Cost to Export (USD per container)</b>	\$1,329	\$1,560	\$990	\$1,850	\$1,652	\$1,059
<b>Documents for Import (# of documents)</b>	4	8	8	13	7.6	4.9
<b>Time Required for Import (days)</b>	13	36	15	36	28.1	11.4
<b>Cost to Import (USD per container)</b>	\$1,316	\$1,580	\$1,063	\$1,850	\$1,845	\$1,106

**Figure 3 – Trade Environment Figures from World Bank, Doing Business**

The World Bank's Doing Business Report lists the following documents that may be required in the region: bill of lading (BOL), cargo release order, commercial invoice, contract, convention merchandise routing (CMR), customs cargo declaration (CCD), customs import declaration, inspection report, packing list, payment documents, shipment export declaration (SED), terminal handling receipts, customs export declarations, certificate of origin, and other country specific documents as required.

Georgia has made good progress in reducing non-trade barriers, as the table above shows. Part of the Law on Economic Freedom introduced in 2010 prohibits the introduction of non-tariff barriers that could be regarded as stricter than those already outlined in international agreements. Although the import and export costs for Georgia are on average lower than the CIS Region, they are still much higher than OECD countries, which include Europe, US, and Canada. For Georgia to be truly competitive these costs must align more closely to those of the OECD and Turkey, as an example.

Issues currently not resolved or clarified through our research include:

- VAT Taxes – VAT charges are being levied for product and transportation services at delivery. However, VAT is also being levied for return of empty containers; penalties

have been assessed for not paying this VAT on empty containers, which is now considered a separate, payable service.

- Customs clearance process and rules are not clear. Sometimes the shipping company may be double taxed; once for the shipment (i.e., product and delivery), and a second time for the transportation service.
- New Tax Policy – required Master BOL, which does not include freight forwarder, and therefore, taxes are assessed for international shipments.
- New Tax Policy – the new tax code now applies VAT to many new services that had otherwise not been taxed. For instance, the 18% VAT is now applied to all shipments with foreign owned containers. This tax is not only applied to transit but also to most services related to shipping such as THC, demurrage, other handling charges, etc.

## V. CONCLUSION

- Competition between Georgian ports and the other ports in the Black Sea is limited since the inland transport costs decide which route is more advantageous. For certain trades, Novorossiysk may be on a competing route.
- There are roadblocks that must be reviewed and dealt with before a true competitive environment is established in Georgia.
- There is very little competition between Poti and Batumi, but they have created a contestable market for container handling.
- The degree of contestability is likely to be greatly reduced with the construction of the new container terminal in Poti which will provide services that Batumi cannot emulate.
- The government is not involved in the development or operation of the ports and does not collect any fees from port activities other than the normal VAT and duties collected from the cargo and lease payments and taxes collected from the operating company.
- The Government of Georgia does not appear to be in a position to collect port tariffs, as it does not provide services or infrastructure. Additional taxes on transport services are inadvisable as these reduce the efficiency of the delivery system.
- The new terminals will bring significant efficiencies but the impact on freight rates will be small.

# **ANNEX D: PRESENTATION OF TRANSPORT & LOGISTICS ACTION PLAN**

The following pages includes a slidedeck of the presentation on EPI's transport & logistics action plan.

## Transport and Logistics Action Plan

USAID Economic Prosperity Initiative (EPI)

27 April 2011



## Contents

- Executive Summary
- Georgia is a Logistics Key to Central Asia
- Current State of Georgian Logistics and Transportation
  - Seaports, Railways, Road Transport, Air, Poti FIZ
- Action Plan Focus
- Action Plan Components – Next Steps
- Action Plan Components – Achieving the Vision
- Conclusion

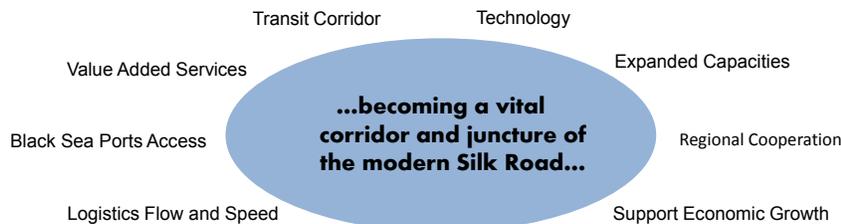
## Executive Summary

- Analysis uncovered a number of potential opportunities with tangible economic impact to Georgia’s economy
- Also uncovered several roadblocks and potential issues to growth without immediate interaction
- Action plan focused around two complementary perspectives:
  - The Pan Caucasus-Central Asian perspective
  - Linking Logistics and Transportation into the Georgian Value Chains



## Georgia Is Logistics Key to Central Asia

- Situation in the historic “Silk Road” – shortest route between Europe and Central Asia
- Transport and Logistics growing significantly in last 10 years – Poti Seaport increased annual TEU traffic from 35K to 210K per year
- 20.2% of all Foreign investment directed to Transport and Logistics
- Vital outlet to the Black Sea for Central Asia’s landlocked countries



## Current State of Georgian Transport & Logistics

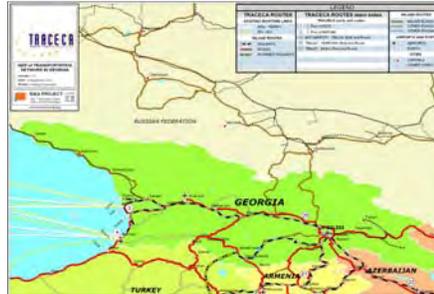
Private sector recognizes:

- Roads are reasonably good and getting better
- Corruption has been eliminated, allowing traffic flow
- Customs has dramatically improved the import/export processes
- Internet access is widely available, allowing for smooth, more efficient transmission of data and money

Efficient Transit Corridor:

- Efficient Markets Connectivity
- Value Added Services
- Transparent Border Procedures

Transit from Europe and the West, onwards to Baku and the Central Asian Region.



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## Georgia's Seaports Have Limited Depth

Container traffic grew from 35K to 210K TEU's per year since 2000

- Poti Seaport, recently acquired by AP Moeller on April 6, 2011, is currently under management transition from the former management Poti Ports Ltd, owned by RAKIA (Ras Al Khaimah Investment Agency) to a joint venture between APM and RAKIA
- Batumi, which is managed by JSC KazTransOil, handles primarily crude and petroleum, oil and lubricants (POL) exports as well as some containers, with petroleum products accounting for about 90% of the port's total turnover
- Kuhlevi port, which is owned and operated by the Black Sea Terminal Ltd., a subsidiary of the State Oil Company of Azerbaijan, is an export port for crude and POL delivered by rail from Azerbaijan

Port	Container Facilities		
	Berths	Length	Draft
		m.	m.
Poti	1 mp	211	9.75
Batumi	2 mp	200	11

The draft limit for the Ports in Poti and Batumi allow ships up to 1200 TEU's

- Missed Economies of Scale
- Hinder future growth
- Multi-Purpose Cranes need replacement if port grows

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## Modern and Reliable Railway Transport Across Georgia Hits Bottleneck in Baku

Georgian Railways transported 17.1M tons of freight in 2009 - 65% was transit goods, primarily petroleum products moving from Azerbaijan and Central Asia to seaports of Batumi and Kulevi.

The capacity of the mainline is limited due to a fixed block train control and low average speeds of 60 kph for freight and 80 kph for passenger trains. Improvements in train control are expected to allow these speeds to increase.

The initial capacity of the line to the Turkish border is estimated to be 5 million tons per year with up to 15 million tons per year possible with additional investment in cars, locomotives and terminal expansions.



Only one provider for Caspian transport – Azerbaijan State Shipping Co. and their vessels do not operate to a fixed schedule  
Current Vessel Capacity from Baku to Aktau: 102 TEU

## Road Transport in Georgia Is Improving

The principal road rehabilitation project involves upgrading the Batumi-Poti-Tbilisi-Azerbaijan road in sections as funding becomes available. The Roads department reported to the project team that all major road projects are to be completed in 2013; however, some stakeholders with whom the team met openly speculated that this goal will not be achieved.

Road Transport is limited by:

- Chokepoints along mountains and small towns
- Lack of passing lanes
- Delays at Azerbaijan border and in Baku, Caspian crossing

About 400 trucks a day cross the border from Turkey  
About 60% of these trucks are carrying transit cargo from Europe  
Mostly in Turkish trucks

## High airport charges and limited ground cargo capacity impacting Air Transport in Georgia

Tbilisi International Airport has a capacity to receive 3 million passengers a year. In 2010 it only received 821,860. Volumes have been increasing, but not as expected since remodel in 2007.

Slow growth is being attributed to airport charges to airlines by TAV, the Tbilisi airport operator.

These charges appear significantly higher than airports in the EU, or comparable airports in Turkey.

Airport charges are passed on to passengers, resulting in higher air ticket prices.

Runway Charges	TBS (01/10)	MUC (01/11)	LHR (04/11)	IAD (01/10)	IST (01/11)
Landing	3,391.75	1,501.33	2,197.50	1,438.35	2,184.35
Noise & Emissions	0.00	796.60	351.45	0.00	0.00
Terminal Nav.	0.00	743.90	549.29	0.00	61.33
<b>Terminal Charges</b>					
Infrastructure	339.17	0.00	0.00	0.00	67.26
<input checked="" type="checkbox"/> Airbridge	0.00	0.00	0.00	0.00	563.74
Aircraft Parking	0.00	0.00	0.00	0.00	0.00
<b>Airport Charges</b>	<b>3,732</b>	<b>3,042</b>	<b>3,098</b>	<b>1,439</b>	<b>2,876</b>
Average Per Pax	0.0	0.0	0.0	0.0	0.0

### Air Cargo

Lack of available infrastructure to handle cargo will make it difficult to capitalize on the existing surplus capacity.

- Although the Tbilisi International Airport does have some facilities
- Batumi and Kutaisi have little to no parking facility, storage, or equipment to handle air freight
- Substantial investments will be needed to realize usable capacity to support exports coming from growing value chains.

9

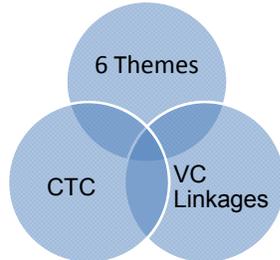
## Free Industrial Zone at Poti not successful as expected

Typically, a FIZ should be located near a modal interchange, e.g. seaport, airport or border, or a major market. The competitiveness of these zones with others in the same country or region depends on several factors:

- Location Relative to major transport and trade corridors
  - Availability and cost of resources including labor, utilities, and land
  - Ease of doing business
  - Tax and regulatory regime
- The Poti FIZ has had a slow takeoff due to external economic and political conditions, but also due to its basic value proposition:
- Industrial Manufacturing being targeted although it lacks raw materials connectivity and immediate access to final market
  - Provides access to low cost labor pool, but most industrial manufacturing is capital intensive
  - Legislation limits sale of FIZ produced goods to be sold into the local market, this restriction makes investors to locate outside the zone

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## Transport & Logistics Action Plan Is Focused on Two Perspectives and Six Thematic Areas



Market Access and Partnerships  
Product and Service Development  
Infrastructure Development and Technology  
Workforce Enhancement  
Certifications and Standards Development  
Business Management Improvement

### Caucasus Transit Corridor

The Caucasus Transit Corridor (CTC) Action Plan will lay the foundation for creating a framework and approach for ensuring the movement of goods through Georgia, while attracting significant foreign and domestic investment. The goal is to develop the CTC as an efficient transport corridor with close regional cooperation between Georgia, CIS countries, and Europe and beyond.

### Value Chain Linkages

Value Chain linkages are a more localized perspective focused on how logistics and transportation will support Georgian value chain development and the initiatives planned by EPI to grow these markets. This Action Plan was devised to be a catalyst for the growth of these value chains and of the transport and logistics sector

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## Action Plan Components – Next Steps

Theme	Action Plan Components
<b>Market Access and Partnerships</b>	<ul style="list-style-type: none"> <li>Trade and Transit Analysis</li> <li>Competitive Analysis of CTC</li> </ul>
<b>Product and Service Development</b>	<ul style="list-style-type: none"> <li>Agriculture Product &amp; Food Logistics Hub Pre-feasibility Study</li> <li>Logistics Technology Service Offering</li> </ul>
<b>Infrastructure Development and Technology</b>	<ul style="list-style-type: none"> <li>International Trade Route Connectivity Assessment</li> <li>Current Logistics Technology Assessment</li> </ul>
<b>Workforce Enhancement</b>	<ul style="list-style-type: none"> <li>Logistics Technology Training Program Development</li> <li>Event: Logistics Technology Training – 1<sup>st</sup> Session</li> </ul>
<b>Certifications and Standards Development</b>	<ul style="list-style-type: none"> <li>Supply Chain Operations Reference Model (SCOR) Certifications and Metrics Package</li> </ul>
<b>Business Management Improvement</b>	<ul style="list-style-type: none"> <li>CTC Supply Chain Council (SCC) Chapter</li> </ul>

Short-to-medium-term Action Plan components are defined as those plans to be carried out or started within the next six months following the approval of the Action Plan

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## Longer Term Action Plan Components – Achieving the Vision

Theme	Action Plan Components
<b>Market Access and Partnerships</b>	<ul style="list-style-type: none"> <li>• CTC Conference Planning and Management</li> <li>• Event: CTC Conference</li> <li>• Air Transport Competitiveness Assessment</li> </ul>
<b>Infrastructure Development and Technology</b>	<ul style="list-style-type: none"> <li>• CTC Corridor Management</li> <li>• FIZ and Bonded Storage Competitiveness Assessment</li> <li>• Firm Business and Investment Plans Development</li> <li>• Firm Financial Needs Assessment</li> </ul>
<b>Workforce Enhancement</b>	<ul style="list-style-type: none"> <li>• Event: Logistics Technology Training – Subsequent Sessions</li> </ul>

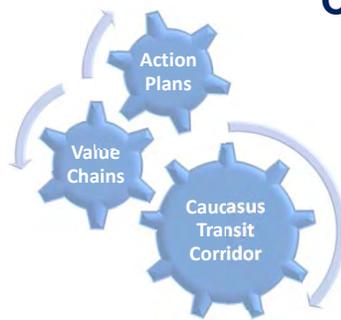
Two additional components related to Value Chain Linkages and Partnerships include the following:

- VC Logistics Growth Analysis
- VC Logistics Investment Analysis

Longer term Action Plan components are defined as those plans to be carried out or started beyond the six months period following the approval of the Action Plan

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## Conclusion



- We believe this Action Plan to be a launching pad for growth in the Transport and Logistics sector. To be effective, this plan must be flexible, scalable, and compelling.
- The Value Chains targeted by EPI will require a transportation and logistics sector that is relevant and growing in order to improve access to supply chains and raw materials
- Georgia has the potential to become the key enabler of the Caucasus Transit Corridor, lead the region in the management of the corridor, and a catalyst for trade legislation change

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