

ROMANIA WEST REGION COMPETITIVENESS ENHANCEMENT AND SMART SPECIALIZATION

*Trade and Transport Facilitation and Logistics
Infrastructure*

Key challenges and opportunities

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Intermediate Report

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Executive Summary

Romania has made some progress in trade facilitation and logistics in recent years, a fact which is reflected in international rankings. The performance of international supply chains is measured using the World Bank's 2012 *Logistics Performance Index*¹ (LPI). According to the newly released Logistics Performance index, Romania moved to 54th position in 2012, representing 63.8% percentage of the highest performer, which compares to 59th position or 59.1% in the previous LPI (2010) and 51st position or 59.8% in LPI 2007. Despite this progress, trade facilitation and logistics remains a key challenge of the trade competitiveness agenda for Romania, which finds itself in the group of partial performers when it comes to logistics.

Effective logistics is of paramount importance for Romania's competitiveness, in order to respond to deadlines and control costs with regards to exports as well as imports to and from the EU. A high level of logistics is also essential to support the performance of companies carrying out operations on domestic markets, such as transport or distribution. Finally, the development of efficient services provision and effective infrastructures will allow Romania to play a central role in the development of direct exchanges (and transit) with the other countries in Central and Eastern Europe.

Yet, understanding domestic logistics in upper middle-income countries in particular is becoming increasingly important as they endeavor to move up the value chains. However, unless these efforts are inclusive and addressed at the national level - where policies are implemented, they may have the opposite result of increasing disparities between the core and leading/lagging areas and thus minimize the opportunities to improve performance.

As a result, the importance of having a national strategy for transport and logistics which will identify priorities for investments in infrastructure and logistics services reforms is essential for formulating a regional strategy for the West Region. Many of the issues identified during interviews with industry and logistics companies in the West Region pointed to policies that need to be addressed at the national level in order to be effective and therefore the focus of this report is on national policies which will in turn affect the performance of the West Region.

Potential for a regional trade and logistics hub for Central and Eastern Europe

Romania has the potential to position itself as a strategic regional trade and logistics hub for Central and Eastern Europe. It is geographically and economically well located as it represents the main access gate between Asia and Europe, and benefits from transportation on sea, river, rail and road. Provided that a long distance reliable railway connection linking the Port of Constanta with the West Region and Europe can be established, Romania can take advantage of the economic growth in Eastern Europe and the regional production networks established between Eastern and Western Europe.

¹ World Bank (2012). "Connecting to Compete. Trade Logistics in the Global Economy" Washington DC.

In addition to efficient ports and railway connections, becoming a regional trade and logistics hub will require a competitive logistics along the whole supply chain. Improving supply chain efficiency – by improving infrastructure and the logistics business environment, and by facilitating international trade, border administration - generates scale economies, raises the quality of service to EU levels, reduces cost, and improves productivity.

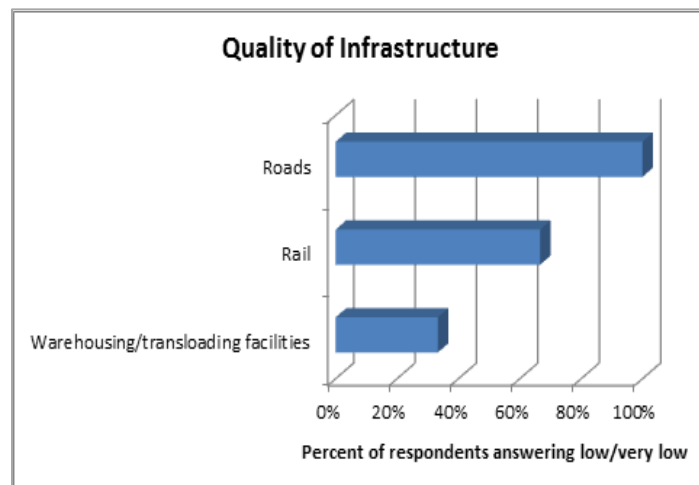
Logistics sector in Romania at crossroad

The government recognizes the need for efficient transport and trade logistics for realizing the country’s potential as a regional logistics hub, which will also enhance intraregional exports.

Effective logistics is of paramount importance for Romania’s competitiveness, in order to respond to deadlines and control costs with regards to exports as well as imports to and from the EU. When comparing Europe and Central Asia with other regions and the upper middle income countries group along the LPI’s six components of logistics performance, a number of lagging areas stand out. Romania’s logistics performance is average, and therefore insufficient in relation to international competition; it is most constrained by the quality of infrastructure, customs, and the performance of quality of logistics services.

The Romanian logistics sector is at a crossroad. Being strategically located at the intersection of numerous roads connecting Western and Eastern Europe, and North with the South and also on the transit axes between Europe and Asia, highlights the importance of a well developed infrastructure for Romania. Yet, the Romanian transport infrastructure is not well seen by the transport operators and data from the LPI domestic component validates these findings: transportation infrastructure is poor, underinvested, fragmented, and varies in terms of quality (Figure 9).

Figure 1: Romania’s transportation infrastructure varies in terms of quality



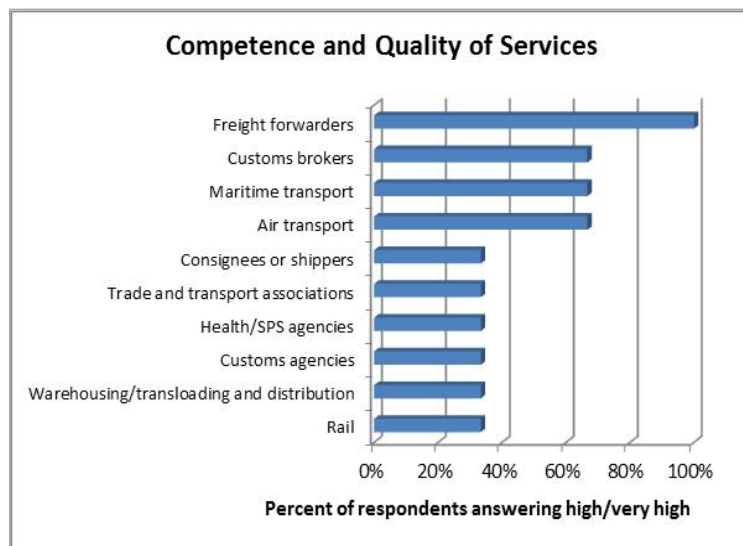
Source: LPI 2012, WB.

Therefore, Romania’s physical infrastructure requires further investment to reach EU levels of development. Such improvements would benefit the economy overall by connecting

rural areas to larger markets, improving productivity, reducing transport costs, and generally encouraging development and more economic activity. A comprehensive and coordinated plan to bring Romanian infrastructure to EU levels should be high on the list of priorities for policymakers. The low level of development presents a significant opportunity to implement integrated intermodal transportation that would reduce costs, increase efficiency, and reduce the environmental impact of this sector.

Problems and challenges for the professional logistics service providers in Romania revolve around improving quality, service levels and competitiveness (Figure 11). The share of logistics in total FDI is still low for Transport and Storage, at approx. 1% in total FDI in 2009.

Figure 2: The problems and challenges for the professional logistics service providers in Romania revolve around improving quality, service levels and competitiveness.

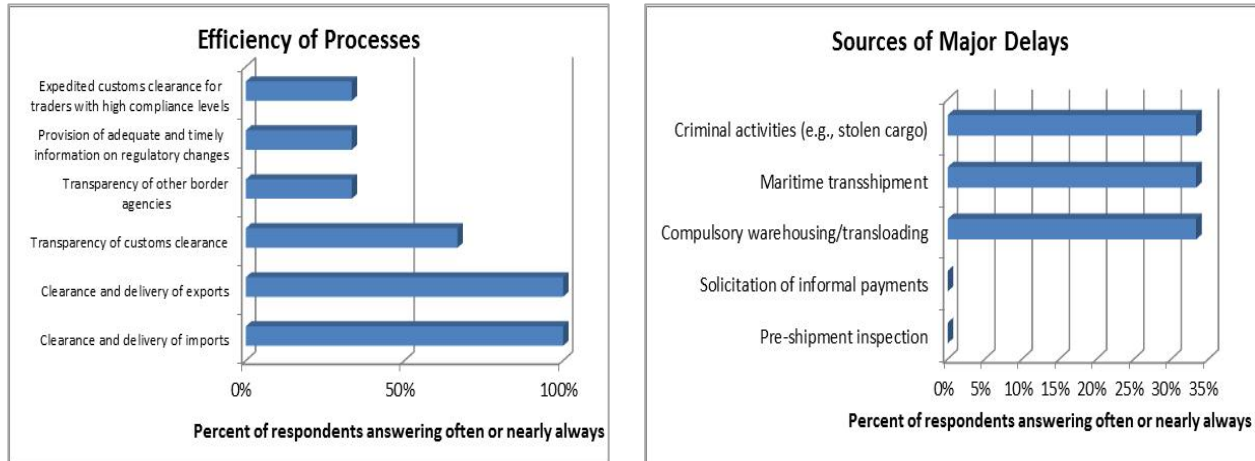


Source: LPI 2012, WB.

Data from the LPI 2012 also shows that major delays² and inefficient processes hinder trade competitiveness and growth (Figure 12). Another issue is the unpredictable customs clearance procedures and the lack of transparency for transport costs out of Constanta to the hinterland.

² One operator reported that during the rail domestic transport of exports of agricultural fertilizers to China, many containers were illegally opened and robbed while the seal remained intact, bags were filled with sand. The Government needs to offer full protection for such cases.

Figure 3: Major delays and inefficient processes hinder trade competitiveness and growth



Data from LPI 2012 – trend; Source: LPI 2012, WB

Considerations for Policy Actions

Recommendations and plans of action to improve logistics performance follow the three main dimensions in the TTFA toolkit: infrastructure, services, and procedures and processes which are ultimately aimed at increasing the competitiveness of the West Region.

Current efforts to improve Romania’s logistics focus on three general supply chains:

1. The transit trade for goods from Asia shipped through Constanta to Eastern Europe, which require an effective trade corridor that can compete with alternative routes through Northern Europe.
2. The distribution of consumer goods, produced locally and imported, to the domestic economy, which currently experiences a high cost for goods, partly due to geography (mountainous topography), bad quality infrastructure, but also due to the organization or lack of the distribution network.
3. Improved competitiveness and stimulating exports.

Romania has been an attractive destination for the offshoring of the production of labor intensive sectors. The strengths of the logistics sector in Romania are: a) Geographical location at the intersection of numerous roads connecting Western and Eastern Europe, and North with the South, and also on the transit axes between Europe and Asia b) Extensive navigable river network c) Highly skilled employees d) Low hourly labor costs.

Opportunities to establish Romania as a key location for production facilities with respect to production costs, by moving from low cost supply chain to value added supply chains are real (such as the Renault Techno Centre for research and design which relocated from Paris to Bucharest). Yet, in order to enhance its competitiveness as a production site, Romania has to improve its transport networks. Identified weaknesses of the logistics sector

in Romania are: a) Limited length of motorways, b) Low share of electrified railway lines, small capacity offered and poor commercial speed, c) Underdeveloped and overall low quality of physical infrastructure.

Also, the retail sector urgently needs a national distribution network, separate from the existing distributors networks, because at the moment logistics services companies are waiting to see what will be the right locations for the national distribution network.

The Romanian Government could increase the attractiveness of Romania, by introducing an import VAT deferement scheme similar to the ones in Europe.

The large shipping lines see Constanta as their natural port for CEE, which implies the need for a strategic view regarding the transferring of production and assembly activities from Western Europe in order to become the Asian gateway for Central and Eastern Europe via Constanta Port³ and the distribution center of CEE. Creating international supply chain networks and national supply chain network with transport corridors on the Romanian territory as well as a hub-and-spoke system, will help reduce lead times and increaseservice levels, thus placing Romania in the continental transport network.

Therefore, for a more durable development of the Romanian logistics sector, the government and the private sector need to develop a vision and a plan of action for logistics both at the domestic levels, as well as internationally, focusing on the entire supply chain, i.e. warehousing, loading, handling and transport, instead of considering each activity separately. Moreover, there is a need for an oversight organization for the action plan (“National Logistics Council”) that would join together the stakeholders from the public and private sectors in order to help set up project groups to carry out specific actions.

In order to position itself as a strategic regional hub, Romania needs to establish an Association for the Promotion of Logistics. The mandate of this association would be to promote Romania as a logistics hub for Central and Eastern Europe. This function is not only beneficial to the Constanta area, but will generate an economic boost for many regions in Romania, including the West Region.

Romania needs a long-term strategy when it comes to logistics. Instead of focusing on short term wins, the country must adopt a comprehensive view to logistics performance and a coordinated plan to improve infrastructure towards EU levels. Efforts to attract the available EU funds for transport infrastructure should focus on ensuring co-financing sources from the state budget, and on developing well-structured public-private partnerships (e.g. for the construction and operation of a highway section).

³ Currently 70% of TEU for Europe pass the Suez route (Romania and the intercontinental transport connections)

1. Introduction

Trade facilitation refers to measures that aim at reducing the cost and time associated with trading across borders. These depend on the quality of the transport infrastructure networks, and the cost and time associated with cross-border trading procedures (such as complying with border-crossing logistics procedures relating to Customs and other administrative agencies involved in the clearance process). These also depend on the regulatory environment that can either impede or aid in the movement of freight, people, and vehicles in trading across borders. Therefore, both hard and soft infrastructure trade facilitation issues need to be looked at for achieving higher integration within the region and with the EU.

Economic growth and prosperity depends on how effectively a country's supply chain operates and connects it to its neighbours and to global markets. While geography plays a role, policy matters for logistics performance, whether it is for infrastructure investment, trade facilitation at the border, or a conducive environment for logistics services (Box 1).

Box 1: Trade Facilitation and Logistics: What Matters to Improve Supply Chains

In 2007, the World Bank proposed the now widely-accepted concept of logistics performance, which has become a standard framework to analyze national supply chains. Logistics performance captures the different dimensions of supply chain efficiency, including how supply chains connect globally and regionally, and how each is influenced by national endowments and policies. The three pillars of logistics performance include:

- Availability and quality of trade-related infrastructures: ports, airports, roads, railroads.
- Friendliness and transparency of trade procedures implemented by Customs and other border control agencies.
- Development and quality of logistics services such as trucking, warehousing, freight-forwarders, shipping and Customs agents, and value-added logistics services (third and fourth party logistics providers).

Thus, logistics performance and the ability of countries to connect to international markets are dependent upon a range of policy interventions that can be implemented at the national or, increasingly, at the regional level. Priority areas for logistics performance improvements include:

- Regional integration and development of trade corridors: border crossings, transit regimes;
- Customs reform and trade facilitation;
- Border management extending beyond Customs;
- Port reform;
- Regulations and development of logistics services (such as trucking, third party logistics, freight forwarding, and warehousing);
- Development of performance metrics; and
- Building public-private coalitions for reforms.

Improving logistics along the whole supply chain will contribute to growth via several channels:

1. **Better productivity** through increased reliability of logistics and through the reduction of logistics costs⁴.
2. **Optimization** in the wholesale and retail distribution sector. It helps rationalizing distribution networks. It also allows outsourcing non-core activities so that logistics providers can achieve a sufficient scale of production and benefit from the associated economies of scale. Competition in the sector would then ensure that the gains in efficiency and production translate in lower prices for the users of logistics services.
3. **Better connectivity** and extension of involvement in trade-based supply chains.

Yet, developing modern logistics services requires efforts along many dimensions. It requires establishing reliable connections, at affordable prices. It also needs efforts to optimize networks through the integration of both international and local providers. It means reducing the cost of crossing the border through trade facilitation initiatives. It also needs improving the business environment to: help users and suppliers of logistics services achieving economies of scale in their core business, through the externalization of non-core activities; and creating the conditions for logistics providers to offer valued added services. Moreover, with the dominant trend towards developing environmentally friendly logistics services especially in Europe - it is also important to help firms transitioning towards business models that reduce the environmental footprint.

2. Romania's trade facilitation and logistics performance

2.1. Trade Costs

Differences in size and endowments of national economies are not the only explanations for differences in the volume of trade and in its complexity, in terms of export participation and diversification of trade patterns. Distance and supply-side constraints and inefficiencies play a large role. Bilateral trade costs between countries capture the price equivalent of the reduction of international trade as compared with the potential implied by domestic production origin country and consumption in the destination markets⁵. Higher bilateral trade costs result in smaller bilateral trade flows.

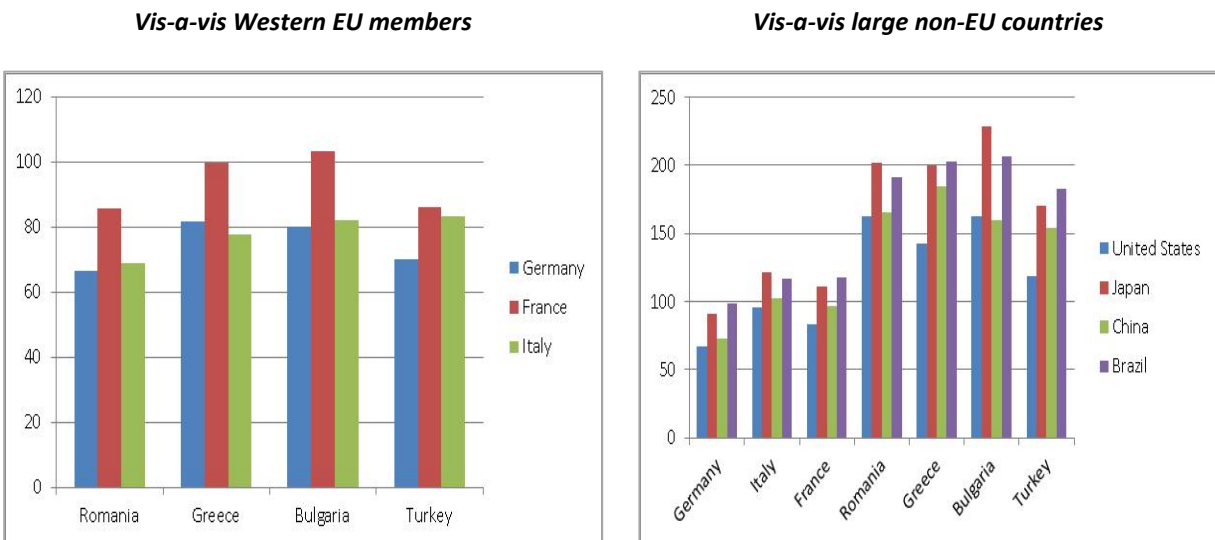
⁴ Estimates indicate that the costs incurred by the manufacturing sector for their logistics activities range from 10 percent to 30 percent of the turnover.

⁵ The recently published World Bank-UNESCAP dataset (Arvis et al. Trade Cost in the Developing World, Policy Research Paper WPS6309, World Bank 2013) proposes comprehensive measures of trade costs for 178 countries over the 1995-2010 time period using the inverse gravity methodology due to Novy (2013). The trade costs are ad valorem equivalent computed from trade and production data. Trade costs have two main categories of sources. The first has to do with entirely bilateral factors of separation between the exporter and the importer, which are more dependent on exogenous factors rather than particular policy choices (e.g., geographical distance, transportation costs or the lead time associated with transportation, common features between trading partners

Romania has lower trade costs than the other countries in the region (Figure 4, left-hand side panel). Trade costs vis-a-vis the EU markets are lower for Romania than for Turkey which is further away from the EU than Romania and economically less integrated with the EU. Romania performs much better over the same distances than Greece and Bulgaria.

With distant markets, Turkey does better while Romania has the same broad cost patterns as Bulgaria and Greece, despite the fact that Greece is much better positioned than the Black Sea countries Romania and Bulgaria in terms shipping connections (Figure 4, left-hand side panel). Compared to other old members of the EU, Romania posts double the trade costs than Germany, Italy and France, irrelevant of whether the destination is the USA, Japan, China or Brazil.

Figure 4: Bilateral trade costs for Romania and comparator countries (ad valorem equivalent)



Source: LPI 2012, WB.

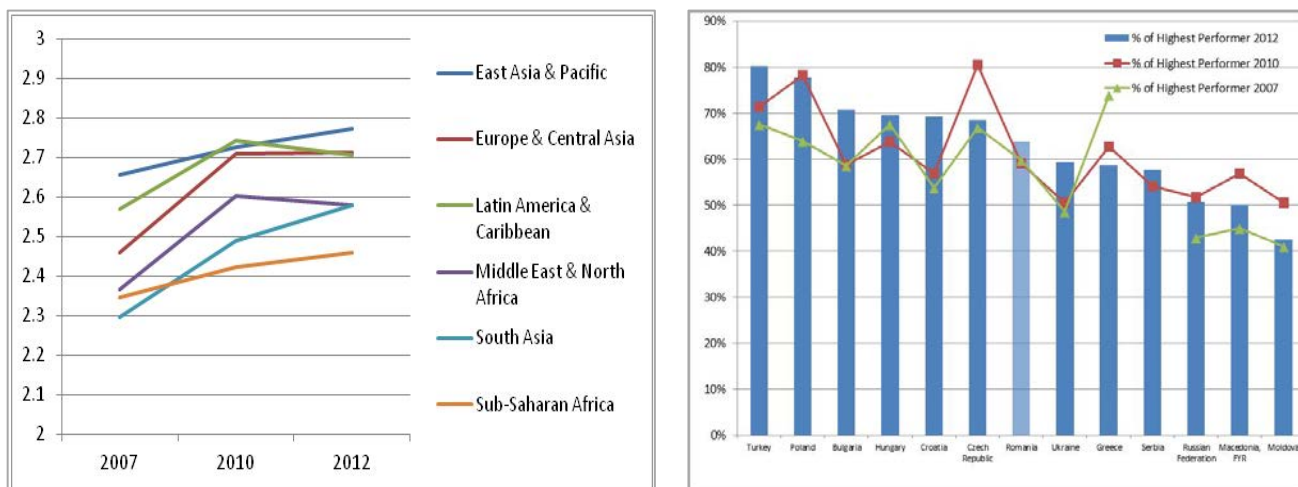
such as language, common history, sharing a common border, or participation in the same economic community). The second category consists of endogenous trade costs, which are factors specific to the origin or destination, and which in a sense represent the “thickness” of their borders (e.g., logistics performance in cost, delay, and reliability, and trade facilitation bottlenecks such as border control, and transit systems with third countries, international connectivity, such as the existence of regular maritime, air, or terrestrial services, and tariffs and non-tariff measures).

2.2. Logistics Performance

The high trade costs are associated with poor logistics performance, according to internationally comparable indices.

Romania made some progress in trade facilitation and logistics in recent years, reflected in international rankings. The performance of international supply chains is measured using the World Bank's 2012 Logistics Performance Index⁶ (LPI). The LPI is a global multidimensional assessment of logistics performance and shows that as in previous years, Europe and Central Asia's overall performance fared ahead of that of South Asia's and other regions when it comes to overall logistics performance as measured by the International LPI. According to the newly released Logistics Performance index, Romania moved to 54th position in 2012, representing 63.8% percentage of the highest performer, which compares to 59th position or 59.1% in the previous LPI (2010) and 51st position or 59.8% in LPI 2007, yet Romania is still in the category of partial performers group of countries when it comes to logistics performance (Figure 5).

Figure 5: ECA performs well, yet logistics is a key challenge for Romania



LPI score; Data from LPI 2007 – 2012 – trend Source: LPI 2012, WB. Data from LPI 2007 – 2012 – trend Source: LPI 2012, WB.

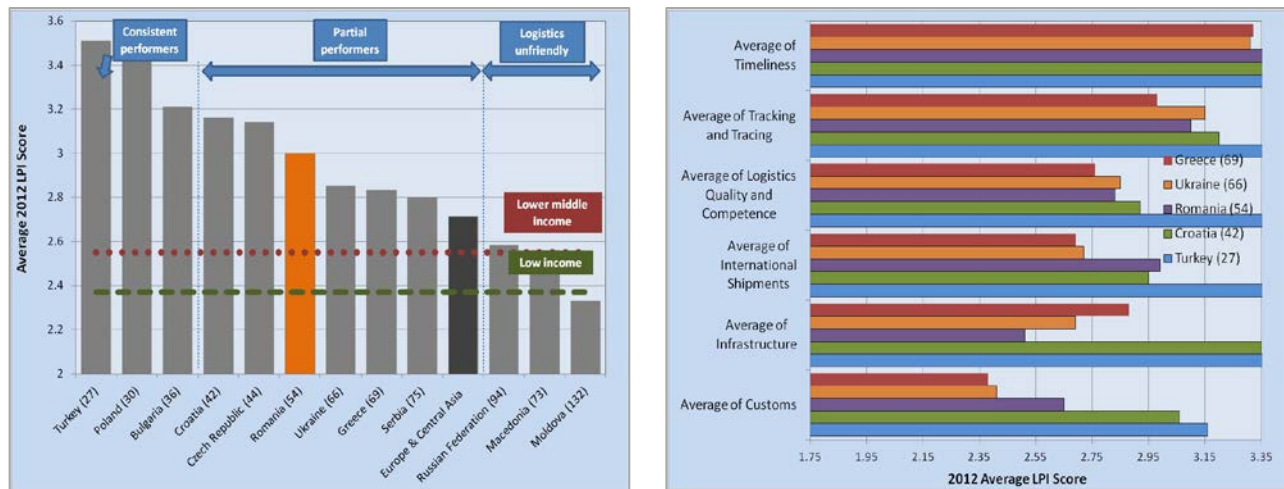
⁶ World Bank (2012). "Connecting to Compete. Trade Logistics in the Global Economy" Washington DC.

⁷ The LPI covers the entire supply chain, and as the results are based on a survey of the perceptions of over 1,000 logistics professionals worldwide, it is a useful tool for comparing the logistics performance across countries and identifying key reform priorities within countries. The logistics performance (LPI) is the weighted average of the country scores on the six key dimensions of the logistics environment of countries: 1) Efficiency of the clearance process (i.e., speed, simplicity and predictability of formalities) by border control agencies, including Customs; 2) Quality of trade and transport related infrastructure (e.g., ports, railroads, roads, information technology); 3) Ease of arranging competitively priced shipments; 4) Competence and quality of logistics services (e.g., transport operators, Customs brokers); 5) Ability to track and trace consignments; 6) Timeliness of shipments in reaching destination within the scheduled or expected delivery time.

Despite the progress, trade facilitation and logistics remains a key challenge of the trade competitiveness agenda for Romania, which remains in the group of partial performers when it comes to logistics performance.

When comparing Europe and Central Asia with other regions and the upper middle income countries group along the LPI's six components of logistics performance, a number of lagging areas stand out. Romania is most constrained by the quality of infrastructure, Customs and the performance of quality of logistics services (Figure 6).

Figure 6: Key areas lagging behind on logistics performance: quality of infrastructure, Customs and the performance of quality of logistics services



Data from LPI 2007 – 2012 – trend and component indicators Source: LPI 2012, WB.

2.2.1. Potential for a regional trade and logistic hub

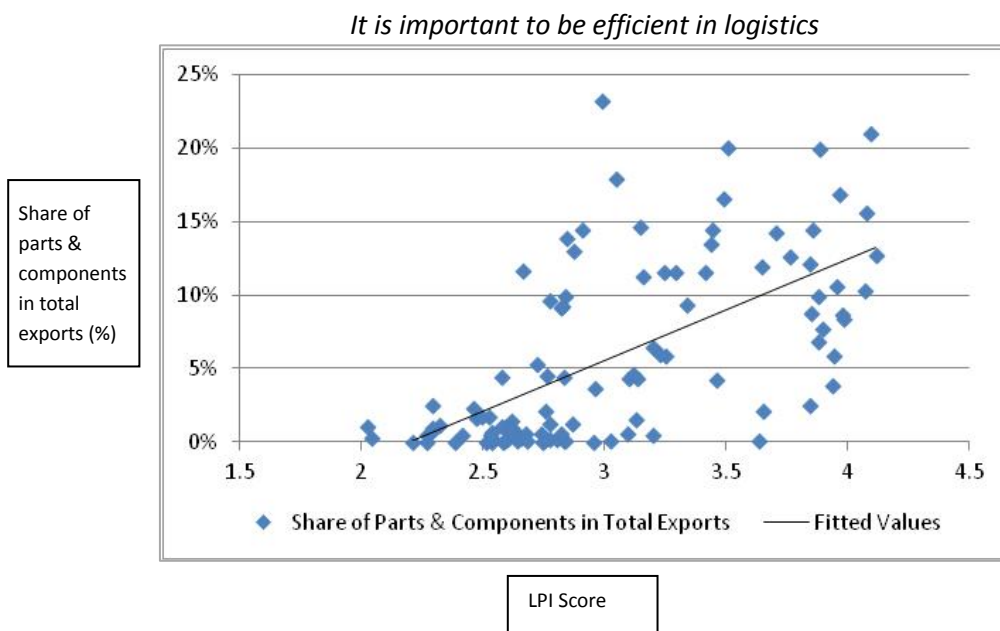
Romania has the potential to position itself as a strategic regional trade and logistics hub for Central and Eastern Europe. It is geographically and economically well located as it represents the main access gate between Asia and Europe, and in addition, it benefits from the possibility of transportation on sea, river, rail and road. Provided that a long distance reliable railway connection to link the Port of Constanta with the West Region and Europe can be established, Romania can take advantage of the economic growth in Eastern Europe and the regional production networks established between Eastern and Western Europe.

In addition to efficient ports and railway connections, becoming a regional trade and logistics hub will require a competitive logistics along the whole supply chain. Conversely, the fragmentation of supply chains reduces productivity. Improving supply chain efficiency – by improving infrastructure and the logistics business environment, and by facilitating international trade, border administration - generates scale economies, raises the quality of service to EU levels, reduces cost, and improves productivity. Globally, even a modest convergence in logistics performance can increase GDP by nearly 5 percent and trade by 15

percent. Reducing supply chain barriers lowers costs and hence lowers prices, both to consumers and to firms that import production inputs. In the long run, trade facilitation promotes a shift in resources to more productive industries and firms, thereby increasing productivity and wages (Enabling Trade: Valuing Growth Opportunities - World Bank-WEF report, January 2013).

Moreover, it is important to be efficient in logistics performance. Recent research shows that networked trade in parts and components is more sensitive to improvements in importing country's logistics performance than is trade in final goods (Figure 7, sourced from Arvis et al. 2010) pointing to an important policy area in support of the development of international production networks and the potential for logistics upgrading to affect different economic sectors. For instance, one sector that might be particularly sensitive to the quality of logistics is trade in parts and components. These products are traded within international production networks in which speed and reliability of delivery are vital. Networked production relies heavily on efficient and cost effective logistics services to spread production across multiple countries and reduce inventory-carrying costs to a minimum.

Figure 7: Relation of the share of parts and components in total exports and the LPI score



Note: Export shares are constructed as the value of parts and components exports divided by the value of total exports. Data are for 2008, sourced from Comtrade via WITS. The parts and components sector is defined using the classification in appendix 1 of Kimura, Takahashi, and Hayakawa (2007).

Source: Logistics performance survey data, 2009, and United Nations Commodity Trade Statistics Database (Comtrade), <http://comtrade.un.org/db>.

Figure 7 shows a strong, positive association between logistics performance and the share of parts and components in total exports. A higher trade share in parts and components

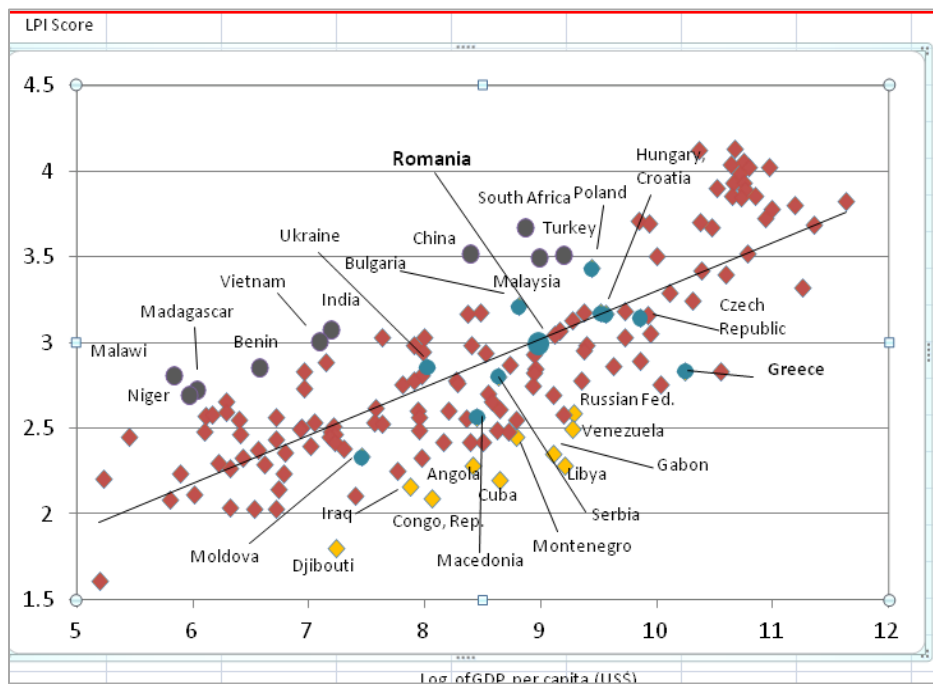
indicates stronger involvement in international production networks, as well as a higher degree of specialization in that sector, associations confirmed by recent research. Saslavsky, Shepherd research confirms these associations and thus provide another strong reason for countries to upgrade logistics performance: the widespread desire for further and deeper integration in internationalized production.

Therefore, the development of the logistics sector can play a key role in promoting greater integration in international production networks. Policymakers can help building logistics competence, which involves issues such as regulation of transport and related sectors, border procedures, infrastructure and private sector development.

However, Romania performs only in line with its level of income on the LPI 2012 (Figure 8). While income alone cannot explain why performance varies widely among countries in certain income groups—particularly in the low- and middle-income groups of countries, the dispersion within income groups suggests that policy, as well as income, affects logistics performance.

Figure 8: Romania performs in line with its level of income on the LPI 2012, while other countries in the region at similar income levels, over-perform

LPI 2012, underperformers and over performers



Source: LPI 2012, WB.

Underperformers (yellow diamonds) are the non-high-income countries with the 10 smallest residuals. Over performers (purple circles) are the non-high-income countries with the 10 largest residuals.

2.3. Disentangling domestic logistics performance

Effective logistics is of paramount importance for Romania's competitiveness, in order to respond to deadlines and control costs with regards to exports as well as imports to and from the EU. A high level logistics is also essential to support the performance of companies carrying out operations on domestic markets, such as transport or distribution. Finally, the development of efficient services provision and effective infrastructures will allow Romania to play a central role in the development of direct exchanges (and transit) with the other countries in Central and Eastern Europe.

Yet, understanding domestic logistics in upper middle-income countries in particular is becoming increasingly important as they endeavor to move up the value chains. However, unless these efforts are inclusive and dealt with at the national level where policies are implemented, they may have the opposite result of increasing disparities between the core and leading/lagging areas and thus minimize the opportunities to improve performance.

As a result, the importance of having a national strategy for transport and logistics which will identify priorities for investments in infrastructure and logistics services reforms is essential for formulating a regional strategy for the West Region. Many of the issues identified during interviews with industry and logistics companies in the West Region pointed to policies that need to be addressed at the national level, in order to be effective and therefore the focus of this report is on national policies which will in turn affect the performance of the West Region.

However, the assessment of logistics performance at the sub-national level is still evolving and the more widely used density-type indicators emphasize the infrastructure dimension of logistics but do not handle effectively the service quality attributes⁸.

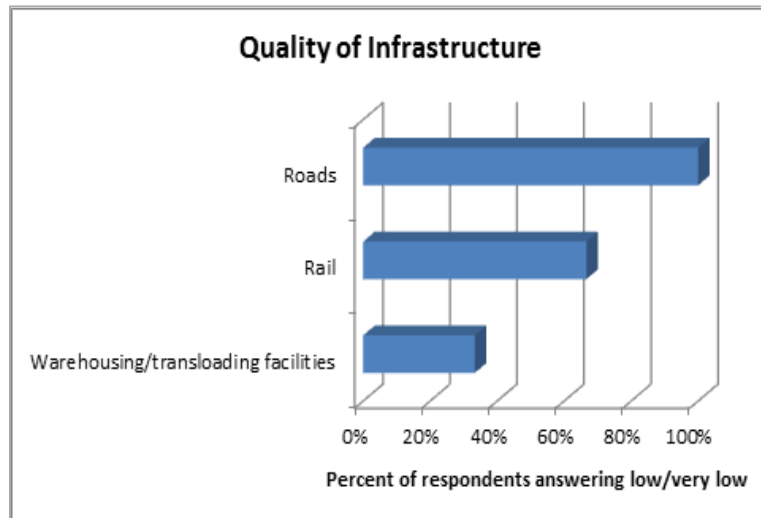
As described earlier, logistics performance comprises at least three interdependent dimensions. The first one concerns the quality and quantity of infrastructures: nodal and multimodal infrastructures, areas available for logistics operations, and availability of information technologies for the various logistics operators. The second dimension is about the procedures applicable to logistics and commercial operations, in particular but not exclusively related to Customs procedures. Finally, logistics competitiveness is largely determined by the availability and competence of service providers (transport, forwarding agents, third party logistics) available for both international as well as for domestic operations.

Romania's logistics performance is average, and therefore insufficient in relation to international competition. The Romanian logistics sector is at a crossroad. Being strategically located at the intersection of numerous roads connecting Western and Eastern Europe, and North with the South and also on the transit axes between Europe and Asia, highlights the importance of a well developed infrastructure for Romania. Yet, the Romanian transport infrastructure is not well seen by the transport operators. On one hand, rail infrastructure is

⁸ There is a stringent need to develop new metrics for assessing sub-national logistics costs. While existing measures of access and mobility tend to focus largely on infrastructure density, it is critical to also include the quality and cost of services.

old and doesn't accomplish the commercial speed needed and many transport operators complain that the road infrastructure is overwhelmed by the number of vehicles and urge the extension for many national roads from one lane to two lanes. Data from the LPI domestic component validates these findings: transportation infrastructure is poor, underinvested, fragmented, and varies in terms of quality (Figure 9).

Figure 9: Romania's transportation infrastructure varies in terms of quality



Data from LPI 2012; Source: LPI 2012, WB.

On the other hand, the waterway network is developed only in the south and south-east regions of the country which are offering access to the Danube River and the Black Sea, yet opportunities to increase the volume of water transport exist in other regions as well, given the low cost of such transport as compared with land or air transport. Moreover, the airport infrastructure is also not as developed as to efficiently support air freight transport.

Therefore, Romania's physical infrastructure requires further investment to reach EU levels of development. Such improvements would benefit the economy overall by connecting rural areas to larger markets, improving productivity, reducing transport costs, and generally encouraging development and more economic activity. A comprehensive and coordinated plan to bring Romanian infrastructure to EU levels should be high on the list of priorities for policymakers. The low level of development presents a significant opportunity to implement integrated intermodal transportation that would reduce costs, increase efficiency, and reduce the environmental impact of this sector.

It is nevertheless demonstrated that the type and location of transport infrastructure has a major influence on logistics performance and that the task of developing the core infrastructure to fit purpose is critical. Therefore, strategic investments by the public sector can send a positive signal to potential buyers and sellers to commit to market production, as well as creating the environment for the private sector to provide logistics services.

A much closer in-depth look at the domestic logistics performance using a Phase I approach of the Trade and Transport Facilitation Assessment Toolkit (TTFA)⁹ for Romania's West Region provides a review of the situation pertaining to international trade and transport, in terms of transaction and transportation costs and efficiency of the related services and infrastructure. As such, the assessment helps develop a prioritized and evidence based reform roadmap to improve Romania's logistics performance and competitiveness and identifies several areas for improvement at the country level and in turn at the regional level, with a focus and direct impact for the West Region. The TTFA toolkit¹⁰ helps tackle a wide range of issues in trade facilitation, transport and logistics services, infrastructure, regulation, and border procedures that may affect trade competitiveness.

The TTFA assessment is based on extensive interviews with importers and exporters, freight forwarders, public agencies including Customs, Standards and quarantine, Ministries of Transport, Economy, Trade) analysis of primary data and comparative analysis drawing on secondary sources from other countries as well as World Bank studies regarding the issues mentioned.

2.3.1. Transport Infrastructure and Delivery of Transport Services

Romania's trade-related infrastructure consists of roads, railways, transport by inland waterways, ports, airports and warehousing and transloading facilities. About 60% percent of freight in long-haul traffic is by roads, the lowest share freight transport by road in Central and Eastern Europe (CEE). This is followed by sea freight with approx 31.2%, rail freight transport with 20%, inland waterways with 20%, which is among the highest freight transport by inland waterways in CEE and warehousing with 5.2%.

Bucharest dominates the country's industrial and logistics sectors and is popular due to its strategic location – 225km from the port of Constanta, 850km from Budapest, and at the junction of two Pan-European corridors. Yet, for Bucharest, logistics operators indicated an urgent need to connect the highway to the city, there are additional 6km to be built which should be a priority for the government, as it increases travel times with by approx. 30 min which takes a truck to exit the city. A ring road around Bucharest should also be considered.

At the same time, Timisoara, Arad and the West Region in Romania are becoming more popular, along side with Cluj, Sibiu and Brasov and Constanta. However, manufacturing sectors, particularly car production, is located in the west and north of the country. Multinational car producers are attracted to these regions due to the close proximity to Hungary, lower labor costs, and better availability of more competitively priced land compared to Bucharest. Yet, interviews with industry and logistics companies show that they are

⁹ Published in 2010, the Trade and Transport Facilitation Assessment (TTFA) is a practical tool to identify the obstacles to the fluidity of trade supply chains. Taking the perspective of service delivery to traders, the TTFA assessment is based on facts and data collected through a series of meetings and interviews with the main public and private participants to these international supply chains. They include Customs and other border agencies, transport regulators, freight forwarders, transport operators, ports, and others. The toolkit helps design plans of action to improve logistics performance among its three main dimensions: infrastructure, services, and procedures and processes.

¹⁰ Similar diagnostic tools have been applied to over 50 countries around the world and most recently, regional assessments.

currently hampered by poor infrastructure, but the situation is slowly improving. Several large scale infrastructure improvements are currently underway, such as the new A2 motorway between Constanta and Bucharest.

In addition, given that the majority of the cargo will be transported on the Northwest axe (which includes the West Region), where the consumer purchasing power is the largest, the strategic focus by the Ministry of Transport is on three of the TEN-T priority projects passing through Romania and which are expected to lead to new emerging logistics locations, as accessibility to regional cities improves: Axes no. 7 & 22 (Constanta – Bucharest – Timisoara/Arad – Budapest) and 18 (Danube), and the location choices by major companies which are concentrated especially on Axes no.7 & 22 locations.

A new bridge spanning the Danube River along the 430 km border between Bulgaria and Romania is expected to be "completely ready" and "functional" in March 2013. Carrying road and rail traffic between Vidin and Calafat, the bridge is expected to provide a vital link on a key priority route of the Trans-European Transport Network (TEN-T).

Local to Global Connectivity

There are five main reasons why a focus at the sub-national level is important. First, there has been a significant increase in government and donor agency resources being invested in improving international trade corridors. The investment is either to increase production or to improve accessibility. The assumption is that following the investment there will be an improvement in trade flows following a reduction in transport costs. The evidence of this happening is mixed, and in some cases, in fact, the infrastructure that is developed is not always appropriate to the demand that exists. It is apparent that the factors that shape the service supply response are not always well considered.

The policy framework that is proposed in the WDR has transport as a connecting infrastructure. Research shows that transport infrastructure has the most important external impact on firm-level costs.

Improving connectivity through appropriate services can reduce the tariff -barrier effect of long distance from major markets. The WDR makes the argument that there is a virtuous circle between transport and trade—transport costs reduce as trade increases, which, in turn, lowers transport costs. Therefore, increasing local interactions and reducing economic distances within a country and globally contributes to these virtuous circles.

The policy framework that is proposed in the WDR has transport as a connecting infrastructure. Research shows that transport infrastructure has the most important external impact on firm-level costs.

Road Infrastructure

The basic assumption is that provision of roads would lead to lower transport costs. Over the past decade in particular, the World Bank and other donors, as well as governments, have invested huge resources into rebuilding and extending road networks.

The road network developments are typically predicated on the premise that transport costs would be reduced and there will be greater volumes of both domestic and international trade traffic. However, in rural Africa, Raballand et al. (2010) recently demonstrated that this approach ignores the fact that farmers may not be able to afford to use a truck because of a low agricultural surplus and because vehicle operating costs savings may not be passed to users to lower transport tariffs. This would be, in part, be due to the small volumes per capita that are produced, which can make it uneconomical to run motorized vehicles. Some of the possible solutions that Raballand et al. propose include the following: giving more attention to intermediate means of transport to complement the road improvements, and exploring innovative marketing models that enable farmers to consolidate their produce.

It is therefore apparent that the provision of road infrastructure alone is not a sufficient condition for efficient logistics services.

2.3.2. Freight transport market – development strategies

Launched in late 2010, the first Intermodal Transport Strategy of Romania aims to have a direct impact on the existing freight transport infrastructure by attracting freight volumes from the road sector to the rail and naval transport sectors and increase efficiency. The development of the local logistics sector, the launch of new multimodal platforms and rail transport integration for 3PL companies is expected to stimulate the railway modal share among other modes of transport.

2.3.3. Road transport

Romania's road infrastructure is among the least developed in Europe in terms of coverage, and scores poorly in both connectivity with other EU member states and safety. Romania currently has approximately 400 kilometers of highway.

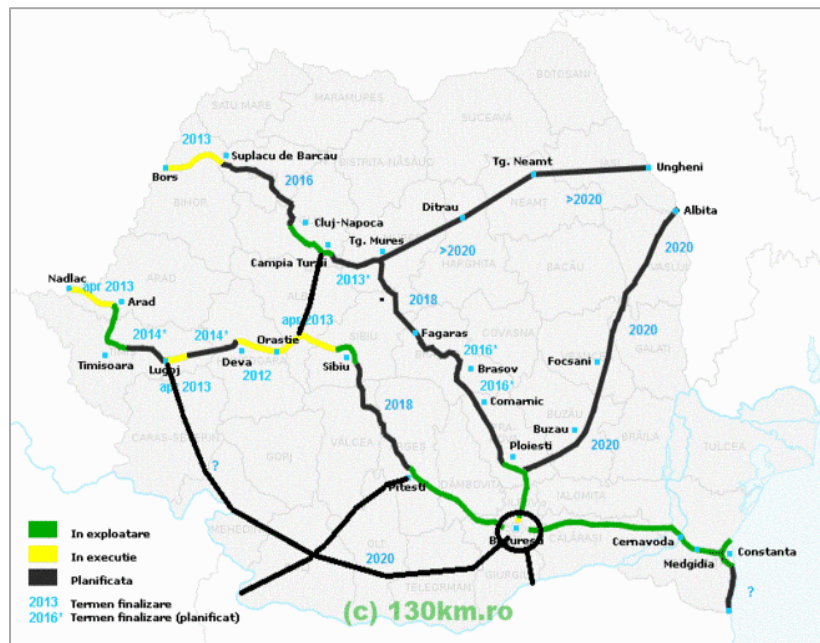
In terms of length, Romania has the shortest length of km motorways in CEE, approx 400 km of highways whereas Hungary and Poland have over 800km or Germany 10,000km. There was a strong increase in freight transport by road from over 5000 mil T-km in 1998 to over 20,000 mil T-km in 2008 and the volume of national road freight transport is also slowly improving. Main international destinations for Romanian road transport are: Hungary, Italy, Bulgaria, Germany, France and the main countries transporting to Romania: Bugaria, Italy, Hungary, Austria.

A series of interviews carried out revealed that potential customers were concerned with, among others, the inadequacy of transport for the domestic market which is more difficult than the export (it can take up to 16h for a truck leaving Timisoara to reach Bucharest due to bad quality of roads which increase delays en-route; for instance Bucharest – Botosani can take up to 12 hrs driving at the average speed; also delays are often registered en-route from Constanta due to congestion in the Port of Constanta and bad quality infrastructure). Therefore, the main challenge facing traders was the poor quality of the roads for both international and local traffic. These have a significant impact especially on the margins for agro-food products with short shelf life.

However, there has been significant improvement in connectivity by roads (both internal and external) following investments in road infrastructure over time. This is particularly true at the level of interstate roads, roads that cover adjoining countries and on corridor routes. Romania's Transport strategy currently under development aims at developing a national highway network to support continental and transcontinental transit in all directions (both North-South and East-West).

Given Romania's EU status, the importance of Western markets for the Romanian economy, and the development of a number of powerful growth centers particularly in the West Region of Romania, policymakers in Romania are currently supporting two major infrastructure projects of critical importance for the country: the Transylvania Highway and the Pan-European Corridor IV. Both target the development of a highway system that connects Timișoara and Cluj-Napoca to the Western border and to Bucharest, and which increases accessibility to the West for people and companies in the capital, and surrounding growth centers (e.g., Brasov, Ploiesti, Constanta). While some parts of this infrastructure have already been completed, the work has encountered significant delays. On one hand, the Transylvania Highway (connecting Ploiesti, Brasov, Targu-Mures, and Cluj-Napoca to each other and to the West), was supposed to be finished in 2012, yet its completion date is not yet certain. On the other hand, the development of the Bucharest-Nadlac highway, part of the Pan-European Corridor IV, also benefitting from EU structural funds, has progressed more quickly. The highway connecting Timisoara and Arad has been completed, and several other key segments are expected to be finished by 2013, including Nadlac-Arad and Timisoara-Lugoj which needs to be connected with Deva (Figure 10).

Figure 10: The development of connections to the West is underway



Source: <http://www.capital.ro/detalii-articole/stiri/se-intampla-in-romania-inca-o-autostrada-finalizata-inainte-de-termin-174474.html>

In terms of connectivity and overall benefits to the economy, these two highway are given top priority among Romanian policymakers. Yet, it is of critical importance that not only availability of European funds, but also the capacity, and oversight are strenghtned to ensure that they move forward towards completion as planned.

While the more 'traditional' hard infrastructure issues (including road, rail, air and potentially river transport) are one of the biggest concerns for the West Region, issues related to passenger transport and facilitating links between people and jobs are just as important and are treated in a different chapter.

The trucking sector in Romania is competitive; moreover, from the entire Romanian fleet, approx. 75% of trucks are providing services to the European market (rather than the domestic market). Also, since January 2012, marking the next stage in the liberalisation of the European road haulage sector – Romanian truck operators can access the domestic market within the framework of cabotage enlargement in the EU11. Operators have joined those from Poland, the Czech Republic, Slovakia, Hungary and the three Baltic states, who have had the right to carry out up to three domestic transport operations in fellow member states over a seven-day period, following an international operation since May 2009.

Yet, as observed by operators, there are many issues with the implementation and enforcement of the legislation, there is lack of clarity which leaves room for interpretation and discretionary implementation, plus too many legislative changes in short periods of time.

Turkey imposes many barriers; recently they banned the transit¹² of sheep meat, while they were consuming domestically sheep meat imported from Romania. Also, operators reported that in the summer months, Romanian trucks were restricted to travel due to high temperatures, while in EU they were not. Moreover, while Turkish trucks are transiting Romanian territory with no problems, Romanian trucking companies were discriminated against on their own territory in Romania, thus creating unfair competition.

Another example is the trucks that are overweight but pass by the weighbridges without being weighted. They are often receiving fines (i.e. 4000 RON) on unclear grounds¹³; axle-loads are not respected and when a truck is weighted it is with 5% more than the real weight¹⁴. For the West Region, the City Hall in Timisoara is imposing a transit fee for trucks over 7.5 tonnes transiting through the city, even though trucks are using national/European roads, thus creating discrimination. Moreover, a tax for the usage of the road infrastructure is applied for vehicles over 40 tonnes.

¹¹ France accounts for one-third of all cabotage operations in the EU and more than 40% of trucks on the country's roads are foreign-registered.

¹² In 2012 the authorization for transit over Turkish territory expired, negotiations for update are on-going.

¹³ For instance, a law requires the driver to have available in the truck many documents, including the leasing contract for the truck, HG 69/2012 and HG 37/2007, OG 21/2009, L52/2010, art 8, alin 1, for arriving at destination 5 minutes later than the allowed time.

¹⁴ Operators reported an example of a truck weighted in Hungary, while after crossing to Romania the same truck is weighting with 2 tonnes more and gets a fine of 6000 Euro.

2.3.4. Railway freight transport

Romania is the second largest in length of railway lines in CEE with over 10,000 km in 2009, but only about one-third (37%) is electrified; Rail transport (inland freight transport by rail in Romania) is at an historical low level with over 10,000 million T-km vs. Over 80,000 in 1988 and a decreasing number of freight wagons (over 40,000 in 2009 vs. Over 160,000 in 1990)

A high level logistics is also essential to support the performance of companies carrying out operations on domestic markets, such as transport or distribution. This requires the availability of efficient rail freight transport for competitive logistics services. Yet, one of the main challenges faced by operators is the quality of rail Infrastructure; they also reported that the railway potential remains underutilized in Romania.

In the absence of a coherent national strategy for logistics, potential synergies between different modes of transportation are missing, yet, links could be done with Constanta but railway speed¹⁵ is a problem. The European Union funds allocated within the Sectoral Operational Programme – Transport 2007-2013 will co-finance the reconstruction of the line linking Constanta Seaport and Bucharest to Central and Western Europe. Therefore, Constanta will be once more brought on the global transport market as a complementary alternative to the large ports of the Atlantic and the North Sea (Rotterdam, Anvers, Hamburg).

Moreover, interviews carried out revealed that potential customers were concerned with, among others, the inadequacy of existing terminal facilities, the inflexibility of terminal operations, traffic delays at the port of Constanta, and poor security both on terminals and on trains. For the West Region, one possible key performance indicator to be included that highly reflects the market requirements is the measurement of the total time needed between departure from sender and arrival at receiver of the goods, i.e. the “Time-to-Serve”. For example: time from vessel arrival in the Port of Constanta to the receipt of goods in the warehouse in Timisoara (includes: unloading, loading on e.g. rail wagon, transport time Constanta – Timișoara, unloading, customs, loading on truck, delivery time to warehouse).

Rolling stock and transshipment equipment: for increasing their competitiveness, railway operators have to renew their rolling stock and transshipment equipment, currently close to the end of its lifecycle, old and overused and customers complain that they don't offer the level of service they are expecting. Especially in the traction segment, the need of modernization or renewal is stringent. Consequently, operators reported that have purchased rolling stock from large integrators which at times are old, while others are buying second hand equipment from abroad or frequently call on the services of rolling stock leasing suppliers for certain jobs and/or short periods of time. Romanian integrators have adapted their offer to the everyday more varied demands coming both from national freight operators and from shunting services suppliers.

¹⁵ Commercial speed has decreased over the past years, due to bad quality infrastructure and lack of predictability; for instance, operators reported that they have to update their client very often on where the shipment is located; this is due to speed restrictions and the fact that in the EU, passengers' trains have priority over freight trains.

Terminals: as discussed above, interviews carried out revealed that potential customers were concerned with the inadequacy of existing terminal facilities, the inflexibility of terminal operations, and poor security both on terminals and on trains. Yet, considering the extension and topography of the network, Romanian transport terminals can be considered well positioned and accessible. Old terminals are part of a national development strategy, with planning and construction of new terminals being in progress. The quality of the old equipment used in terminals is inadequate for quick loading/unloading services or modal change. However, plans for new terminals include new operating systems and modern equipment to increase the quality of services in terminals.

The main problem of logistics market in Romania is an access and connection to the terminals and also a big problem with quality of infrastructure. The whole market needs more support from the government on national level as well as support from European Funds. Logistics market players must be more motivated to use the combined transport.

2.3.5. Transport by inland waterways

The total length of navigable inland waterways in Romania is 1,779 km, mainly including:

- 1,075 km on the Danube River
- 524 km on secondary navigable branches of the Danube,
- 64 km on the Danube – Black Sea channel (only half way finished)
- 28 km on the Poarta Alba – Midia – Navodari channel, and
- 88 km on the Bega channel and on two navigable lakes (Bicaz and Vidraru).

An important way of transport is the Danube, which has a total 2411 km navigable, 78 ports and 1100 ships registered in 30 states in comparison with the Rhine river, which has approximately 10,000 ships registered, though it has only 1000 km navigable. This shows that there is still room for development of navigation on the Danube. For Romania, it is very important to use the fluvial capacity of transportation because it represents a cheaper logistics solution. The European network of rivers and canals has 3500 km and links hundreds of cities and industrial regions. The Rhine, Main and Danube represent a river corridor between The North Sea and The Black Sea.

The European Commission has named a DANUBE COMMISSION which has the purpose to analyze and improve the transport infrastructure on the inland waterways. One direction of action consists in rehabilitating ports and building intermodal platforms to facilitate the transshipment from ships to railroad or railway.

Another important way of transport is provided by an extensive network navigable rivers (over 1500 km in 2009) with the national transport having the largest volumes transported and with the international and transit transport growing. Main markets by inland waterways are Serbia, Hungary, Bulgaria and Austria in the Danube region, as well as Germany and Ukraine. There has been a strong increase of inland freight waterways transport (approx

12,000 mil T-km in 2008 vs. less than 4000 in 2002) but with much less volumes transported than in the Netherlands.

Specific problems in the development of Inland Water Transportation (IWT) are: a) Reduced funds for maintenance and the development of inland ports infrastructure b) Lack of night signalisation for navigation on the maritime sector of the Danube.

2.3.6. Maritime transport

The role of the port of Constanta should be emphasised since the port of Constanta generates / attracts 70% of the inland waterway international and transit traffic, 40% of the railway international and transit traffic and 12% of the road international and transit traffic. Maritime transport through the port of Constanta absorbs half of total export and import volumes, while road haulage and rail freight have overall equal shares, road is more heavily used for inland border exports to EU countries.

Constanta is a small port internationally, but dominant maritime port in Romania with less than 1 mil TEU in 2009. Main goods handled Port Constanta in 2010 were: petroleum & petroleum products (less than 10,000 kt) and iron ore (less than 6000 kt), showing a decline from previous years. Therefore, trade of industrial products declined, while trade in food products increased (main goods handled at port Constanta being cereals, with an increase from less than 4000 kt in 2007 to over 12,000 kt in 2010). Main markets are outside EU-27. Total volumes of maritime transport in Romania by direction (inward intra-EU-27 at over 2 mil tonnes & outward extra-EU-27 at over 6 mil tonnes). In terms of % of total volume, Russia (20%) and Turkey (14%) are the main trading partners.

While this reflects the current situation of exports of food products through the port of Constanta, mainly cereals, which increased over time with the higher share for extra EU vs intra-EU, the trade outcomes assessment provides an in-depth discussion on the diversification of exports and the potential for new exports and markets outside EU and seems to indicate that export diversification outside the EU has little potential (for the West Region) as these markets are very small compared to the EU.

The Port Constanta terminal is brand new, was designed to have 2 rail lines, 5-6 trains/day, 200 containers, yet, it was designed as a road terminal. Operators reported that in Constanta Port, Customs do not operate 24h, but rather only in one shift due to the fact that they do not have enough people for the volume of containers handled.

There is also the absence of inland ports, which include multimodal rail container terminals, with rail, road and, if possible, water and air connections. Logistics and industrial parks should be developed in the vicinity of such inland ports. There have been suggestions for a few targeted intermodal hub locations: Giurgiu to become a container terminal at the Danube for both Romania and Bulgaria (as well as Bucharest when the Constanta Bucharest channel will be completed) which can reduce costs, help with decongestion¹⁶ since some of

¹⁶ Operators reported that there is a backlog of documents and unpaid taxes and fees in in the Port of Constanta, creating congestion and unnecessary delays.

the backlog can be moved there at cheaper prices using the existing good condition road for 50km.

2.3.7. Air transport

The volume of air travel is well below the EU average for both passengers and freight. Yet, a coherent policy for promoting Romania as a hub for international air traffic in the region could change the current situation.

Timisoara's Traian Vuia airport is located 11 km and North-East from the city. Timisoara airport needs a strategy to retain airlines (low-cost airlines like WizAir are not reliable in terms of timing; most domestic flights are for business); Carpat Air created a hub in Timisoara but have downsized by 50% due to facilities granted to WizAir.

A plan for the development of cargo transport services was put together in 2006 by a company from Rotterdam (the project was stopped in 2009). According to this plan Timisoara would have been included in the European Corridor 4. However, for this alternative to be a viable option, a viable railway structure that connects Constanta (point of unloading) to Timisoara is necessary as discussed above.

There are some recent plans for the development of the cargo transport: from December 15, 2012 a company in Abu Dhabi will operate in AT (aircrafts of 260/300 tons capacity). The frequency of this service was initially planned to three times a week with goods for Vienna (the company chose to deploy operations in Romania because airport charges are significantly lower than in Vienna – at an estimated savings of 10,000 Euro/day). There is potential for the Timisoara airport to be used to bring goods from Asia / Middle East, but these opportunities depend in part on global economic conditions and the development (based on a well-defined strategy) of logistics centers.

2.3.8. Warehousing

The logistics market is also currently characterized by high demand for modern warehouse space (Figure 9). Demand for new flexible space continues to grow each year and is driven primarily by large multinational companies entering the market or those relocating from unsuitable old facilities. The retail sector plays an increasingly important role in the logistics market and the arrival of large multinational companies signals stronger demand going forward.

The modern warehouse sector is generally undeveloped in Romania. However, the western and north West Regions are witnessing increased development activity due to their attractive locations and good connections with the rest of Europe fuelling the requirement for modern logistics facilities. As a result, most new developments are located along the A1 highway to the west of Bucharest.

The lack of warehouses is critical as agro-food small producers need to find storage options and get rid of production quickly.

2.3.9. Logistics Services

Logistics services are a derived demand which in turn also open new opportunities to trade. Logistics services have to adapt to technological and economic changes. Technological changes are clearly reducing the need for proximity between the producer and the consumer. These changes are also allowing the fragmentation of production into tasks that may be performed in different locations (Feenstra, 1998). Fragmentation, that affects both productions of goods and services means that vertically connected production process, i.e. process that takes place in one location, can now be undertaken in different regions or countries (Jones, 2000). Communication, logistics, and financial services among others, allow the connection among tasks.

The clients of the logistics companies demand more and more complex services, so that, now, logistics is not only about transport and storage, but also about optimizing the whole logistics chain and value added services. Yet, fragmentation of the Eastern European logistics sector induces high costs and uncertainties for trade and transport in the CEE and are blocking economic development while the demand for logistics services is growing.

For the agro-food sector, interviews revealed that not only that the supply chain is lacking storage facilities, leading to expensive imports, but the processing industry (selecting, washing, packing, labeling) is almost non-existent. Local producers and suppliers lack management and western commercial capabilities (there is a too high focus on the spot market), but they also cannot deliver quality and frequency and are usually operating on a too limited scale, waiting for volumes to be high and frequent enough to invest in their own supply chain.

There is a need for horizontal relationships between the small-scale producers and their vertical connections to higher tier parties involved in the same supply chain. For this, a combination between a cooperative¹⁷ approach to link producers horizontally and a newer and innovative approach through virtual integration of farmers using modern information communication technologies such as the e-Choupal system¹⁸ in India may be considered. A case study and assessment of Indian small-scale producers'¹⁹ shows that small-scale agricultural producers linked through these various approaches are more integrated to international supply chains than those who are not.

From a trade perspective, the presence of regional or local wholesalers and distributors is adding costs to the supply chain and almost no distributor has a national distribution network and public cross-docking facilities do not exist. Cargo consolidations are absent and there is a lack of willingness to cooperate and/or integrate services. On the side of traditional transporters there is a significant absence of logistics capabilities (know-how, IT, tracking & tracing). In addition, there is a relative large import volume and quality standards are at too low levels to comply with, e.g. HACCP, AEO.

¹⁷ However, due to the negative connotation of the word "cooperative", as a reminiscent of Communist times, small-scale producers are resisting to the implementation of such approach.

¹⁸ Annamalai, Rao (2003)

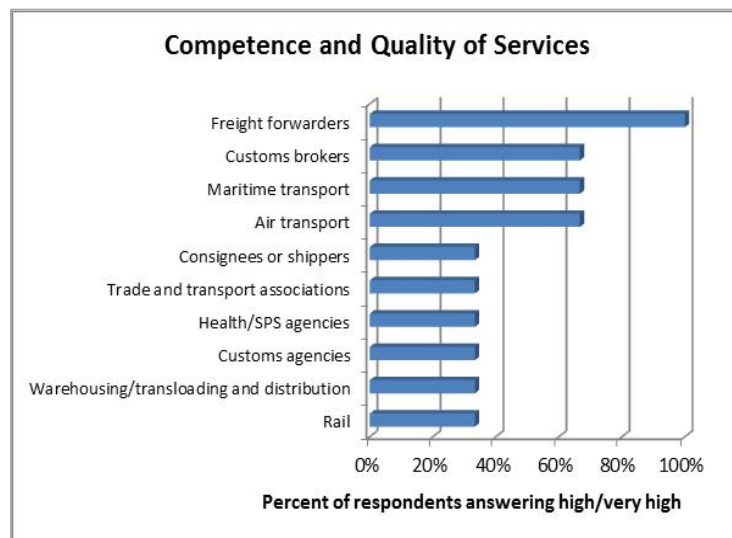
¹⁹ Logistics in lagging regions, Kunaka, 2011

Clearly therefore, there are several operational imperatives that should be considered in the pursuit of an improved global framework for logistics services: a) a desire to facilitate participation in shared production networks; b) the desire, especially in middle income countries, to move up value chains; c) the need to encourage greater competition in services and drive down costs and d) emerging demands, especially trade in new products or minimizing negative impacts on the environment.

These are all forces that are evident in Romania and which place growing demands on the performance of the country' logistics system. Unless the system adapts to growing or emerging demands, it can be a hindrance to greater trade competitiveness and growth.

Global production chains also depend on a robust logistics sector. Logistics encompasses an array of essential activities for trade—including transport, warehousing, cargo consolidation, border clearance, distribution, and payment systems. Coordinating the various stages of product development, component production, and final assembly requires the ability to move goods across borders quickly, reliably, and at low cost.

Figure 11: The problems and challenges for the professional logistics service providers in Romania revolve around improving quality, service levels and competitiveness.



Data from LPI 2012 Source: LPI 2012, WB.

Yet, with the increasing number of new registered logistics companies at the beginning of 2011 and increasing FDI in logistics (over 700 mil Euro in 2009) vs. less than 300 mil in 2005, (although share of logistics in total FDI is still low at approx. 1% in total FDI in 2009 for Transport and Storage), the problems and challenges for the professional logistics service providers in Romania revolve around improving quality, service levels and competitiveness (Figure 11).

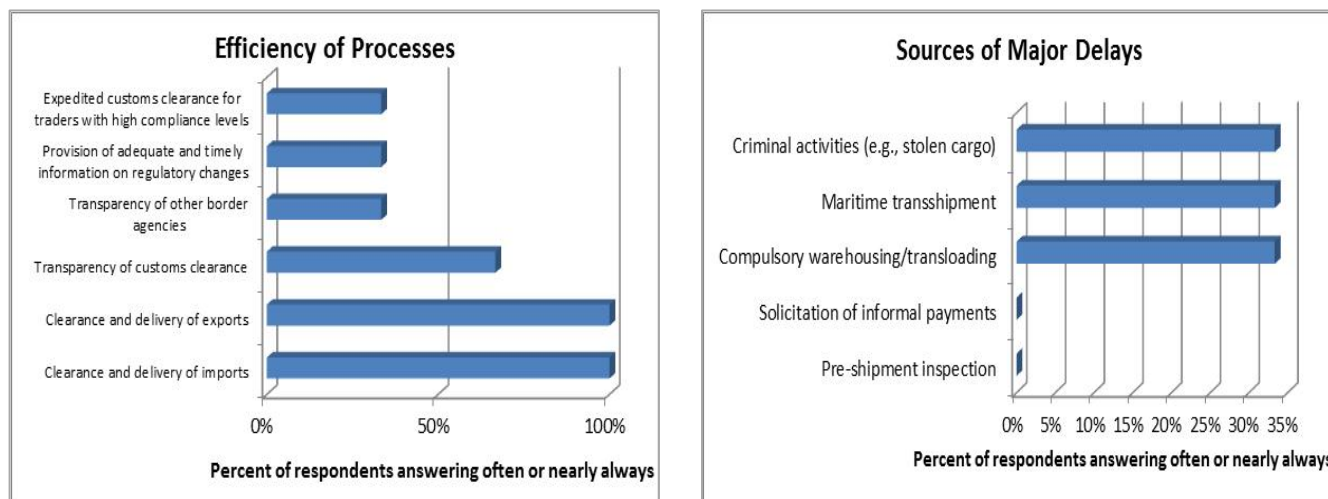
For instance, operators reported that a few months ago trucks had to reroute traffic almost 200km off the main road from the Port of Constanta, but received no compensation for

the delays incurred; Moreover, the industry associations are rather weak and there are no collective actions taken by providers. The creation of an Academy for training of freight forwarders and FIATA Certification courses was under discussion but did not materialize.

2.3.10. Customs and Border Management

Trading procedures have been simplified with support from the EU and other agencies. The WB Doing Business 2012 report shows that trading across borders is largely in line with the EU averages in terms of number of days to complete procedures, number of documents requires and average costs of imports and exports. The EU assisted programs to Customs and integrated border management have supported alignment of the legislation and regulations with the EU standards. The Customs IT system was upgraded and most of the procedures are now done electronically. Nevertheless, surveys of business communities and border users suggest that the level of unofficial payments and their frequency remain issues which require further attention from the government. Romania makes efforts to join the Schengen area, and has been judged by the EC as having met the technical criteria for membership. However, membership has been blocked so far for both Romania and Bulgaria by a number of member states on grounds of high levels of corruption.

Figure 12: Major delays and inefficient processes hinder trade competitiveness and growth



Data from LPI 2012; Source: LPI 2012, WB.

Data from the LPI 2012 shows that major delays²⁰ and inefficient processes hinder trade competitiveness and growth (Figure 12). Another issue is the unpredictable Customs clearance procedures and the lack of transparency for transport costs out of Constanta to the

²⁰ One operator reported that during the rail domestic transport of exports of agricultural fertilizers to China, many containers were illegally opened and robbed while the seal remained intact, bags were filled with sand. The Government needs to offer full protection for such cases.

hinterland. Customs procedures can still constitute an obstacle to business processes (some Customs employees retain an old mentality in spite of regulatory harmonization and may delay certain shipments²¹ and operators also reported that Customs offices are understaffed in certain departments²²). We have proposed earlier in this document to introduce a key performance indicator for the West Region, that highly reflects the market requirements, i.e. the measurement of the total time needed between departure from sender and arrival at receiver of the goods, i.e. the “Time-to-Serve”²³.

Although the belief that Romania has the opportunity to become Europe’s Eastgate trade hub is shared by many investors in the logistics sector in Romania, there are numerous aspects that have so far held Romania back from taking advantage of this opportunity and hindered such a development so far, but this opportunity is achievable.

The main hurdle is the absence of VAT deferment for direct imports from outside Europe, which is very important especially for those companies²⁴ that import products in Romania with the main reason to export them again. Those products do not stay in Romania and for these situations a tax deferment should be allowed. There are any instances in which companies have large volumes of goods on stock for a certain period, and they have to pay immediately 24% VAT, although they will receive the money back from their clients after half a year. Import VAT deferral certainly helps business cash flow and it would therefore make more sense to pay those taxes at the moment the goods are exported. By allowing for VAT deferment, Romania could attract many foreign investors and companies to use it as a hub. The associated benefits would be the development of the transport, services, and even more revenues to the state. Although this has been in discussion for a while, it has not yet been implemented. This prevents large companies from using the port of Constanta as an inbound port, storing, assembling, handling and exporting products from Romania to the rest of the Europe.

For example, countries in West Europe provide VAT deferment. Austria and the Czech Republic offer some of the most popular import VAT deferments schemes in Europe, putting in place very easy records procedures for importers²⁵, potentially enabling importers to avoid cash flow payments on import VAT and as a result, they are two of the most popular import hubs in Central Europe.

Under the current legislation, by 2013 the import VAT deferment in Romania is only available to some companies that have reached a threshold (in terms of value of imports) of minimum RON 100 million during the previous year. As a result, the requirement in Romania

²¹ In such cases companies are following standard procedures for filing a complaint, yet due to problems in the implementation of laws and regulations which are applied differentiated for different entities, in many instances, the conflict can escalate to the level of European authorities.

²² For instance, one company with large shipments and which qualifies for an in-house Customs service at its bonded warehouse was not honoured due to understaffing of Customs.

²³ For example: time from vessel arrival in the Port of Constanta to the receipt of goods in the warehouse in Timisoara (includes: unloading, loading on e.g. rail wagon, transport time Constanta – Timișoara, unloading, customs, loading on truck, delivery time to warehouse).

²⁵ The government does not provide enough facilities to companies which bring expensive component shipments (e.g. from China) and as a result some of these companies prefer to import through Austria

to pay VAT upon import puts Romania in an uncompetitive position vis-à-vis Western Europe and therefore, many companies have chosen to invest in other EU countries or to re-route their Customs operations through other countries (Austria, Czech Republic) to avoid the costly pre-financing the import VAT.

Laboratories

There is only one accredited²⁶ laboratory in Bucharest and verification requirements are numerous which puts pressure on the lab in Bucharest due to deadlines; sometimes it takes 10 days to perform the tests²⁷ and sometimes firms have to go to Bucharest for complex tests because the lab in Arad is not sufficiently equipped or they also use the facilities in Hungary.

Currently, there are two border inspection points in Constanta and in Bucharest International Airport at Otopeni. Therefore, operators especially for agro-food products urge the creation of independent laboratories as most are government run²⁸ and are at least 100 km away.

2.3.11. Importance of a Comprehensive Approach to Logistics Reforms

The government recognizes the need for efficient transport and trade logistics for realizing its potential as a regional logistics hub. Trade facilitation and logistics reforms can not only help the country to realize its potential as a regional logistics hub for East-West and North-South trade, but also enhance intraregional exports.

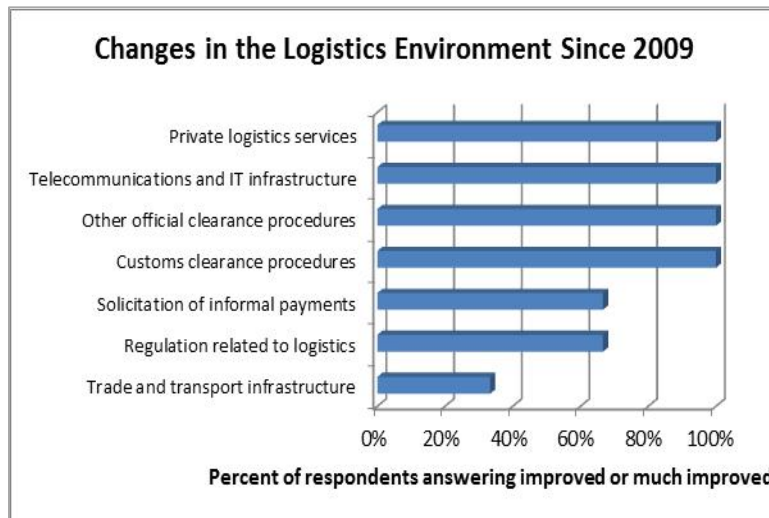
The 2012 LPI shows the preconditions for efficient logistics. All top performers in the LPI have developed and maintained a long tradition of strong public-private partnership and dialogue; good cooperation between policymakers, practitioners, administrators, and academics; a comprehensive approach in the development of transport services, infrastructure, and efficient logistics; and consistent policies in transport and logistics. Yet, while Romania improved in many areas of the logistics environment, still lags behind in others (Figure 13).

²⁶ RENAR is the agency that is accrediting laboratories in Romania.

²⁷ The biggest problems are encountered in the case of energy products (mainly diesel).

²⁸ There are rumours that the existing National Food Safety and Veterinary Agency, Border Inspection Points may be moved under the authority of a newly to be created Ministry for Control.

Figure 13: Romania improved in many areas of the logistics environment, yet still lags behind others



Data from LPI 2007 – 2012 - trend; Source: LPI 2012, WB.

Some of the main weaknesses and issues to address are in the area of “interpreting” legislation which leaves a large scope to local authorities to take decisions that in many instances harm business or other bureaucratic rigidities that are causing red tape. For instance, one importer reported the inability to operate with a temporary license while waiting for the authorities to approve the license which increases the fixed cost of investments.

However, the focus and leadership of logistics reforms is country-specific and needs to be tailored to local circumstances. Efficient delivery of transport and logistics services requires a concerted effort involving many players. In advanced and emerging economies, transportation agencies have more often than not led the coordination efforts; while in developing countries the agencies in charge of commerce and economic development have played a major role in promoting a transformative trade facilitation and logistics agenda. Whether in advanced or in emerging economies, reforms must be implemented as coherent packages, and they require sustained, long-term attention for sustainable results. There is not one unique institutional arrangement for countries to implement logistics-related reforms; policymaking is a responsibility shared among the different government agencies in charge of transportation policies and investment, commerce, industry, and Customs and border management. No country has a ministry for logistics. Instead, a collective framework that includes the private sector is important for consistent implementation. Canada, China, Finland, Germany, Malaysia, and Morocco have all introduced councils or similar coordination mechanisms for bringing the stakeholders together.

For Romania to realize its potential to position itself as a regional logistics hub in the region, only a concerted effort similar to those driven by a high level commitment as in countries like Malaysia and Indonesia will yield significant results in this area (see Box 2).

Box 2: Innovative approaches to border agency cooperation: the Philippines and Indonesia

In 2010 and 2011, the Philippines government developed— and began to implement— a national single window system for trade. The system has already automated 33 government agencies' import and export permit and licensing requirements. Many of those agencies did not have automated back-office functions until 2011, but all are now connected to the system, and more than 80 paper-based processes are in the process of being fully automated. Traders can access the system online— first to submit and pay for permit applications- and then to track approval and clearance. Key performance indicators show that the system has reduced the time it takes traders to apply for various permits and licenses and be granted them.

The Indonesian government has also launched a national single window system, one that now links the national Customs system with more than 25 government agencies. The new system's implementation brought to light conflicting trade regulations issued by various ministries over time, revealing a need to regularly review and harmonize trade-related regulations. The system also established a mechanism for regular private sector consultation. Initially created to fix deficiencies in system implementation, the consultation mechanism quickly evolved into a more general forum, where traders discuss trade regulations with government officials. These discussions have led to some regulations being simplified— and some being repealed.

In both countries, Customs hosts the national single window system's information and communications technology infrastructure. Also in both countries, the system's design and development involved both public and private stakeholders. The Philippines's system was led by Customs, Indonesia's by the Coordinating Ministry for Economic Affairs (directly led by the Deputy Minister for Industry and Trade Affairs *). Although the two countries used different coordination mechanisms, each improved its border management substantially— without resorting to expensive, likely disruptive, organizational restructuring.

Source: Special address by H.E. Mari Pangestu, Minister of Tourism and Creative Economy of Indonesia, ex-Minister of Trade for Indonesia and co-coordinator of the Task Force on Poverty and Development for the United Nations Millennium Project. As a champion in leading the logistics agenda for Indonesia, Dr. Pangestu has worked on bringing a comprehensive package of reforms. <http://go.worldbank.org/I3RZU91930>.

Therefore, for a more durable development of the Romanian logistics sector, the government and the private sector need to develop a vision and a plan of action for logistics both at the domestic levels, as well as internationally, focusing on the entire supply chain, i.e. warehousing, loading, handling and transport instead of considering each activity separately. The experience of other countries, including of Turkey or Ireland, shows that examples of creating such as national organization to improve logistics performance. However, it should not be just a consultative mechanism whereby the various Ministries involved are consulting the private sector on a strategy, but rather it should be a process with strong ownership by the private sector with a work program and clear timelines and milestones. Moreover, an oversight organization for the action plan (“National Logistics Council”) that would join together the stakeholders from the public and private sectors in order to facilitate the setting up of projects group to carry out specific actions is needed.

Moreover, there is currently insufficient consultation between the authorities and the private sector. For example, in Timisoara, the airport authorities decided to build a new cargo facility without consulting the large players.

Last but not least, Romania needs well trained managers and skilled experts in the field. The limited dissemination of a logistics culture within the private sector, and the lack of competences and training among logistics operators and shippers needs to be addressed through proactive measures, such as training programs, quality, improvement, and incentives for the formation of operators groups. Moreover, there are fears that the the West Region may lose its comparative advantage in terms of cheap labor force as the need for skilled labor force is increasing.

The current number of courses and training programs provide far fewer specialists than the market requires. Therefore, the immediate launch of supply chain and logistics studies at Bachelor's and Master's degree level is urgently needed. As a result, the creation of the first Romanian logistics faculties, developed as a partnership between the Bucharest and Timisoara Polytechnical Universities, the Ovidius University in Constanta and the Fontys University of Applied Sciences in Venlo was announced in 2011. This is a major step forward in developing the transport and logistics capabilities of Romania by creating a new generation of highly-skilled logistics specialists with an in-depth understanding of this type of industry and capable of using state-of-the-art logistics practices and capabilities.

In addition to the degree level training, companies most often require hands on experience, and professional level training, such as FIATA certification and train the trainers programs, IATA, ICBC (customs brokers) professional certification.

Moreover, in order to position itself as a strategic regional hub, Romania needs to establish an Association for the Promotion of Logistics with the mandate of promoting Romania as a logistics hub in Central and Eastern Europe. This role would be beneficial not only for the Constanta area, but will generate an economic boost for many regions in Romania, including the West Region. For instance, the Romania Black Sea Gateway Association was created in 2011 as an organization designed to promote the development of Romania's potential in the field of re-export activities, transport and logistics, by acting as a dialogue partner for the Romanian authorities, but also by attracting assembly, trade, transport and logistics investors interested in the opportunities offered by Romania.

Another important element in support of the country's transformation into a logistics hub for the CEE region and Western Europe, are environmentally-friendly methods of transport (such as river transport), which are also in line with the EU standards. The trend towards developing environmentally friendly logistics services especially has become dominant trend, particularly in Europe - it is also important to help firms that are transitioning towards business models which reduce the environmental footprint. And these actions need to be an integral part of national regulatory and policy level actions and the various prioritization and orientation of funding streams that can help facilitate the identification of effective solutions.

3. Considerations for Policy Actions

The recommendations and suggested plan of action to improve logistics performance follow the three main dimensions in the TTFA toolkit: infrastructure, services, and procedures and processes which are ultimately aimed at increasing the competitiveness of the West Region. Weak endowment and quality of infrastructure in all sectors are well-known issues. While infrastructure improvements are foreseen, including through EU funding, unless these efforts are inclusive and addressed at the national level - where policies are implemented, they may have the result of increasing disparities between the core and leading/lagging areas and thus minimize the opportunities to improve performance.

Romania needs a long-term strategy when it comes to logistics. Instead of focusing on short term wins, the country must adopt a comprehensive view to logistics performance and a coordinated plan to improve infrastructure towards EU levels. Progress is however very slow due to weak administrative capacity, aggravated by a lack of strategic long-term priority setting and budgetary planning. The new transport master plan and strategy, which is currently under development by the Government, and which constitutes the second attempt by the authorities to produce a master plan, will have specific budget allocations. Therefore, the efforts to attract the available EU funds for transport infrastructure should be focused on ensuring co-financing sources from the state budget, as well as on developing well-structured public private partnerships (e.g. for the construction and operation of a highway section). However, several challenges need to be considered in developing PPPs for Romania as recent experiences indicate that the country lacks capacity to design and implement PPPs and the PPP concept is often misunderstood and seen solely as an alternative source of funding or procurement method. In addition, uncertain profitability and risk aversion of private investors are also constraints.

Current efforts to improve Romania's logistics focus on three general supply chains:

1. The transit trade for goods from Asia shipped through Constanta to Eastern Europe, which requires an effective trade corridor that can compete with alternative routes through Northern Europe
2. The distribution of consumer goods, produced locally and imported, to the domestic economy, which is currently relatively expensive, partly because of geography (mountainous topography), bad quality infrastructure, but also due to the organization or lack of distribution networks
3. Improved competitiveness and stimulating exports

Romania has been an attractive destination for the offshoring of the production of labor intensive sectors. The strengths of the logistics sector in Romania are: (a) Geographical location at the intersection of numerous roads connecting Western and Eastern Europe, and North with the South and also on the transit axes between Europe and Asia, (b) Extensive navigable river network, (c) Highly skilled employees, (d) Low hourly labor costs.

Opportunities to establish Romania as a key location for production facilities with respect to production costs by moving from low cost supply chain to value added supply chains are real (such as the relocation from Paris to Bucharest of the Renault Techno Centre for research and design). Yet, in order to enhance its competitiveness as a production site, Romania has to improve its transport networks. Identified weaknesses of the logistics sector in Romania are: (a) Limited length of motorways, (b) Low share of electrified railway lines, small capacity offered and poor commercial speed, (c) underdeveloped and overall low quality of physical infrastructure.

While the requirements for improved competitiveness and for stimulating exports (e.g. auto components) and for the provision of high value added services implies a need for distribution centers, in order to achieve better distribution for imports and improved transit trade initiatives must focus on increasing volumes and promoting cooperatives of farmers. This in turn requires the provision of specialized warehouses and better transport infrastructure.

Also, the retail sector urgently needs a national distribution network, separate from the existing distributors networks, because at the moment logistics services companies are waiting to see what will be the right locations for the national distribution network.

In terms of supply chain development , in the first stages, the a solid logistics structure will have to include cross-docking facilities for storage and cooled frozen facilities, targeted to the agro-food processing industries. This system will include the possibility of overnight transport between hubs (both for agro-food as well as for the non-food sectors) using facilities that comply with EU norms. In the second phase, the country must take advantage of the fact that large shipping lines see Constanta as their natural port for CEE. Authorities should have a strategic view focused on transferring of production and assembly activities from Western Europe in order to become the Asian gateway for Central and Eastern Europe via Constanta Port²⁹ and the distribution center of CEE. Creating national and international supply chain networks with transport corridors on the Romanian territory as well as a hub and spoke system, will help reduce lead times and increased the quality of services, thus placing Romania in the continental transport network.

Central and Eastern Europe (CEE), including Austria, accounts today for more than 12% of EU's GDP, yet the region attract less than 1% of the sea freight coming to Europe. This is a huge imbalance as the bulk commodities and goods coming mostly from Eastern Asia and the Middle East, which could enter the region directly, are currently transiting through North-Western Europe. Therefore, there is a need to promote the Port of Constanta, which has a great potential to become the gateway to Central and Eastern European markets and to make Romania the international EU entrance gate from the east: a trade hub for assembly and product customization activities, serving the Central and Eastern Europe (CEE) and Black Sea markets. Creating such a direct route which would serve EU from Asia is more efficient and will attract additional benefits. It would not only save 2400 sea miles and reduce CO2 emissions, but will create new business for Romania (brokers, storage, transport companies) and

²⁹ Currently 70% of TEU for Europe pass the Suez route (Romania and the intercontinental transport connections)

stimulate Romania to further develop its logistics infrastructure (roads, inland ports, intermodal strategy, railway transfer hubs³⁰).

Moreover, Romania can explore the potential of non-obvious trade routes such as sourcing inputs and increasing trade opportunities with Macedonia and Serbia, especially in agricultural products. The closest major city to most parts of the West Region is Belgrade, in Serbia (less than 150 km away or within a three hour drive time). With a population of around 1.5 million, the Belgrade is only slightly smaller than Bucharest and Budapest. At the moment however, due in large part to its position outside the European Union, Belgrade (and Serbia in general) remains almost completely disconnected from the economy of the West Region. Therefore, with improvements in transport connectivity and efforts to facilitate efficient border crossings (ongoing with the EU cross border cooperation office for Serbia-Romania, based in Resita) will be important in order to enable the region to take better advantage of the opportunities with Serbia and Macedonia.

The Romanian Government could increase the attractiveness of Romania by introducing an import VAT deferment scheme similar to the ones in Europe. Import VAT deferment should be a priority for Romania. Implementation of import VAT deferment in Romania and the Customs duties deferment procedure are serious obstacles for companies and if adopted, these measures would greatly improve Romania's status as a CEE trade hub. The import VAT deferment should be enforced as soon as possible and for all importers irrespective of company age or size. This will have substantial benefits and will enhance Romania's attractiveness for investments and business (as companies will not have to pre-finance the import VAT for the goods they are importing through Romania) and most importantly, it will eliminate Romania's current uncompetitive position as compared to the EU countries applying the import VAT deferment relief (such as Austria, Czech Republic, or the Netherlands).

The phase I TTFA focused on two sectors and the associated supply chains - automotive and agriculture - and helped to identify barriers to the connection of firms in the West region to regional value chains in each of these sectors. It also provided an initial assessment of the efficiency of the logistics services and the enabling regulatory framework. One of the key issues particularly relevant for the automotive sector was to assess how easily suppliers and sub-contractors from the West Region can connect to other big producers located outside the region: to Continental (located in the West Region) and to Ford and Renault (located elsewhere in Romania), but also internationally, linking both with the German auto sector but also their assembly and component manufacturing facilities in Hungary, Czech, Slovakia, and possibly Serbia. This analysis need to be further developed and should focus on key corridors in order to provide more detailed information on specific impediments that were identified during phase I of the TTFA.

³⁰ For instance, the port of Rotterdam is one of most experienced harbour in re-exporting (with added-value) of goods into EU

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