

Eastern Europe | Industrial | July 2014

WHITE PAPER SERIES

# Industrial & Logistics Demand - What's driving change?

DAMIAN HARRINGTON Regional Director of Research | EE

KATY DEAN Senior Regional Research Analyst | EE

## Executive Summary

The European industrial and logistics market is diversifying and becoming more complex in response to changing demand, improved transportation networks and dynamic technologies. The movement of freight still centres itself within the hubs of the 'Golden Triangle' in the UK, and the continental 'blue banana' of Benelux, western Germany, France and the northern part of Italy, but the concentration of activity is also increasing across the top of northern and central Europe into Poland, the Czech Republic and Slovakia. We are also seeing distribution volumes grow in Russia, with activity shifting further east from Moscow.

While the extent of this growth is underpinned by expanding trade, improved infrastructure, time sensitivity and cost, the increase in the number of logistics operators specialising in intermodal/multimodal transport in Central and Eastern Europe (CEE) suggests an ongoing structural shift in freight distribution is taking place. Intermodal freight and logistics operators have become a significant driver of demand in CEE, with pan-European operators seeking economies of scale in the main logistics hubs of the Czech Republic and Poland - western Slovakia will be one market to watch moving forward.

Russia, still chiefly an internal market, is quickly developing its own large-scale intermodal/multimodal network driven by retail and domestic e-commerce fulfilment demand which is growing at an unprecedented rate. To date, Moscow and St Petersburg have been the main hubs of industrial and logistics demand, but activity has recently increased around the regional city markets where retail demand is booming.

It is not only in Russia where the rise of online retailing is beginning to filter through to the logistics sector.

In the core CEE logistics markets, take-up from e-commerce occupiers has increased fourfold in the last three years, especially in Poland and the Czech Republic.

As well as expanding locations, there is increasing evidence of 'hub and spoke' distribution models taking shape. Hubs are getting bigger, with e-commerce occupiers dominating take-up of larger facilities (40,000 m<sup>2</sup>), particularly in the Czech and Polish markets. Yet the spoke components are still developing, a likely outcome of which is the growth in demand for smaller, urban e-fulfilment operations.

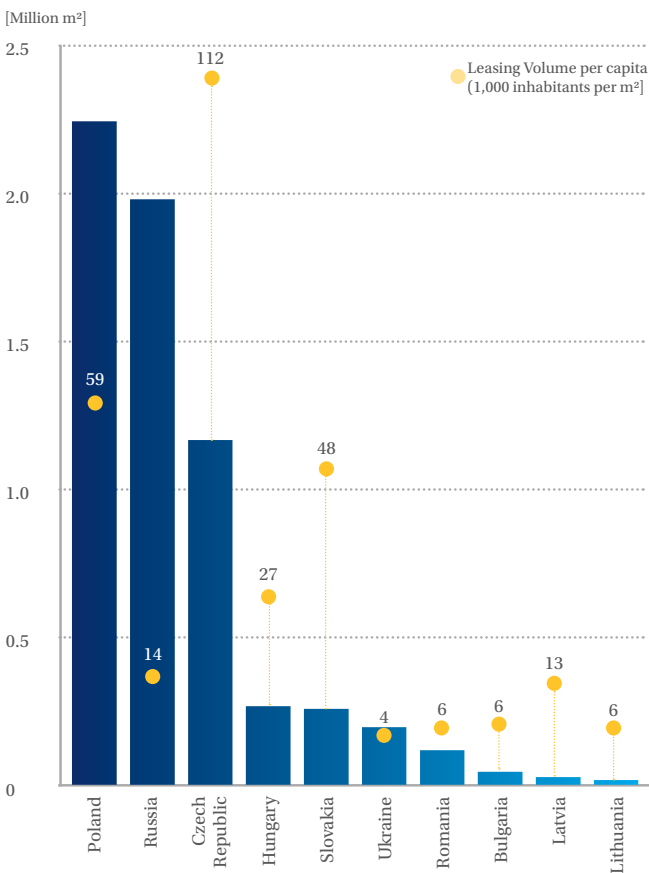
Manufacturing is also undergoing a renaissance across the entire CEE region. This is driving demand not only in the traditional markets of Poland and the Czech Republic, but also for new facilities in Hungary and Serbia. Russia is working on localising its manufacturing and production and creating a base for domestic and foreign companies alike.

The industrial and logistics market is developing rapidly and we are just beginning to see the impact on the demand for 'hub and spoke' facilities, and new forms of freight and transportation modes. The positive effects on the market through further growth in logistics, manufacturing and retailing demand will continue to revolutionise the CEE markets in the short and long-term providing investment opportunities for an increasingly popular global market sector.

## Table of Contents:

EXECUTIVE SUMMARY	1
INTRODUCTION	2
CATCHMENT: WHICH MARKETS HAVE THE MOST ACTIVE DEMAND?	2
GEOGRAPHICAL SHIFTS IN ACTIVITY	3
WHICH BUSINESS SECTORS ARE DRIVING INDUSTRIAL AND LOGISTICS DEMAND?	3
THE RISE OF RETAILING	4
E-TAILING SURGING AHEAD	4
TOWARDS HUB & SPOKE DISTRIBUTION MODELS	5
SPOKES YET TO DEVELOP	5
LOGISTICS & TRANSPORT PROVIDERS EVOLVING	6
THE GROWTH OF INTER/ MULTIMODAL	6
MANUFACTURING GROWTH	7
CONCLUSION	8

Figure 1: Leasing Volume (m<sup>2</sup>) by Country 2013



Source: Colliers International

## Introduction

For the last three years, we have been reporting on the strong growth dynamics of the industrial and logistics sector in our EMEA Future of Logistics series, Logistics Hubs and Best-shoring reports. In summary, the sector is going through a number of structural and cyclical shifts driving significant growth, change and opportunities globally and across Europe. E-commerce, best-shoring, customer and consumer proximity, combined with growing global trade, new infrastructure, technologies and forms of freight are significantly altering the landscape. Evidence of this growth shift can be seen in the wave of institutional capital which has married up with developer and operator expertise over the past 24 months to capture and consolidate this growing market.

Table 1: Global & European JV Platforms

'Capital & Expertise' I&L Platforms	Publicly Quoted Capital Invested
Canada's Brookfield & IDI Gazeley	\$3.5billion Global Platform
Norges & Prologis JVs	€2.4billion Europe; US\$1 billion USLV
SELP: SEGRO and PSP JV (Canadian Public Sector Pension Investment Board)	€1billion
HOOPP and Verdion JV (Healthcare of Ontario Pension Plan)	€1billion
Goodman GELF Fund	€1.9 billion portfolio
Blackstone-Logicor	€1.5 billion portfolio
TPG, Ivanhoé & P3 (Pointpark Properties)	€750 million
KWASA Goodman Germany (Goodman & Malaysian Employees Provident Fund)	€713 million

Source: Colliers International

In this short report we review the extent to which these trends have been driving industrial and logistics demand in the CEE region in recent years via an analysis of industrial and logistics occupiers by business sector, as of end 2013.

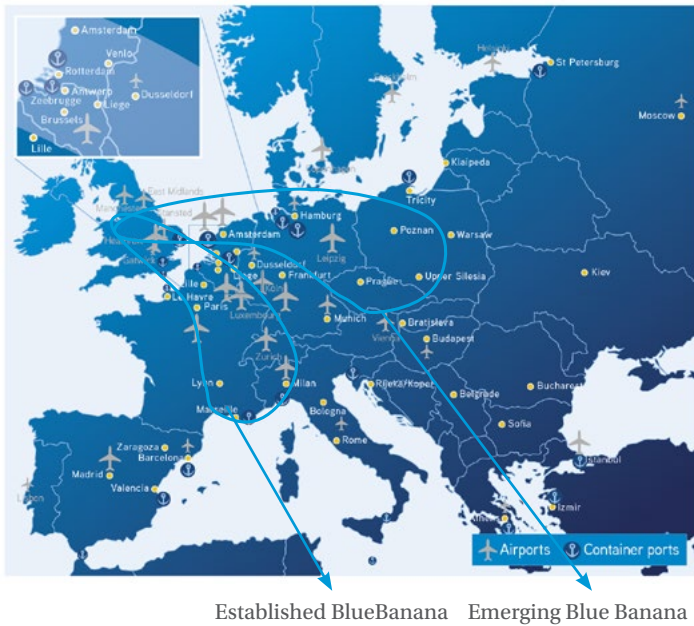
## Catchment: Which markets have the most active demand?

As Figure 1 shows, the main logistics hubs of the region are located in the Czech Republic, Poland and Russia. Occupier demand is increasing in Slovakia, and recent activity suggests that this trend may continue, but as one moves south and east from Hungary, demand clearly drops off.

In terms of distribution, however, there are significant differences. The geographical catchment area for occupiers in Russia is predominantly local, while the Czech Republic, Poland, Hungary and increasingly Slovakia operate across pan-European networks. Although distribution in the other markets of the region is largely national, increasing evidence of growth in manufacturing away from the core CEE markets into southern Hungary, Serbia and further afield is increasingly internationalising the nature of distribution across the region. In turn, this is creating a change in distribution corridors across Europe.

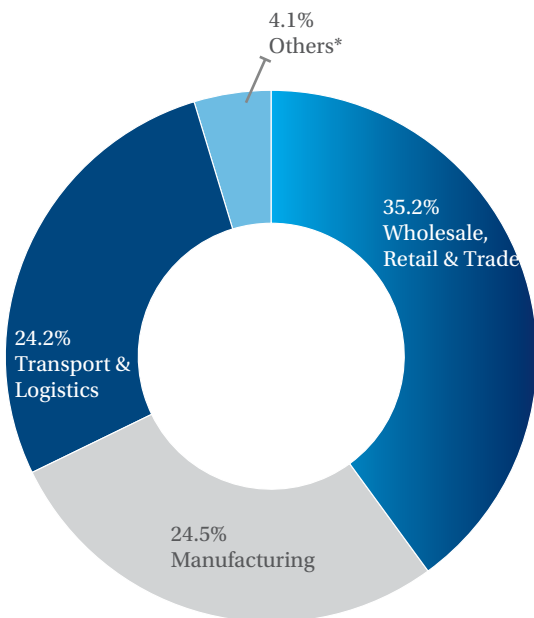


Figure 2: Europe's 'Blue Bananas'



Source: Colliers International

Figure 3: CEE Industrial & Logistics Business Occupiers 2013



\*Others includes Construction, Energy & Materials, Health Care, IT  
 NB: approximately 12% of the total transaction volume for 2013 is confidential and/or unable to be classified

Source: Colliers International

## Geographical Shifts in Activity

In EMEA, traditional distribution channels have been road-based and focused within the 'Established Blue Banana' as shown in Figure 2 - i.e. the 'Golden Triangle' in the UK, and the continental markets of Benelux, western Germany, France and the northern part of Italy, encompassing the dominant European trade-ports in the Le Havre - Hamburg range.

Distribution channels are now expanding across the top of northern Europe into Poland, the Czech Republic and Slovakia creating a new 'Emerging Blue Banana'. In our Regional Year-End Review in 2010, we noted that this shift was likely to occur, but expected it would take a few years before there was evidence of this change. Our analysis of leasing transactional data across the CEE markets since 2011 shows that this shift is well under way with markets such as Slovakia starting to benefit from the regional expansion of the transport and logistics sector.

The remainder of this report looks at the economic and business sectors driving this growth in expansion.

## Which Business Sectors Are Driving Industrial and Logistics Demand?

The industrial and logistics market is represented by nine broad categories including:

- » Agriculture,
- » Construction,
- » Energy and Materials (Utilities),
- » Health Care (Life Sciences),
- » Information Technology,
- » Manufacturing,
- » Scientific and Technical,
- » Transport and Logistics, and
- » Wholesale, Retail and Trade.

As of end 2013, the three main occupiers of industrial and logistics space in the CEE region were:

- » Wholesale, Retail and Trade (35.2%),
- » Manufacturing (24.5%), and
- » Transport and Logistics (24.2%).

Together, these sectors account for 84% of all leasing transactions.

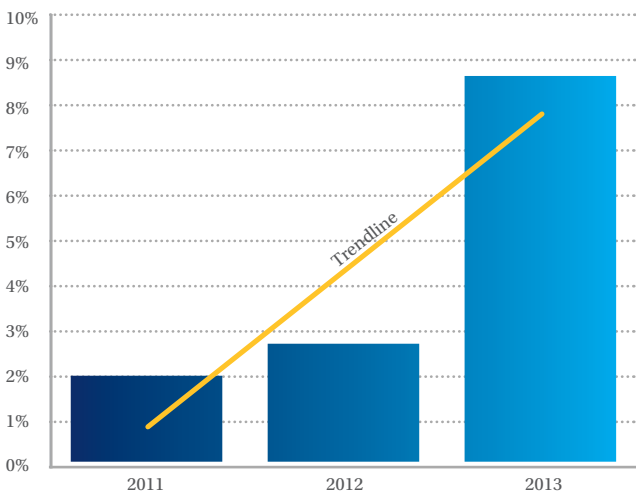
## The Rise of Retailing

During the last three years there has been a clear shift in the growth of retailer demand for logistics space. Overall, retailers share of total space leased increased from 24.7% in 2011 to 35.2% in 2013, making retail the top consuming sector of industrial and logistics space in the CEE region.

By classifying the retailer category in greater detail, we have been able to observe which retail segments are driving this growth for logistics space. By sub-sector:

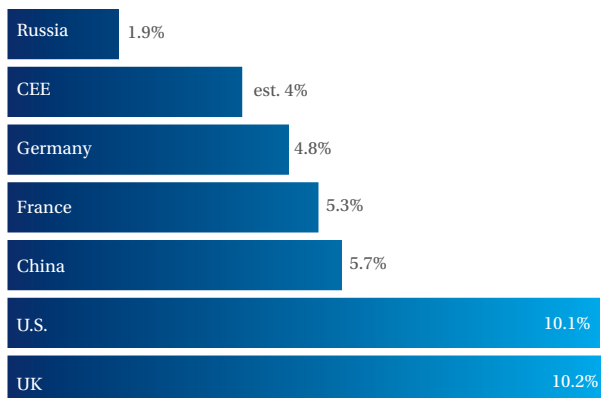
- » Retail trade in food, beverages and tobacco is a consistent major occupier of logistics space in CEE, with an average 8.5% share of total logistics and industrial transactions per annum since 2011.
- » Demand by occupiers specialising in the retail trade of household and personal goods has almost doubled from 0.73% to 1.21% since 2011, reflecting the strong growth in GDP/capita across the region post EU-accession.
- » However, take-up by e-commerce users has been the most impressive, increasing fourfold from 1.9% in 2011 to 8.7% in 2013.

Figure 4: Change in Take-up by E-commerce 2011-2013



Source: Colliers International

Figure 5: E-commerce as % of Retail Sales 2012



Source: Euromonitor, Morgan Stanley Research- est. for Russia

## E-tailing Surging Ahead

Domestically, e-commerce is one of the fastest-growing sectors in Russia, and Moscow is the main hub for domestic e-commerce occupiers. There is some occupational demand from the e-commerce sector emerging in St Petersburg but mostly, 'food, beverages and tobacco', and 'household and personal goods' retailers dominate here. Outside of these two major cities, demand is growing rapidly for 'standard' retail storage and distribution needs, driven by the expansion of shopping facilities in cities with populations greater than 500,000. In fact, we have already begun to see a big change in the market this year. Around 70% of demand in Russia in 2014 comprises retailers outside of Moscow and St Petersburg, representing a complete reversal of the trend in 2013.

In Poland, the growth in e-commerce take-up has expanded from Warsaw to other regional cities namely, Poznan and Wroclaw. Overall, wholesale, retail and trade take-up of warehouse space has almost doubled in the last three years and in 2013, almost 40% of all industrial transactions came from this segment. Amazon has had a very big part to play in this expansion, with three new centres comprising ca 324,000 m<sup>2</sup> in Poznan and Wroclaw agreed to be delivered in 2015. What is interesting to note, however, is that these new Amazon facilities in Poznan and Wroclaw will initially be used to facilitate pan-European demand - not to primarily serve Polish or CEE markets.

In the Czech Republic, e-commerce occupation is rising, though mainly in Prague. Amazon has been interested in developing a facility in Brno for some time, and it was recently reported that plans to build a warehouse complex were finally progressing. The Prague and Brno regions have historically been the most popular destinations, however Pilsen's strategic transport links, proximity to Germany and it being a traditional industrial centre, has seen it rapidly grow into a logistics hub for multimodal and e-commerce operators. A number of Czech e-commerce operators have already expanded their operations into markets outside of the Czech Republic and it is believed Pilsen is an ideal hub location to facilitate this expansion west.

Our analysis of leasing activity shows that there will only be a partial impact on the rise in e-commerce sales. As of end 2012, e-commerce sales as a percentage of all retail sales were believed to be around 4%, with Russia lagging behind at sub-2%, suggesting there is plenty of growth to come from occupiers across the region in this specific retail sub-sector. This is somewhat less than the more mature markets of the US, UK, France and Germany which are closer to, or above 10%. Equally, a recent article in the Financial Times (29th June 2014), quotes a DHL forecast which states their belief that e-commerce as a proportion of total trading in Europe could grow from just 8% today to 40% by 2025.

This suggests that we are only just 'scratching the surface' of growth in this area via the initial activity of the likes of Amazon. Although other domestic players have started to embrace growth in the sector, there is potential for new market players and retail/e-commerce operators to enter this market sphere. As a result, we expect a shift towards a 'hub and spoke' distribution model, with both increased demand for both large regional and sub-regional distribution hubs and the rapid growth of smaller urban e-fulfilment centres.

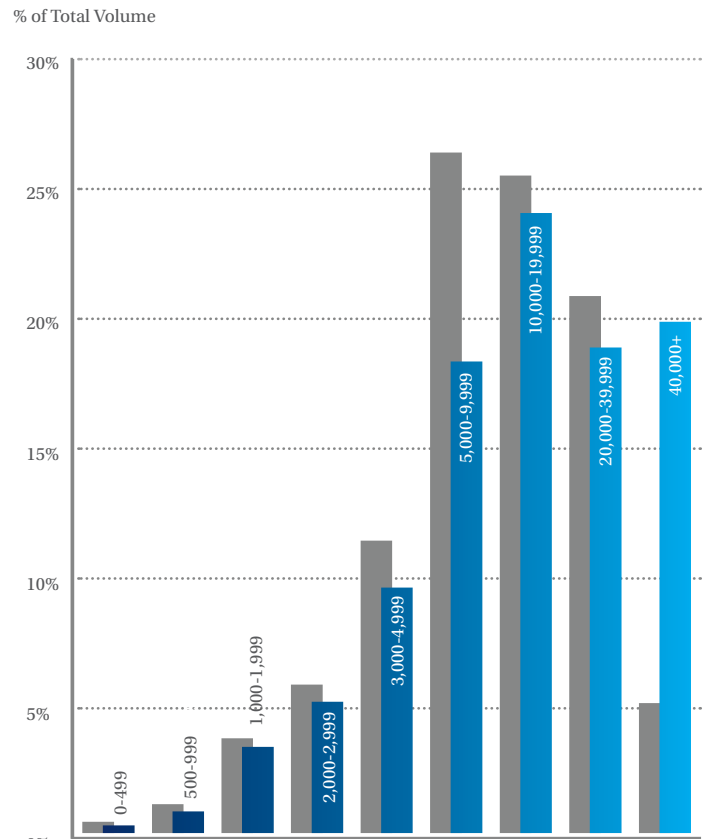
## Towards Hub & Spoke\* Distribution Models

Greater demand from e-commerce occupiers is leading to the take-up of larger 'distribution hub' facilities. While this shift has been triggered by the e-commerce sector, the increase in demand for more retail goods generally is increasing the need for greater warehousing and storage capacity. In 2011, approximately 5% of warehouse facilities leased in CEE were 40,000 m<sup>2</sup> or larger. In 2012, this grew to 10.8% and in 2013 ca. 20% of all transactions were in this bracket. More than half of these occupiers are retailers, the majority of which are involved in e-commerce business activities. The remaining occupiers in this segment are manufacturers, followed by a small number of transport and logistic users.

### Spokes Yet To Develop

Just as large distribution hubs are on the rise, we anticipate greater demand for their spoke counterparts in the near future. These will take various forms comprising a combination of smaller retail and warehouse e-fulfilment centres which provide localised, rapid delivery and collection points in and around cities, towns and urban areas. Given the increasing need to be closer to consumers and customers, precipitated by the expansion of 'click and collect', 'next-day delivery', and what will soon become 'customise, click and collect', this trend is likely to be accelerated in the near future. The current lack of such existing facilities illustrates that we are only in the very early phases of adapting to this structural change and growth of the e-commerce sector in the CEE region. The emergence of 'next day delivery' in particular could prove to be the game changer which drives this shift in distribution.

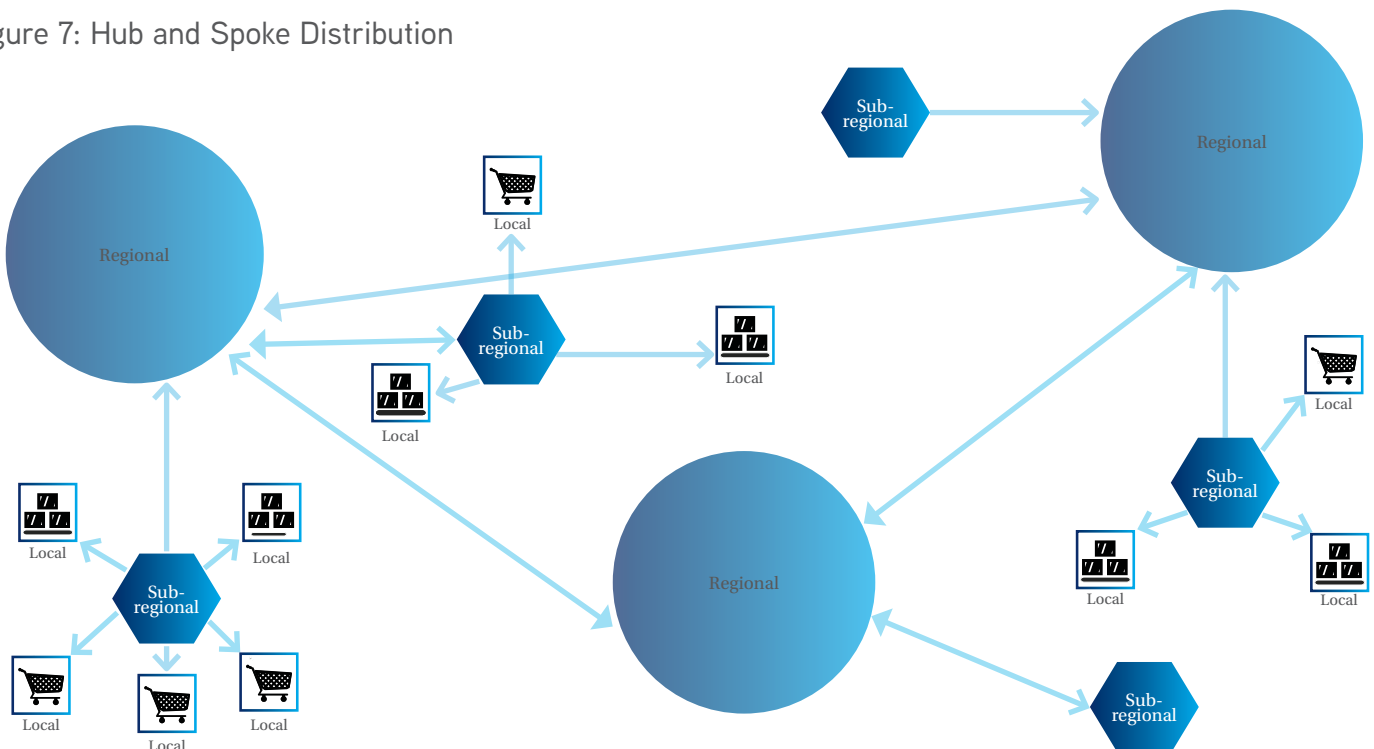
Figure 6: Size of Logistics Space Occupied 2011 vs 2013



Source: Colliers International

\*A 'hub and spoke' distribution model is a transportation network connecting two or more cities/markets with its regional (centralised) hub. A hub facilitates a more efficient distribution network by acting as the regional centralised interface (point of contact) for the consumer/customer. A spoke is a smaller, usually scaled-down model of the regional hub, positioned at various locations across the distribution network to maximise freight efficiency, improve the ability to track and trace, and potentially make the price of shipping more competitive.

Figure 7: Hub and Spoke Distribution



Source: Colliers International

## Logistics & Transport Providers Evolving

The general increase in demand for retail goods is fueling the need for greater warehousing and storage-capacity efficiency. Retailers are seeking to become more competitive in their domestic markets by making supply-chain operations more efficient. The flow-on effect of all this expansion in e-commerce is that there is immense pressure to improve the quality of transport-related infrastructure to allow for greater efficiencies in shipment and trade through use of transport and logistics operations. This progression and consumer need to have goods 'now' have underpinned growth in this sector to the point that traditional transport and logistics operators are now diversifying to offer more efficient combinations of transport and warehouse use to meet capacity pressures and manage costs.

## The Growth of Intermodal/Multimodal

Transportation networks are becoming more complex and global supply-chains are diversifying. After having just got used to the term 'third-party logistics' (3PL), there are now 'fourth party' (4PL) and 'fifth-party' (5PL) logistics managing the process. While a 3PL is an operator, specialising in integrated operation, warehousing and transportation services, a 4PL works as an advisor or consultant managing the whole supply-chain, and often other 3PLs. A 5PL manages all parties in the supply-chain in conjunction with an e-business. Intermodal distribution systems, often called multimodal, are becoming synonymous with this change and this is reflected in the increasing volume of space being consumed by these occupiers in the CEE region.

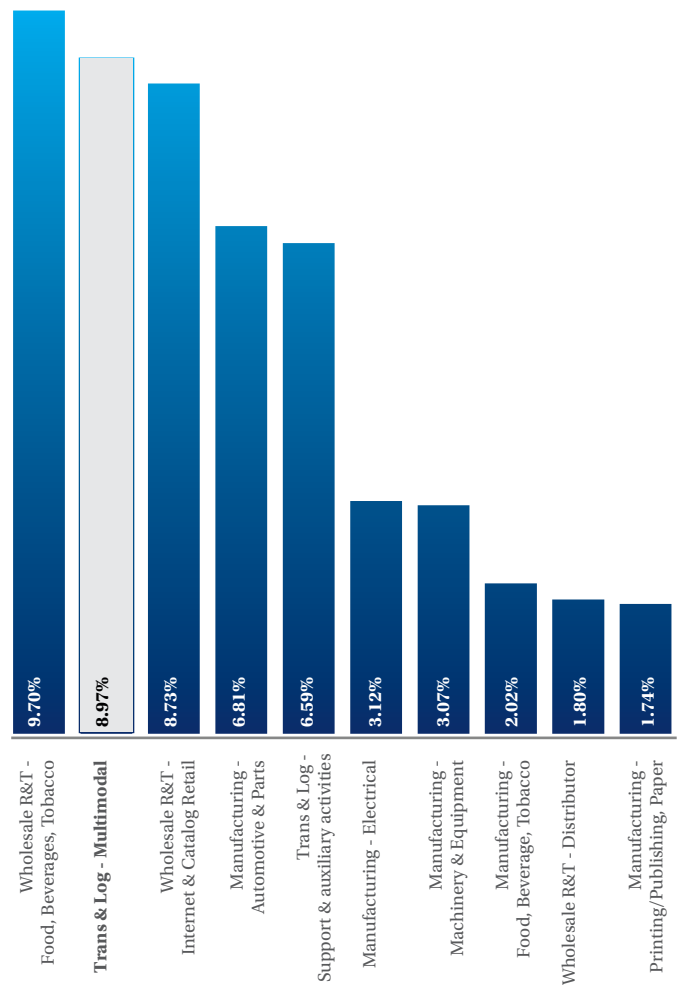
Intermodal, or multimodal, integrates two or more transport modes to get goods to their final destination. Growth in containerised freight using road and rail is revolutionising the use of intermodal distribution systems and we can see this shift in the CEE region according to the services provided by logistics operators.

Transport and logistics operators specialising in multimodal/intermodal freight systems accounted for around 10% of the volume of space leased in 2013. This means that the volume of space occupied by multimodal/intermodal operators has increased by 69% since 2011 (337,492m<sup>2</sup> to 570,204m<sup>2</sup>), which is a very telling trend.

At present, Prague dominates activity in the transport and logistics sector in the CEE region whilst Moscow has rapidly developed into the main hub for local markets in Russia.

In the Czech Republic, as well as Prague, the Pilsen and Ostrava regions are undergoing some expansion. In Poland, transport and logistics operators have predominantly centred themselves within Warsaw's three zones – ca. 40% of all logistics transactions occur in Warsaw. In 2013, almost half of these occupiers had the capacity to provide multimodal/intermodal freight transport options.

Figure 8: Top 10 Occupiers by Sub-Sector 2013



Source: Colliers International

Since 2011, Poland has undergone significant expansion, with many other regions experiencing growth in multimodal/intermodal occupier take-up, including Poznan, Central Poland and Gdansk.

In Russia, occupancy in the transport and logistics sector has increased considerably during the last three years, with Moscow dominating the market, underpinned by a rise in the number of multimodal/intermodal operators securing facilities. St Petersburg is just beginning to experience growth in this sector as well as a rise in the number of transport support and auxiliary-service centres.

In summary, this highlights the start of a potentially significant shift towards more efficient, containerised intermodal freight logistics. As we highlighted in our previous 'Future of Logistics Reports', the growth potential for intermodal freight across the CEE market, if not the whole European market, is significant. It seems like operators are now embracing this change. We shall be looking in more detail at the expansion potential and constraints impacting this sub-sector across EMEA later in 2014.



## Manufacturing Growth

Last, but certainly not least, we have manufacturing. This component of demand has also seen an increase in activity in recent years. Although, as with retail and logistics operations, Poland, the Czech Republic and Russia remain the main hubs for occupancy.

Whilst retailers tend to drive the Russian market and logistics operators the Czech market, Poland tends to be top spot for manufacturing - the highest share of total volume leased to manufacturing are in Poland, followed by Russia and the Czech Republic. Poland's traditional industrial and manufacturing bases include Warsaw, Wroclaw, Upper Silesia, Poznan and Central Poland, and cover a broad spread of industries which has helped to attract manufacturing businesses.

While this has not changed significantly over the last few years, despite the downsizing of some traditional industries such as mining, there has been a switch to high-tech and value-add manufacturing across the country. For example, Whirlpool now have an R&D manufacturing centre in Wroclaw to complement traditional production. In the traditional shipyards of Gdansk, companies such as Sunreef yachts now build luxury catamarans to order. Equally, we have witnessed small increases in manufacturing take-up outside the major regional centres suggesting that there is some expansion occurring.

Since 2011, Moscow has expanded its manufacturing base from largely electrical, 'food, beverages and tobacco', 'printing/publishing and paper' occupiers to include a large number of automotive/mechanical-engineering occupiers. St Petersburg, which was heavily occupied by automotive/mechanical manufacturers, has increased its number of food, beverages and tobacco occupiers. Russian President Vladimir Putin recently discussed plans for a new policy to increase local manufacturing and to expand the number of large production facilities. The aim is to strengthen the domestic automotive industry and create a manufacturing base for both Russian and foreign producers in Russia.

By the same token, manufacturing in Hungary is expanding outside of its traditional locations of Győr and Budapest to other regional markets. This is underpinned by growth in demand for automotive products as well as government-led regional-development programmes. Earlier this year, wheel manufacturer Alcoa announced plans to expand its facility in Székesfehérvár to meet surging European demand for its products (truck wheels). Its expansion is also supported by the Hungarian Government's Regional Operative Programme.

Further south, Fiat reopened the Kragujevac plant in Serbia early last year and according to a report in the Financial Times, has invested €1 billion since 2010 with plans to export globally. Fiat's trend did not go unnoticed with other car production and manufacturing companies having since laid down foundations in Serbia. These include Bosch, FAS, Siemens, Panasonic and more recently Finnish automotive group PKC.

The Czech Republic has traditionally operated with a strong industrial base, with Prague and Brno being the most developed. In 2011, more than 80% of the Czech Republic's transactions in this sub-sector were in Prague and Brno. However, in the last three years, this has shrunk to 50%, while occupier take-up in the Pilsen and Ostrava regions has grown substantially, underpinned by increasing demand from electrical and automotive/mechanical manufacturers as well as occupiers operating in chemical manufacturing. Both Pilsen and Ostrava have good transport connections and offer significant brownfield redevelopment investment opportunities.

Figure 9: Top 5 Manufacturing Sub-Sectors 2013



Source: Colliers International

## Conclusion

The growth in logistics has become one of the hottest topics in commercial real estate. This has been underpinned by e-commerce enabled shipping, new technologies and the increasing need for more sophisticated supply-chain networks. Expansion in the sector is being closely watched and the three sectors driving these changes in CEE are manufacturing, transport and logistics and wholesale, retail and trade.

While these three sectors are not uncommon occupiers in the industrial sector, the frequency and volume of take-up from the diversified sub-sectors within each group is changing. We have observed significant increases in e-commerce demand and take-up, as well growth from operators providing multimodal/intermodal freight distribution and infrastructure. The changing intensity of consumer (and business) demand and accessible technology has meant that these industries are under pressure to respond more quickly than ever before and, in some cases, provide specialist services to meet that demand.

There is clear evidence that strategic locations have been chosen by logistics and retail operators to consolidate their main distribution hubs alongside ongoing improvements in the quality of infrastructure and trade networks.

In particular, the future of retail is changing and the full impact of multi-channel shopping, mobile technology and fulfilment logistics is not yet known.

What can be observed from this study into occupier take-up in the CEE region is that the scale of activity is growing quickly and that the efficiency and accessibility of distribution networks have a profound effect on where this activity is centred.

We expect that current market leaders, the Czech Republic and Poland will continue to dominate logistics distribution hub activity regionally. They have already established capacity to service numerous regional/pan-European locations.

Growth of e-commerce will be the most likely immediate driver of demand across a host of locations in the form of retail and/or e-fulfilment warehouse spokes. While the market is at a very early stage, the development of e-commerce in the Czech market suggests we will see both forms emerge in our cities in the near future.

Manufacturing is likely to continue to spread south and east to lower cost markets where transport connectivity has improved. This includes Slovakia, Hungary, Serbia, Romania and Bulgaria. Similarly, high-tech production growth will continue to develop in and around existing clusters, particularly those built to support the automotive and electrical goods sectors.

To date, we only appear to be scratching the surface of the opportunity in terms of the initial ramp-up in demand for large national and pan-regional distribution hubs. The emergence of more customer/consumer-focused urban spokes in the supply-chain system will form the next phase of this change. This could significantly impact existing shopping and retail facilities in many of our towns and cities in due course.



# 485 offices in 63 countries on 6 continents

United States: **146**

Canada: **44**

Latin America: **25**

Asia Pacific: **186**

EMEA: **\$2**

billion in  
annual revenue

**\$2**

billion in  
annual revenue

**1.12**

billion square feet  
under management

**15,700**

professionals  
and staff

Katy Dean  
Senior Regional Research Analyst | EE  
+420 226 537 618  
katy.dean@colliers.com

Damian Harrington  
Regional Director of Research | EE  
+358 400 907 972  
damian.harrington@colliers.com



## About Colliers International

*Colliers International is a global leader in commercial real estate services, with over 15,700 professionals operating out of more than 485 offices in 63 countries. A subsidiary of FirstService Corporation, Colliers International delivers a full range of services to real estate users, owners and investors worldwide, including global corporate solutions, brokerage, property and asset management, hotel investment sales and consulting, valuation, consulting and appraisal services, mortgage banking and insightful research. The latest annual survey by the Lipsey Company ranked Colliers International as the second-most recognized commercial real estate firm in the world.*

[colliers.com](http://colliers.com)

Copyright © 2014 Colliers International.

The information contained herein has been obtained from sources deemed reliable. While every reasonable effort has been made to ensure its accuracy, we cannot guarantee it. No responsibility is assumed for any inaccuracies. Readers are encouraged to consult their professional advisors prior to acting on any of the material contained in this report.



Accelerating success.