Supply Chain Coordination in the Netherlands

Holland.

"Statement by Client of Supply Chain Coordination."

Client of Supply Chain Coordination

The Netherlands: Fast Facts

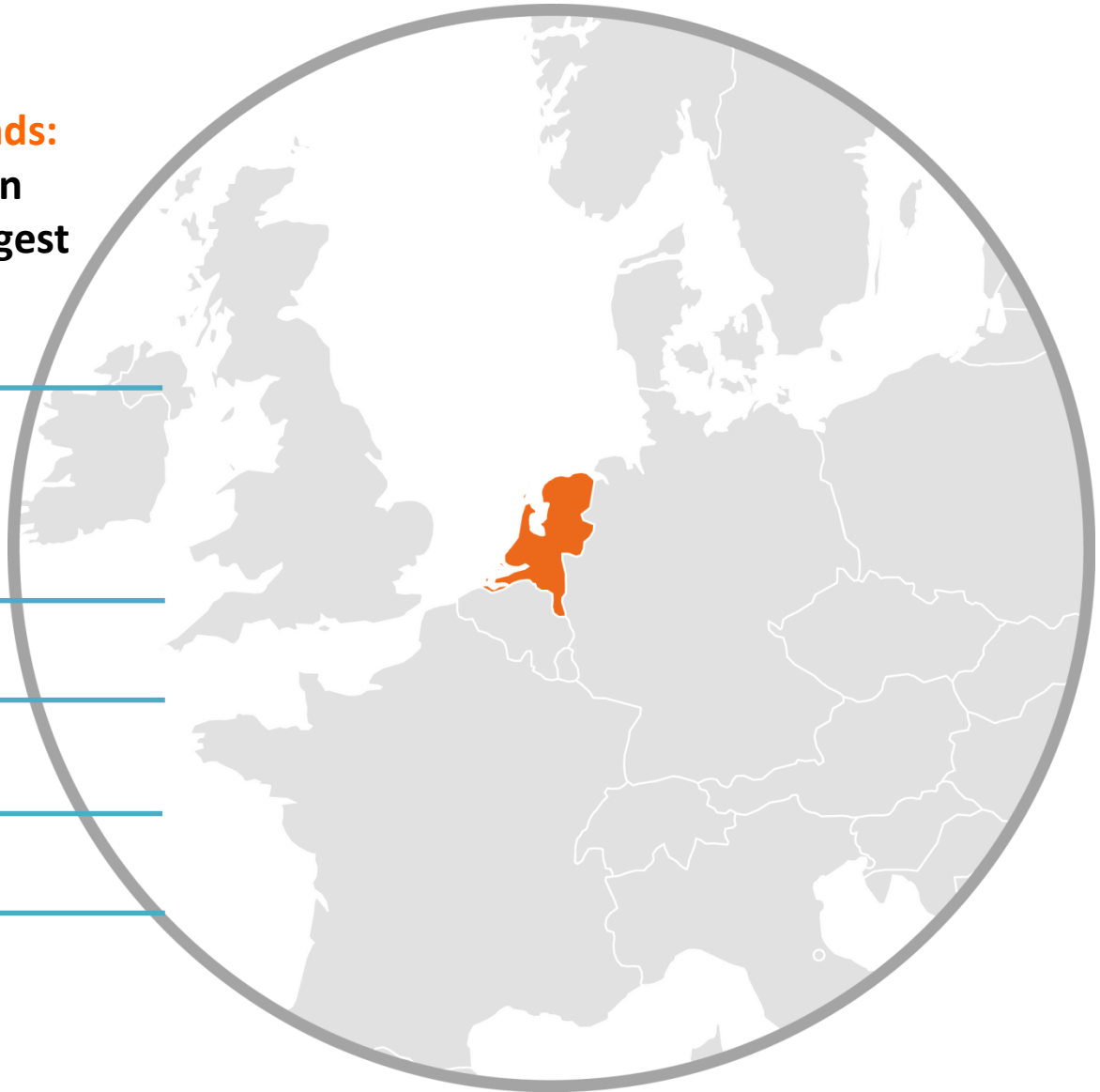
Welcome to the Netherlands:
Ideal geographic location in the centre of the three largest economies in Europe: Germany, UK and France

Vote! Parliamentary democracy and constitutional monarchy

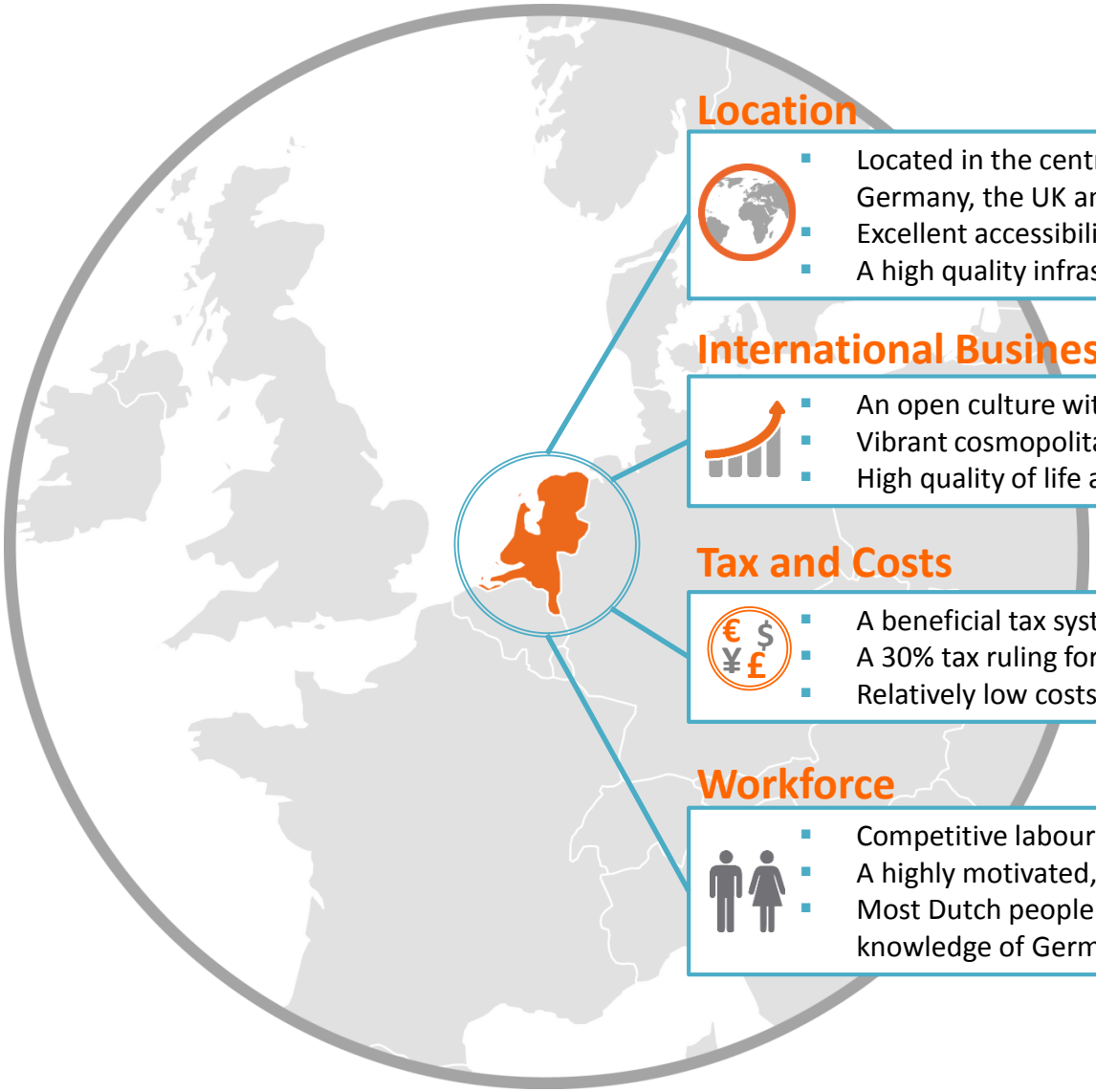
€ Currency: Euro (€)

Area: 16,033 square miles

I amsterdam. Capital: Amsterdam



The Netherlands: Top Reasons to Invest



Location

- Located in the centre of the three largest economies in Europe: Germany, the UK and France
- Excellent accessibility to the rest of Europe
- A high quality infrastructure

International Business Climate

- An open culture with an international mindset
- Vibrant cosmopolitan community combining business and creativity
- High quality of life and relatively low cost of living

Tax and Costs

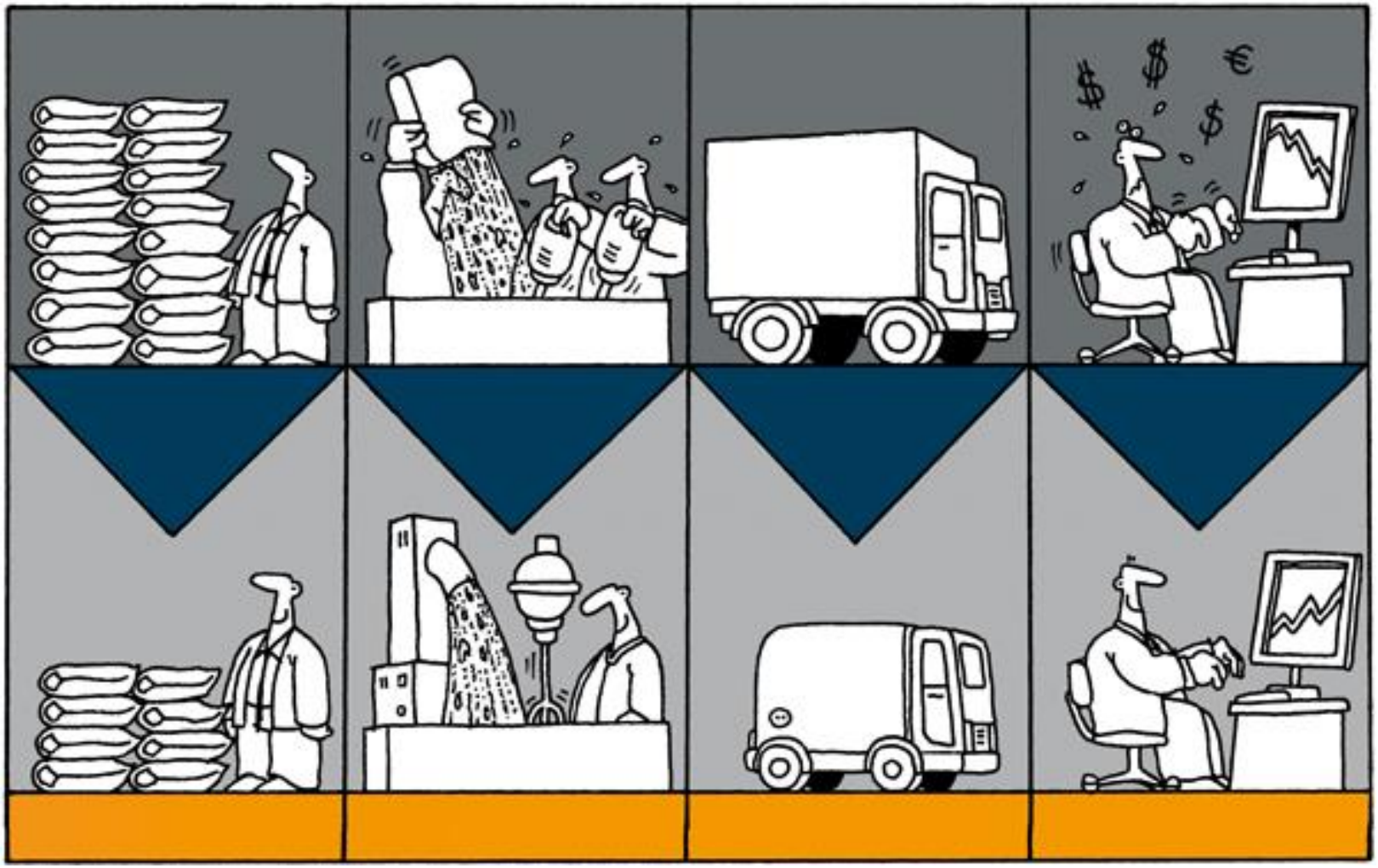
- A beneficial tax system with competitive 25% corporate tax rate
- A 30% tax ruling for foreign employees
- Relatively low costs of doing business

Workforce

- Competitive labour and operational expenses
- A highly motivated, well-educated and multilingual labour force
- Most Dutch people speak English very well and many have good knowledge of German and French

SUPPLY CHAIN COORDINATION

Supply Chain Coordination for increased efficiency



Cross Chain Coordination Centers (4C)

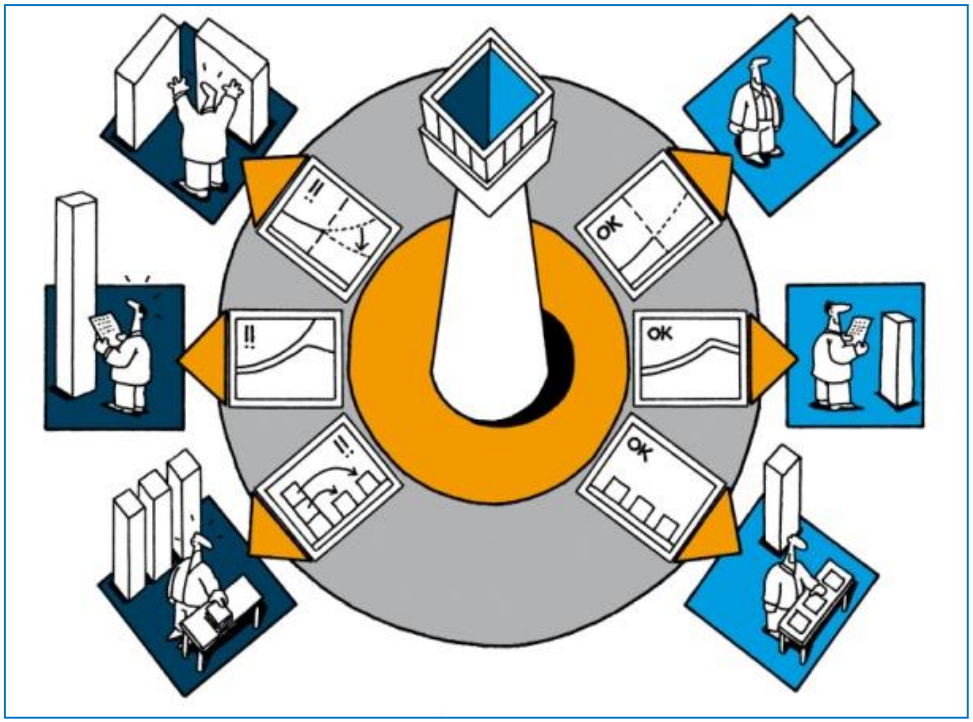
Cross Chain Coordination Centers (4C) are advanced centers where several complex worldwide supply chains are coordinated and directed.

This concerns the bundling, coordination and control of:

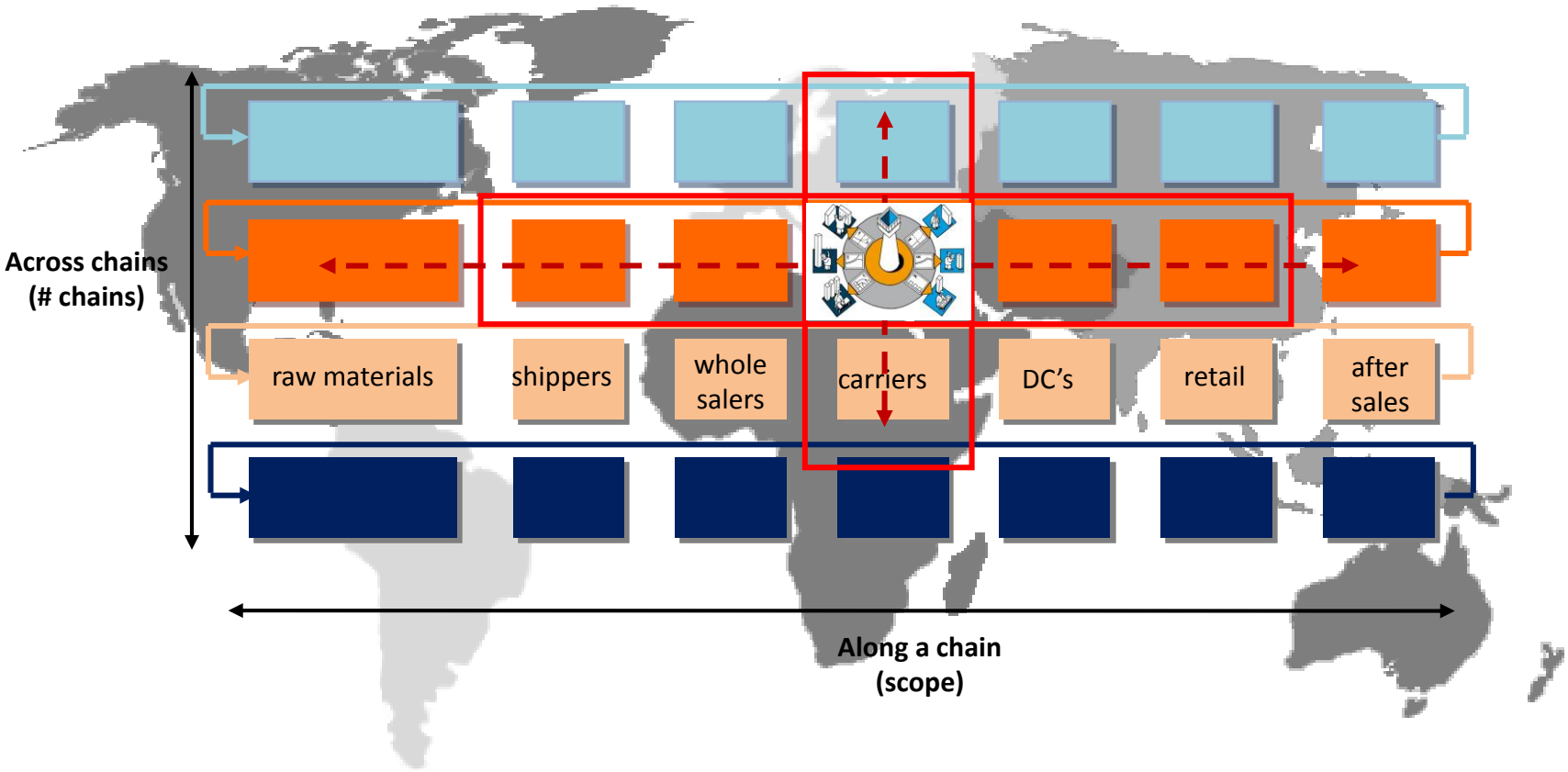
- physical goods flows,
- information flows,
- and financial flows.

Key words:

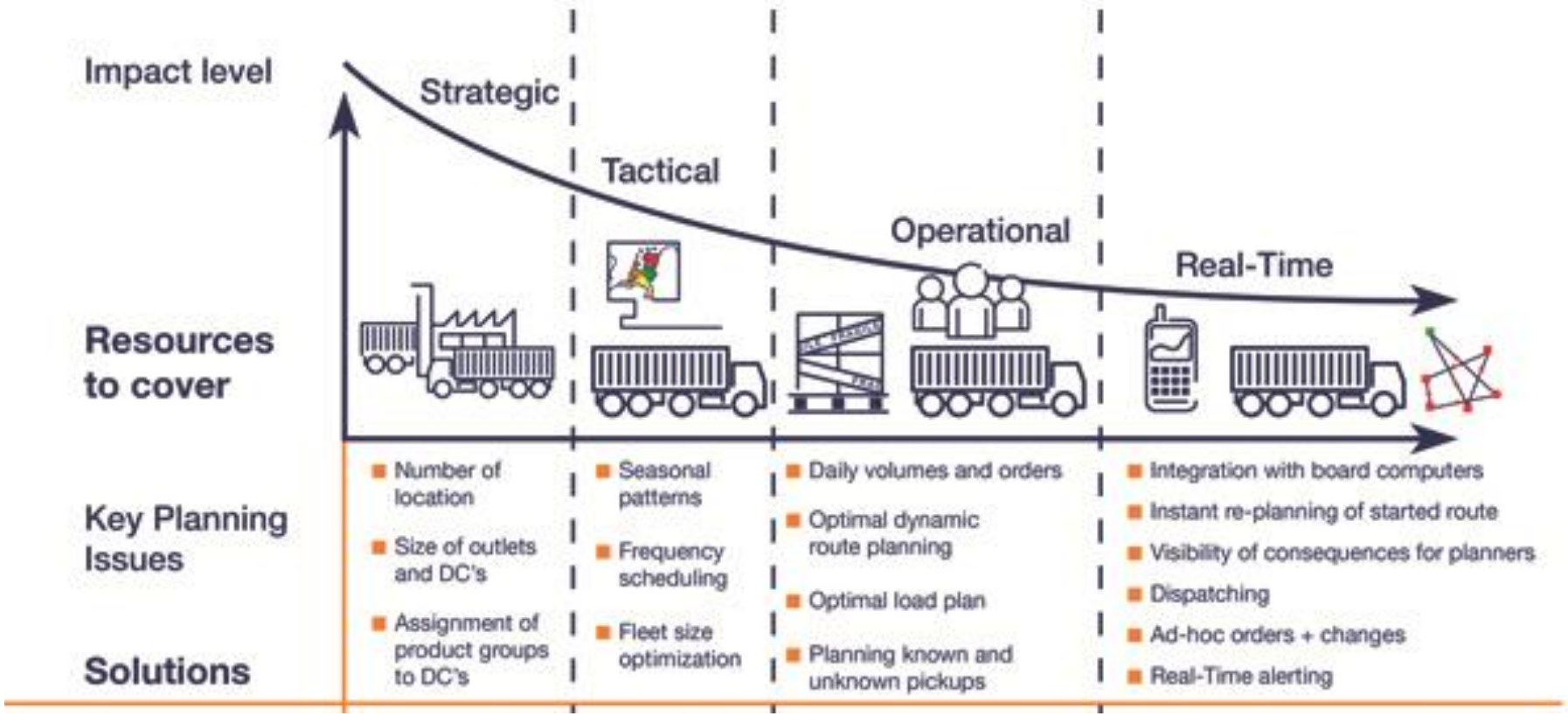
- Cooperation among multiple companies
- Bundling, realizing economies of scale in the operations
- Sharing information



Supply Chain Coordination along and across chains



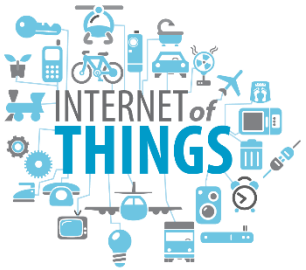
Logistics planning



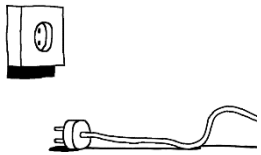
Source: ORTEC

Trends & consequences of logistics planning

- E-fulfilment & Omnichannel
- Closely knit distribution
- More returns
- Complex planning



- Internet of things
- More data sources
- More opportunities for planning optimization



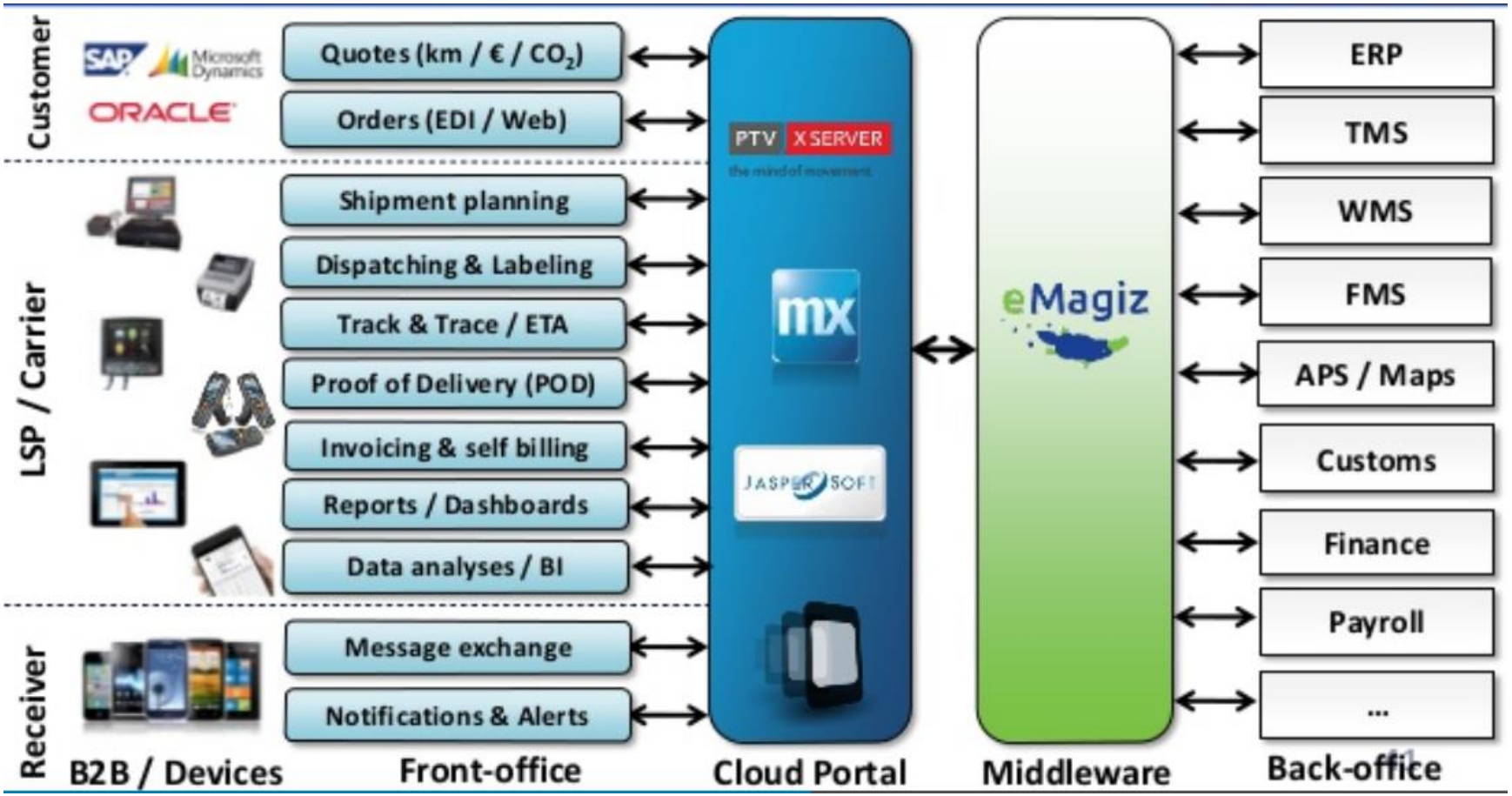
- System integration
- Plug & Play
- Collaborative Planning

- Real-time data
- Reliable planning
- Increased service level

- Planner 2.0
- Control Tower environments
- Other skills

- Paperless transport
- Documents coupled to logistics

Plug & Play cross chain collaboration center example



Source: Cape group

Innovation Supply Chain Coordination the Netherlands

TKI DINALOG
Dutch Institute for Advanced Logistics

- The Netherlands has designated a special innovation program to Cross Chain Collaboration Centers, noting the importance and knowledge in the Netherlands, driven by the Dutch Institute for Advanced Logistics.

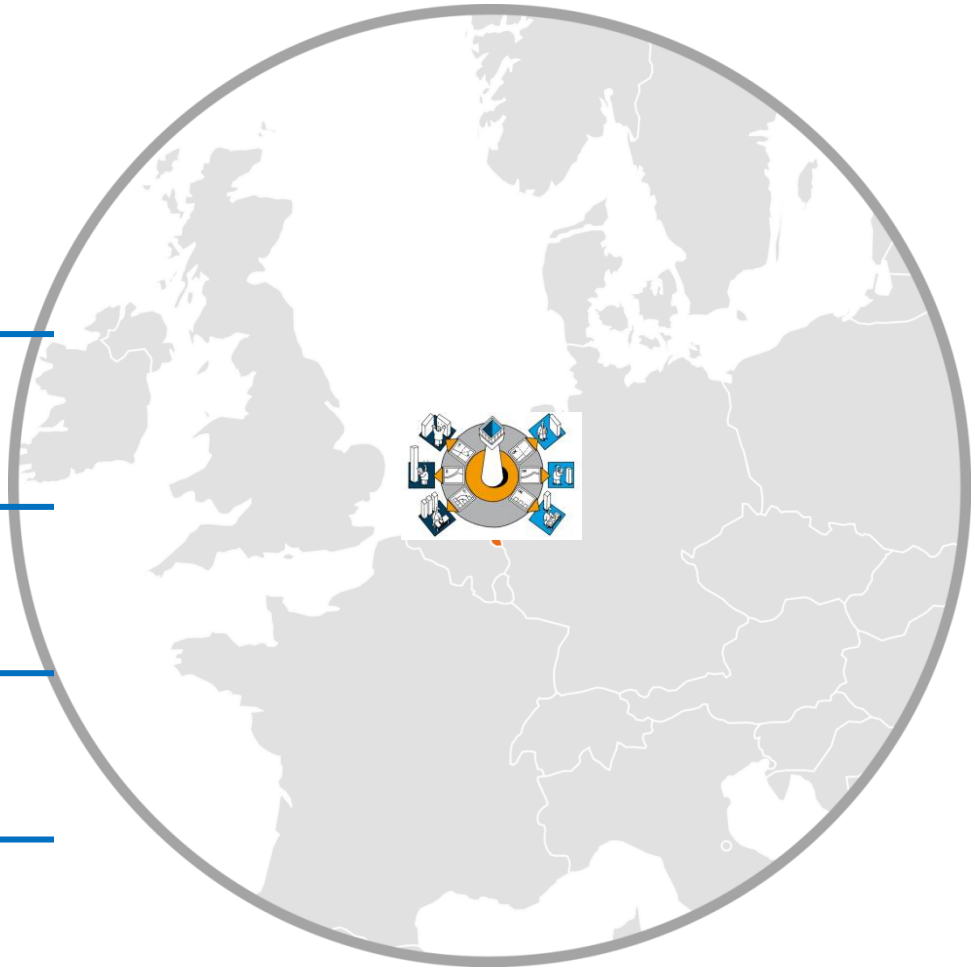
Ambition:

	International top position in supply chain control of (inter)national logistical activities
	Coordinate and control international transport flows
	Attract international cross chain control centers to the Netherlands
	Increased share of GDP in Supply Chain Coordination

Supply Chain Coordination

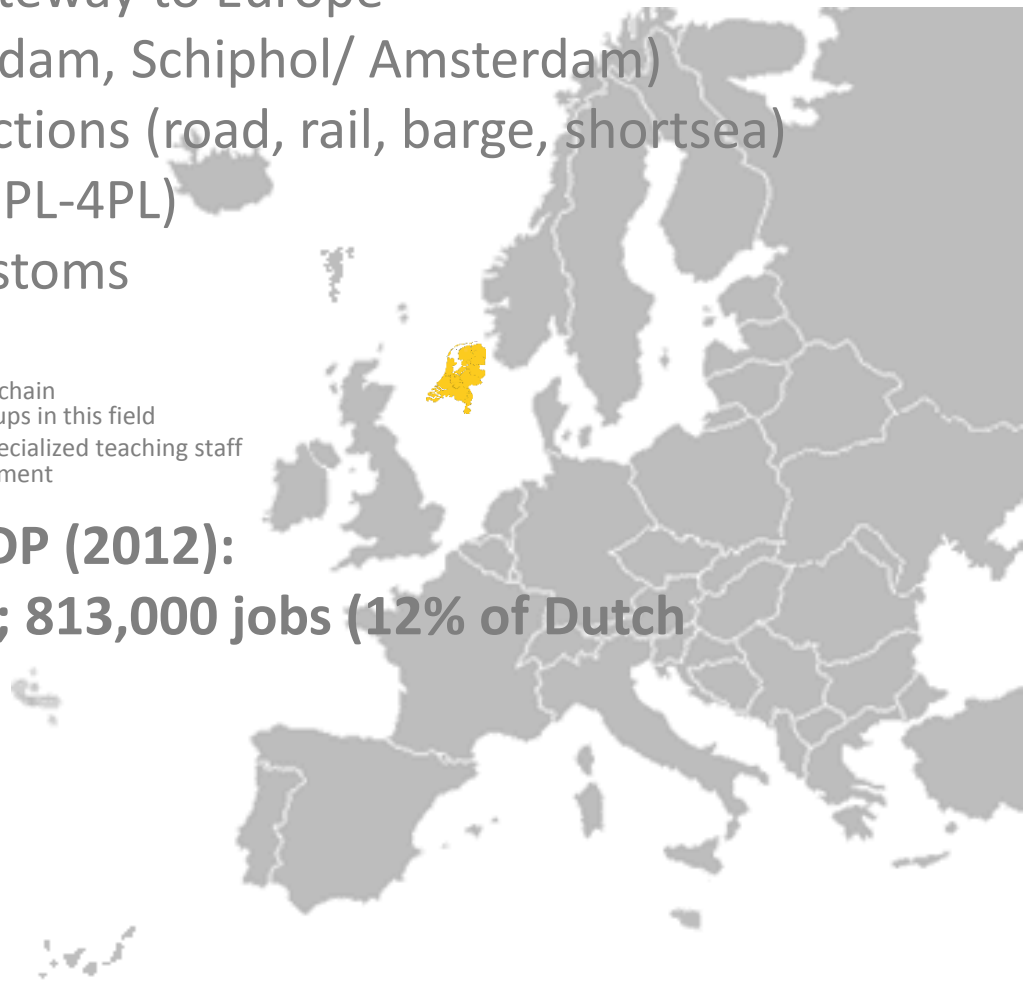
Benefits of Supply Chain Coordination

- Improved overview of the different involved chains leading to better harmonization and bundling of activities
- Savings in costs and decreased pressure on the environment by combining loads
- New knowledge and new profitable business activities (incl. new jobs);
- Improved attraction of the Netherlands on foreign companies.



The Netherlands = Logistics

- Geographical position as gateway to Europe
- Excellent Mainports (Rotterdam, Schiphol/ Amsterdam)
- Excellent Hinterland Connections (road, rail, barge, shortsea)
- Logistic Service Providers (1PL-4PL)
- Legislative framework & customs
- High level of knowledge:
  - 8 Universities with specialization in logistics / supply chain management, with over 45 professors/ research groups in this field
  - 11 Universities of Applied Research with over 150 specialized teaching staff with specialization in logistics / supply chain management



Logistics/ transport related GDP (2012):

55 billion euros (10 % of GDP); 813,000 jobs (12% of Dutch workforce)

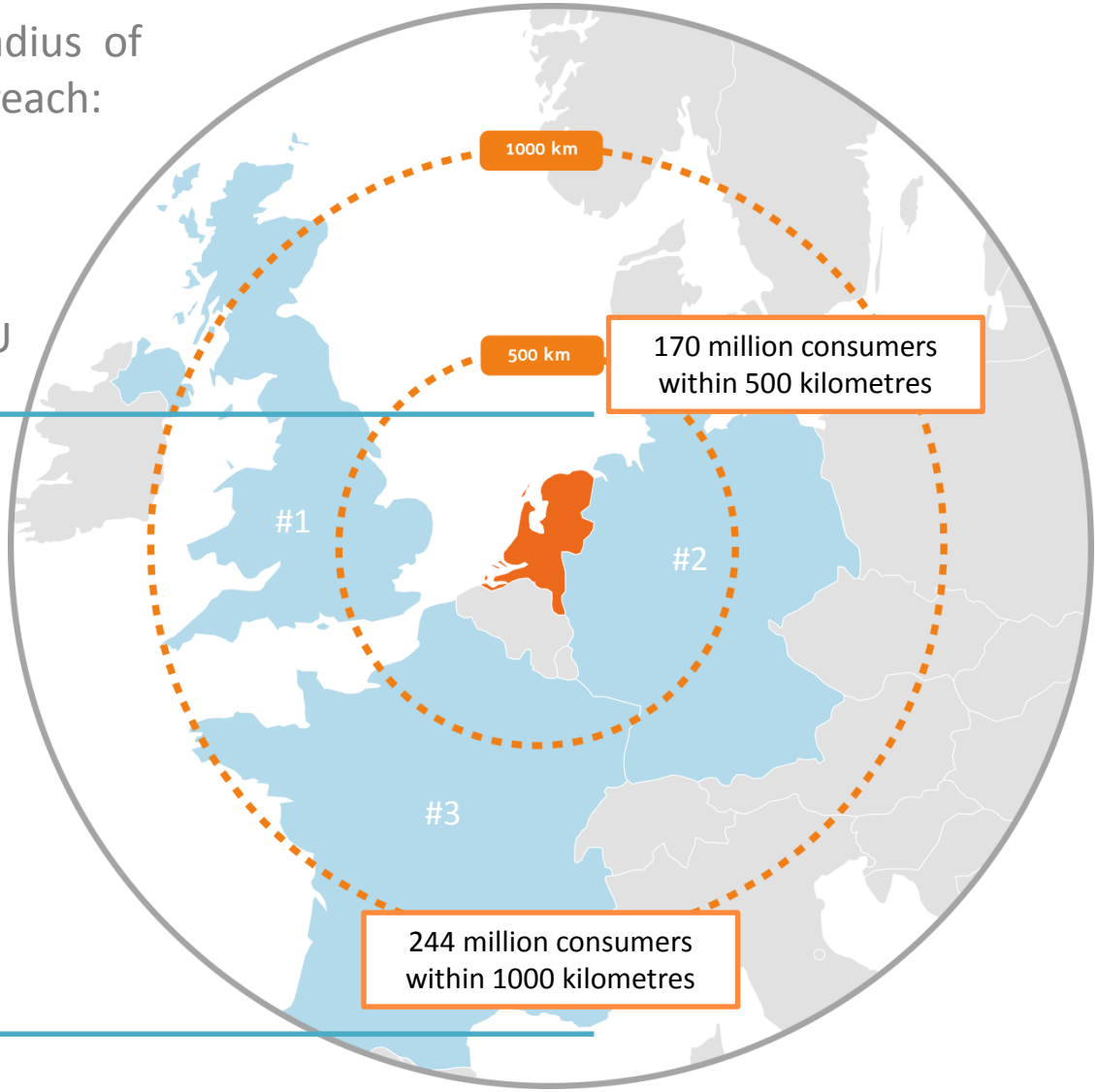
Supply Chain Coordination in the Netherlands: Ideal location to reach rest of Europe

Within a 1000 kilometre radius of the Netherlands, you can reach:

- 3 biggest E-Commerce markets in the EU
- 244 million customers
- Area with 90% of all EU sales in E-Commerce

Value of close EU E-Commerce markets

	Online Sales (€bn) 2015	Growth 2015	Online percentage of total market share 2015
UK	€ 61.84	16.2%	15.2%
Germany	€ 52.79	23.1%	11.6%
France	€ 36.53	17.0%	8.0%
Spain	€ 9.64	18.6%	3.5%
Italy	€ 7.51	19.0%	2.5%
Sweden	€ 4.93	15.5%	7.8%
Poland	€ 5.12	21.0%	3.3%
Europe	**€ 156.67**	**18.4%**	**8.4%**



Sources: Investinholland.com, Centre for Retail Research

Dutch Collaboration for economic competitiveness

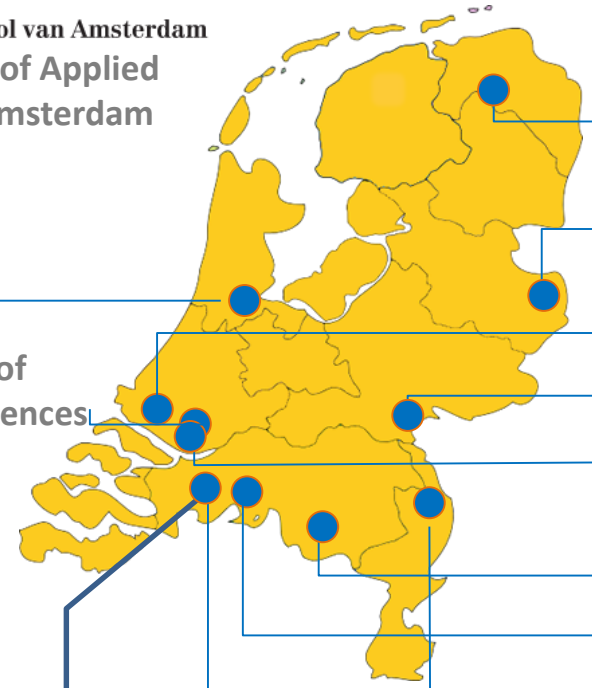
Logistics is one of the nine priority sectors in Dutch economic policy. Government, business and academia work together to increase competitiveness, in business climate, education, infrastructure and innovation.

Ambition logistics:

In 2020, the Netherlands holds an international top position

1. in handling transport flows through the NL,
2. as supply chain coordinator of international logistic activities and
3. as a country with an attractive innovation and business climate

Chain management - Knowledge institutes and universities



Hogeschool van Amsterdam
University of Applied Sciences Amsterdam

University of Applied Sciences Rotterdam

HOGESCHOOL ROTTERDAM

DINALOG
Dutch Institute for Advanced Logistics

University of Groningen

rijksuniversiteit groningen

University of Twente

UNIVERSITY OF TWENTE.

Delft University of Technology

TU Delft

University of Applied Sciences Arnhem Nijmegen

Hogeschool van Arnhem en Nijmegen

Erasmus University Rotterdam, School of Economics

Eindhoven University of Technology

TU/e

Tilburg University

TILBURG UNIVERSITY

Netherlands Defense Academy

University of Applied Sciences Breda (NHTV)

NHTV

University of Applied Sciences Venlo (Fontys)

Fontys

Knowledge Distribution Center

A Knowledge Distribution Center is the logistics axis for knowledge or innovation matters for companies in the region. In a KDC, University Of Applied Science graduates work with all sorts of parties with regard to application, further development and distribution of knowledge. In the KDC, commerce, education and government involved in regional logistics work together to improve access for companies to (new) knowledge and innovation.

Six KDCs are to be established in the Netherlands to bundle their strengths with Dinalog to create a network with national coverage.

KDCs are focused on their own region. KDCs will have different expertise, networks and focus, but all with a common goal: to help the entrepreneur with logistic innovation. What do the KDCs mean exactly for you as an entrepreneur?

National innovation program in logistics

The National Innovation program of the economic priority sector Logistics in the Netherlands focusses on six innovation roadmaps, in which innovation is driven and carried out by all partners in the supply chain.

1. **Neutral Logistics Information Platform**
2. **Trade compliance and border management**
3. **Synchromodality**

4.Cross Chain Control Centers

the control and coordination of all logistic activities: from product delivery to the end of a product's life cycle.

5. **Service Logistics**
6. Supply Chain Finance

Cross Chain Control Centers has been recognized as one of the internationally competitive strong areas with further development potential in the Netherlands and dedicated resources are geared to develop this field advance this competitive position even further.

Why locate your control tower in the Netherlands?

The location for a logistics control tower is more of a location where the company's data and intelligence and decision-makers reside: Key decision factors for the Netherlands:

- **Highly skilled expertise** in service logistics, both from a knowledge, solution and logistics operation perspective
- **Technological capability** to establish and maintain a control tower: superior IT infrastructure, being one of the most 'wired' countries in the world with the largest Internet Exchange offering an excellent high speed data network. Combined with world class sensor knowledge for system monitoring
- **International business environment**, with fiscal, communication and language skills base to cater for your worldwide service needs
- **Good living environment** for international experts, attracting your needed decision makers to serve your company's global footprint
- **A supporting government** for an excellent breeding ground for innovation and international business in service logistics

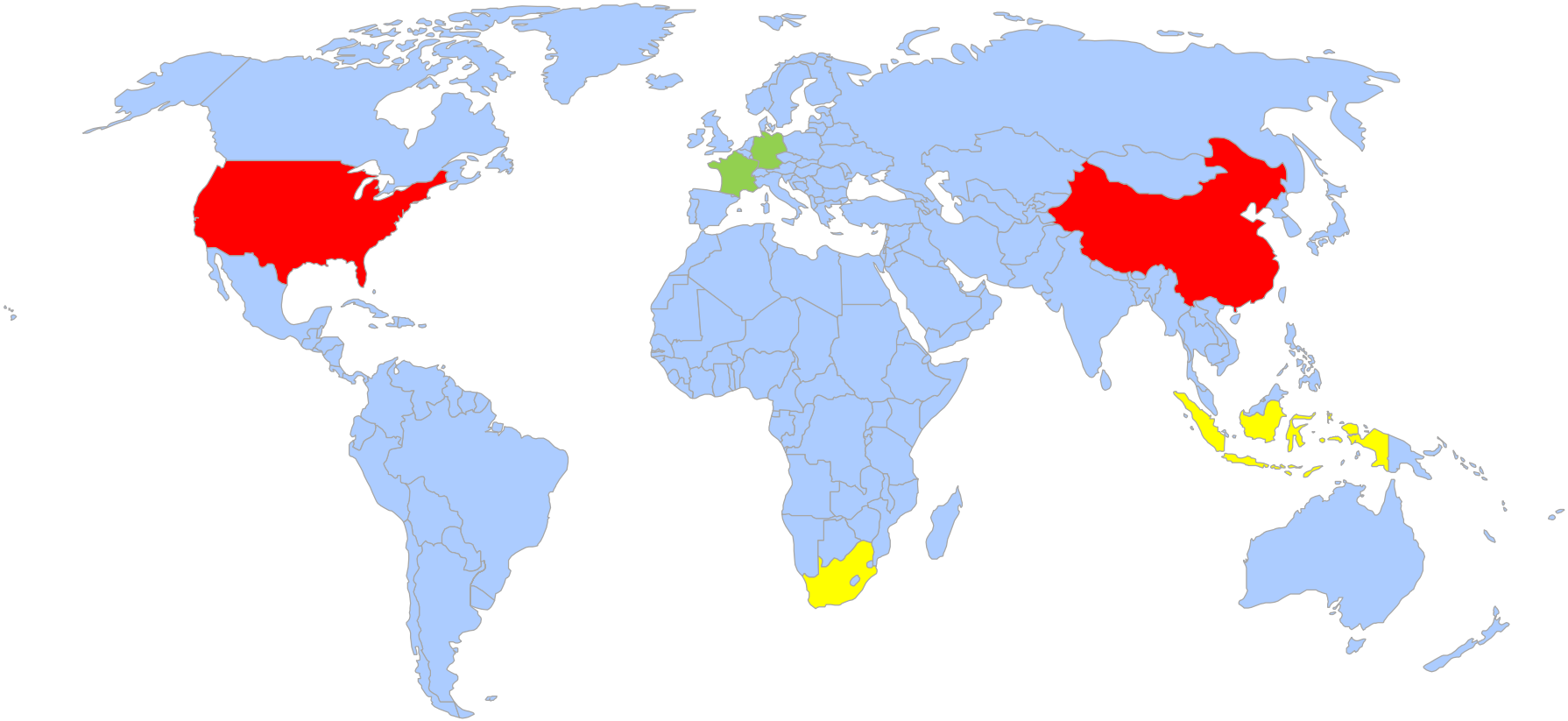
ANALYSIS TARGET MARKETS

Target markets Supply Chain Coordination

Neighbouring countries

Fast growing markets

Developing markets

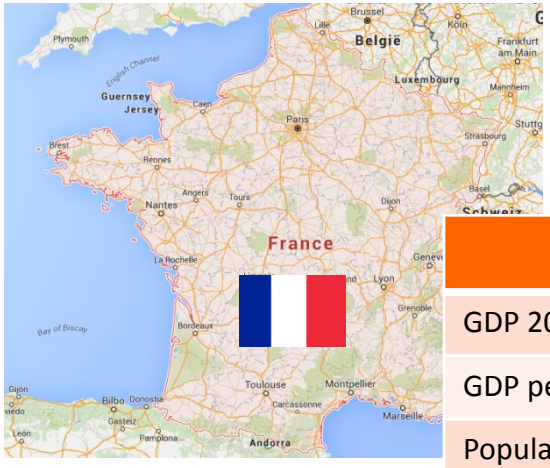


Germany:
Trends and challenges

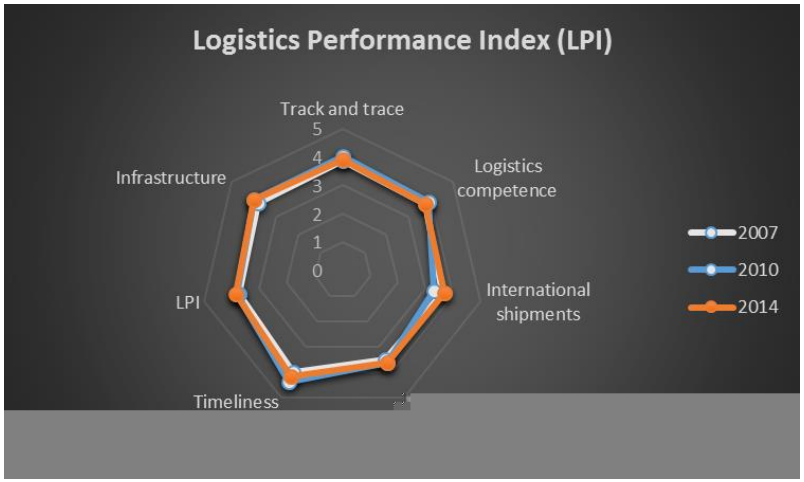
- As the evolution of Germany as a logistic location is highly dependable on the economy, the positive GDP forecast will also lead to increasing importance.
- Despite its well developed logistics infrastructure, investments are urgently needed, especially on ports to prepare for larger container vessels , rail to solve several bottleneck and road which in places over-crowded.
- Because of a lack of funding prioritizing (new) infrastructure projects is needed.
- General trends for the European Market:
  1. **Vertical integration**: when carriers and shippers increase profit pools by "conquering" additional parts of the value chain
  2. **Yield Decline** as shippers and carriers seek to exploit volatile freight rates to protect their own profit margins
  3. **Modal split** as demand shifts from air freight to predominately ocean and, increasingly, rail to reduce costs of supply chains
  4. **Volatility of freight rates** is increasing and demands greater sophistication in steering hedged capacities
  5. **Specialization and value added services** become key USPs as complex supply chains will call for specialized logistics service providers
  6. **Industry specific solutions** increasingly key, both in terms of IT and know-how, to meet complex customer demands
  7. **Shift in the trade landscape** with legacy trade lanes losing importance – emerging markets are new major trading nations
  8. **Hinterland connections** efficiency is of increasing importance – and even an entry condition for business with Chinese shippers
  9. **Contract logistics** – challenges from the tendency toward shorter contract lifecycles will increase hurdles to achieve an appropriate ROI
  10. **Globalization** vs. regionalization: demand will either grow for "global total solutions" or revert back to regionalization

Source: Fraunhofer SCS, 2015 & Roland Berger 2014

France:
Overview

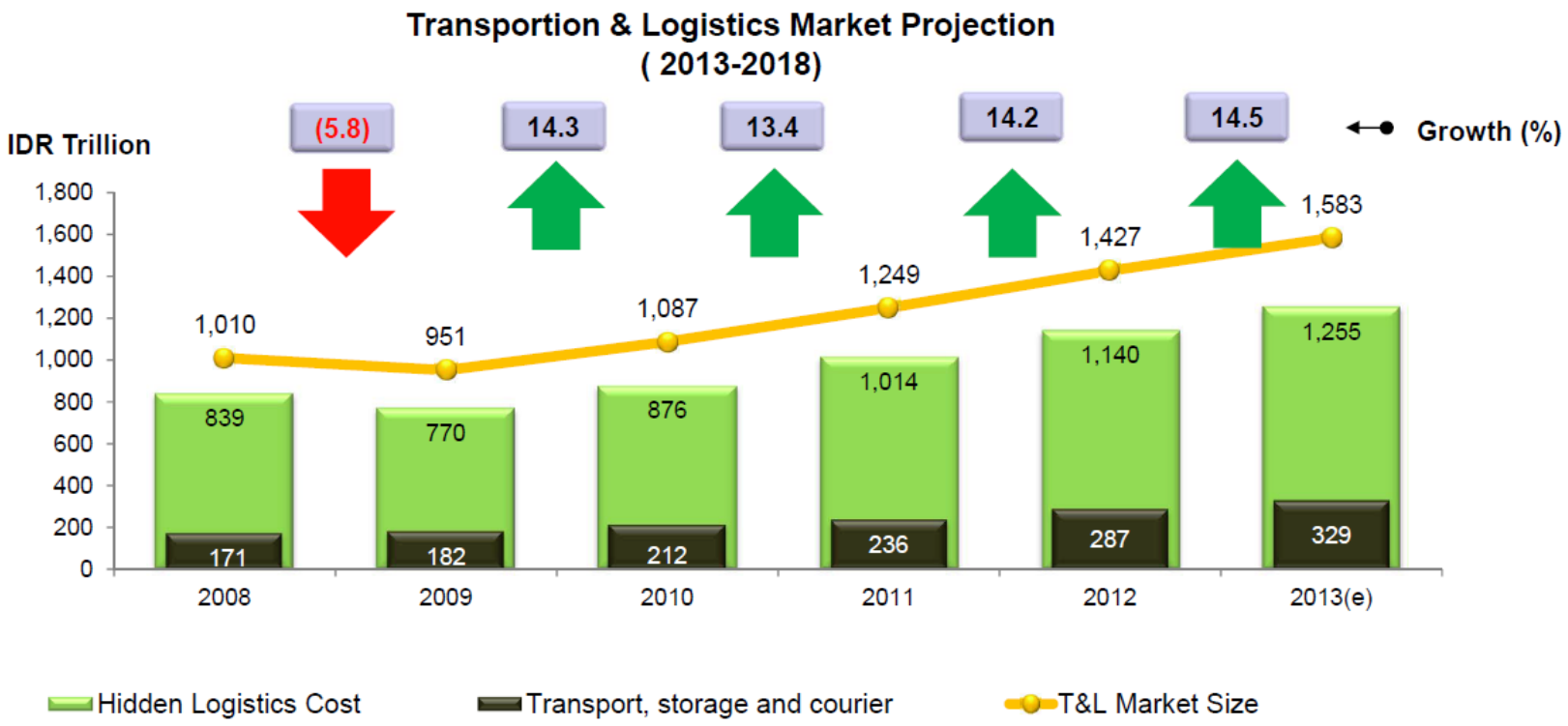


Fast facts	
GDP 2014 (Bill. Euro)	2.572
GDP per Capita (Euro)	32.424
Population 2014 (Mill.)	66
Rail network (km in 2009)	30.013
Road network (km in 2011)	1.052.380



Source: WTO and WB

Indonesia:
Market size and development

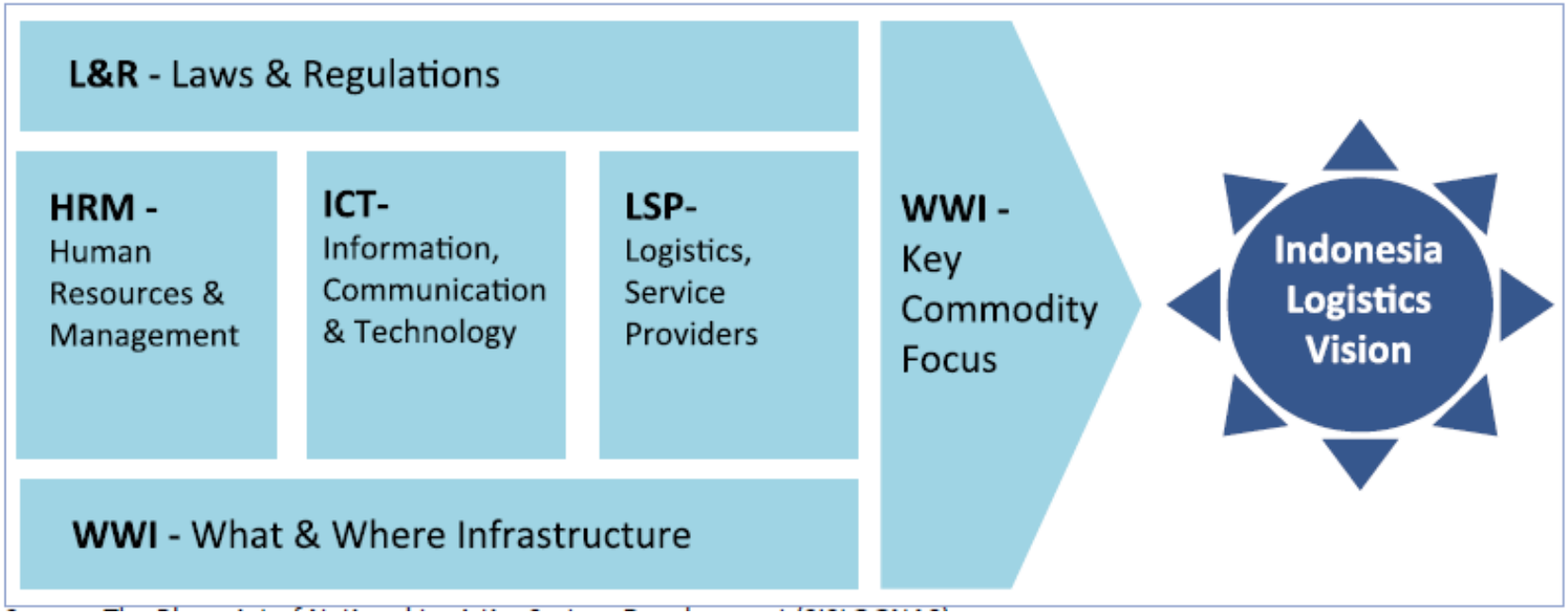


Source: Indonesian Statistical Agency

Indonesia:
Trends and challenges

To enhance its logistics industry Indonesia is developing a National Logistics System which is program running until 2025, the main goal is to to establish an integrated, effective and efficient logistics system to improve the national competitiveness on the regional and global markets, and to improve social welfare.

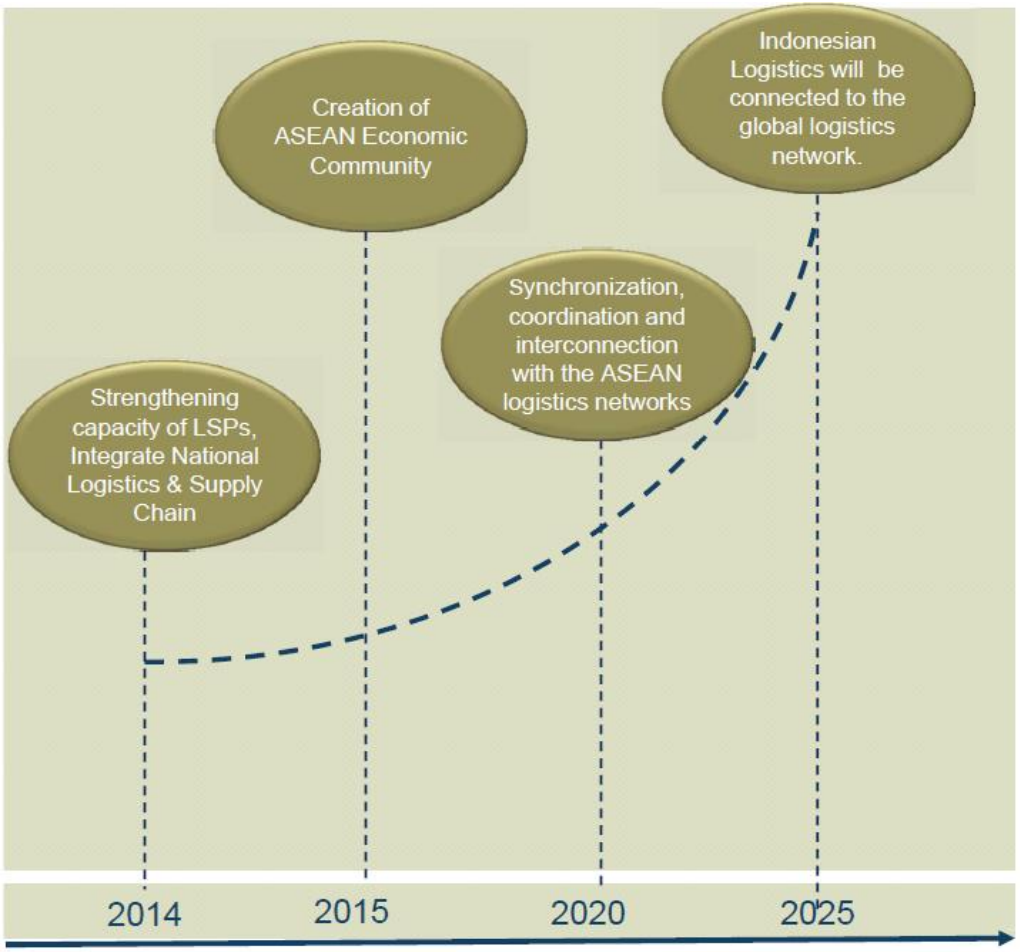
Key Drivers for the National Logistics System



Indonesia:
Trends and challenges

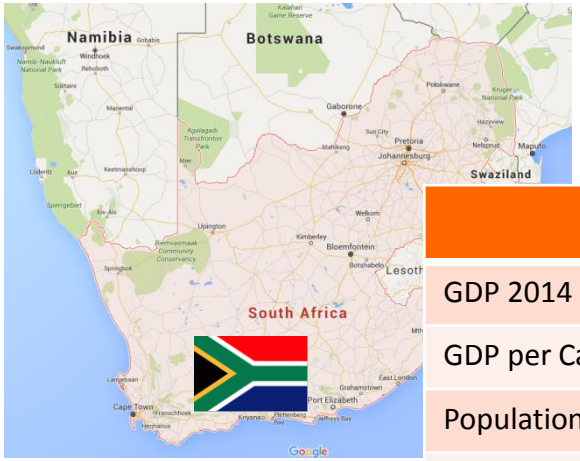
Main goals:

- 2014-2015: Infrastructure development among ASEAN countries are expanded to support the transportation & logistics service in the region
- 2015-2020: ASEAN Logistics Network Integration
- 2020-2025: Integrated Global Logistics Network. Indonesia will be connected to the regional (ASEAN) and global logistics systems via International Hub Ports

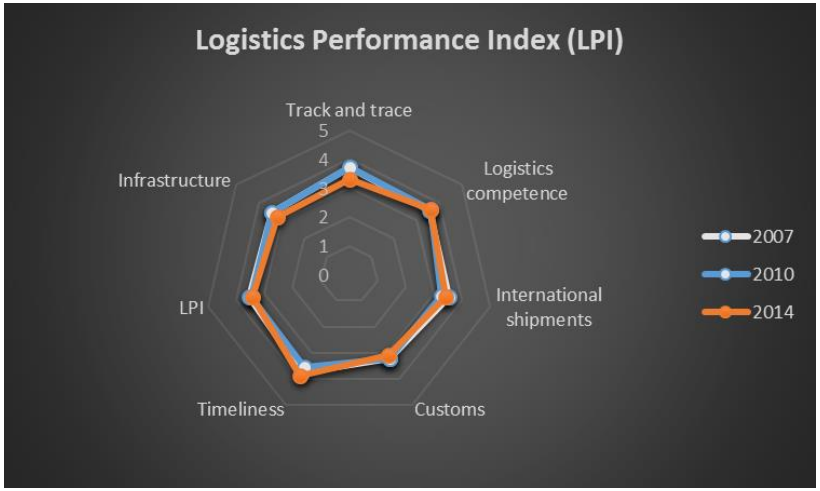


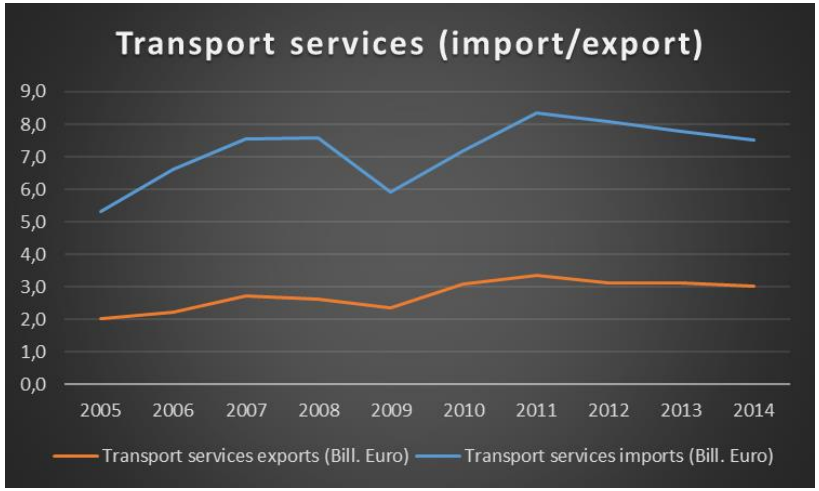
Source: Frost & Sullivan Analysis

South Africa:
Overview



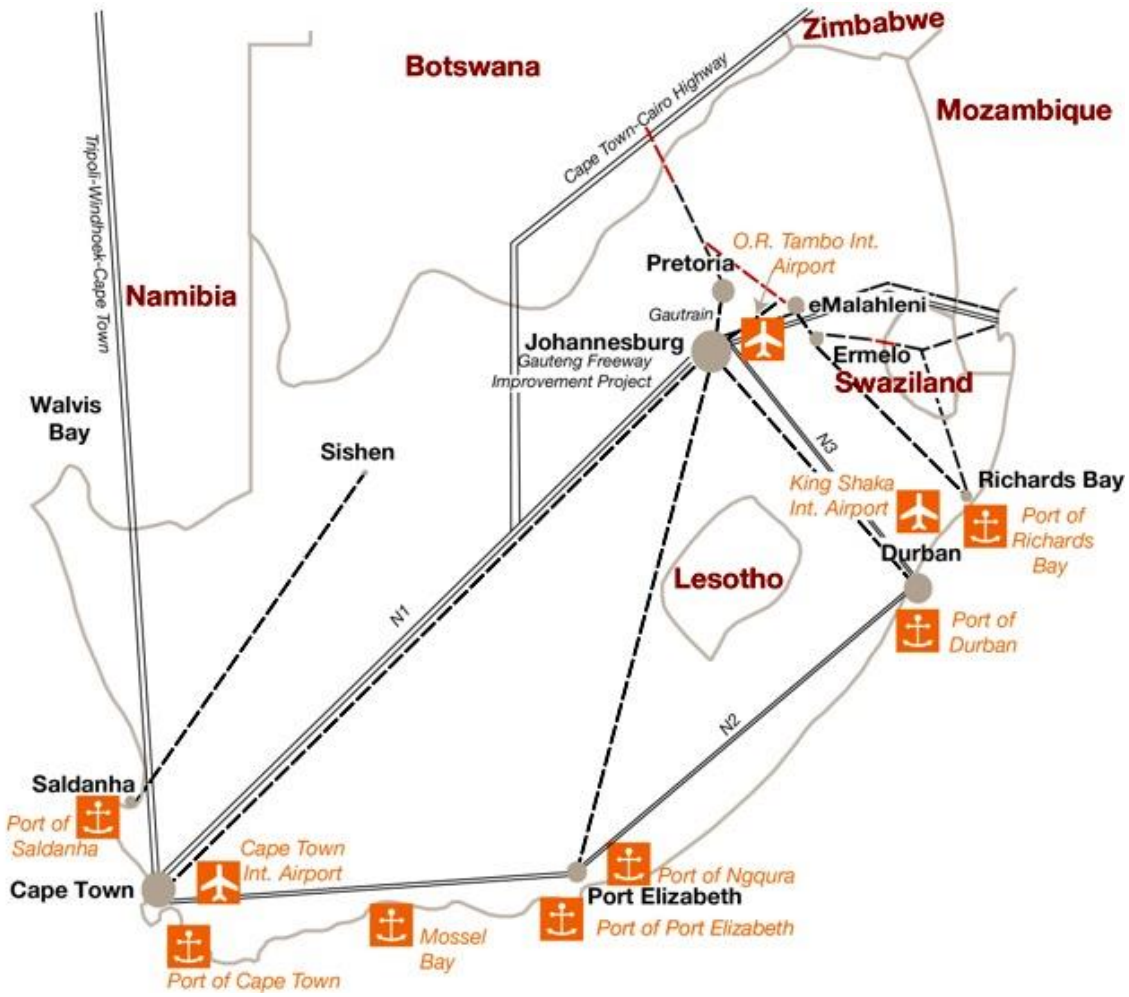
Fast facts	
GDP 2014 (Bill. Euro)	318
GDP per Capita (Euro)	5.533
Population 2014 (Mill.)	54
Rail network (km in 2009)	20.500
Road network (km in 2011)	-





Source: WTO and WB

South Africa:
Connection

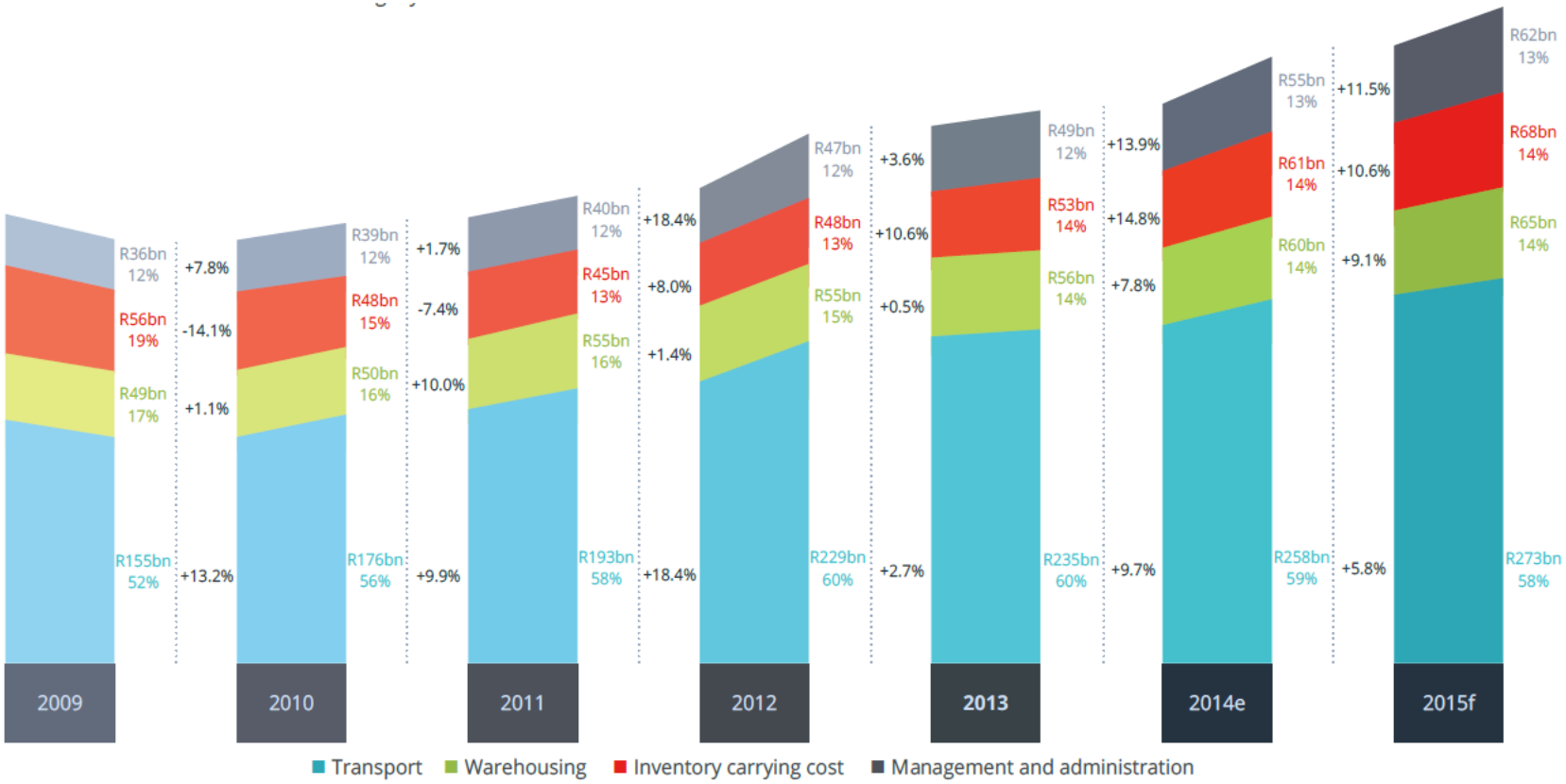


South Africa has the largest economy in Africa and is the most developed in Sub-Saharan Africa with the most advanced transport infrastructure. As a member of the BRICS countries, South is recognised as a key emerging market.

The need to move goods to inland centers of commerce have created a transport-intensive domestic economy. South Africa's logistics costs as a percentage of GDP in 2013 was 11.1% which is higher than developed countries but competitive when compared to other developing regions.

The air and rail networks are the largest on the continent. The major national roads are in good condition, but the provincial road networks have deteriorated considerably. South African port efficiency has improved considerably as a result on investment in new assets such as ship to shore cranes and other supporting handling equipment.

South Africa:
Market size and development



Source: Stellenbosch University, 2015

South Africa:

Logistic service providers

- **Barloworld:** Barloworld Logistics is one of the leading logistics and supply chain management businesses in southern Africa, with complementary operations in China, the United Arab Emirates, Iberia, Germany and the United Kingdom.
- **Jonen Freight (Pty) Ltd.** is an independent South African owned company who has been on the local market since 1979. They are one of the oldest of the medium sized freight forwarders on the South African market today
- **Logwin** offers complete full service solutions. The service portfolio extends from branch-appropriate supply chain management and warehousing through to logistical value-added services to complete outsourcing projects. The business segment Solutions thereby has a high level of competence in process control and the development of customised IT solutions.
- Managed Freight developed an online **freight management consultancy** to provide companies with an alternative to existing services and logistics service provider selection. Most of our clients are small to medium businesses that require support in their shipping department and do not have the volume to negotiate preferable terms and rates.

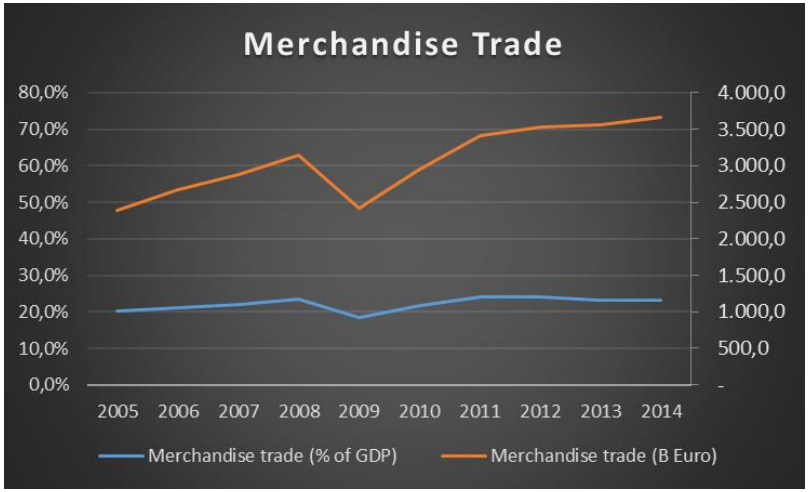
South Africa:
Trends and challenges

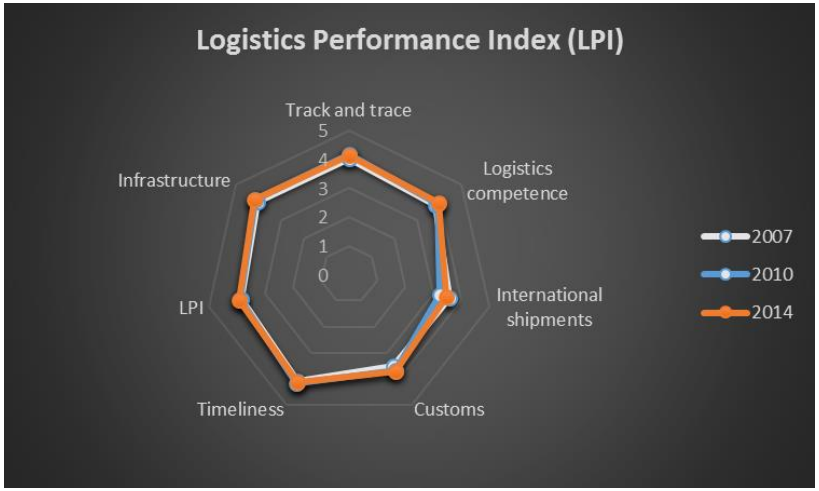
- in South Africa, there is much to be done about reducing the demand for logistics – in other words reducing the kilometres travelled by each tonne, how long it is stored and how often it is handled.
- A major objective is to achieve sustainable funding and maintenance for the infrastructure used by each transport mode.
- Reducing the monetary cost of logistics is an important goal but equally important is the reduction in societal costs such as emissions.
- More general Supply Chain challenges in S-A are:
  - Improving service levels to customers
  - Integration of technology
  - Lowering procurement costs and reducing order lead times
  - Improving visibility in the supply chain
  - Improving the flow of business intelligence
  - Aligning with key players in the supply chain.

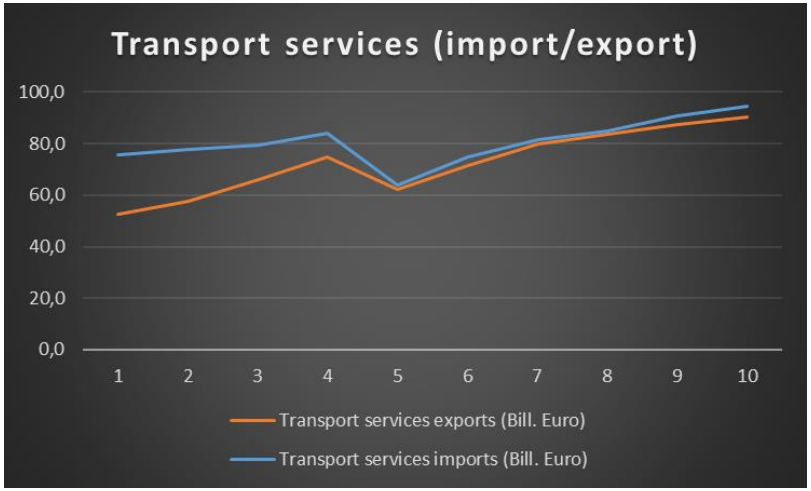
Source: Council for Scientific and Industrial Research (CSIR), 2014 & Stellenbosch University, 2015

United States:
Overview

Fast facts	
GDP 2014 (Bill. Euro)	15.835
GDP per Capita (Euro)	42.187
Population 2014 (Mill.)	319
Rail network (km in 2009)	19.4136
Road network (km in 2011)	656.1643







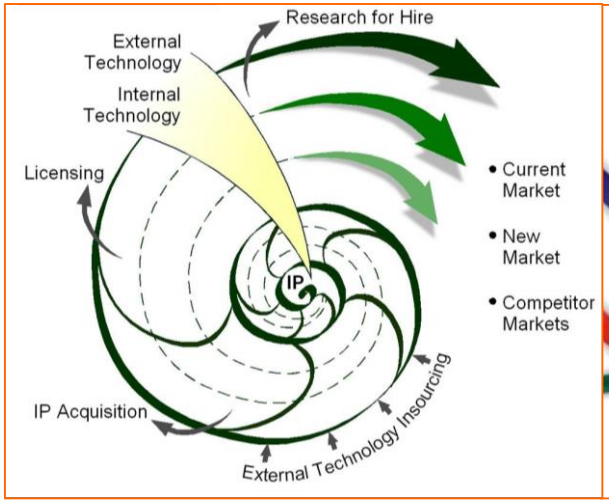
SUPPLY CHAIN COORDINATION EXPERTISE IN THE NETHERLANDS

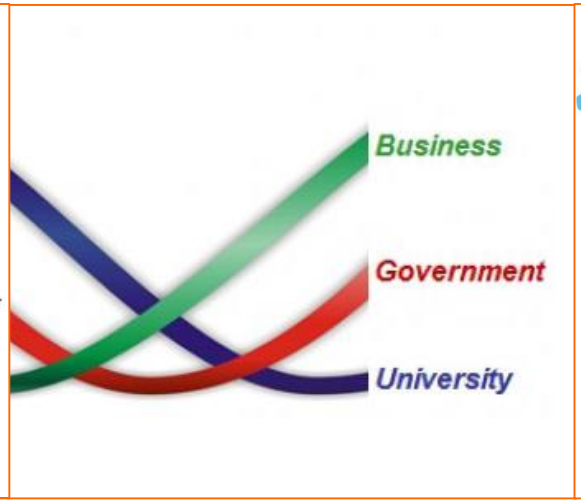
Dutch collaborative innovation in logistics

1.
Open innovation

2.
Public private partnerships: triple helix collaboration

3.
Supply chain collaboration and coordination





Knowhow Supply Chain Coordination
The Netherlands

The Netherlands has high level knowledge on how to develop and operate supply chain coordination

- Plan from collaboration
- Operational aspects for the supply chain collaboration
- Integration of IT, Plug&play
- Collaborative planning.

Supply Chain Collaboration tool, TKI Dinalog

Service providers
Supply Chain Coordination

Supply chain services	Supply chain coordination	IT
Argusi	Ewals	Quyntess
CAROZ	IDS	ORTEC
CAPE Groep	Simacan	CAPE Groep
Flinqer	Spierings Smart Logistics	Quintiq
TransdocLink	E-Lc	Eyefreight
Pro-Quidity	GET Service / Jan de Rijk	Centric
Blue Rock Logistics	SilFit	ISTIA
Van Berkel	Formaat XL	Quyntess
IZI Motive/Packs	INAD	ORTEC
12return	Huuskes Vers	CAPE Groep
Gordian		Quintiq
Various services	Various services	
Cargogator	4C4Chem	
Hubways	Modality/CTU/MCS/TNO	
Antaris Solutions	Cofano	

Some examples on next slides

Chain management in the Netherlands

- The Netherlands has a strong position in Supply Chain Coordination.
- LSP's, including Seacon Logistics, Samskip van Dieren and Ewals, which have already strongly developed their control tower concepts for international clients and operate their European or worldwide Supply Chain Coordination from the Netherlands. Some of these companies took an early lead in structuring complex supply chains.
- IT Companies, including global players as Ortec and a broad range of smaller companies specialized in chain optimization such as Caroz, Gordian and Greenway Logistics, offer a broad range of IT solutions to manage supply chains.
- Dutch universities have also carried out international trend setting research in the area of Chain Management and Control Towers. Research is carried out together with industry leading to knowledge intensive practical solutions.
- Dutch education institutes offer highly skilled graduates.

Supply Chain Coordination players

Type of company	Supply chain role	Examples in the Netherlands
Logistic Service Provider	Operates Control Tower concept and execution	Seacon, DSV, CEVA Logistics, Samskip van Dieren Multimodal
IT suppliers	Supply software and services for logistic cooperation and optimization	ORTEC, Centric, Blue Rock Logistics
Network controllers	Develops and maintain platforms for exchange of logistic data and chain direction	Caroz, SIMACAn, Spierings Smart Logistics

Source: Gordian Logistics Experts

CASES

Integrated services
Silfit

Optimizing bulk ordering and transport through stock data

Service company for information flows in bulk serving farmers, suppliers and transport companies. Subsidiairy company of LSP Nijhof Wassink

Insufficient stock keeping systems at clients locations (farms) leads to rush orders and sub optimal transport planning

Measuring stock of bulk products in clients' silos and using data for order and transport planning

Optimized bulk planning leading to 10% reduction in vehicle kilometres .

Integrated services IDS

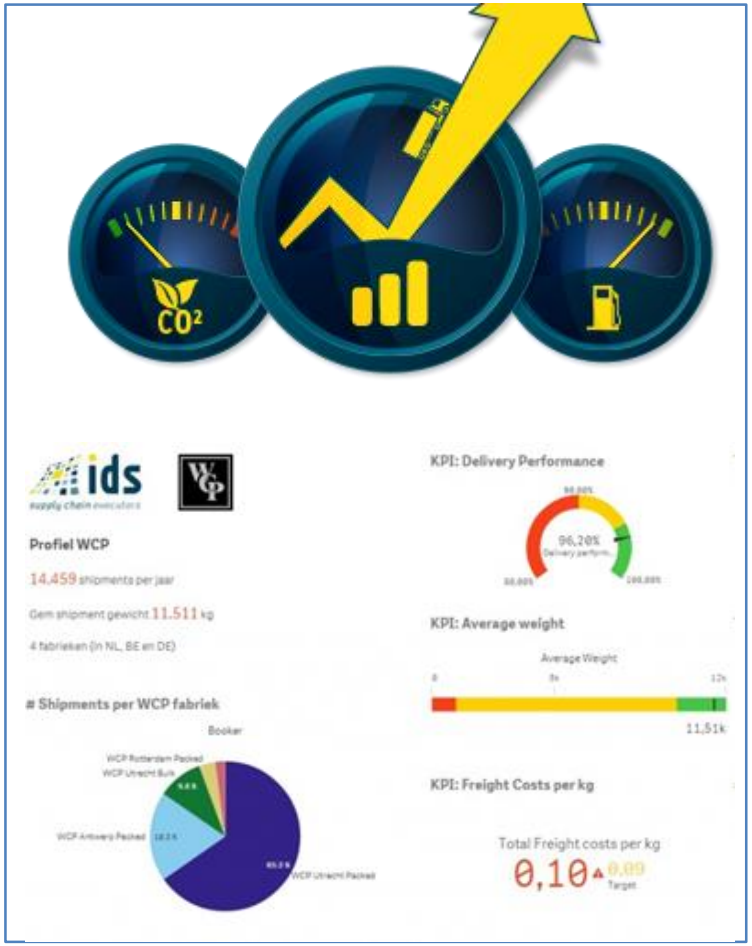
Web based Transport Management System presenting shipment information and KPI reports

IDS manages contracts with “third party (3PL)” logistics service providers, taking over the daily and tactical operations.

How to manage the transport flows for shippers using a variety of transport companies for inbound and outbound tranport

IDS offers advanced ICT systems for the smart consolidation and combination of shipments, streamlining of the invoicing process, carrier management and systematic processing of disputes and claims,

Supply chain cost reductions of 15 to 20% as a result of bundling flows, more efficient handling of disputes and claims, managing various carriers and inventory reduction



Control towers
IZI Motive

Platform offers garage companies reduction in spare parts costs and supply chain costs

IZI Motive offers a purchasing platform solution organizing the parts purchase, delivery, stock optimization and return for garagists

Garagistis often receive 10-12 parts deliveries a day, having to order with brands paying high margins

The Izi2Connect online purchasing and planning platform enables ordering directly form importers and parts manufacturers and offering reduction of the number of deliveries a day

15-20% cost reduction on parts
Potential 35% supply chain cost reduction and 15% logistics cost reduction for transport and warehousing

Control towers
12 Return

End-to-end Reverse logistics solution for brands and retailers creating value

12 Return Returns management software company enabling brands and retailers a controlled reverse supply chain

Managing the returns and re-use of products for retailers and their customers as well as prevention of value erosion

Cloud-based control tower streamlining authorization, transportation, processing and settlement of product returns from consumers and business clients

Returns are turned into value with 96% customer satisfaction, 86% efficiency, 82% sustainability benefit and 61% lower costs, saving 4-8 euros per return on physical handling and administration.

Returns Authorization

Reverse Logistics

Returns Processing

Returns Settlement

Control towers Gordian

Land Maintenance Initiative (LMI), control tower for spare parts Dutch army

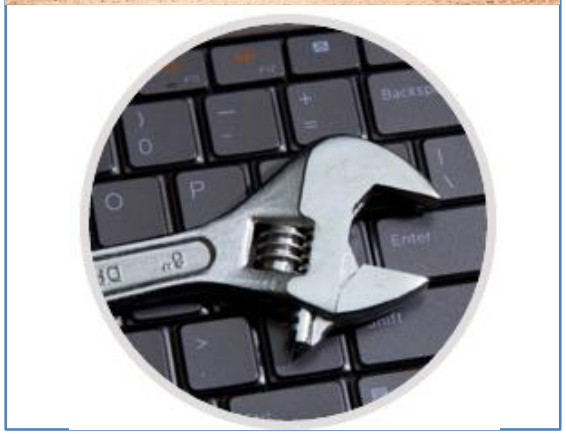
Gordian Logistic Experts

Advice, solutions and innovations in the field of service logistics, spare parts management and supply chain management.

High cost and low service in spare part supply of Dutch army due to a myriad of suppliers with different logistical concepts and systems

LMI to streamline the maintenance of land systems. Redesign and manage existing service supply chains in close cooperation with the OEM's, service suppliers and component suppliers. Introducing a "Shared Business Intelligence Cell (SBIC)".

Increasing operational availability of land based systems and lower logistic costs



Control towers
SIMACAN / Ahold Transport

Retail Control Tower managing transport flows from warehouse to shops

simacan

Integrate real-time traffic information in primary business processes. Specialized in making geospatial data accessible and useful

How to integrate planning of delivery trucks of 13 carriers and 1000+ stores

Simacan Control Tower within Ahold Transport. Daily positions of 1000+ truck journeys in the Netherlands and Belgium visualized on map, 13 carriers, each connected via its own TMS

1000+ stores see ETAs of incoming deliveries ETAs are calculated 1/min, based on real-time traffic information

Control towers
Greenway Logistics / Ewals

Bundling at source location

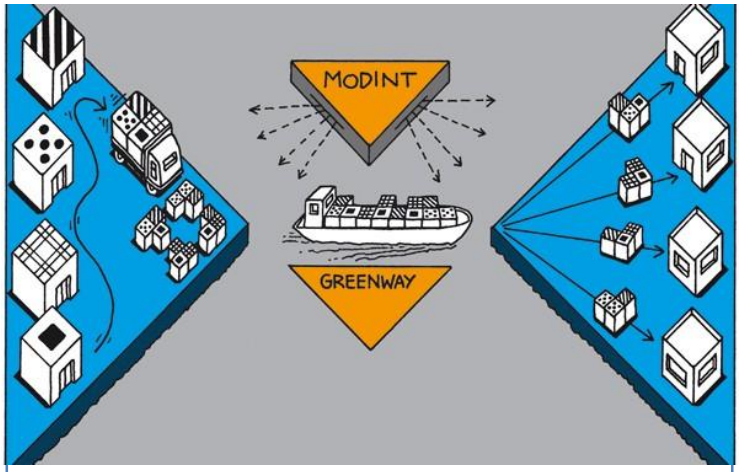
Ewals operates as a Lead Logistics Provider (LLP) and manages total logistics flow

Greenway is active in mediation, buying and selling of logistic services, developing logistic concepts, IT, advice and consultancy.

How to increase the efficiency of shipments from a myriad of Chinese suppliers to individual stores in the Netherlands

Design and realisation of a central organisation for "Bundling at source location“, design and realisation of a working IT SAAS platform and execution for inbound transports from the Shengzhen region in China.

Reduction of handling costs of 30-40%
Reduction of distribution costs of 7%
Reduction in lead times



Coca-Cola Enterprises saves $millions with ORTEC planning software

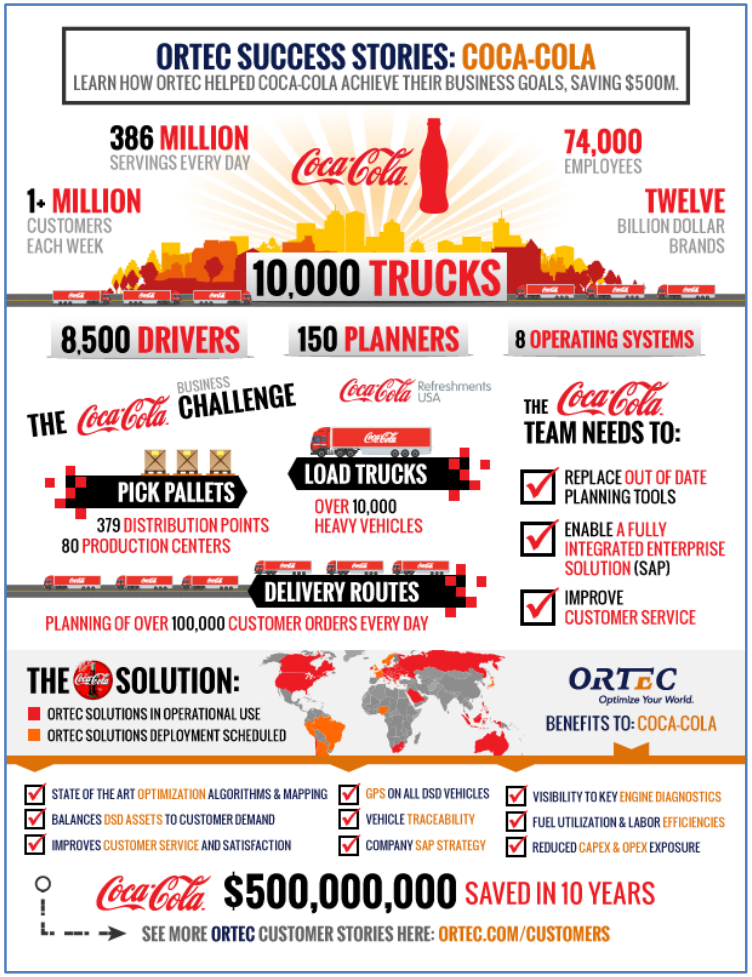
ORTEC
OPTIMIZE YOUR WORLD

World leader in optimization software and analytics solutions, with 750 employees and 15 offices across 4 continents.

Coca Cola Refreshment needs to efficiently plan one of the largest distribution systems in North America with over 100,000 customer order each day loading more than 10,000 vehicles a day.

ORTEC Optimization Solutions for Routing and Load Building, planning efficient delivery routes with cost effective and flexible scheduling and driving.

Saving Coca Cola an estimated $ 500 million over a period of 10 years



Supply chain collaboration

Quyntess

Providing supply chain solutions as a service in the cloud. Configure best-of-breed standard software to produce solutions that exactly match customers' needs.

?

No structured and mutually agreed process flow for all (future) supply chain partners. No open standards based integration for both process and data.

Advanced, ready-to-use functionality on the adaptable Tradeshift collaboration platform that enables companies to connect, manage and control crucial (future) supply chain processes and business transactions.

PM

Information services CAROZ

PM

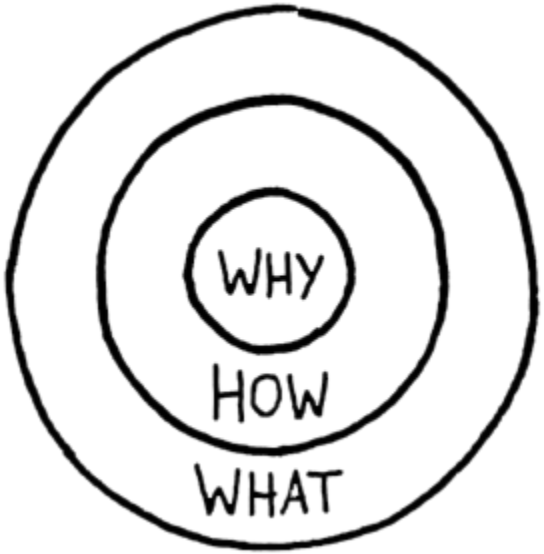
CAROZ

Development and execution of logistic network solutions

Managing the returns and re-use of products for retailers and their customers as well as prevention of value erosion

Support of network collaboration by supplying independent support and a neutral platform to exchange data. Speeddocking is

PM



Venturn Container Terminal excellence; strategic planning terminals

Maritime consultancy, training & development, executive search and interim Services to the maritime and the interrelated logistics sector.

How to develop a strategic plan for future development of container terminals

Serious gaming sessions which focuses on operational excellence, strategic thinking commercial skills. Four teams take over full management of an existing container terminal. Teams rise to the challenge to transform their terminal into a true and sustainable success.

PM.

Information services TransdocLink

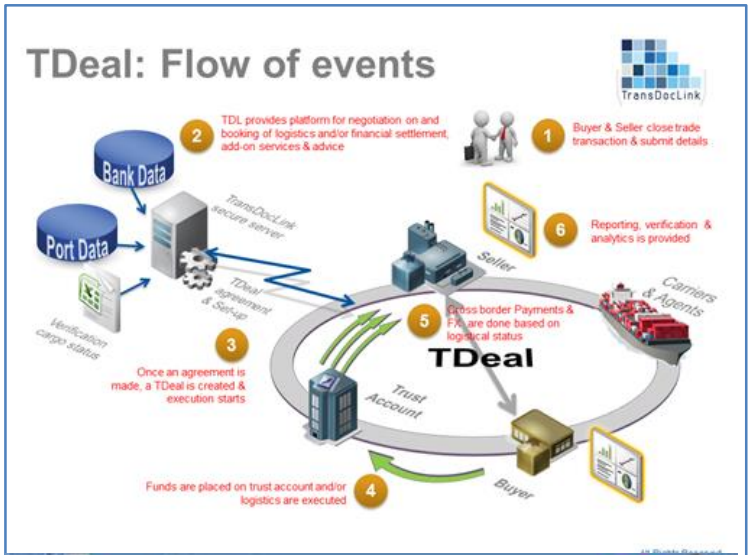
Providing access to near real-time information and knowledge on what's happening with cargo, payments, customs anywhere around the world

TransDocLink delivers on-line payment & cash management capabilities in combination with logistical tracking & service provisioning.

You want to know the details of manufacturing timelines, shipment conditions and have insight on payable & receivable of funds.

Transdoclink, the platform to agree conditions, arrange & schedule payments, arrange & track logistics and workflow & document handling

Transparency, cost efficiency & risk minimalisation.



Information services
Blue Rock Logistics

Exercising influence on big flows through analyzing inefficient logistics

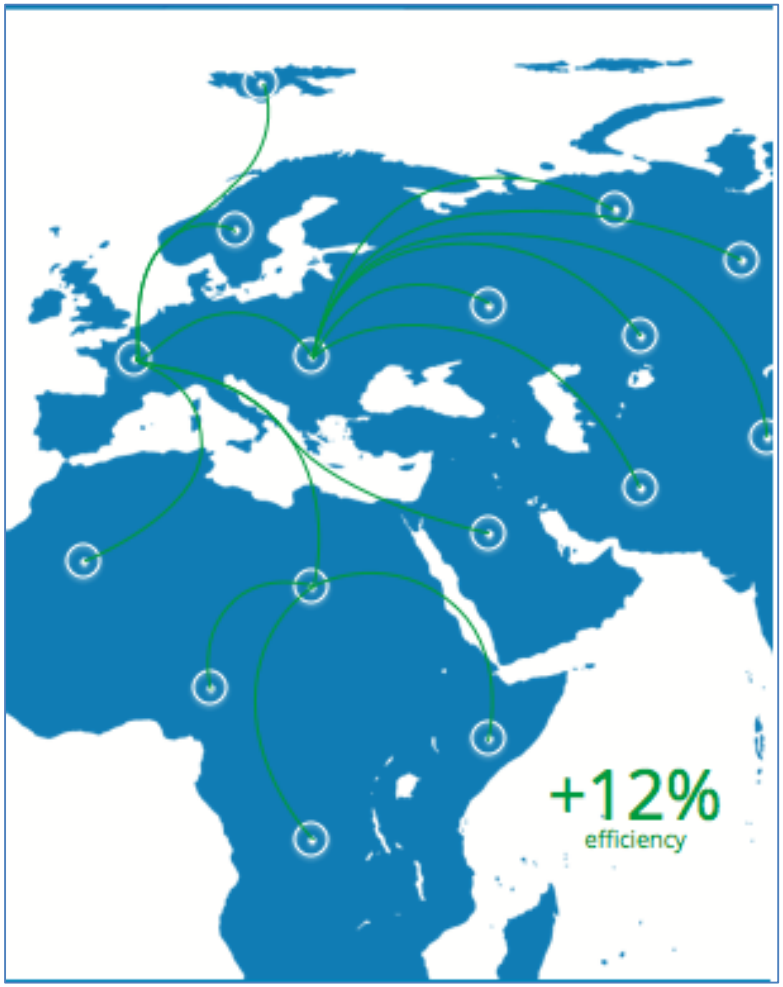
BLUE ROCK

Specialized company offering practical applications and knowledge for logistics optimization of inbound and outbound freight flows in complex networks.

Optimize the Freight Audit processes and visibility of freight flows an costs across their 40 European locations of a reputable metals company.

Standardized platform for Freight Audit system for the shipper and their carriers, with analysis and visualization of large data sets of the complex supply chain network.

Typically a ten-fold ROI wiht a payback time of less than a year.

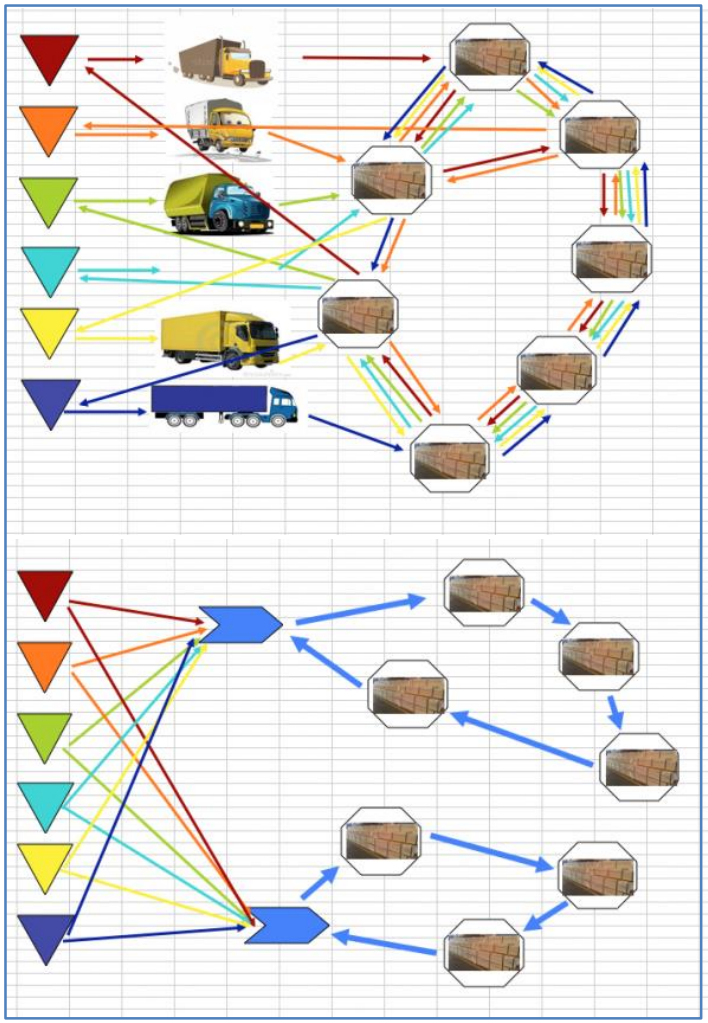


Information servicesFormaat XL

Cross chain collabaration for lenghty construction materials

A partnership with platform for cross chain collaboration in distribution of lengthy construction materials

Efficient Benelux distribution of construction materials > 220cm in both FTL and partial shipments

Cloud-based order processing system for real-time information exchange between client and selected transport partner combinding shipments with transport capacity

Full trucks by combined shipments resulting in lower costs and less emissions