SUGAR

Sustainable Urban Goods logistics Achieved by Regional and local policies

Dominique Mamcarz - TNT

Brussels, May 4th, 2011

European Union
European Regional Development Fund

Regione Emilia-Romagna

INTERREG IVC
INNOVATION & ENVIRONMENT
REGIONS OF EUROPE SHARING SOLUTIONS

Made possible by the INTERREG IVC programme

Topic

The operator's perspective focussing on innovations for the last mile of delivery

Content presentation TNT City Logistics

Introduction

Environmental and business challenge in

the cities

Examples of City Logistics solutions

SUGAR

CEI
CENTRAL EUROPEAN INITIATIVE

European Union
European Regional Development Fund

Regione Emilia-Romagna

INTERREG IVC
INNOVATION & ENVIRONMENT
REGIONS OF EUROPE SHARING SOLUTIONS

Made possible by the INTERREG IVC programme

Content presentation TNT City Logistics

Introduction

Environmental and business challenge in the cities

Examples of City Logistics solutions

World-class global leader in express and mail

TNT | express

- Largest in express in Europe
- 48 aircraft
- 26,310 vehicles
- 231 million consignments

TNT | post

- Best postal operator in the world
- Mail networks in eight European countries
- 4.5 billion addressed mail items in Holland

Note: Mail and Express split per 1-1-2011

Our sustainability track record …..

1

Dow Jones Sustainability Indexes

2007, 2008, 2009 and 2010 Super sector leader and highest scoring company in DJSI

Successful partnership with World Food Programme since 2002

Planet Me program to reduce our CO_2 footprint and engage customers and employees

CEI CENTRAL EUROPEAN INITIATIVE

European Union
European Regional Development Fund

Regione Emilia-Romagna

INTERREG IVC
INNOVATION & ENVIRONMENT
REGIONS OF EUROPE SHARING SOLUTIONS

Made possible by the INTERREG IVC programme

Content presentation TNT City Logistics

Introduction

Environmental and business challenge in

the cities

Examples of City Logistics solutions

SUGAR
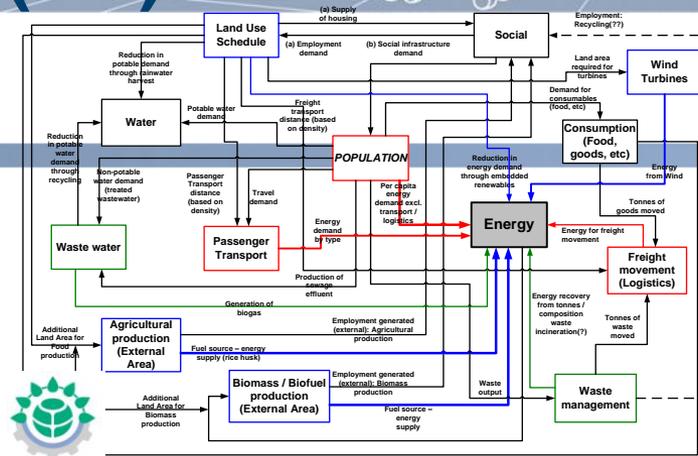
> *"Transportation is the most serious challenge facing city's infrastructure"*
> *Source: GlobeScan Toronto*

> *"We enter by foot (less preferable option) but in some cities it's the only one left"*
> *TNT Operations - Italy*

Inner-city distribution causes problems: congestion, emissions,fragmented delivery, and higher costs

Perspective	**City issues and requirements**	**"Solution"**

"Mayor"

Improve quality of life
- Congestion (traffic jams) & noise
- Emissions
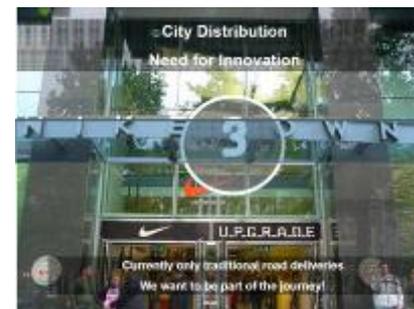
Customers

Efficient service
- Fragmented collection and delivery
- Complex and multi channel supply
- Higher price due to higher cost

Carriers

Service pressure
- Loosing flexibility
- Lower productivity
- Higher costs

The ultimate goal of CL is to protect and grow customer value and contribute to sustainable inner-cities

Local governments **are trying to reduce inner-city congestion & pollution problems**

Governments are likely to increase their efforts **as problems get worse, e.g. due to further urbanisation**

This leads to two possible outcomes:

➢ More and stricter **regulations** for "dirty" distributors

➢ **Incentives** for "clean" distributors

By reducing congestion & pollution issues, TNT will:

➢ Secure future **license to operate** in inner-cities

➢ Improve **service offering** for inner-city customers

➢ Strengthen sustainability **profile** towards customers and stakeholders

Regulations	
Umwelt ZONE	Various cities
C	London
	Modena Orléans

Incentives	
Gemeente Utrecht	Time Window Exemption

CENTRAL EUROPEAN INITIATIVE

European Union
European Regional Development Fund

Regione Emilia-Romagna

INTERREG IVC
INNOVATION & ENVIRONMENT
REGIONS OF EUROPE SHARING SOLUTIONS

Made possible by the INTERREG IVC programme

Content presentation TNT City Logistics

Introduction

Environmental and business challenge in

the cities

Examples of City Logistics solutions

Made possible by the INTERREG IVC programme

City Logistics is a very old story !

Electric parcel tractor in Bremen, around 1920

TNT City Logistics solutions are based on 3 pillars

TECHNOLOGY
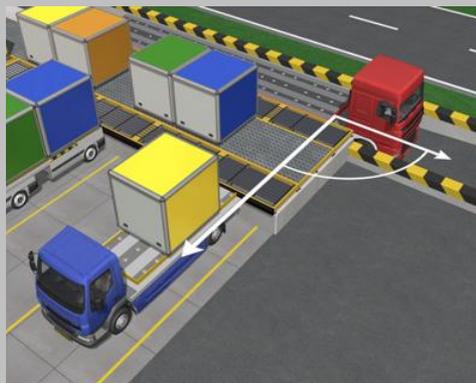
TO1
Colli: 1/2
Peso: 12.000 KG

TNT GLOBAL EXPRESS

Data : 24/12/06
LDV:AB123456

SETTIMO TORINESE
10100 TO

22

TO1

3   26A
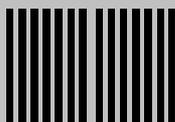
COLLABORATION
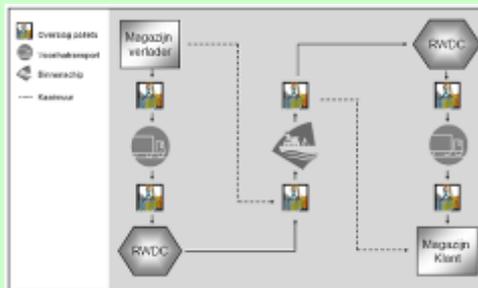
SUPPLY CHAIN LOGISTICS

albert.

LAW and REGULATIONS CRITICAL BUT LIMITED INFLUENCE

milieuzone
ZONE
uitgezonderd
ontheffinghouders

+

Last mile efficiency rely on clean fleet implementation

and on a wide set of smart & stackable City logistics solutions

Parcelservice	Express	Innight	Fashion	Third Parties

Bundle

Mobile Depot

City Distribution Centre

24 hours

Tricycles

EV- Parcels

EV - Freight

zero emission

Zoom on Mobile/Micro Depot and Tricycles solution

Parcel deliveries

Air network

TNT Hub location

Road network

Storage & Just in time deliveries

Parcel & Mail pick-ups – lighten your load service
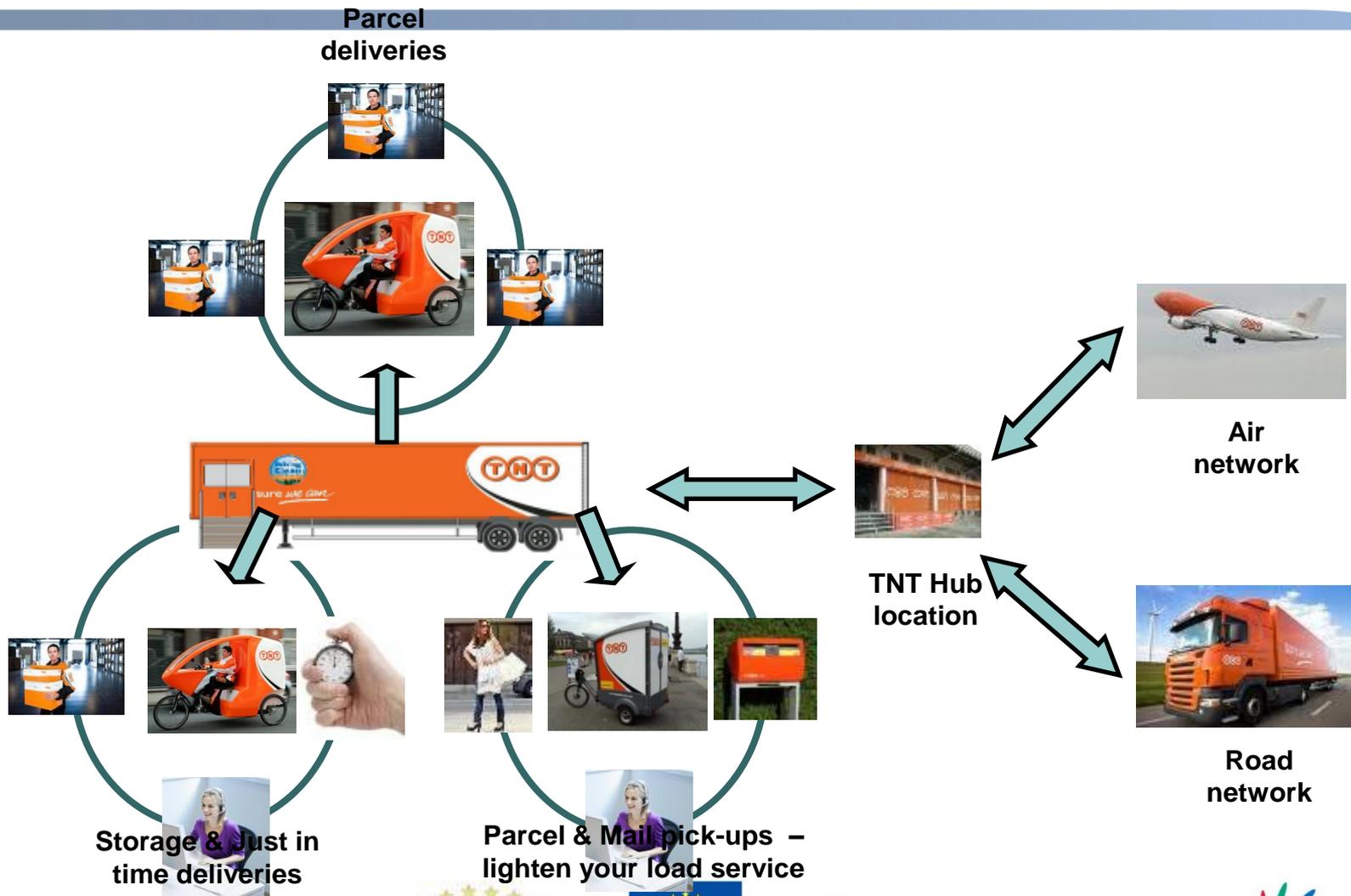
Collaboration remains key to success

TNT actively contributes to the WBCSD Urban infrastructure initiative. 14 multinationals engaged to help cities to develop livable and successful cities.

TNT supports various European programs (e.g. FP7) to improve sustainability in our industry. Examples are FiDEUS 2003-2006 (e.g. demo Hannover), CityLog 2010-2012 (e.g. demo Berlin) and Straightsol 2011-2014 (e.g. demo Brussels).

TNT works intensively together with many universities (e.g. University Brussels) and research centers (e.g. Frauenhofer) to understand what the best future solutions are for City Logistics

Continue to work with reps. from all key city stakeholders to make sure we can benefit from joint knowledge, resources, assets, etc.:

➢ Government: local, national and regional (e.g. Brussels and Berlin)
➢ Suppliers and customers (e.g. Gucci and Nike)
➢ New entries (e.g. Green Link, Cargohopper and GCD)
➢ Competition (e.g. DPD, Transmission)

Zoom on Citylog Project

- Project funded by EC (FP7-SUSTAINABLE SURFACE TRANSPORT (SST)-2008-RTD-1)
  - ✓ Technologies and systems for freight movements and goods services in cities which minimize their impact upon residents whilst maintaining or increasing overall system efficiency.

- Objective
  - ✓ To contribute to the improvement of the overall city logistics efficiency through :
    - ✓ *Technology*
      - ✓ Info-telematic support functionalities
      - ✓ New logistic-oriented vehicle solutions

    - ✓ *Delivery process review*
      - ✓ Vehicle-to-vehicle transhipment
      - ✓ Innovative and interoperable load units

Citylog – Key information

- Partners
  - ✓ 18 partners from 6 different countries (IT,FR,DE,BE,NL,SE)
    - ✓ Project leader CRF (Centro Ricerce Fiat)
    - ✓ TNT *only* logistics provider in the project
    - ✓ Vehicle Manufacturers
    - ✓ Public Authorities
    - ✓ Telematic companies
    - ✓ Research Centers
    - ✓ Associations & SME

- Timing *Start : 1-1-2010 Finish : 31-12-2012*

- Sito Web   http://www.city-log.eu/home

Citylog – Key concepts

1. Freight Bus concept
- ✓ Containers from outside city center on freight bus
- ✓ Distribution inside city center with Low Emission Vehicles

4. Mission support (Telematics)
- ✓ Optimized trip planner
- ✓ Ad hoc map attributes for commercial vehicles
- ✓ Dynamic navigation services
- ✓ Last mile parcel tracking

2. Delivery Van with Interoperable load units
- ✓ Latest Technology Delivery Van
- ✓ Basic compact containers with automatic loading/unloading system on delivery van
- ✓ On-board telematics for clean and efficient mobility
- ✓ Safety and maneuvering support systems

3. Mobile Pack Station (Bentobox)
- ✓ Pack station in public place for clients to come and pick up or send parcels automatically
- ✓ Fixed docking station with user interface
- ✓ Mobile load unit with parcels

Citylog Concepts – 4. Mission Support

- Optimized trip planner
  - ✓ Find the **optimal route** taking into account **real-time traffic data** and **traffic restrictions policies** defined by the public authorities

- Ad hoc map attributes for commercial vehicles
  - ✓ Specific **dynamic** map attributes related to all relevant features for urban freight delivery
    - ✓ Transit restrictions for trucks and vans.
    - ✓ Physical constraints (road blocked)

- Dynamic navigation services
  - ✓ Dynamically manage traffic situation
  - ✓ Exploit ad hoc map attributes
  - ✓ Real time tuning of trip planner
  - ✓ Assign pick up activities (information of other vans)

- Last mile parcel tracking
  - ✓ Matching the vehicle position information and runsheet information in order to inform the final addressees about the expected delivery time;
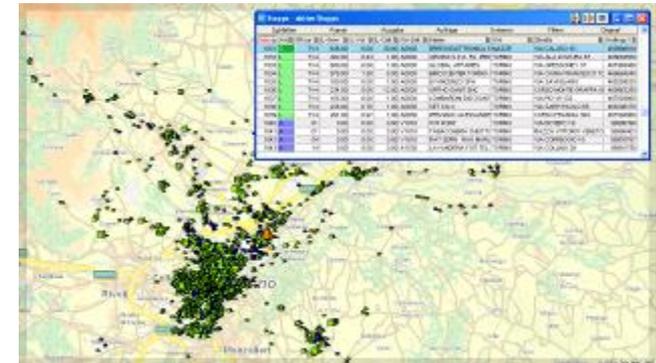
CityLog – What can we learn as TNT?

Evaluate impact on Dynamic navigation vs driver experience on road/customer

Define the best vehicle interoperability in order to optimize and reduce environmental impact

Learn to work together (share information, mission and objectives with cities…)

Develop a standardised approach within TNT

Senate Department for Urban Development
Principle Affairs of Transport Policy
Julius Menge, VII A W, Commercial Transport

Conclusions

- Technology, collaboration and smart supply chains are key areas to success.

- Innovation is required in all three areas.

- Government local and central can play a key role to provide the right policy framework. Subsidies often just delay the real city solutions.

- "National and International platforms" required to boost innovation and implementation.

Thank you for your attention !

www.tnt.com