

The BESTUFS project

A THEMATIC NETWORK TOWARDS THE EFFICIENT MOVEMENT OF GOODS IN URBAN AREAS

Conclusions and Recommendations

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Marcel Huschebeck, PTV AG, Karlsruhe

Table of Contents

- ▷ **BESTUFS Overview**
- ▷ **City Access and Access Regulations**
- ▷ **Urban Distribution Vehicles and Technology**
- ▷ **Rail in Urban Freight**
- ▷ **E-Commerce**
- ▷ **Road Pricing**

BESTUFS Overview

- ▷ **Project within the 5th FP**
- ▷ **Main objectives “to identify and disseminate Urban freight solutions (UFS) which are considered as Best Practice in Europe”**
- ▷ **4 Main Partners**
 - PTV**
 - NEA**
 - Rapp**
 - ARRC**
 - CDV**
 - Transman**
- ▷ **16 fixed Members and a large expert group**

BESTUFS Results Overview

Bringing together the different views for the actors in urban freight transport (transport, retail and cities) and discussing specific themes from different views:

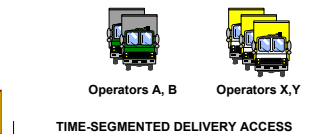
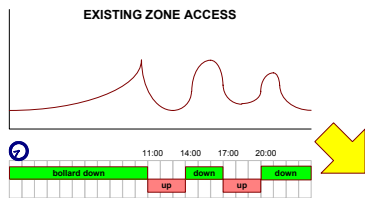
- ▷ **So far 10 workshops**
- ▷ **3 conferences on European and international Best Practice took place**
- ▷ **6 material collections were carried out**
- ▷ **Several contact to other related networks were established (IMPACTS, PSD, Institute for City Logistics, etc.)**

City Access Regulations

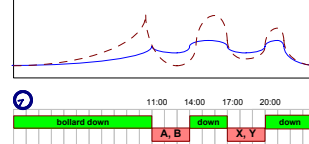
- Vehicle emission, size and weight
- Delivery time windows
- Preferred truck routes
- Loading and unloading zones
- Licences
- Slot Management ?



Barcelona



Barcelona



BESTUFS BPH1 2001

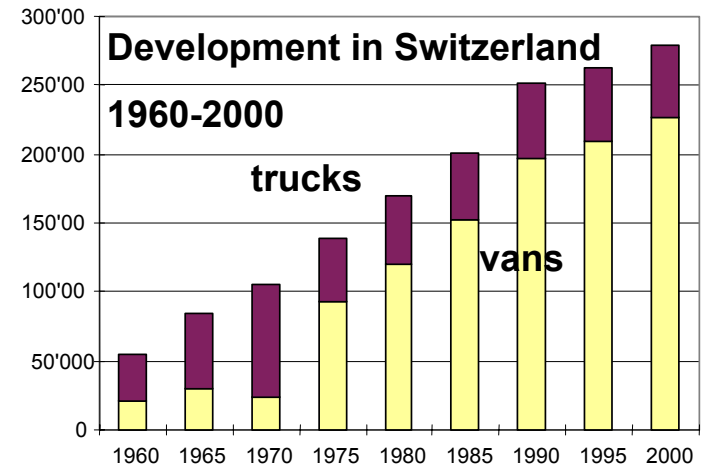


City Access - Recommendations

- **City access regulations have in general positive impacts** and are a recommendable measures to reach a more sustainable freight transport
- **Too restrictive regulations should be avoided** (eg. too narrow time windows lead to more number of trips!)
- Within an bigger area, the **access regulations** (weights, deliver time windows, etc.) **should be harmonised (efficient tour planning!)**
- From **slot management** positive effects can be expected, but more experiences and research are needed
- **Enforcement plays a crucial role (feasibility of a solution!)** and can be supported by **telematics applications**
- **Interoperable solutions are needed !** (one kind of On Board Unit, smart cards etc.)
- **PPP** for better solutions, acceptance and implementation

Distribution Vehicle Technology

- Almost the **complete city distribution by road transport** propelled with combustion engines burning fossil fuels
- **Composition of vehicle park** affected by freight demand, logistics concepts, legal framework conditions and local delivery conditions
- Growing number of 3.5 tons vans
- Vans: 10% of volumes, **60% of mileage**
- **Vehicle technology development** driven by
 - **need to improve the efficiency**
(reduction of time operating in cities, more number of stops, etc.)
 - **need to reduce the environmental disadvantages**
(pollution, noise, etc.)



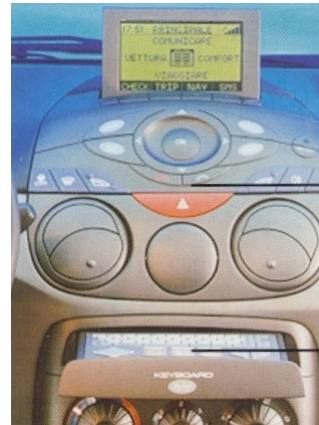
Innovations in vehicle technology

- Low emission vehicles
(Combustion, hybrid, fuel cell,
- “Urban lorries”
- Telematics applications
- Intermodal city vehicles
(small container solutions)



Ruesch 2001

IDIOMA 2001



IVECO 2001



IVECO 2001

Vehicle Technology - Recommendations

- **Public support to develop adapted urban lorries**
- **Public support to use environmentally friendly urban lorries** (e. g. by temporal and spatial access regulations, city administration fleet, labelling,)
- **Promotion of best practices in telematics applications** and software for urban distribution (e.g. interface to urban and regional traffic management and information schemes)
- **Working out supporting measures against economic disadvantages** for alternative propulsion vehicles under the prevailing market conditions
- **Improvement of the information basis** on the state of the art of alternative engines and fuels

Role of rail in urban freight

- **Characteristic developments** in many urban areas:

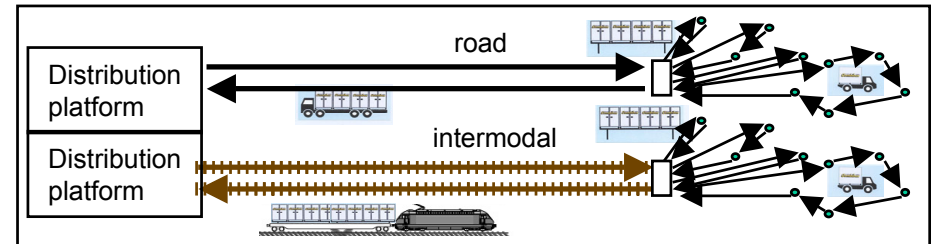
- Industrial sector loses importance --> rearrangements of land use
- rail transport volumes are decreasing, road is increasing
- high rail distribution costs (single wagon traffic)
- city development --> **pressure on rail infrastructure**
- increasing transport volumes
- limited city accessibility by road (peak times)

- **Key questions:**

- **What role can rail play for urban freight ?**
- **What to do with existing rail infrastructure?**

Approaches for using rail in urban freight

- Rail access of urban distribution platforms
- Use of goods stations and private sidings as intermodal transfer points
- Cargo Tram
- Cargo Tube



IDIOMA 2001



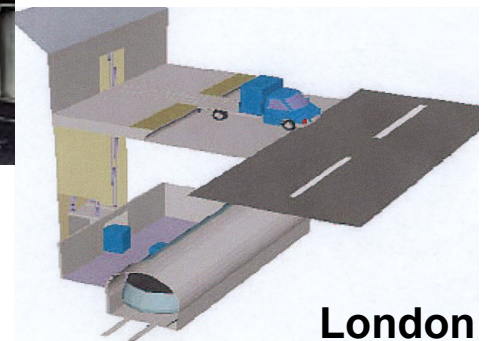
Dresden

Egger 2001



Switzerland

SBB Cargo 2002



London

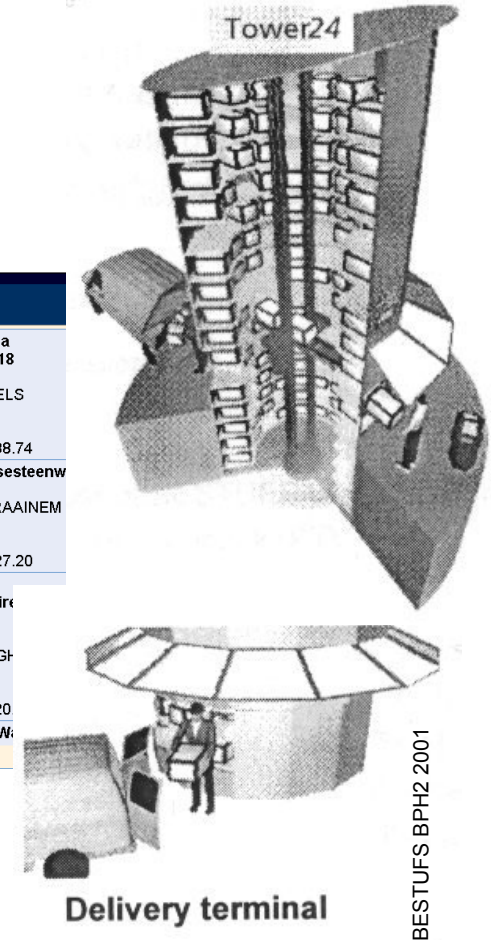
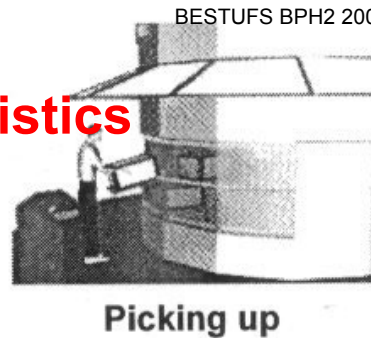
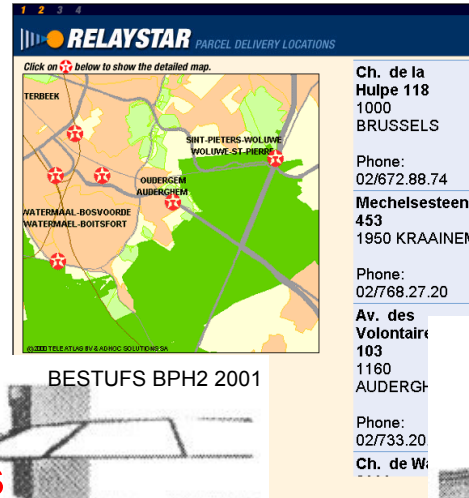
Hilditch 2001

Urban rail freight - Recommendations

- Rail freight has a **limited** potential for urban freight
- **Rail freight transport requires long term decisions from the actors involved!**
- **Regional and urban freight transport strategies should always consider rail**
- **Rail freight requirements have to be considered in land use planning**
 - Location of industrial zones and access regulations
 - Location of distribution centres / intermodal transfer points
 - Preservation of existing / building new infrastructure
- **The needed rail infrastructure has to be identified and secured**
- **Quality partnership between all stakeholders needed**

E-Commerce - Crucial last mile solution

- Last mile problem
 - ➔ Customer not at home
 - ➔ Customer-service ↔ distribution efficiency
- Random delivery
- Time slot delivery
- Delivery on appointment
- locker points, e.g. tower 24
- Pick up points, e.g. Relaystar Pickpoint
- **Efficient and reliable logistics** are a key factor for the economic success of online shopping

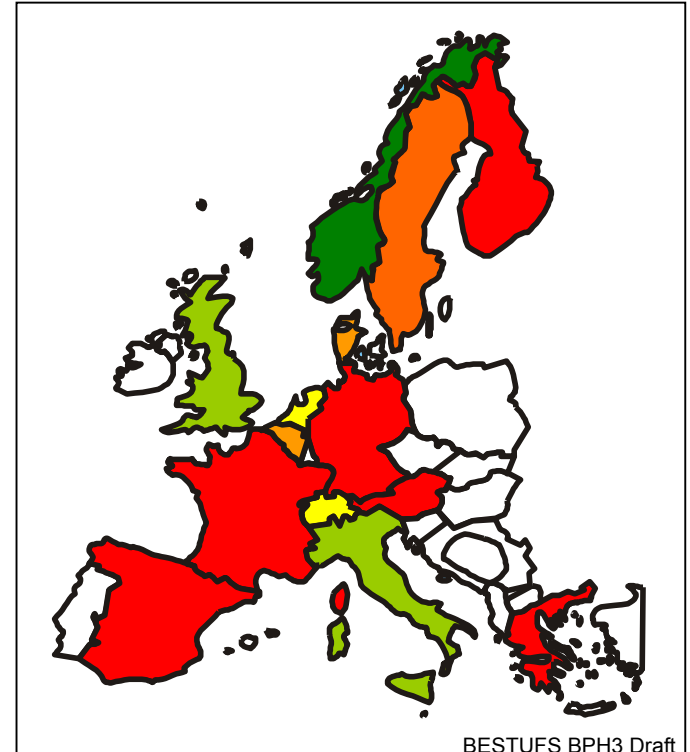


E-Commerce - Recommendations

- **E-commerce could lead to an increase in urban freight transport without an equal reduction in passenger transport.**
- **The impacts of different approaches must be known** in order to support the favourable and prevent the less favourable ones
- **Cities and regions should monitor** closely the development of e-commerce activities
- **Solutions should be supported which**
 - provide synergies between freight and passenger transport
 - allow bundled deliveries
 - allow cooperations
- **Elaboration of appropriate measures and framework conditions needed** in order to increase the positive effects and minimise the negative ones

Road pricing and urban freight

- **Background:** Green Paper and White Paper
- **Urban Road Pricing** = direct fees for the use of (urban) roads
- **Different objectives:**
 - financing
 - demand management
- **Heterogeneous situation in Europe**
- **Only in three out of 14 countries** the legislation allows road pricing
- **Focus on passenger transport**
- **Several European Projects** as PRIMA, EUROPRICE, PROGRESS, IMPRINT, CUPID etc.



Road pricing and urban freight

- Single road pricing (e.g. Lyon)
- Cordon Pricing (e.g. Norway, Rome)
- Area Pricing (e.g. London)
- Complex area pricing (e.g. Switzerland)



BESTUFS BPH3 Draft

BESTUFS BPH3 Draft

BESTUFS BPH3 Draft

Road pricing and urban freight- Recommendations

- **Urban road pricing schemes are presently discussed controversially** without a common conclusion
- The concept design should follow the problem and the technical solution should follow the concept design
- **For freight transport the usage of the charges is a crucial factor.** Transparency on the targets and the usage of the revenues have to be established
- **Interoperable systems have to be implemented**
- **Detailed evaluation of first implemented pricing schemes** as basis for public discussions and the stakeholders acceptance
- **More European and national research needed** relating to Road pricing and urban freight