



the mind of movement

Data sharing, Co-operation and Connectivity among Stakeholders, recent Developments in Europe

Marcel Huschebeck





We plan and optimise everything
which moves **people and goods**
worldwide.

PTV Group

- ▶ Customers > 120 Countries
- ▶ Cities using PTV Software > 2,500
- ▶ Community Truck Parking > 1 Million Downloads
- ▶ Commercial vehicles planned > 1 Million/day
- ▶ Installed Base Traffic Software > 40,000 Licences
- ▶ Installed Base Logistics Software > 50,000 Licences
- ▶ Major events Olympic Games/FIFA World Championship



An abstract background image featuring a complex network of thin, light-colored lines connecting various points, creating a web-like structure. The lines are more densely packed in some areas and more sparse in others, giving it a sense of depth and connectivity. The overall color palette is light and neutral, with shades of grey and white.

Agenda

1. New forms of IT architectures in urban freight
2. Findings from recent research projects
3. ALICE/POLIS initiative to stimulate urban freight

New forms of IT architectures

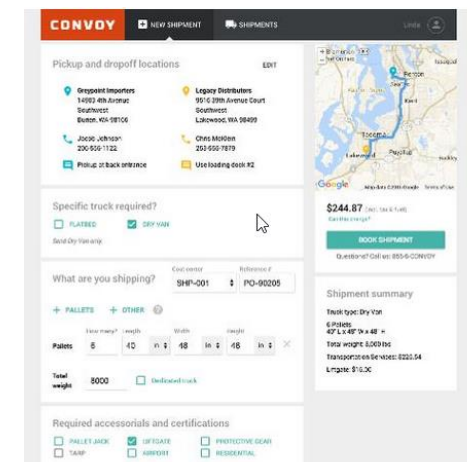
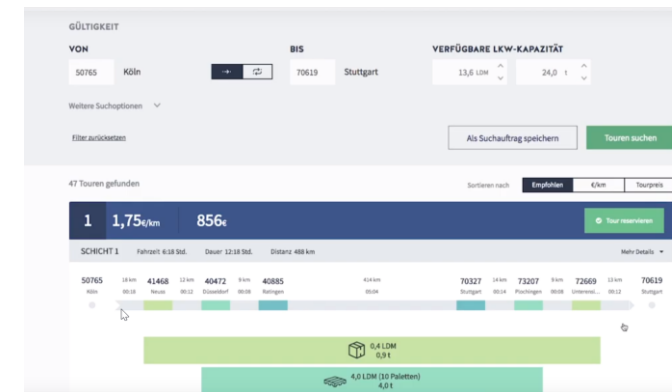
Sharing economy: Online platforms for sellers and buyers (e.g. AirBnB, Booking.com)

Digitalisation: Providing connectivity, data exchange and added value services to facilitate logistics and transport operations in the city

Autonomous vehicles for new business models and service schemes based on driverless delivery schemes

So far Business Models out of these offerings on B2C are much more valuable than B2B.

Electric vehicles, customer driven delivery models (DaaS) and restrictive urban access policy require for connected IT solutions for planning and execution urban transport



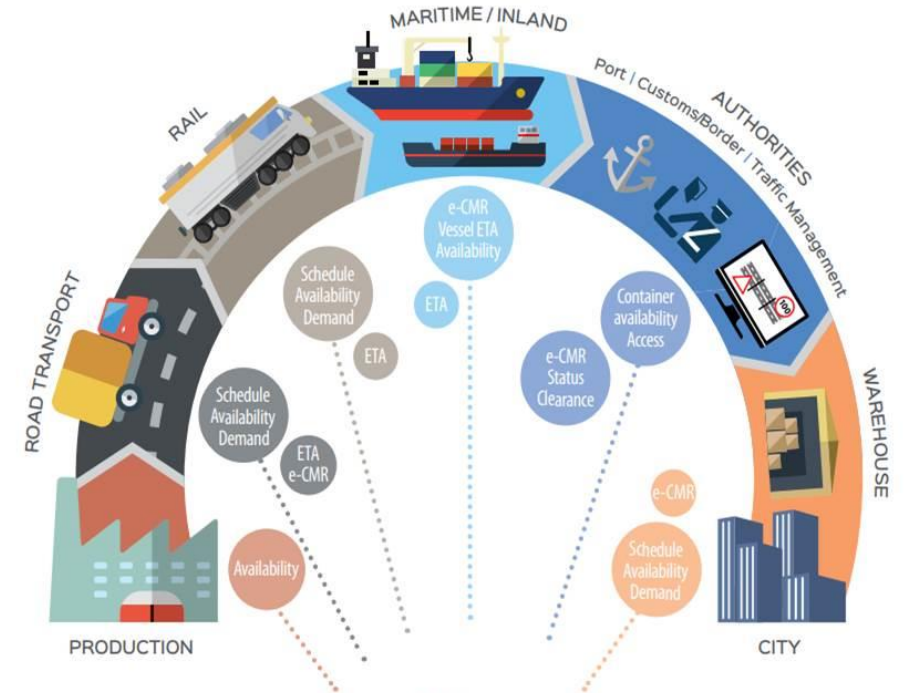
- Transparent, upfront pricing
- Real-time shipment tracking
- Alerts on shipment picked up and delivery
- Online dashboard to manage shipments
- Data that helps on supply chain decisions

New form of IT architectures

Recent initiatives in EU addresses data sharing, co-operation and connectivity among different stakeholders in urban freight.

Urban freight planning is moving from company centric distribution in which the information flow is ahead of the physical delivery towards a service oriented delivery in which bi-directional communication is defining the way how the delivery is made.

LSP centric IT Systems develop towards smart delivery platforms in which LSPs, vehicles, receivers and cities are communicating and planning



AEOLIX



FENIX NETWORK

PTV GROUP
the mind of movement

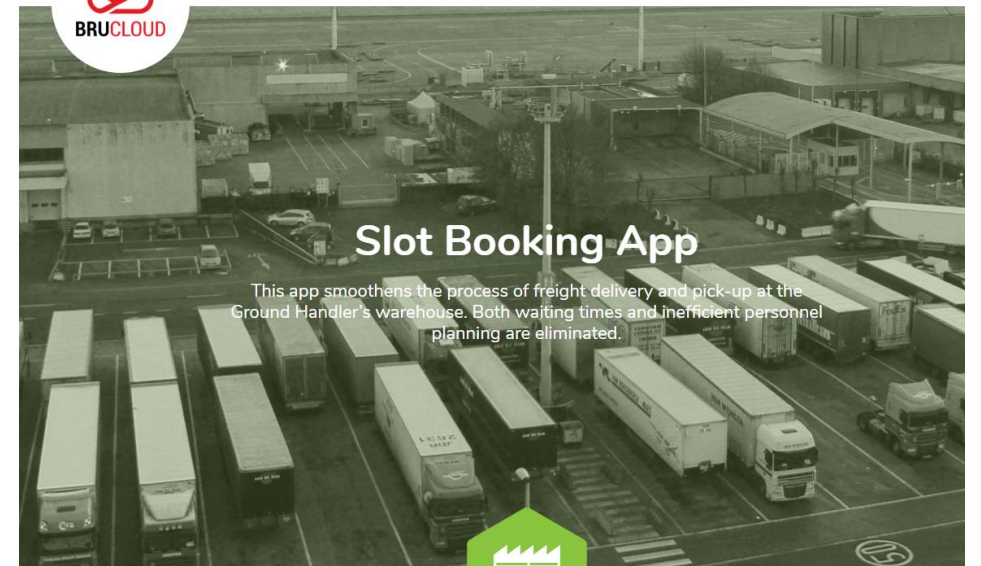
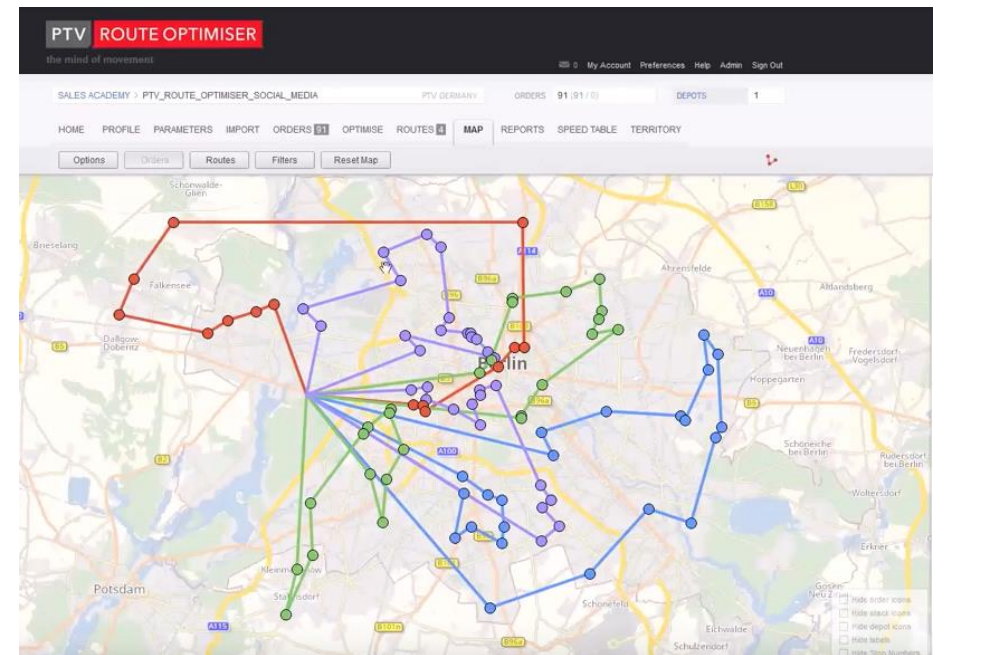
Recent IT Research Initiatives

iHUB: Deployment of 16t truck for LTL distribution

- Heavy electric truck technically feasible, due to higher purchasing costs not competitive!
- Connected IT platform is needed to monitor and predict trip and battery performance

CLUSTERS2.0: Collaborative planning and modularisation within community context

- Community driven platform concepts to enable and stimulate collaborative freight planning for freight pooling and capacity optimisation
- Apps, e.g. for slot booking at warehouses and terminals to co-ordinate and inbound freight flows, less waiting time of up to 1 hour
- Modular loading units provide new possibilities for urban distribution, potentially reducing cross docking costs up to 50%



Recent IT research initiatives

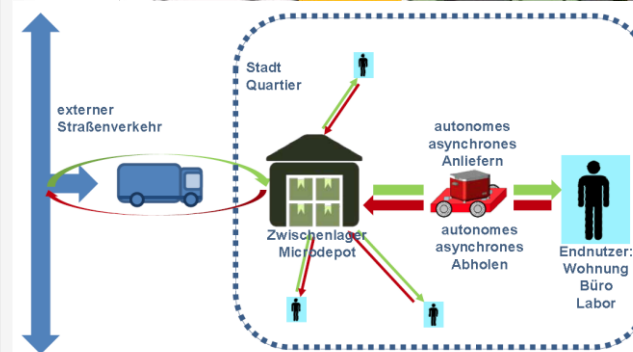
AEOLIX: IT platform for transport and logistics for data sharing and added value services

- Process visibility in combination with ETA calculation improves transport performance by 10% faster lead time
- Collaborative planning in urban freight suggests high potentials, but city platforms are not existing yet
- Added value services (ETA, city routing, freight pooling) could be for the benefit of all city users

eFEU Campus: Last mile delivery using automated robots

- Connected IT platform approach for transport planning, user communication and automated vehicle operations in one system

Arrival	Will arrive in	Company Name	Freight ID	Mobile Number	Licence
14:20 14:15	arrived	City Logistique	#9C8B92	0033665428547	AA-35
14:47 14:51	arrived	Logistika SK	#D29492	004219215478666	BA 98
15:20 15:06	arrived	Transport World	#7D77FB	0033665421356	AA-22
15:19 15:13	26 min	Iberia Transport	#61A4D3	003477521474122	7137
15:47 15:40	1 h	Long Haul Ltd.	#8AD9D7	004477365412555	YR53
15:16 15:58	1 h	Europe Logistics	#2AF910	004917474521325	HH DA
16:46 unknown	unknown	Trucking Bavaria	#B4634F	004917225412568	M XY
17:19 17:06	2 h	Logistek Utrecht B.V.	#1DA358	003161925265411	SZ-VB
17:50 17:42	3 h	Frigo Truck	#DA2E43	003245132456755	976-B



ALICE/POLIS Initiative

A group of cities and ALICE industry members is formed to develop solutions and stimulate co-operation at the gap of data sharing and urban best practices.

- Discuss about best practices on clean vehicles, clean air, space management and data sharing
- Stimulate take up and up scaling of best practices
- Speed up innovations
- Give directions to new research program Horizon Europe

City ITS and collaborative planning might be one key topic to address



Cities & Industry Dialogue Group presentation

Large Cities		Medium / Small Cities		Regions
1. Amsterdam	7. Lisbon	13. Bilbao	17. Liège	20. Arnhem Nijmegen City Region
2. Brussels Mobility	8. London (TfL)	14. Ghent	(Groupement de Redéploiement Economique)	21. Flanders MOW
3. Budapest (BKK)	9. Madrid	15. La Rochelle	18. Helmond	22. Ile-de-France
4. Dresden	10. Paris	16. Leuven	19. Southampton	23. Manchester (TfGM)
5. Dublin	11. Rome			24. Province of Noord-Brabant
6. Gothenburg	12. Rotterdam			

Type of Company	Members			
Shippers & Retail				
Logistics Service Providers, Courier and Postal Operators & Freight Forwarders				
Real Estate				
Vehicle Manufacturers				
ICT & Technology				





the mind of movement

