



New concept for freight transport in Poznań based on urban logistics centre

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&

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Institute of Logistics and Warehousing





The Institute of Logistics and Warehousing Poznań - Poland

*We develop, promote and implement
logistics solutions that facilitate business
operations*





Profile

R&D activities in public sector are commissioned by:

- **The Ministry of Economy**
- **The Ministry of Infrastructure**
- **The State Committee for Scientific Research**





Core competences

- **Logistics Management Consulting**
- **Supply Chain Logistics**
- **Macro-logistics Systems**
- **e-business**





Core Competencies - Logistics Management in Companies

- **Logistics strategies**
- **Logistics management of business processes**
- **Integrated IT Systems**
- **Warehousing**
- **Preservation of commodities (foodstuffs, raw materials)**





Core Competencies - Supply Chain Logistics

- Modelling and improvement of supply chains
- Supply chain management
- Design of logistics centres
- IT Systems





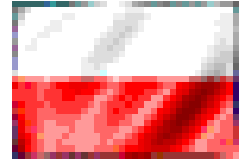
Core Competencies - Macrologistics Systems

- Domestic logistics systems
- Eurologistics
- City logistics
- Eco-logistics (waste utilisation)
- Agrologistics





*Urban goods transport strategies
laissez-faire or following a comprehensive strategy*

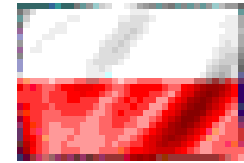


Agenda

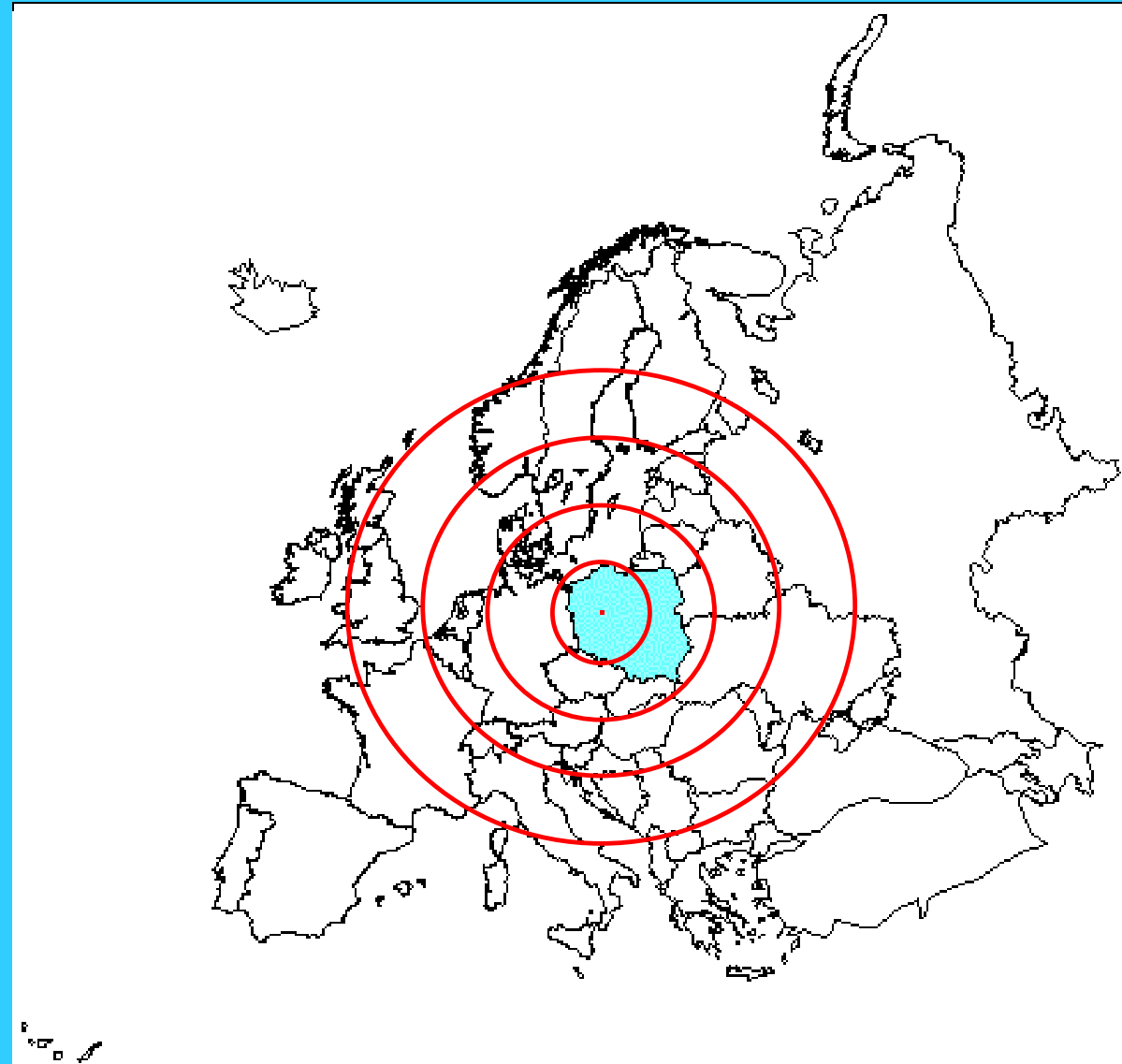
1. The city of Poznań
2. Transport issues in the city
3. Goals to be achieved
4. Solutions
5. Conclusions



*Urban goods transport strategies
laissez-faire or following a comprehensive strategy*



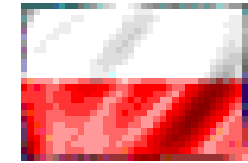
Europe
Poland
Poznań



Maciej Stajniak & Tomasz Dowgielewicz – Institute of Logistics and Warehousing



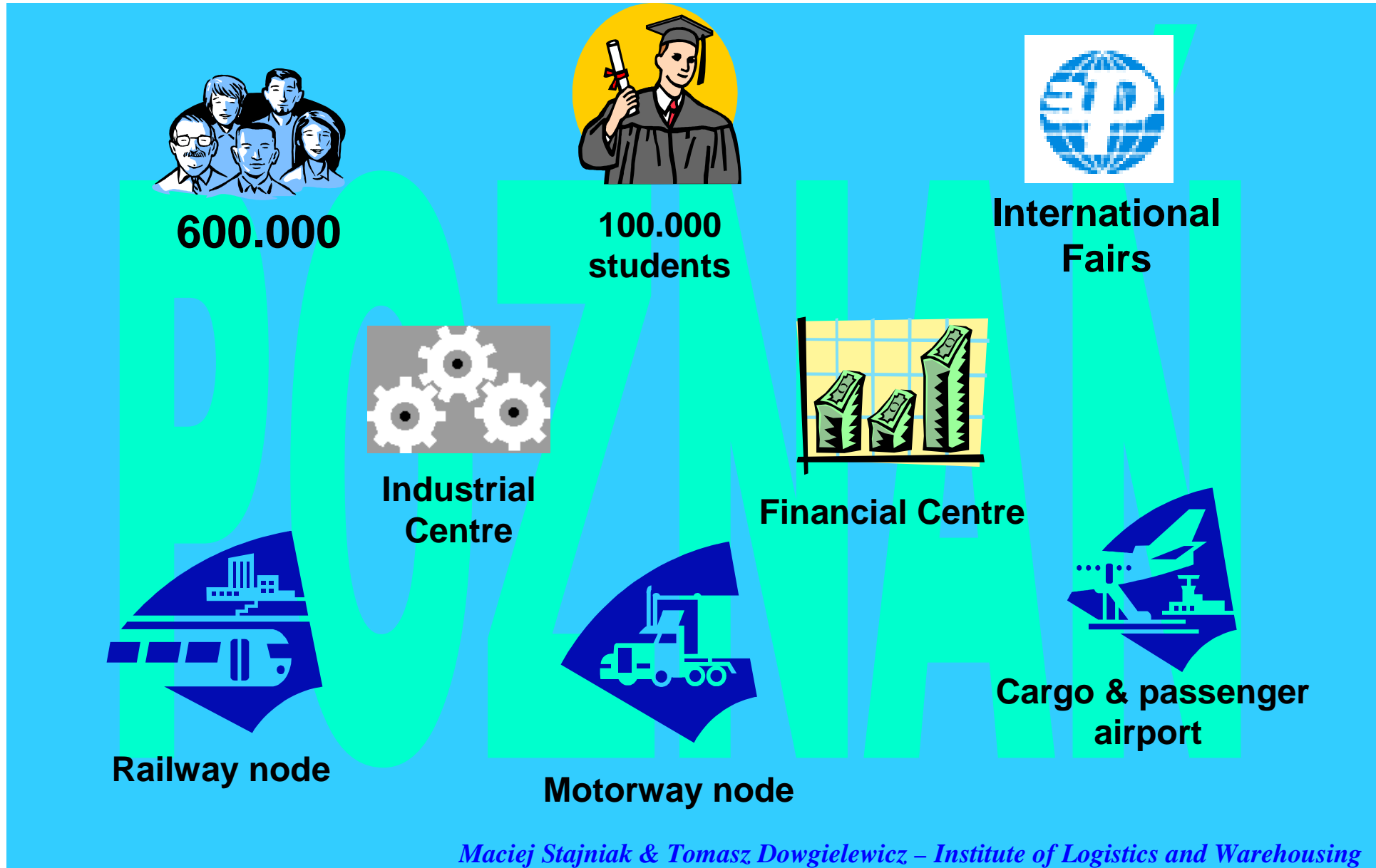
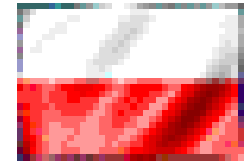
Urban goods transport strategies laissez-faire or following a comprehensive strategy



*Source: Urban Department
of Poznań*

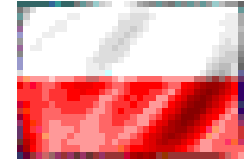


*Urban goods transport strategies
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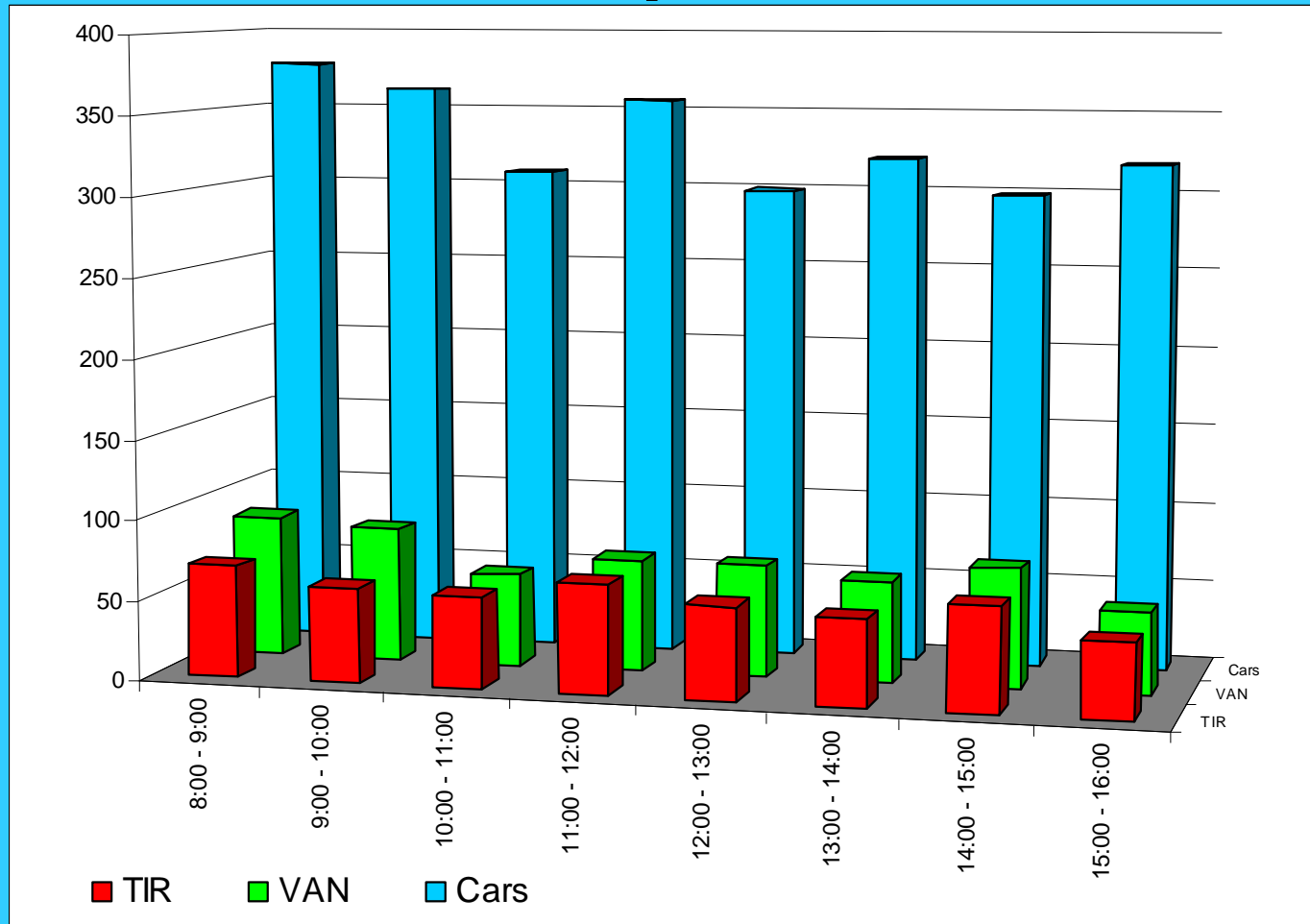




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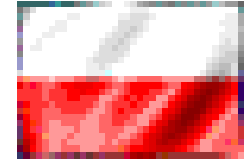


Średnia liczba pojazdów na ulicach Poznania w dzień powszedni

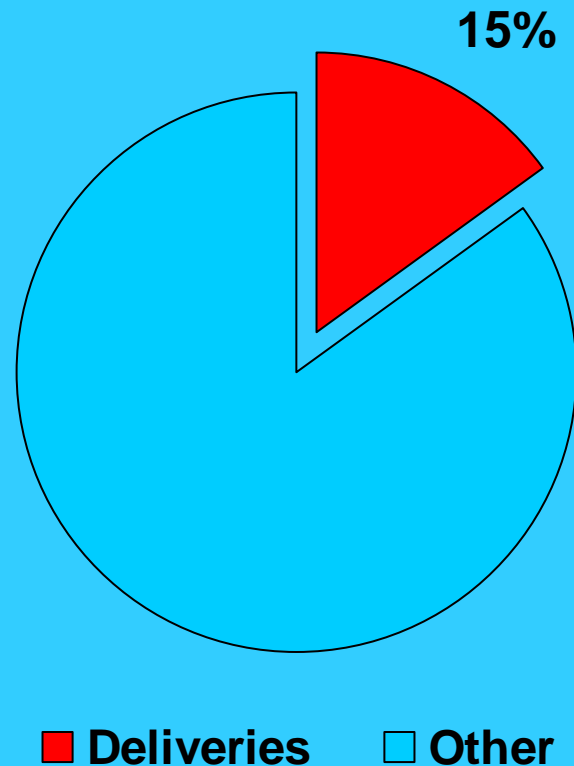




*Urban goods transport strategies
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Goods distribution



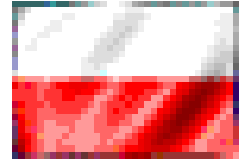
15% share of deliveries in total city traffic

1,3 daily delivery per one shop

**Average volume of 1 delivery
50-200 kg**



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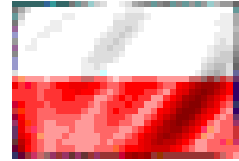


Transport Problems in Poznań

- **Excessive traffic in relation to the efficiency of road infrastructure,**
- **transit transportation through the city,**
- **high level of goods transportation for enterprises and citizens,**
- **lack of parking lots in the city centre,**
- **high level of fumes and exhaust,**
- **high level of noise,**
- **roads destruction caused by heavy cars.**



*Urban goods transport strategies
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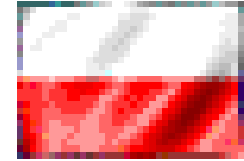


Results of high traffic level

- 1. Problems related to delivering goods to their destination places within the city**
- 2. High pollution level**
- 3. Safety problems**
- 4. Architectural development issues**



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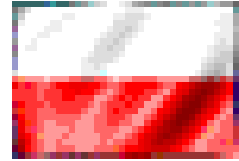


Requirements related to goods transportation

- right time, no delays
- suitable technology and using proper means of transport and regarding their compatibility
- constant monitoring of the level of distribution reliability, supply and demand, customer's expectations including individual deliveries,
- regarding services substitution,
- regarding different infrastructures and streams organizing,
- costs respectable by producer, distributor and acceptable by the final consumer,
- regarding ecological safety,
- licensing carriers.



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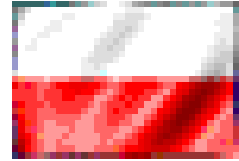


Benefits expected by forwarders and transport companies

- 1. Full exploitation of loading space**
- 2. Empty courses elimination**
- 3. Delivery in convenient time for the carrier**



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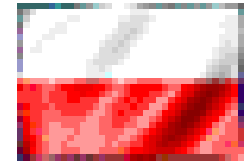


Benefits expected by the citizens

- 1. Life quality improvement**
- 2. City infrastructure more accessible for individual users**
- 3. Possibility of using mini-centers as merchandise points for individual customers**



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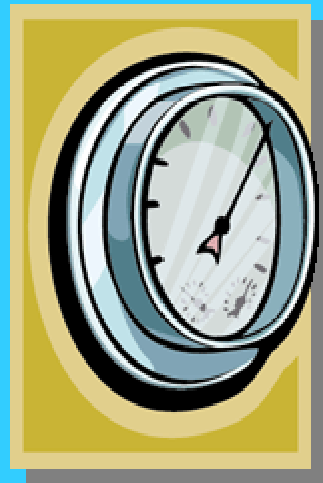


koszt

bezpieczeństwo



**Jakość
transportu
miejskiego**



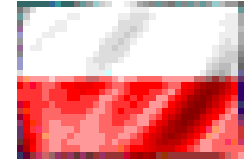
czas

wygoda





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Telematyka transportu

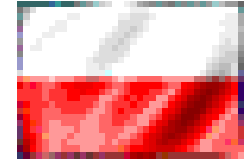
telekomunikacja

**technologie
informacyjne**

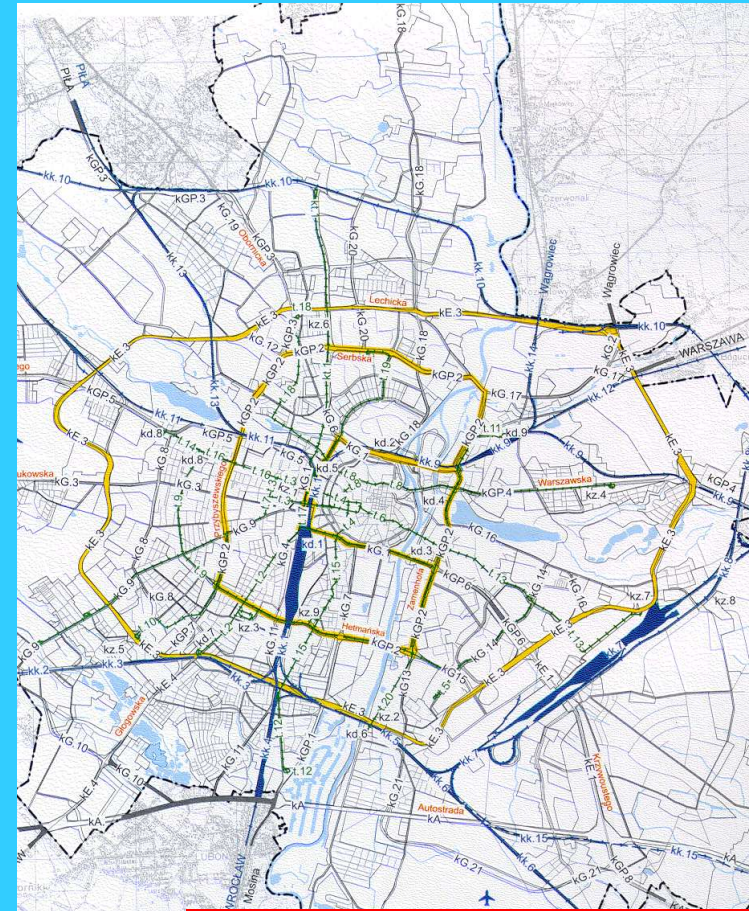
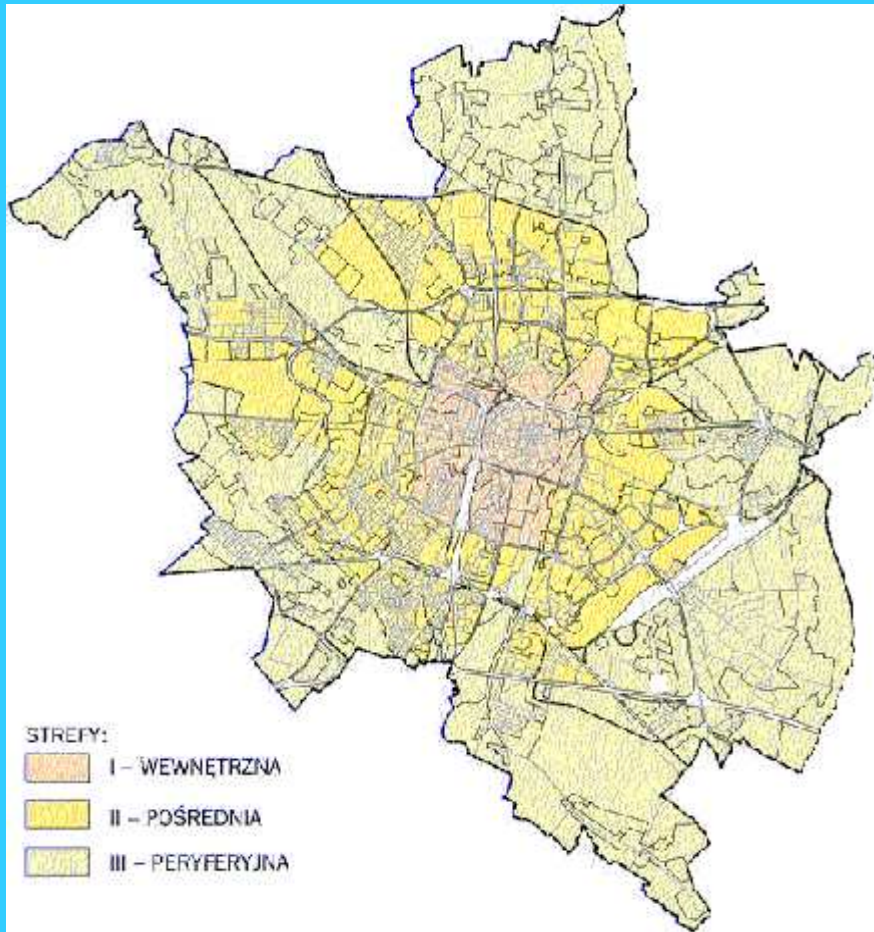
**Zarządzanie
systemami
transportowymi**



Urban goods transport strategies *laissez-faire* or following a comprehensive strategy



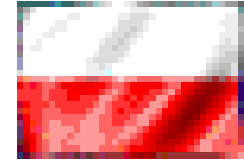
Segmentation of the city



1. Wnioski???
2. A może to na początek?



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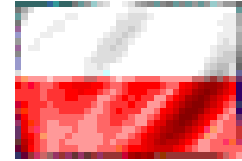


Factors taken into account locating the LC

- Direct access to railway terminal
- Convenient location on the city communication frame
- Close neighboring with the A11 national road
- Access to 2 airports – Krzesiny and Lawica



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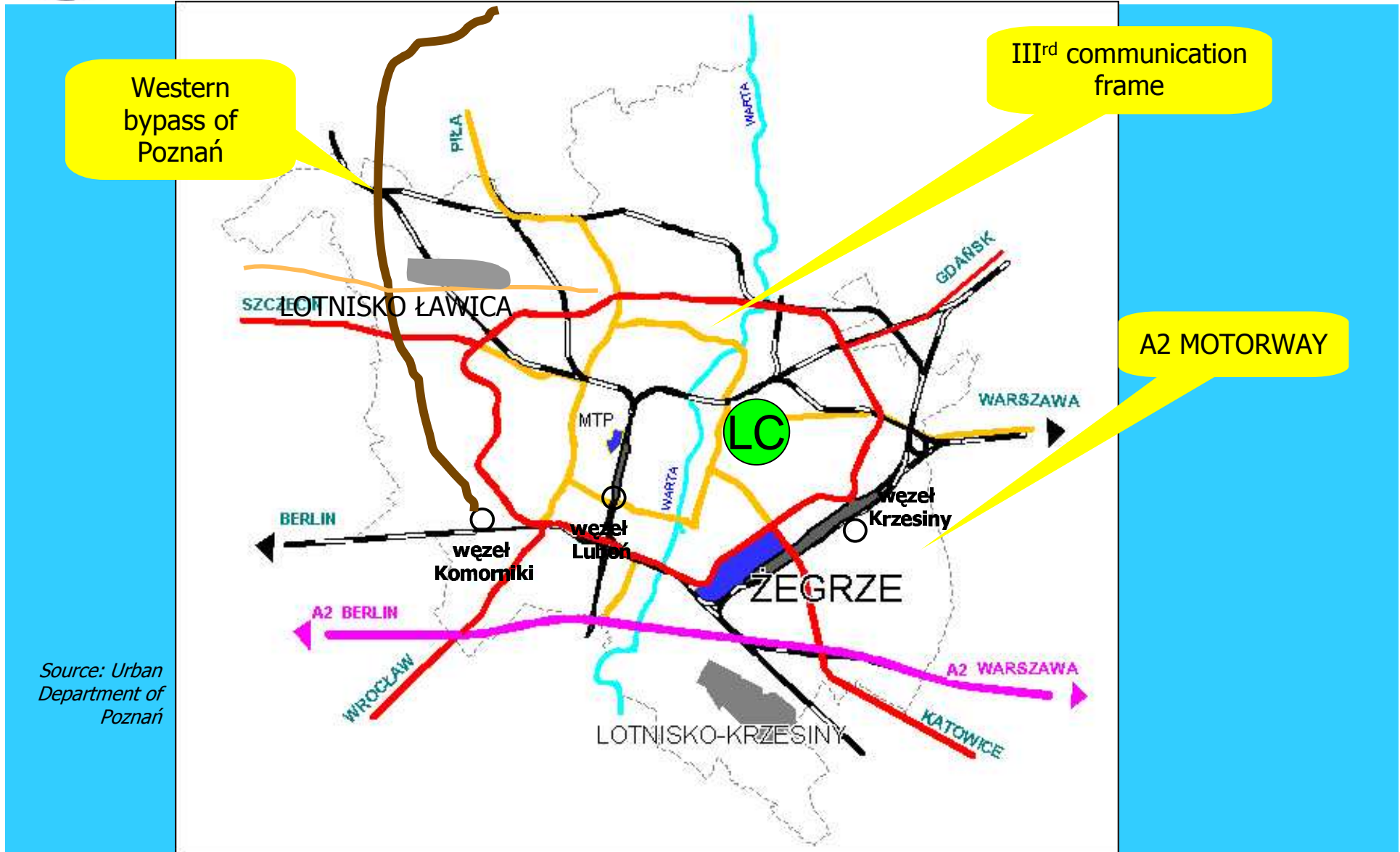
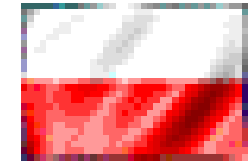


Criteria of carriers selection

- Specialized equipment
- Ecology issues
- Costs of transportation
- Complexity, range of services
- Quality of services (on-time deliveries, number of claims)



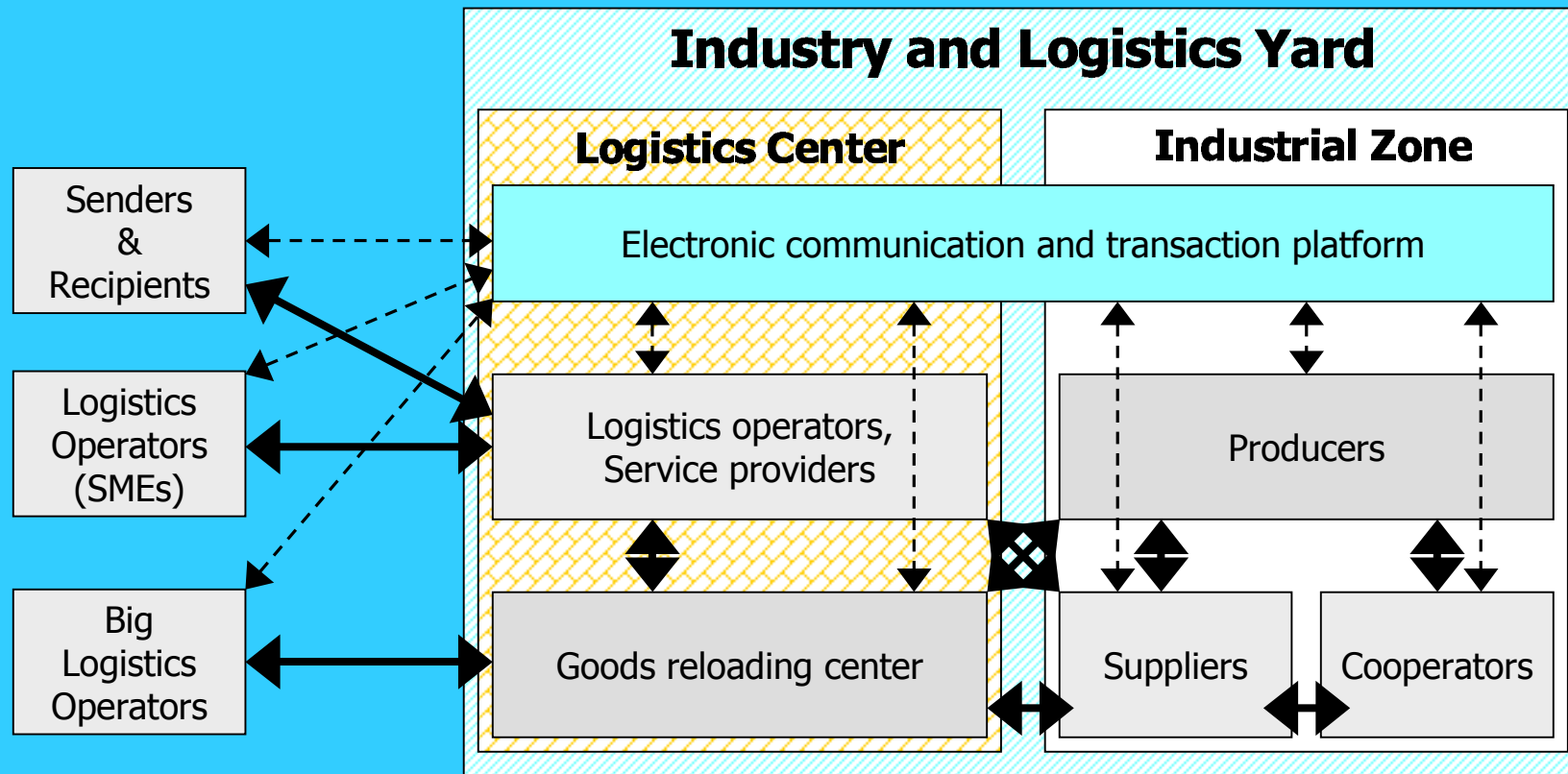
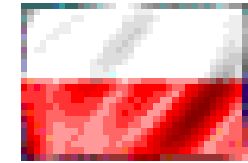
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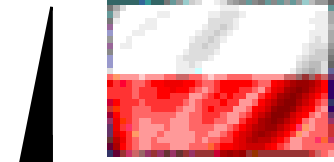
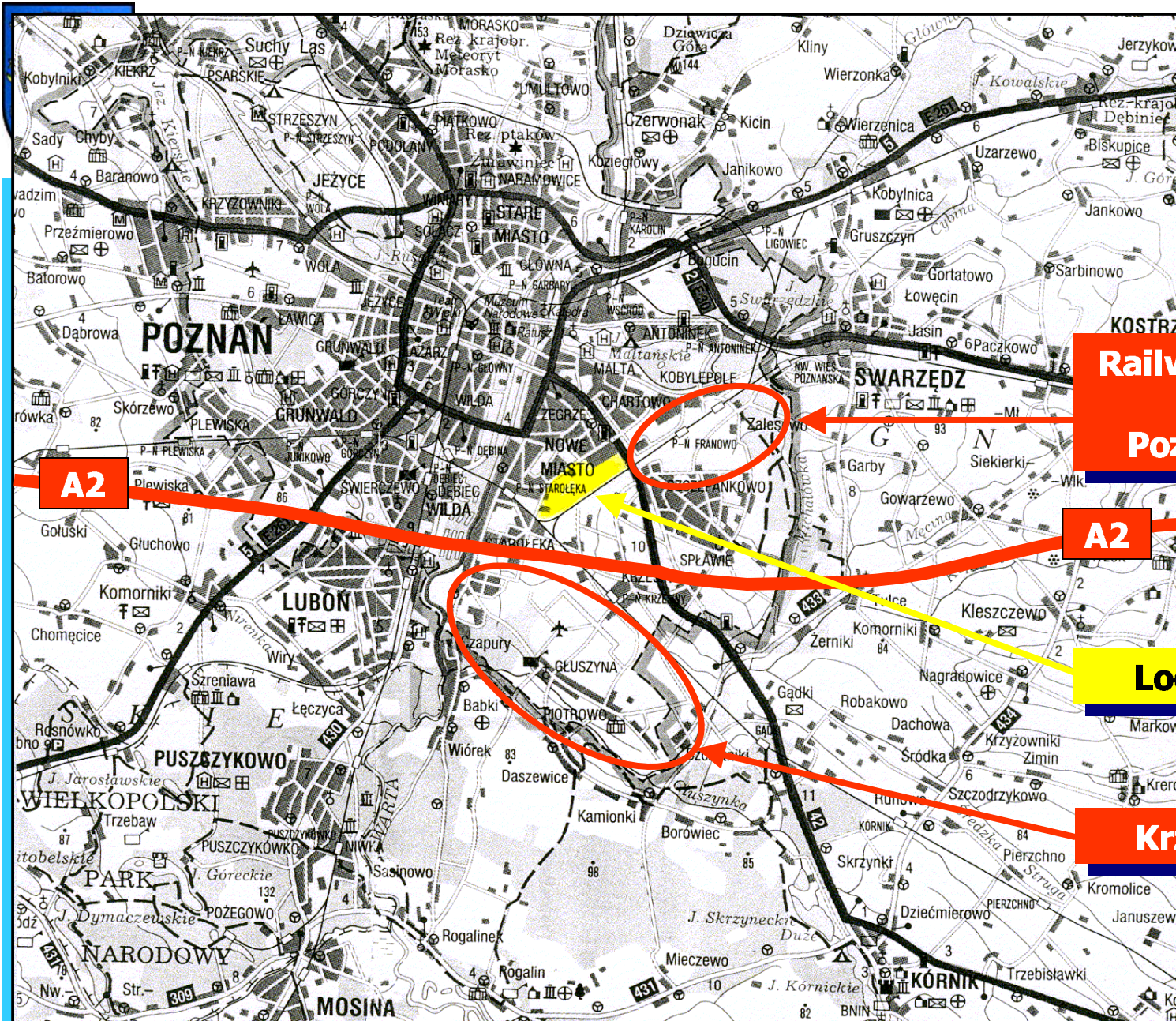
Source: Urban Department of Poznań



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→ Goods steam
- - - - -> Information stream (electronic)



Railway Marshalling Yard of Poznań-Franowo

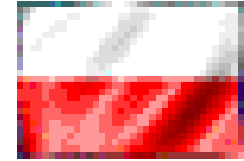
A2

Logistics Center

Krzesiny Airport



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Model zadań i obszarów zainteresowań logistyki miejskiej

DOSTAWCY
(przedsiębiorstwa
produkcyjne i
usługowe)

**DOSTAWCY USŁUG
TRANSPORTOWYCH I
LOGISTYCZNYCH**

**LOGISTYKA
MIEJSKA**

WŁADZE MIASTA
(instytucje samorządu
lokalnego)

**ODBIORCY
TOWARÓW I USŁUG**