

# "City distribution - a holistic approach"

Corporate Solutions, Research & Development

# "Something is cooking ..."





# Where is the "tipping point"?





source idea: futurist Lars Thomsen

### **FUSO eCanter – official handover in Berlin**



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# **Urbanization and its consequences**

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 More and more restrictions are being placed on the access to inner cities. There are currently restrictions in place for over 500 European cities

#### www.urbanaccessregulations.eu

- Severe regulations are being drawn up in Germany and other countries, in particular concerning diesel motors
- DACHSER is investigating this issue within the framework of its R&D project 'City Distribution' and is developing a toolbox which offers a variety of different solutions



# **City Distribution**

 Innovative sustainable business models for distribution in inner cities and creation of a toolbox

All cities have their own individual and special requirements

 The toolbox will be a practical method for providing a variety of solutions to each branch



# **City Centers in Metropolitan Areas**



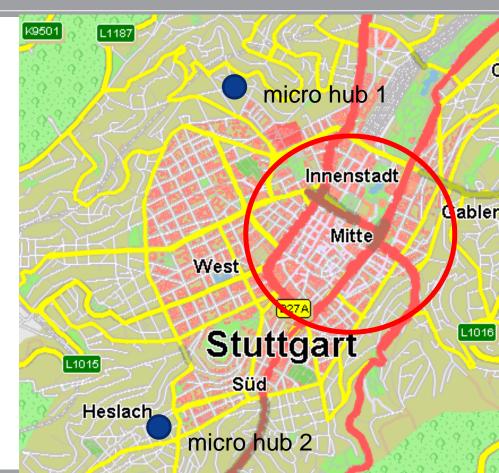
What does a City Center look like?

What is the traffic situation and the structure of the consignees?

Where is our branch located?

• Who is in charge of what?

• Which concept will fit best?



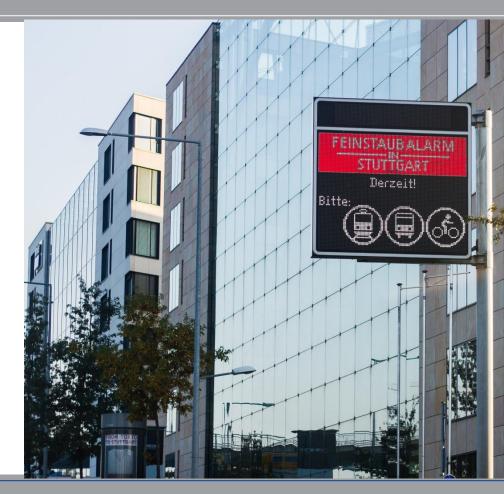
# **Situation in Stuttgart**

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 Acceptable pollutant levels are frequently exceeded

 Temporary traffic bans are to be implemented for diesel motors from 2018 on days with raised dust pollution

 Stuttgart is one of the most congested cities in Germany



# **Toolbox Project City Distribution**



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### Laws and Regulations

- Relying on speculation and rumors concerning regulations is not advisable when trying to reach the best decisions for delivery to inner cities
- This is why DACHSER gathers and evaluates all relevant country requirements in a structured manner
- Example Paris: with effect from 2020 only vehicles licensed in January 2011 or later will be allowed to enter the metropolitan area







### **City Analysis**

- Each city has its own specific logistics requirements. Both topographic and demographic factors have an important role to play
- DACHSER analyzes each metropolitan region separately, in order to be able to offer individual solutions for each city
- Example Stuttgart: lying in its basin valley surrounded by hills means that this Swabian city experiences more days with high dust pollution and therefore increased traffic restrictions



### New Energies and Technologies

- Many cities grant exceptions in the access restrictions, if alternative drive systems are in use
- DACHSER is testing both hybrid, CNG and electric trucks as well as electrically supported delivery bicycles
- Example e-Truck: daily deliveries to the inner cities of Málaga, Paris and Stuttgart by electrically powered vehicles
- Example electrically supported delivery bicycles: daily deliveries to the Stuttgart inner city by delivery bicycle



### **New Energies and Technologies**

### Beware of false conclusions!

- The costs of an electric truck are currently 3 to 5 times as high as a conventional truck
- At the moment there are no electric truck fleets of more than just one or two trucks with an admissible weight > 7.5 tons to be found on the market
- The additional electrical capacity required to sustain just 5 electric distribution vehicles would today, without any preparation, bring a medium-sized branch office practically to a standstill



# **Project City Distribution – alternative drives**



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### Night, Shop and Mall Deliveries

- Shrinking warehouse space and shops, which are difficult to access, calls for new delivery concepts
- DACHSER is attempting to reduce delivery time and fulfill customer demands by means of night deliveries
- Example Paris: Deliveries to hotels, hospitals, restaurants and offices between 17:30 and 22:30



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#### **Investment Plan**

- Sustainable City Distribution does not come for free. The shipping industry must budget for increased costs in the future
- DACHSER is already investing in the development of sustainable delivery concepts
- Example City Distribution: Three year research and development project with activities in France, Denmark, The Netherlands, Spain and Germany



### **Research Start Ups and Innovation**

- Those who want to design inner city delivery concepts for tomorrow, have to combine proven and tested logistics systems with new ideas
- DACHSER works in close collaboration with universities, research facilities, associations and start-ups, in order to be in a position to recognize and implement innovation at an early stage
- Example Nantes University: Development of innovative logistics concepts for inner cities



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# Active Communication with Authorities

- Development of sustainable transportation and logistics concepts in collaboration and consultation with authorities and stakeholders
- Participation in local working groups
- Participation in events to discuss possible solutions
- Example (Paris): Partner in the French capital's economic development and innovation agency, Paris & Co.



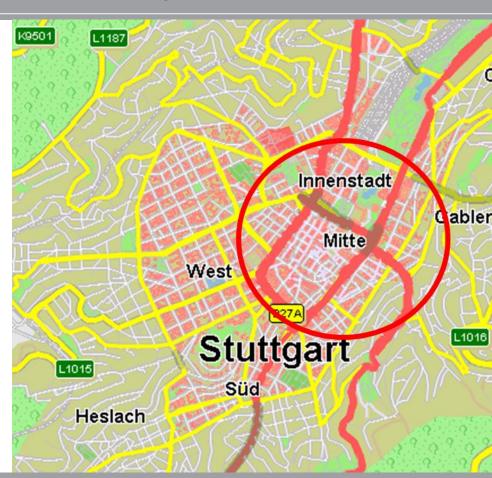
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### Greenhouse gas calculation

- Municipalities, customers, and service providers need well-founded facts and figures to convince the public that they are making efforts to protect the environment
- DACHSER can provide reliable data that will enable them to:
  - Calculate emissions savings
  - Determine their ecological footprint
- Example (CO2): Calculation of greenhouse gas emissions according to DIN EN 16258 and French decree 1336



### **DACHSER - Vision: Emission Free Delivery Zone**



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Approach your city – we provide solutions!

Help your city – help yourself!

# "Something is still cooking ..."



