

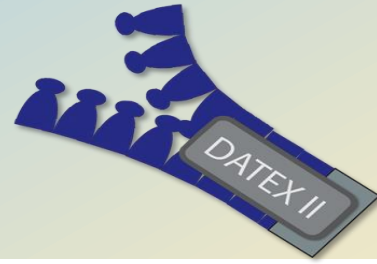


# DATEX II ITP PROFILE IMPLEMENTATION EXPERIENCES



Jürgen Neugebauer, Bavarian Road Administration

# Content



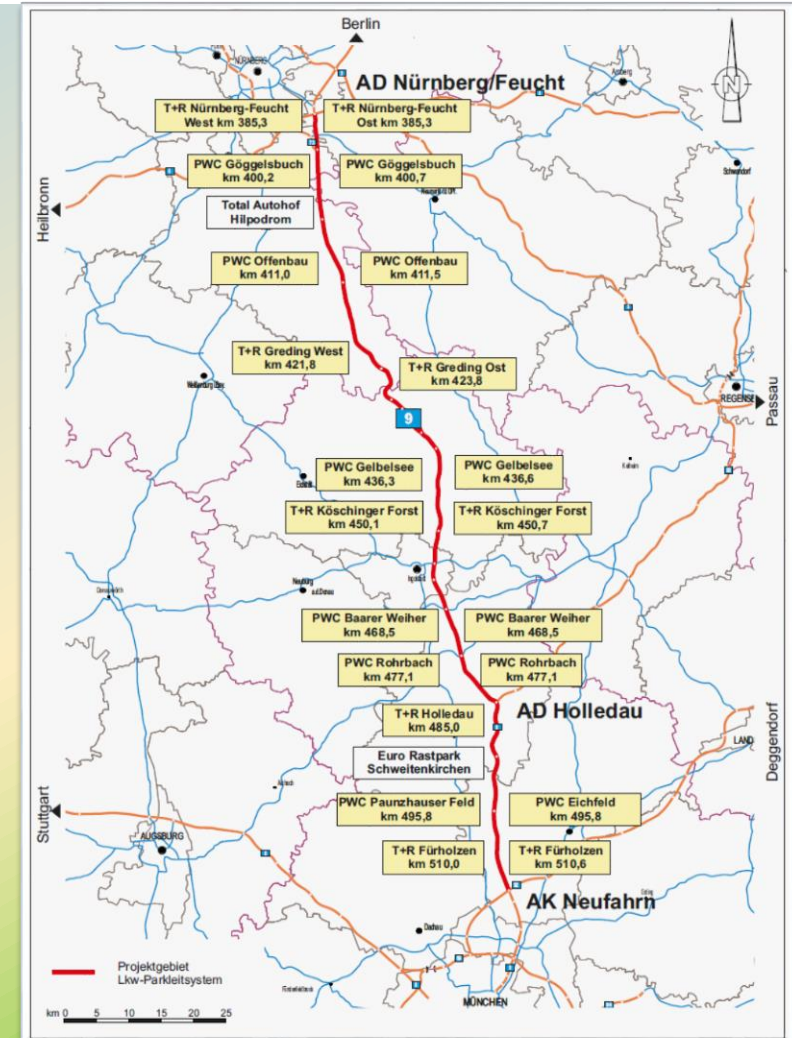
1. Intelligent Truck Parking pilot project on motorway A9 between Munich and Nuremberg
2. DATEX II ITP profile implementation for pilot project
  - ▣ Regulatory Framework
  - ▣ Experience



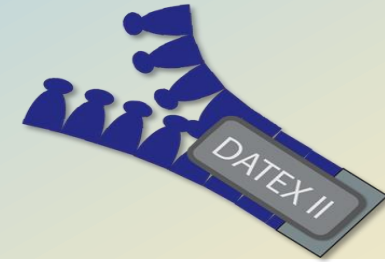
# ITP pilot project motorway A9 in Germany



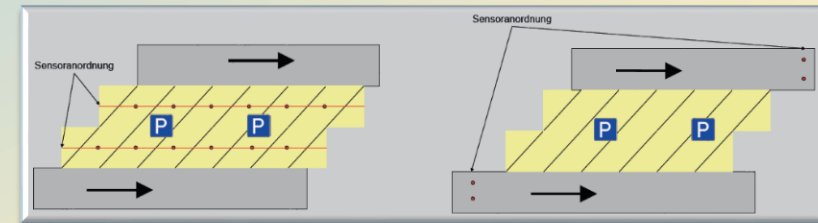
- Automatic truck detection systems at the access and exit points of 21 parking / rest areas (balancing system)
- Real time truck parking information transmitted via fibre optics to TCC
- Start of construction: July 2013
- End of construction: In 2014



# ITP automatic detection system

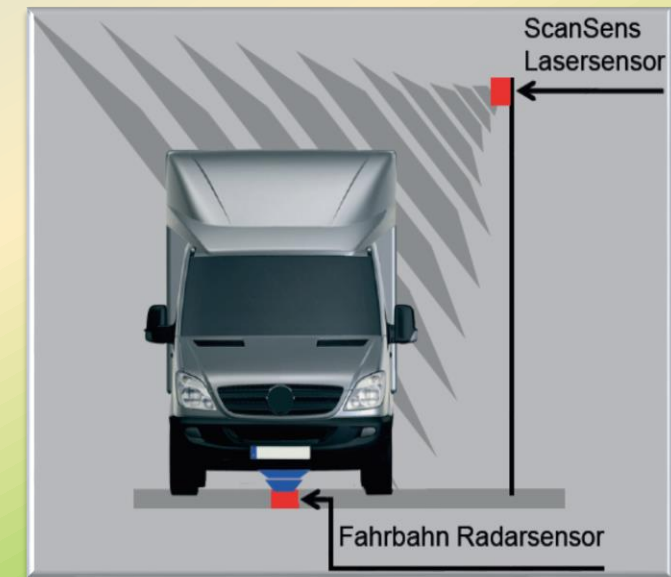


□ Bavarian road administration is testing truck detection systems since 2007 in numerous test installations under real conditions!

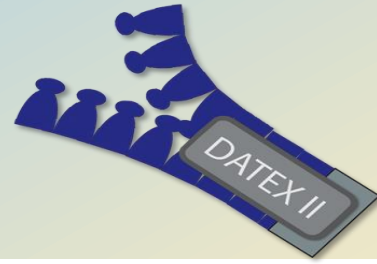


- Truck balancing systems (balancing the access and exit points measured data)
- Single truck parking space detection systems

If you would like to receive more technical insights, please contact us!



# Regulatory Framework

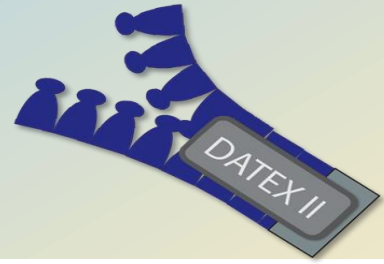


- ❑ **Letter of approval for pilot project**
- ❑ **received in January 2013:**
  - ❑ DATEX II has to be implemented for ITP-data transmission to the German single access point **MDM**
  - ❑ But in January 2013 no DATEX II ITP profile existed (but was already under development)
  - ❑ Because of this we could only demand a DATEX II implementation in a vague way in our public tender documents (and fortunately we did not receive specific DATEX II questions from tenderers)



Mobilitäts  
Daten  
Marktplace

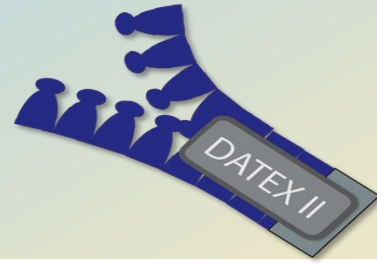
# DATEX II experience – tender process



- To find an independent consultancy company which is able to support you in specific DATEX II tender documents (content, expected costs etc.) ...
  - ...is not an easy task! DATEX II is not the most widely used standard in the world (up to now)
  - We also organised a one-day workshop to better understand DATEX II



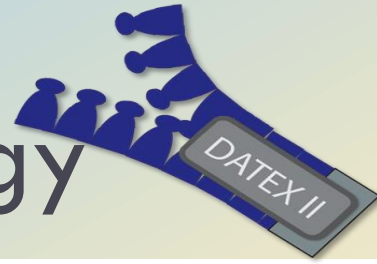
# Understand DATEX II in one day...wow!



- DATEX II is like a swiss army knife - you can do everything with DATEX! Wow!
  - ▣ It defines the communication protocols to be used
  - ▣ It defines the language to be used
  - ▣ It defines the georeferencing systems to be used
  - ▣ It defines the content to be used – and the data model is really huge!



# DATEX II for dummies – a try for an analogy



Transport Protocol (e.g. SOAP, HTTP..)



Post service provider and transport type (e.g. UPS, DHL and e.g. registered letter with reply advice or standard letter)

Data Encoding (XML)



envelope (the packing of the data)

## DATEX II

## Postal Delivery

Data Schema (XSD)

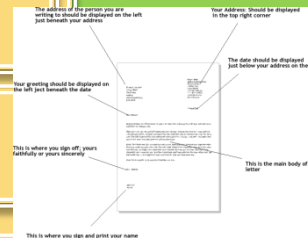
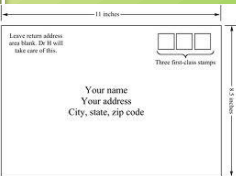


basic rules for the envelope and its content (e.g. size of the envelope, location of sender and addressee etc.)

Data Model

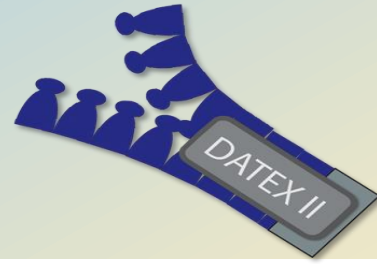


vocabulary + grammar, i.e. the letter





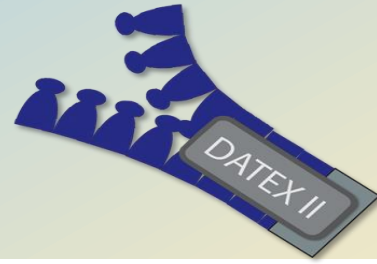
# DATEX II ITP profile – overcrowding



- Truck parking areas are often overcrowded
- DATEX II ITP profile must keep this in mind!
  - Distinguish between
    - Number of marked parking spaces and
    - Number of parking spaces incl. (tolerable) overcrowding figures

Name of rest area in pilot project	Number of marked truck parking spaces (End 2012)	Number of trucks counted in 2012 (actual occupancy figures)
T+R Nürnberg Feucht	136	174
PWC Göggelsbuch	52	82
PWC Offenbau	32	51
T+R Greding	71	97
PWC Gelbsee	59	52
T+R Köschinger Forst	54	141
PWC Baarer Weiher	24	36
PWC Rohrbach	55	66
T+R Holledau	18	58
PWC Paunzhauser Feld	11	21
T+R Fürholzen	26	103
Sum	538	881

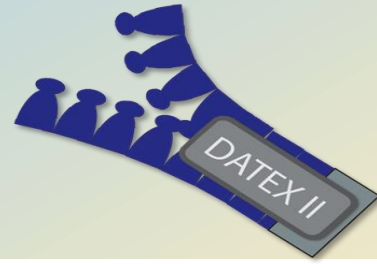
# DATEX II ITP profile implementation



- ITP profile is huge! Would be great if we could define **one common profile**:
    - ▣ Slim common „vocabulary“and easy to understand „grammar“ (data model)
    - ▣ Keep data maintenance in mind!
    - ▣ Profile should make direct reference to Commission Delegated Regulation Nr.885/2013
- „provision of information services for safe and secure parking places for trucks and commercial vehicles“



End



# Thank you very much for your attention!

If you have any questions please  
do not hesitate to contact us:

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Centre for Traffic Management**



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