

Intelligent Truck Parking

J. Kaltwasser AlbrechtConsult GmbH

DATEX II Forum Berlin March 16/17 2010



DATEXI

www.easyway-its.eu

Outline

How does ESG5 support other services? Line of activities The ITP information provision service chain Requirements for ITP information provision Parking Information in (current) DATEX II The 'real world' appears to be more complex! Issues Conclusion





How does ESG5 support other services?

SALE ON ON ON

ESG5 has the experts to add new elements to the DATEX II data model

- Feature request for future versions (level A)
- Extension of existing model (level B)
 - Backwards compatible!
 - Can be used immediately (don't have to wait for future DATEX II release)
 - XML messages still in the DATEX II namespace
- Innovative model (level C)
 - Uses DATEX II modelling methodology, but starts from scratch
 - Can (and should) reuse existing elements from DATEX II
 - Datatypes
 - Attributes (including definition and type)
 - Classes

But: ESG5 does not have the domain knowledge

- Meet Domain experts in one or two initial workshop(s)
- Set up a joint working group to collect stakeholder requirements
 - For small models: ESG5 experts take requirements and create model
 - For complex models: external (EasyWay) project to create model

Feed result back into the DATEX II process via website and/or ESG5 Technical Group



Line of activities

UTP Workshop, May 2009, Koblenz

- ESG3 organised workshop to set the scene for ITP in EasyWay
- Mixed audience, mainly policy level / non-technical
- Huge pressure to improve efficiency of using parking areas for HGV
- New service required to provide parking availability to HGV drivers

ESG5 presentation to inform about how DATEX II can contribute General agreement to cooperate between ESG3 and ESG5

Stakeholder workshop planned for autumn 2009 (as part of ITP days organised by ESG3)

Workshop results

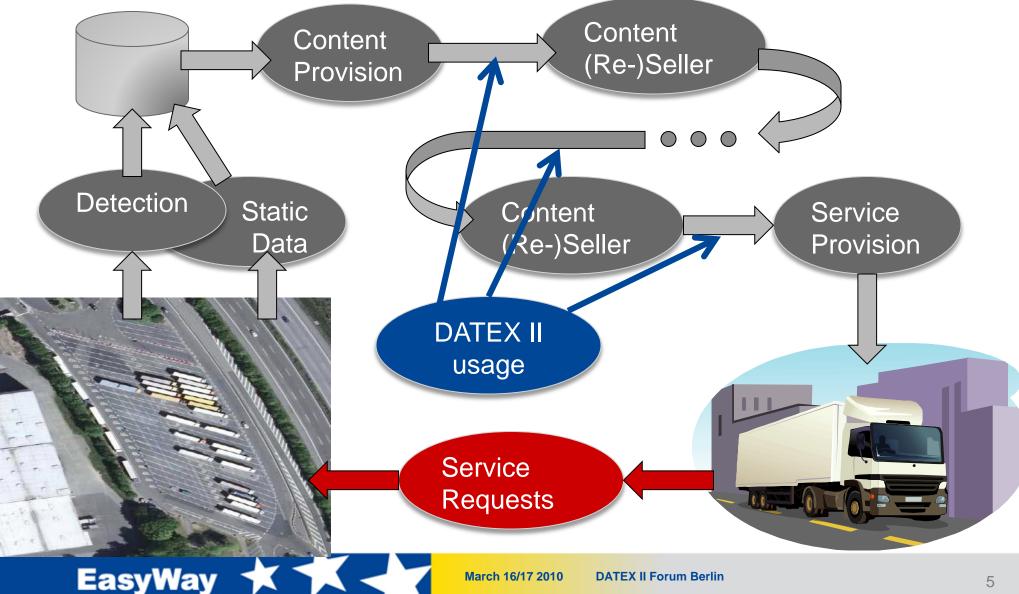
EasyWay

- Difficult to elicit stakeholder requirements for new, innovative services
- Service chain and stakeholder roles & responsibilities not entirely clear
- Some organisational problems in building on previous R&D project results
- Agreement to collect relevant stakeholder input via ESG3
- ESG5 to create an improved parking model for DATEX II



The ITP information provision service chain







Language independent coding

Truck drivers from many countries with many different languages

Rich & unambiguous semantics ("one way to say one thing")

- Harmonisation of Pan-European services is at the heart of EasyWay
- Truck drivers travel long distances along the TEN-T and require the service all over the network; information provided by the service shall have the same structure and the same meaning anywhere in Europe

Machine processability

- Database-to-database / buisness-to-business exchange
- Distinct from data processed for human readers ("rendered data")
- Usable not only for display but also for calculation (e.g. predictions)

Long term stability and maintenance for agreed data constructs

The world of ITC solutions is fast living; the underlying agreed content structures need to be stable and long living!

Standardised Services

EasyWay

Data is only part of the story; Motorists use services that may require more than this, e.g. Free Parking space available => reservation / booking!



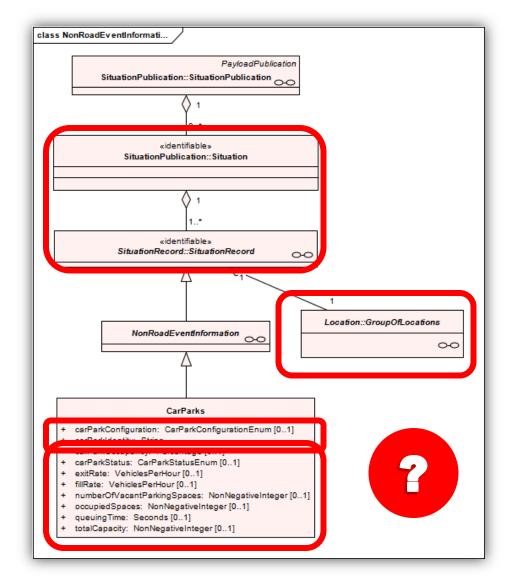
Parking Information in (current) DATEX II

SituationPublication

- Used for traffic 'situations'(!)
- Powerful Location model
- Basic configuration data
 - Type & Id
- Current status:

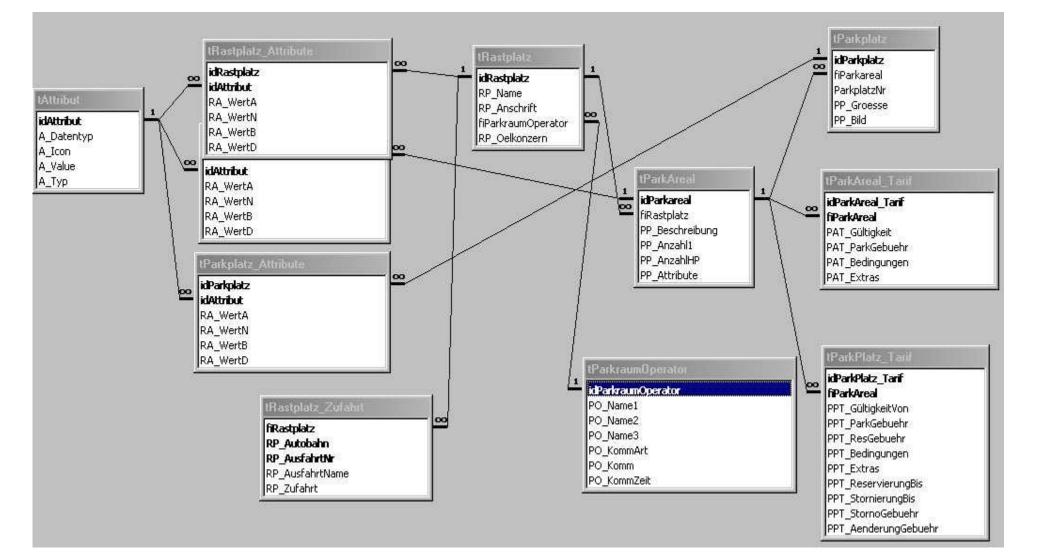
EasyWay

- Occupancy (%; veh)
- Capacity (veh)
- Exit/Fill rate (veh/h)
- Queuing time (s)
- ... but is this all that's needed?
- ⇒ES3/ES5 Cooperation to enhance parking model in DATEX II favourable



The 'real world' appears to be more complex!







EasyWay 🗙 🔨



- A DATEX II based, harmonised data model would certainly be useful, but what about – open, standardised – service interfaces (not covered yet in DATEX II)?
- How can the cooperation between ES3 (pilot) projects and ES5 be facilitated?
- How can external ITP stakeholders and existing systems/pilots best be incorporated into EasyWay ITP projects?
- How can the EasyWay projects best be aligned with ITP activities outside EasyWay (e.g. National ITP projects)?
- How can EasyWay ES5 and the DATEX II standardisation (in CEN) be aligned with the evolution of ITP?



Conclusion

ITP is a very good example, how ESG5 can support other ESGs and stakeholder communities

- ITP is of strong real world interest
- Specifying an interoperability interface is important for ITP
- ITP content is important for DATEX II
- The current modelling of parking in the DATEX II model is weak

Collaboration with ESG5 is welcomed by ESG3 and ITP stakeholders

A working liaison has been established

Stakeholder input (requirements) is currently collected

ESG5 will work closely in 2010 to improve the parking model of DATEX II

The resulting model (extension) can be used in ESG3 pilot projects

Experiences made will be fed back into ESG5 and used for future evolution of the DATEX II model / standard

