



*CTU Prague*

# Hybrid architecture and 17 575 standard

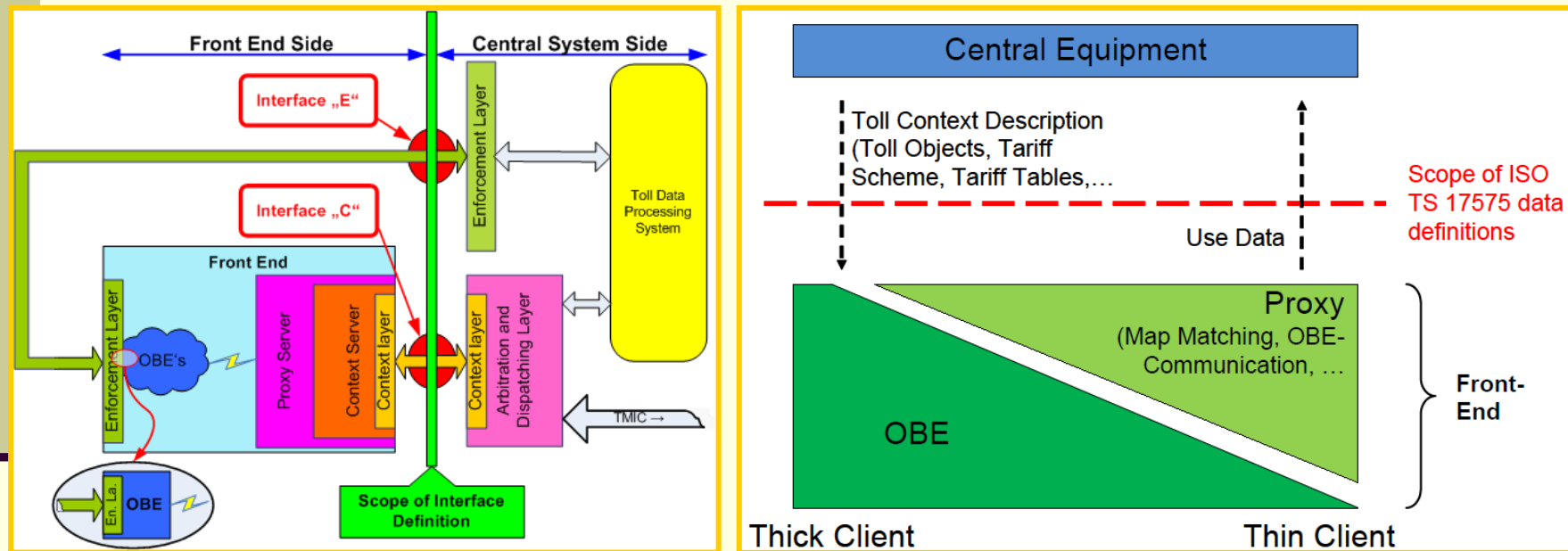
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Czech Technical University, Prague

# History

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- Presentation of Hybrid Design
  - Budapest, March 2007
- PT20 kick-off
  - London, December 2007
- Both approaches
  - support the European EFC Directive (2004/52/EC)
  - target interoperability problem
  - creates background for simplification of business relationship
- Main differences
  - using different terminology
  - some interface “edges” are different
  - standard 17 575 doesn’t include “users” part of the system, in major focused on the “tolling information flow”
- Nevertheless, both designs are very close

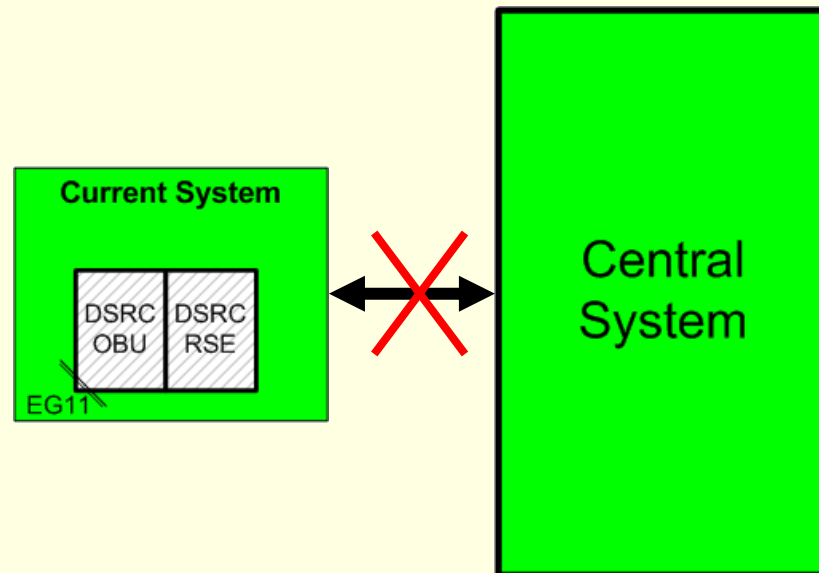
# Two views of the system



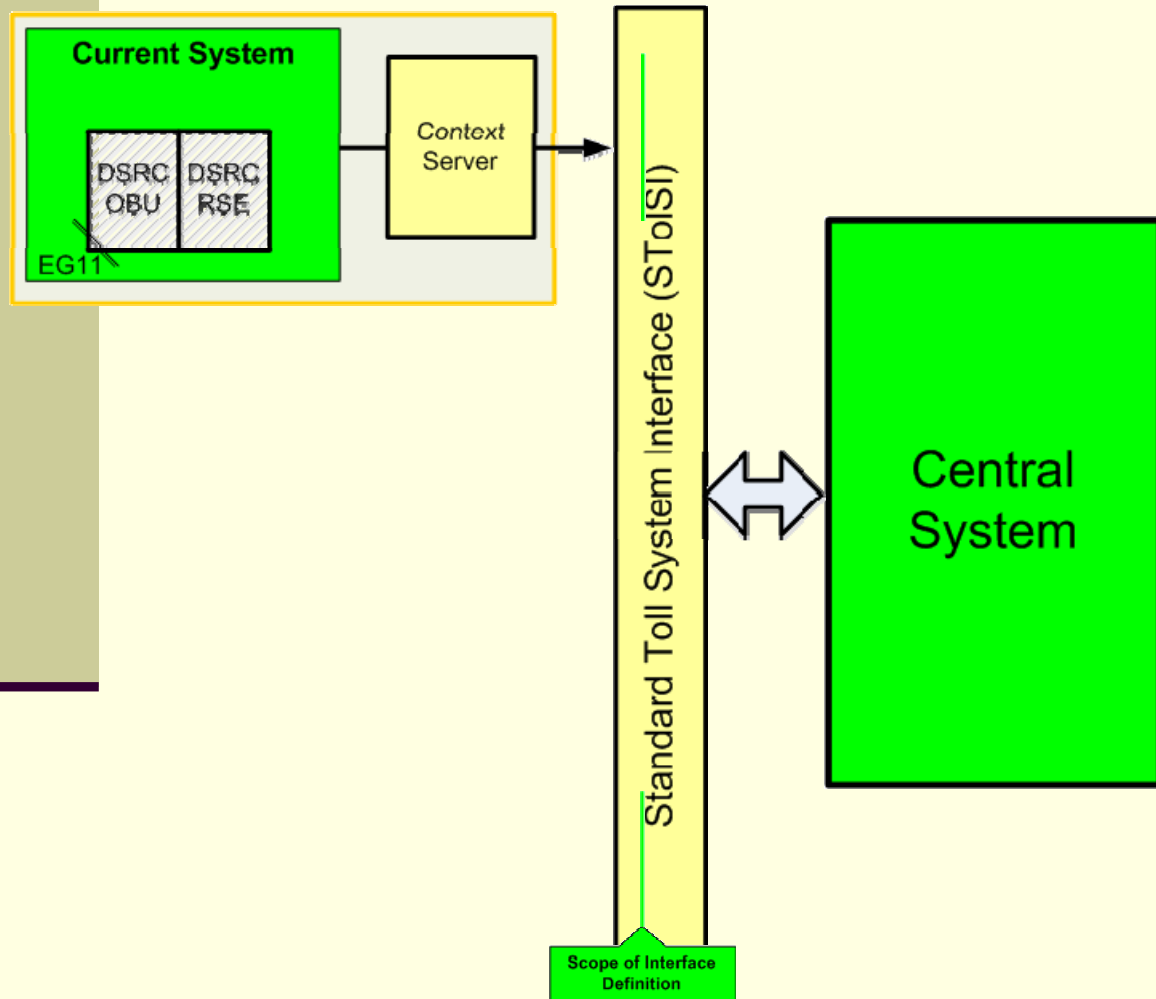
Hybrid Concept View

PT20 projection

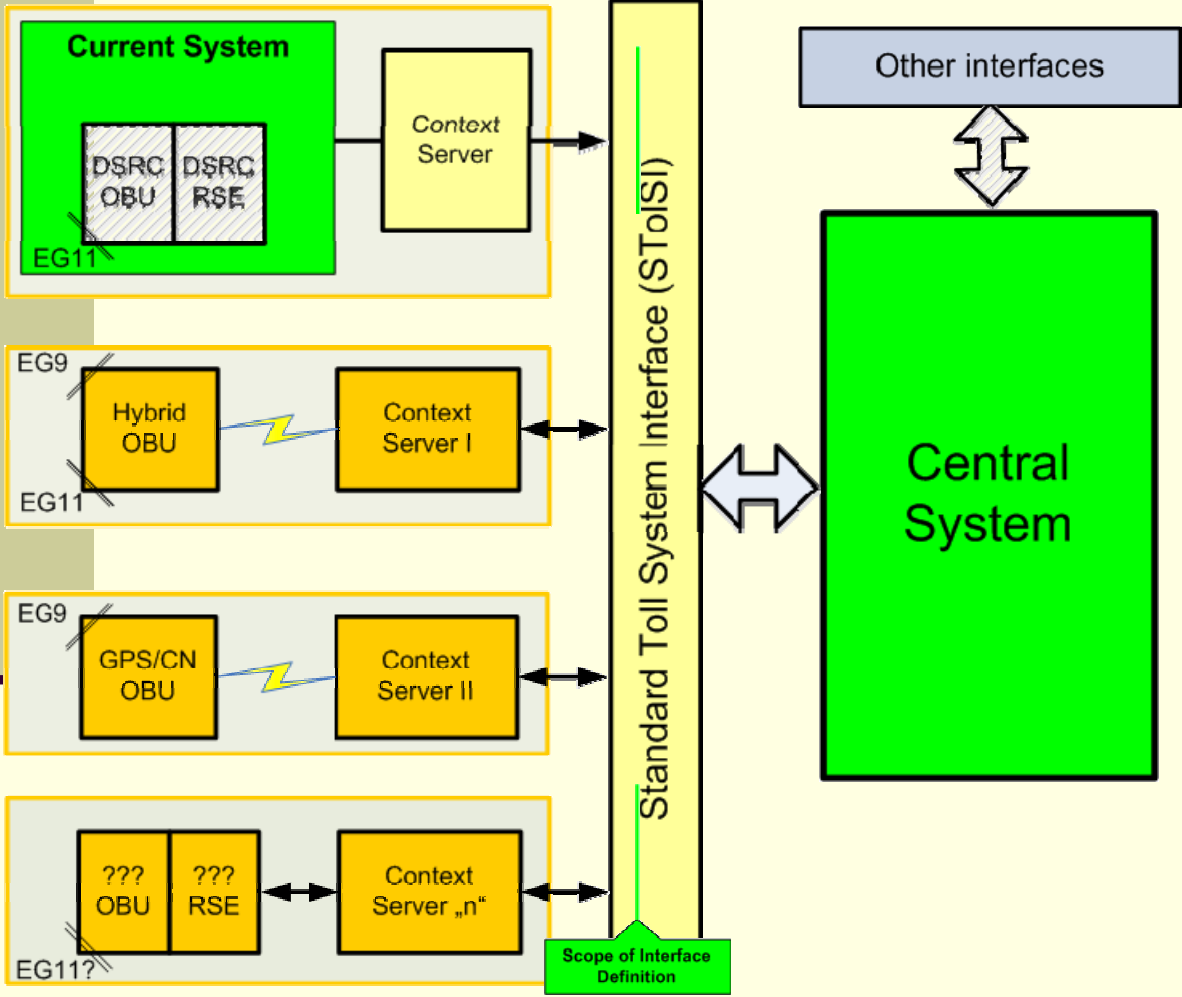
# Hybrid system setup



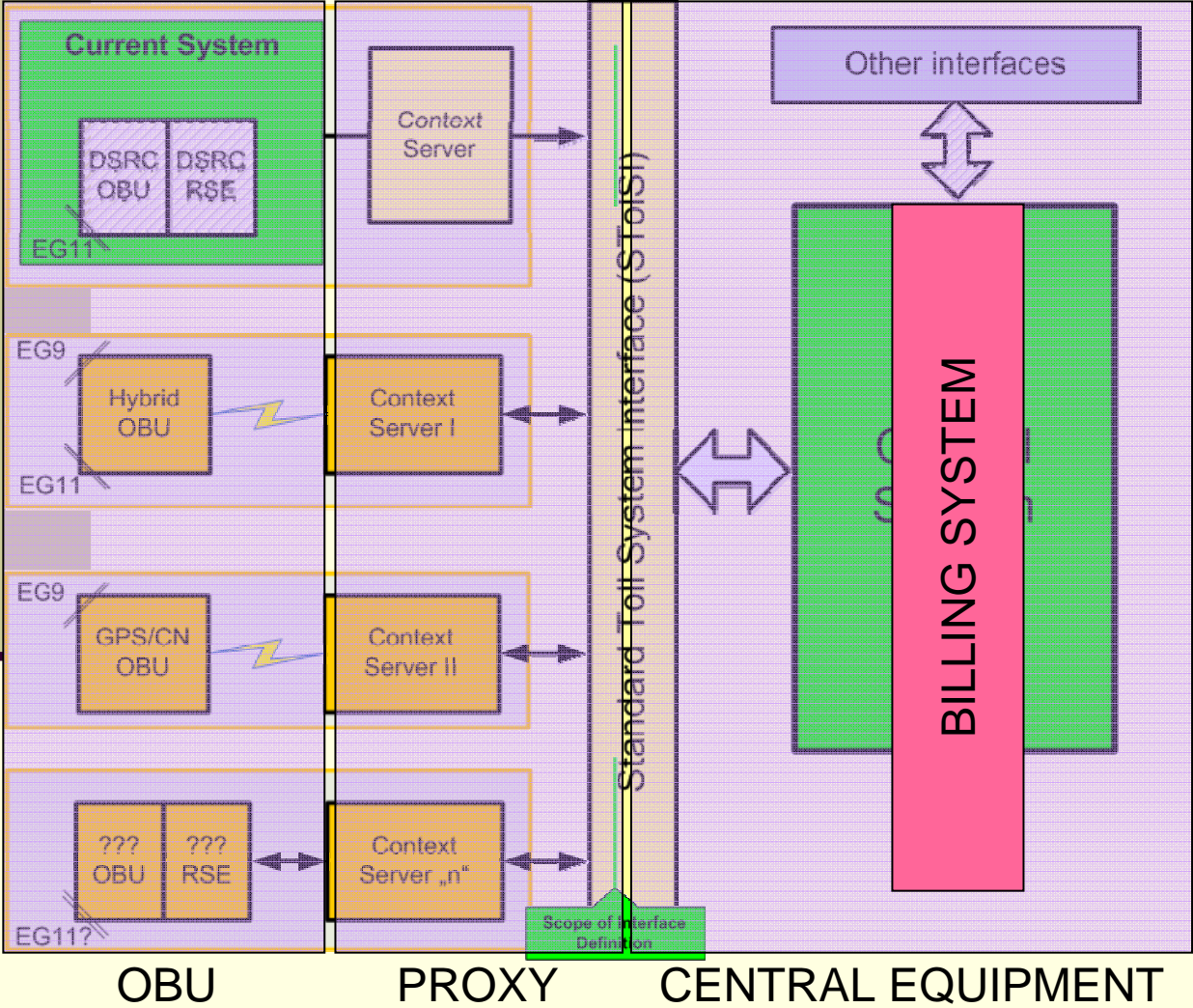
# Hybrid system setup



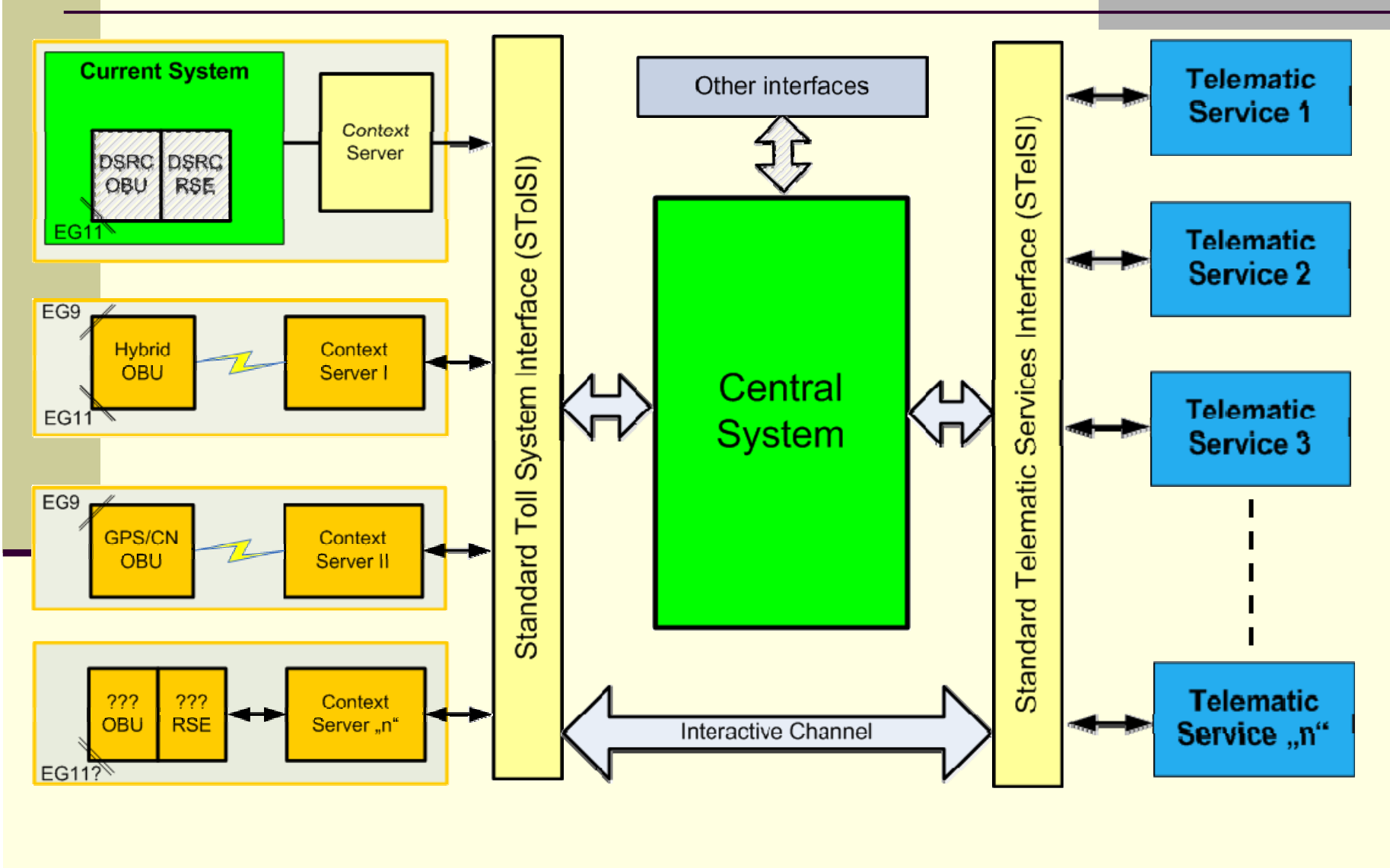
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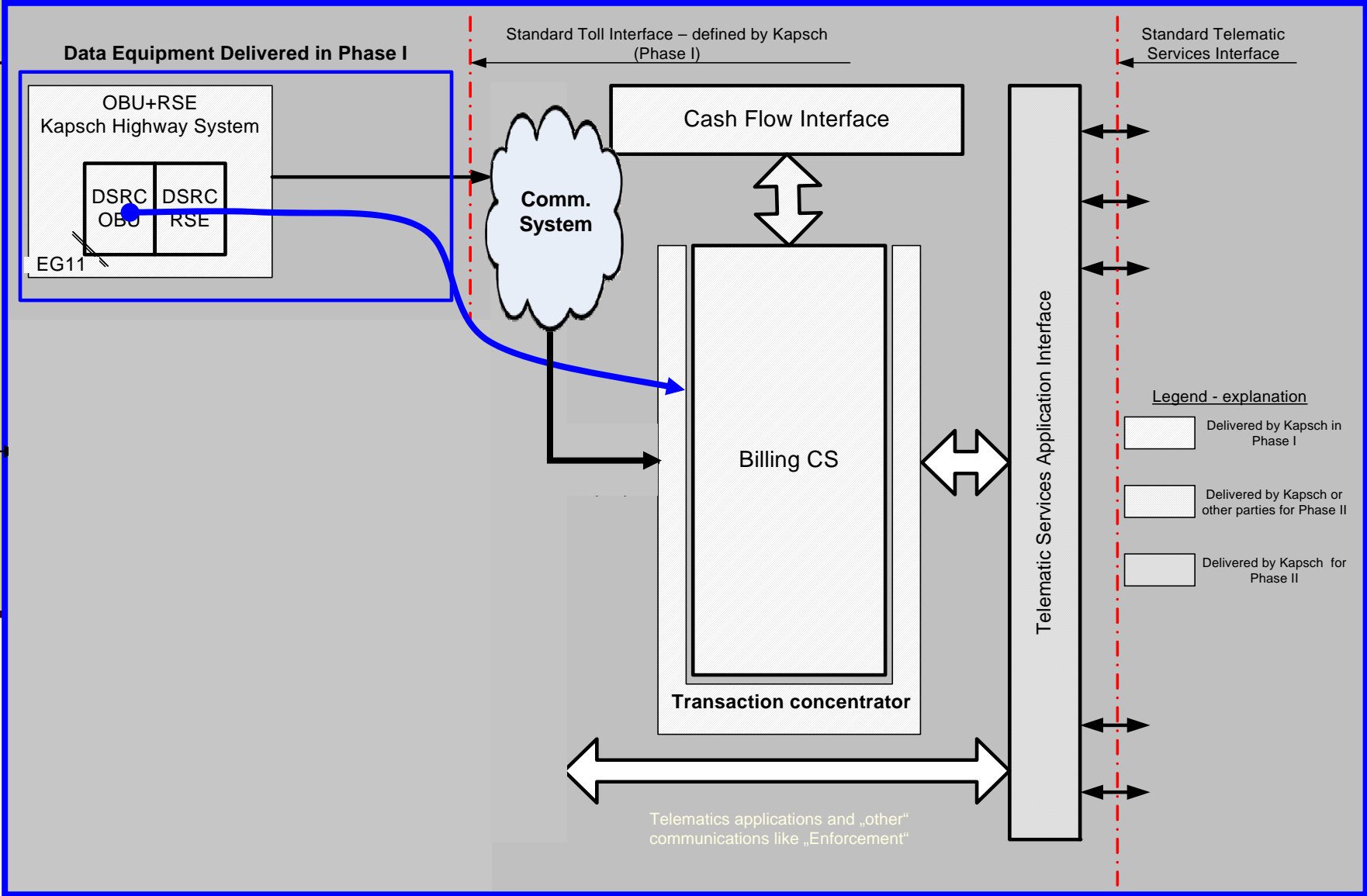
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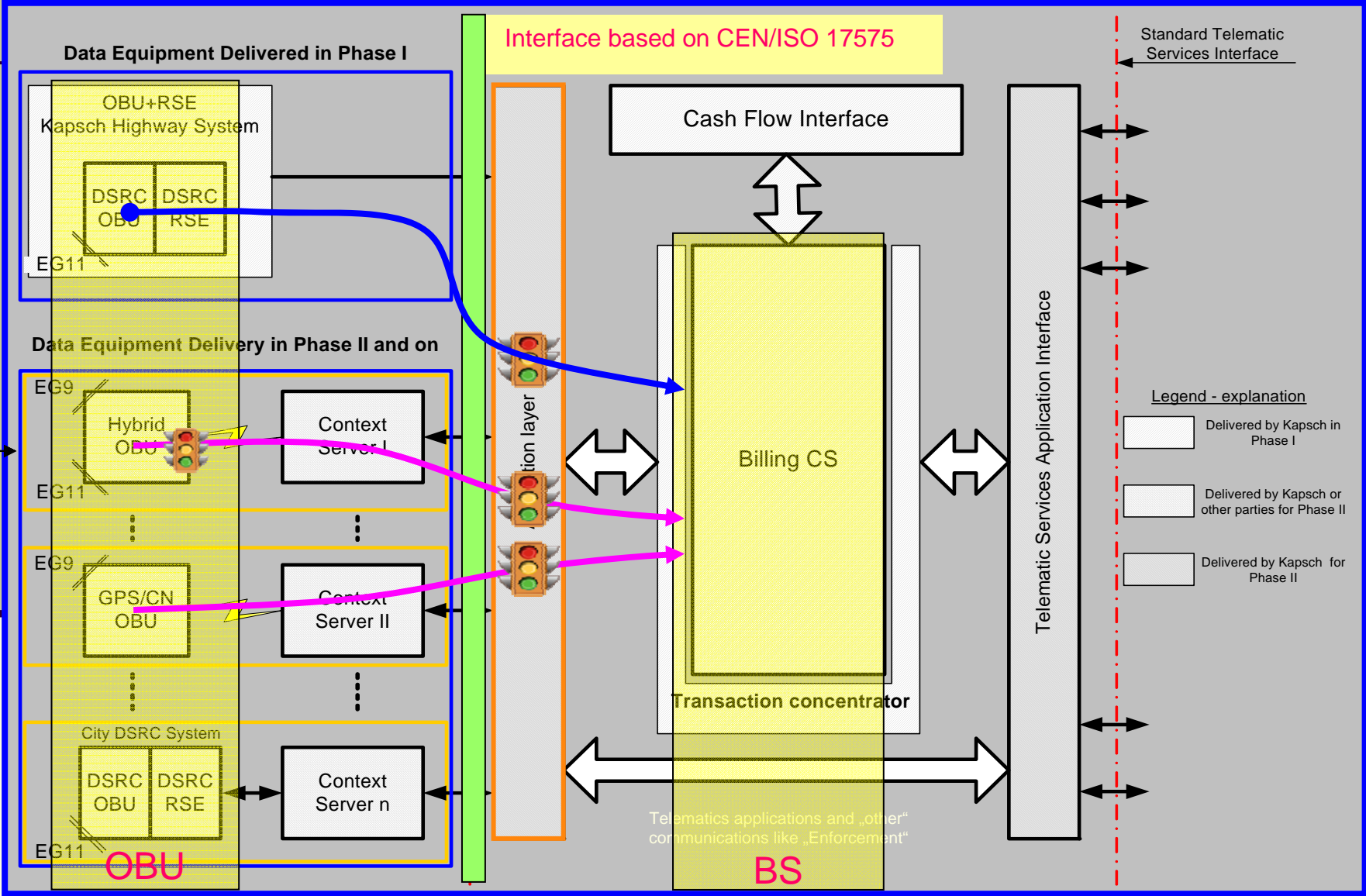
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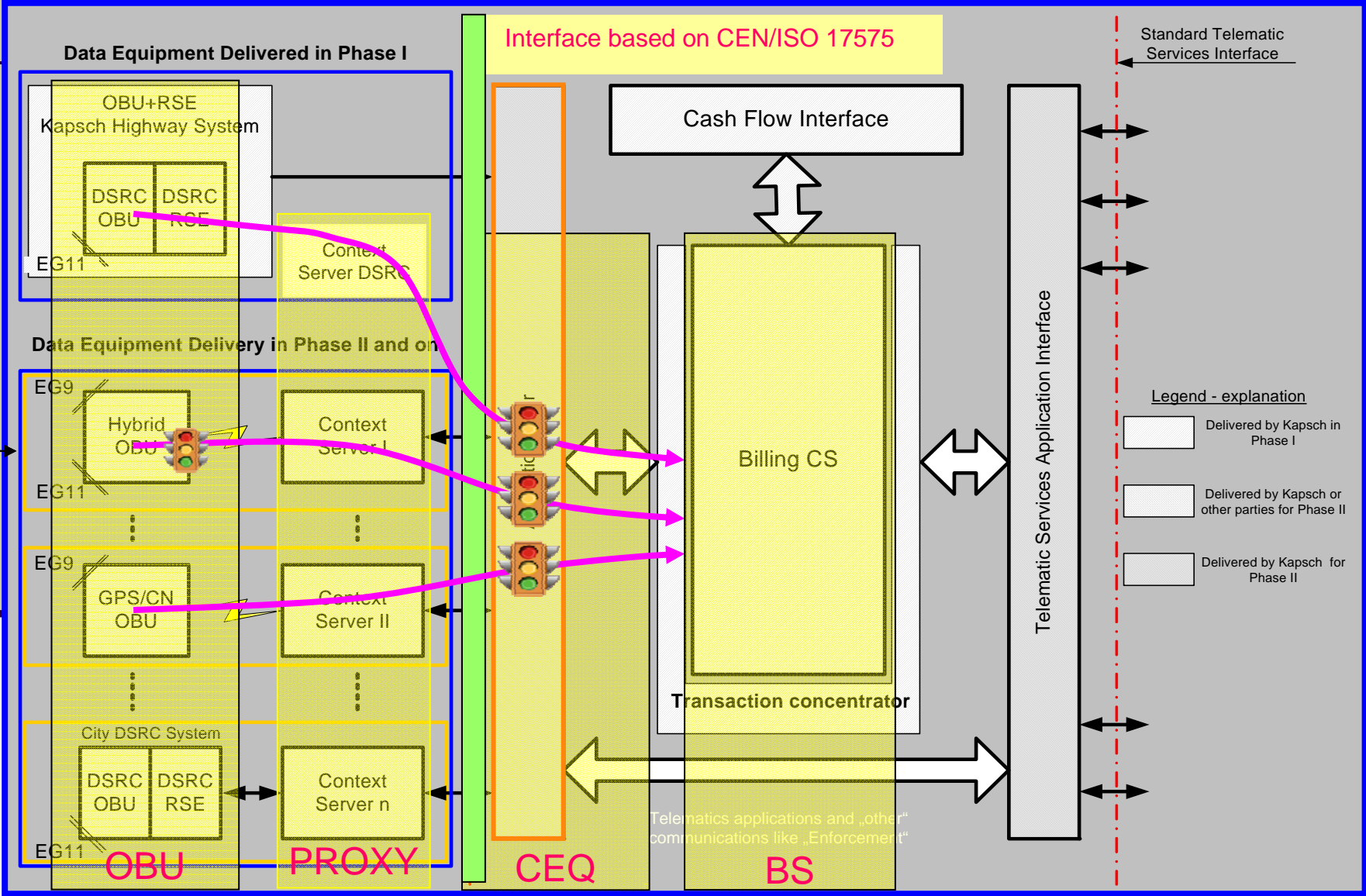
# Implementation - step by step



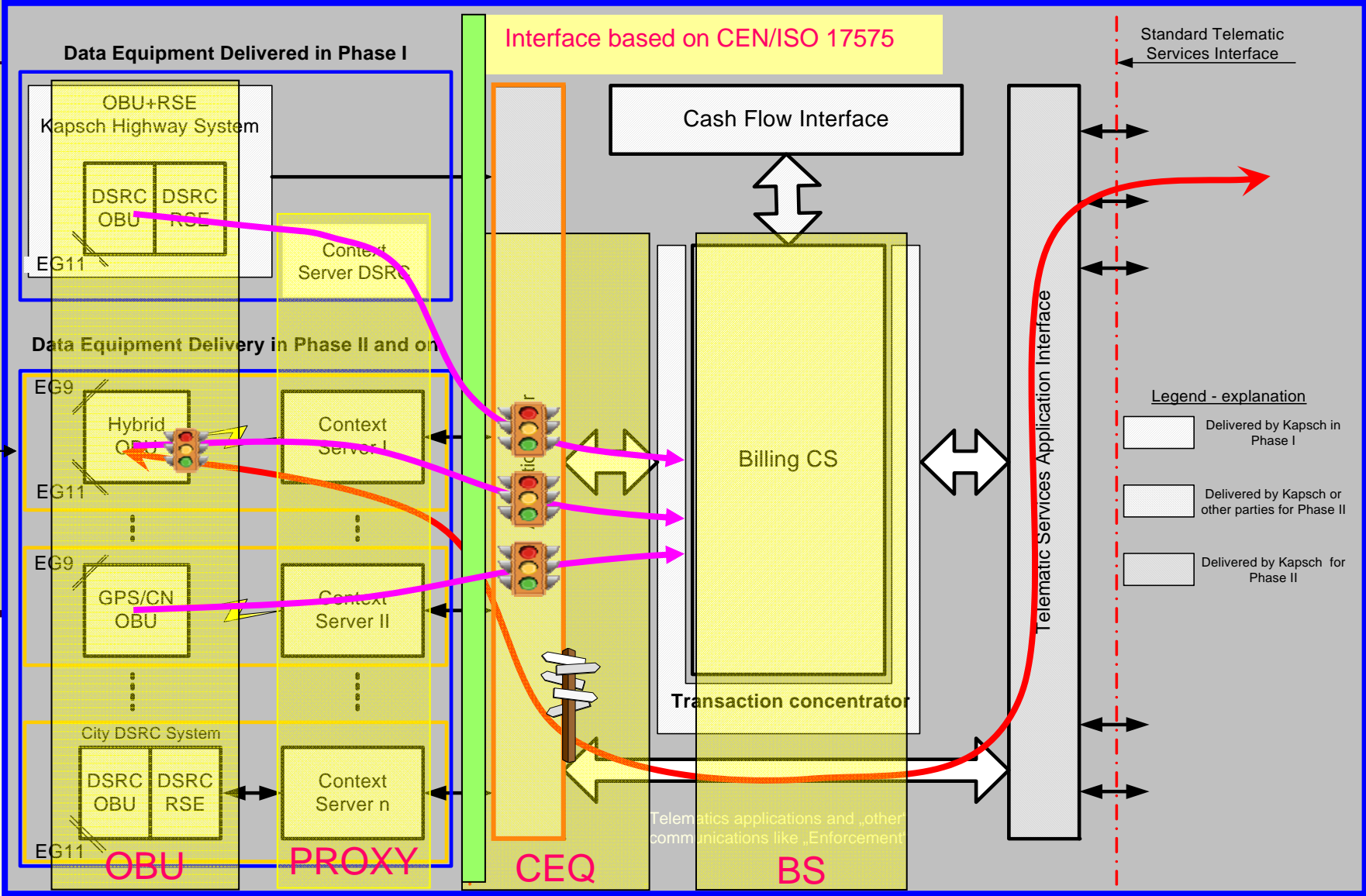
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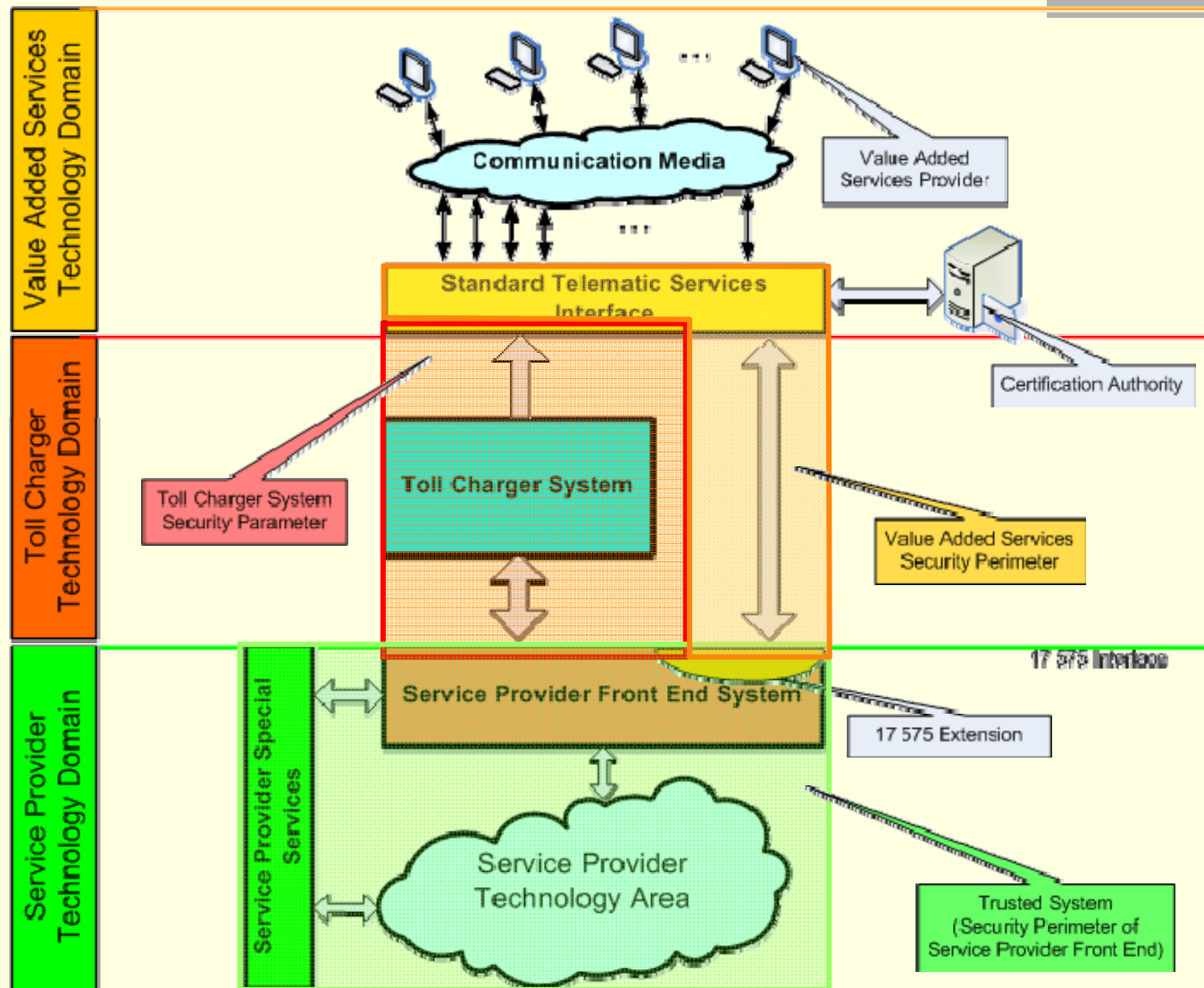
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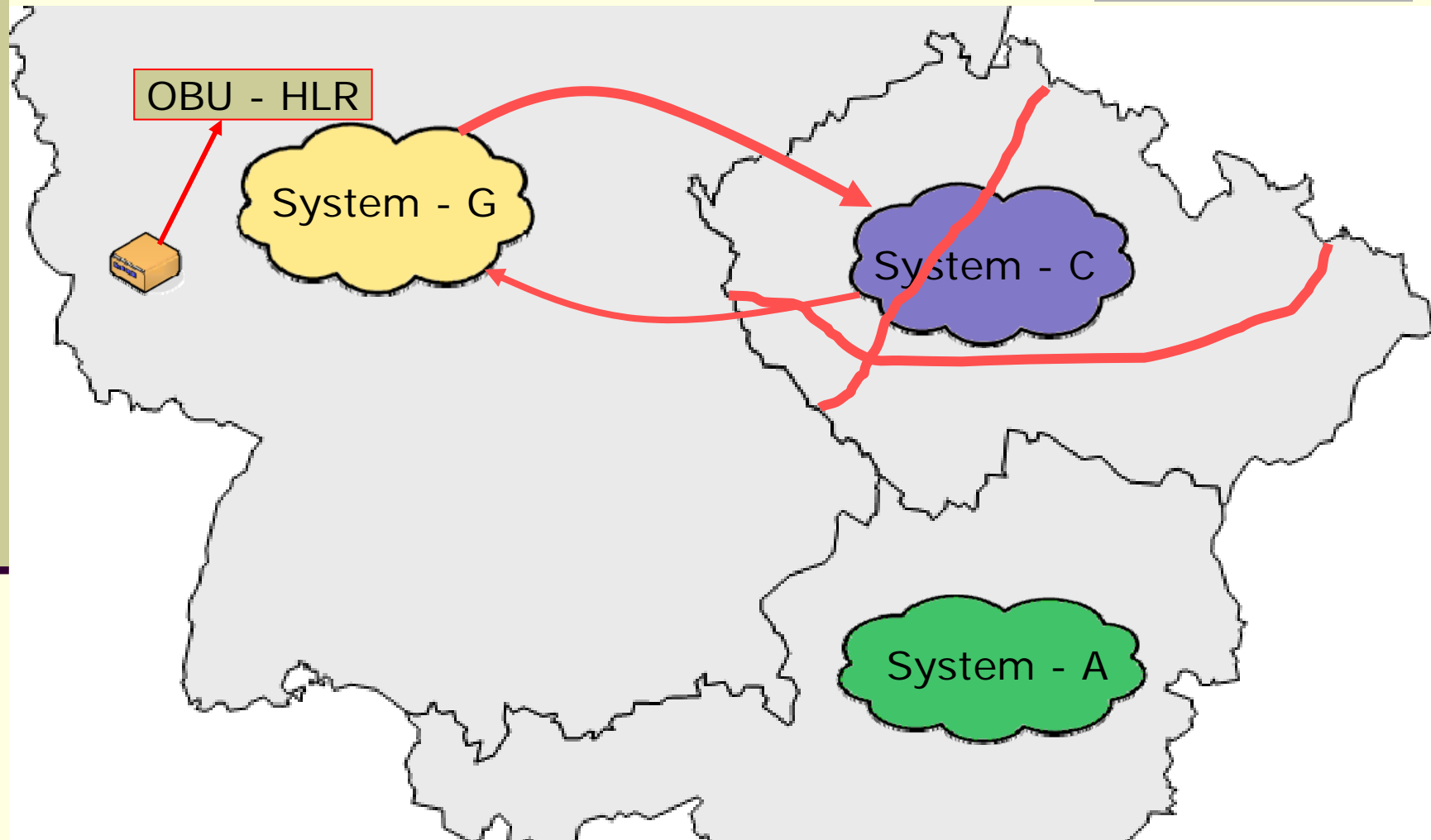
# Implementation - step by step



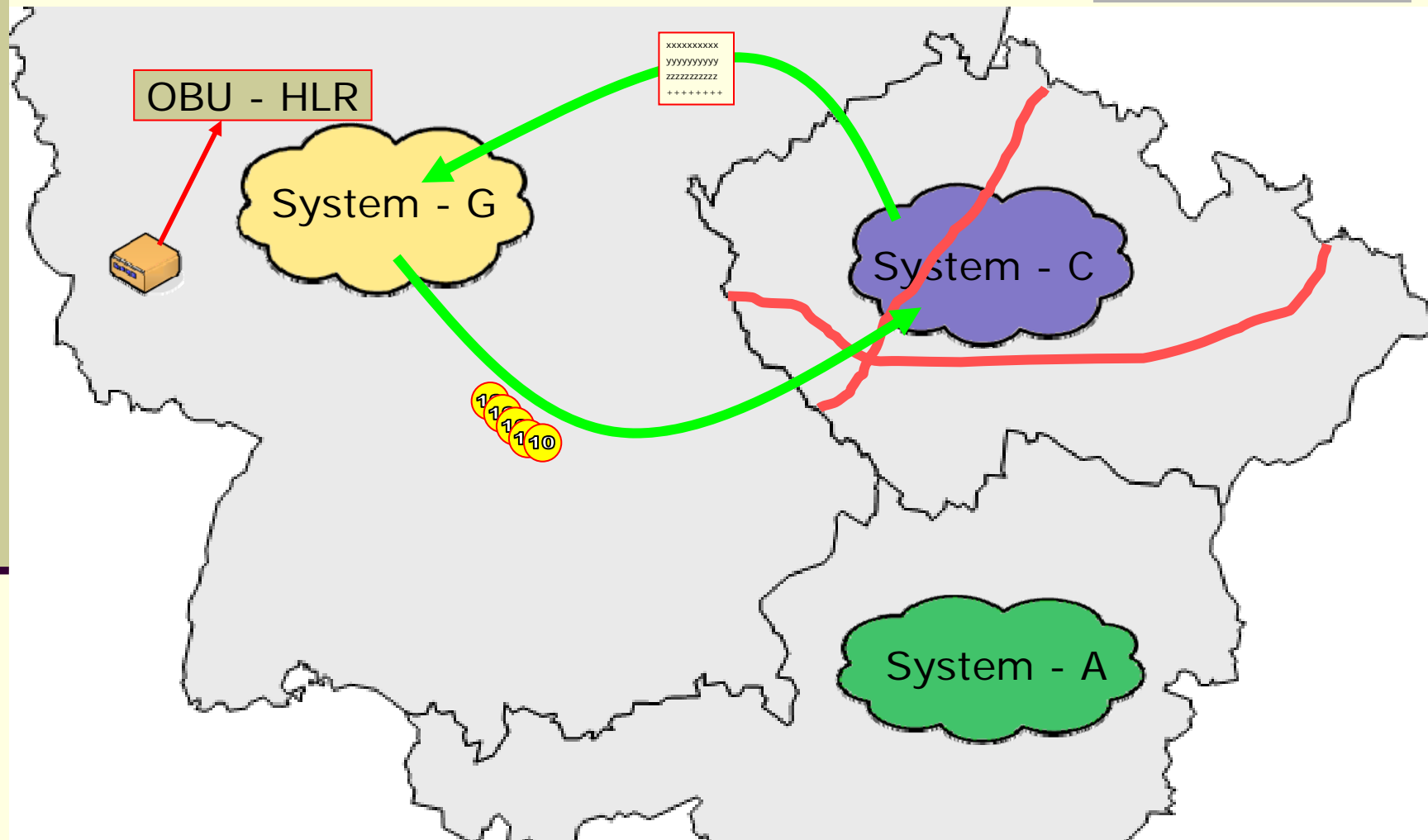
# Value Added Services



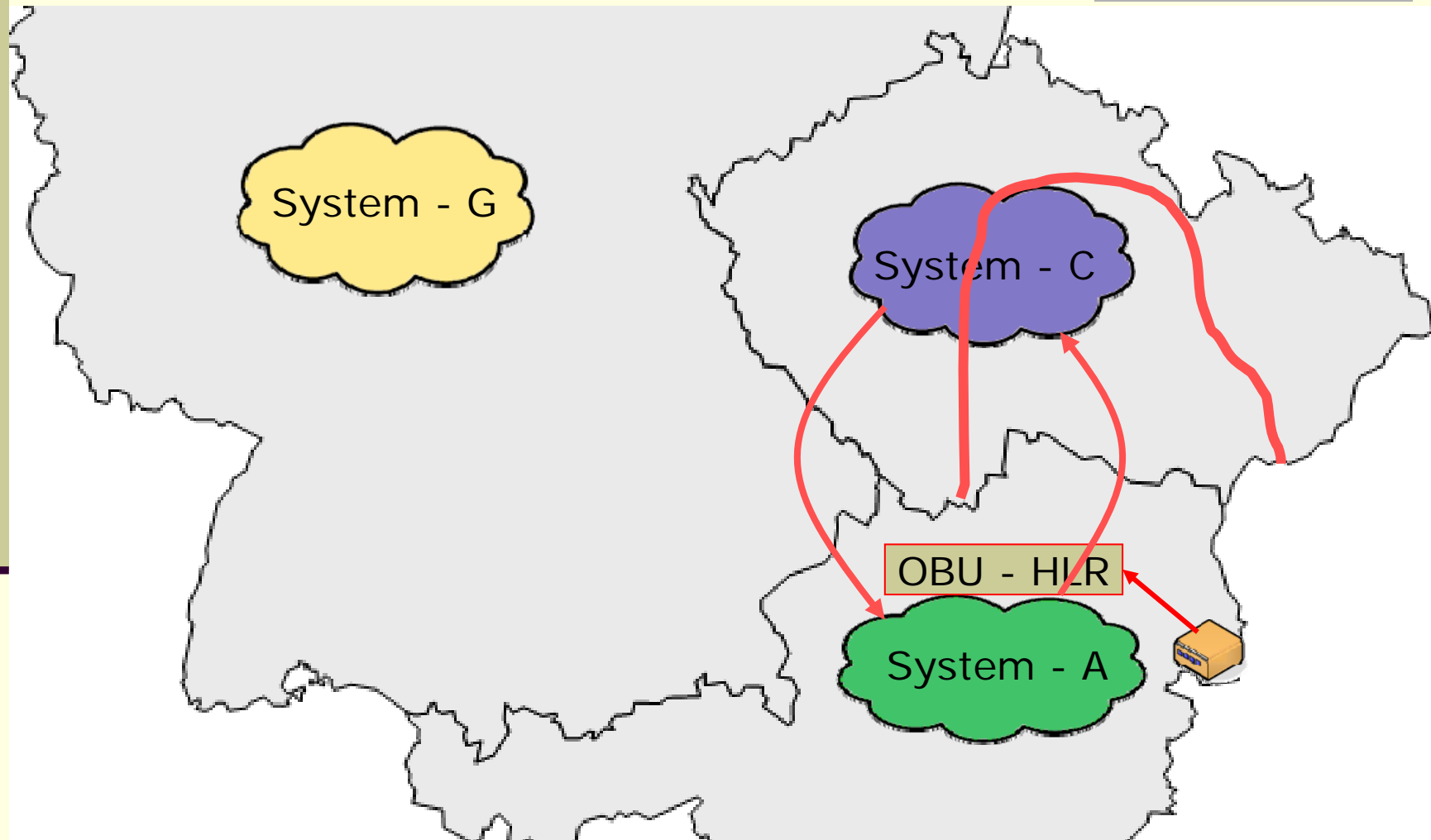
# Rooming – Example 1



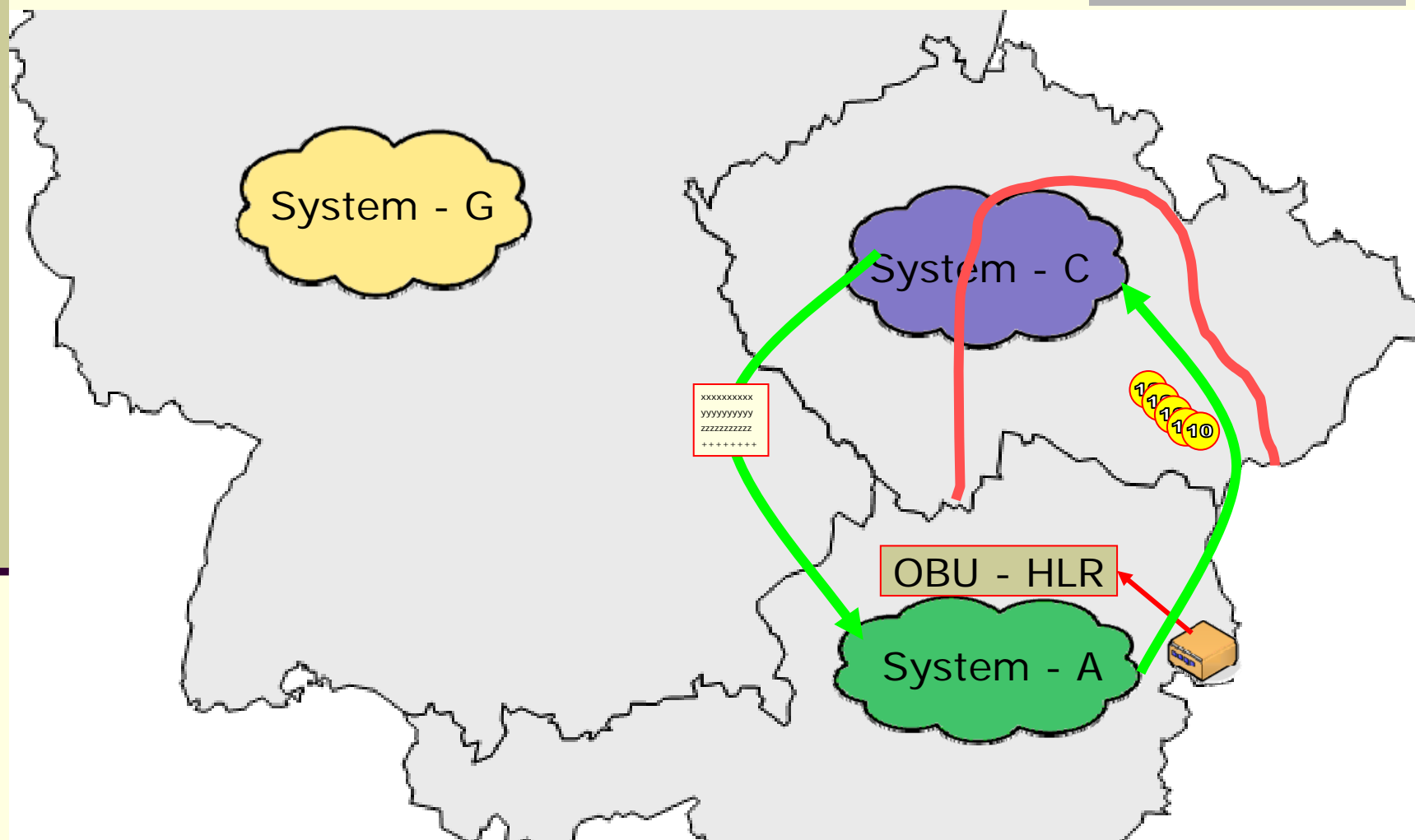
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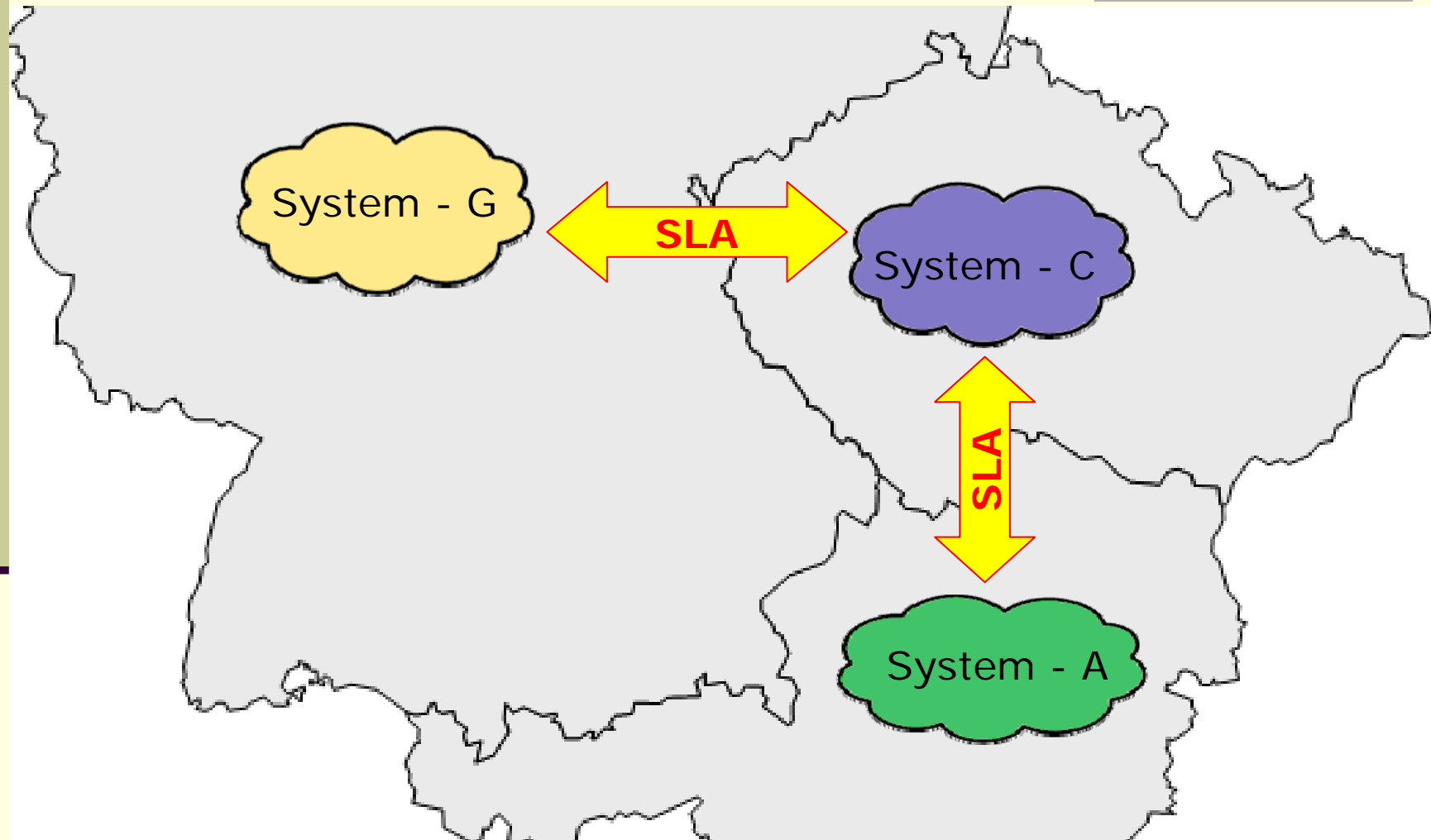
# Rooming – Example 2



# Rooming – Example 2



# Rooming – Example 2



# Conclusions

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- the architecture of Hybrid System fits to the 17 575 Standard
- the Hybrid Architecture allows compatibility of different DSRC and GNSS/GPS system
- there is space for “Data Providers” (Service Providers) competition
- the design is open, allowing numerous “Data Providers” and “Data Users” providing clear definition for business relationship (SLA)
- roaming in Hybrid Architecture is simple and “Toll Charger” oriented
- some of characteristic of design are sharing sophisticated and proven architecture of GSM

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# Questions?

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