



ITS-R technology for development of urban agglomeration

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Human migration – urbanism forecast

- **From rural to urban areas**
 - Transport availability issue
 - Expected the same quality of life in urban areas as in rural areas (air quality, nature)
 - Higher GDP production in economically strong centres (city, regions)
- **Travel demand not uniformly distributed over area**
 - Higher towards economically significant centres
- **Load on overall transport network not uniformly distributed**
 - Infrastructure bottlenecks in urban areas
- **Focalized transport task**
 - Cities, connection between them and/or surroundings



Transport infrastructure

- **Urban planning should always start with transport infrastructure planning**
- **Backbone of transport infrastructure**
 - Limits of automobilism – quantitative

!!! You reap cars if you sow roads !!!

- **Rail transport is an answer!**



The Transport Policy of the Czech Republic for 2014–2020 with Prospect of 2050

- **The cohesion of regions is a strongly dependent on good mobility and interconnection with economically strong centres (p. 13, chapter 4.1.2.) – rail transport**
- **Public passenger transport service (p. 16, chapter 4.1.4.) – competing direct individual transport**
- **Traffic management and safety (p. 19, chapter 4.2.) – ITS and ITS-R**
- **Preparation of Legislative and Normative Process for Tram-Train Systems (p. 52, Point 1)**
- **Alternative energy sources for transport (p. 59, chapter 4.5.1., Point 1)**

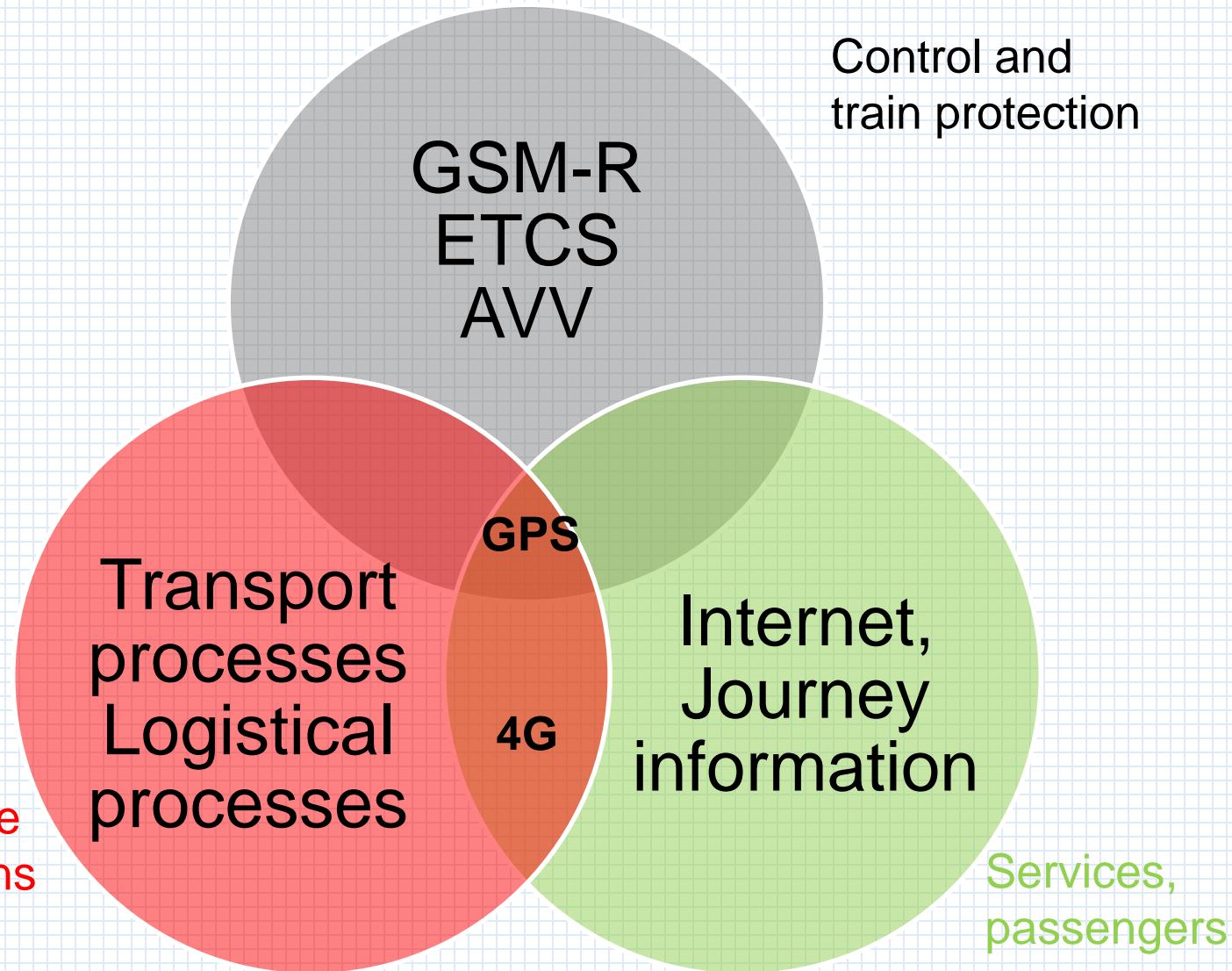


Rail as a backbone of transport infrastructure

- Firstly the concept of rail transport must be modernized so that it can become part of integrated transport system
- Regional trains
 - Cyclic schedule, 1-2 hours interval
- Integrated transport systems
 - Rail, bus, car, pedestrian, cycling
- Intervals in peak hour
 - 15-20 minutes



ITS-R components



Current rail vehicles / new trends for regional routes



CD 814+914 („RegioNova“)



AVG (Karlsruhe) – Bombardier Flexity Swift



CD 844 Pesa Link („RegioShark“)



CVAG (Chemnitz) – Stadler „Hybrid“ Citylink



Thank you for your attention!
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