



Development of HS Services from perspective of small CE country

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Infrastructure *Status quo*



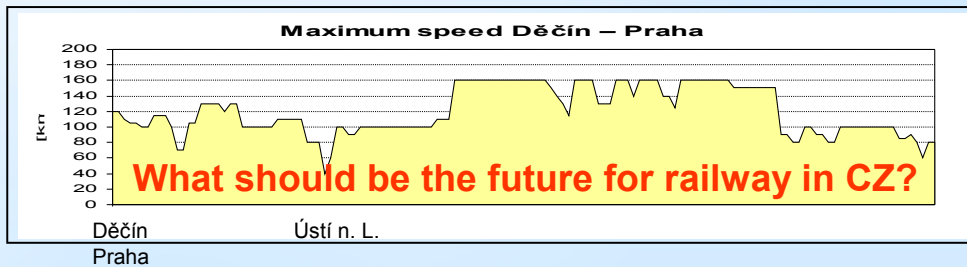


Czech Railway System – current situation

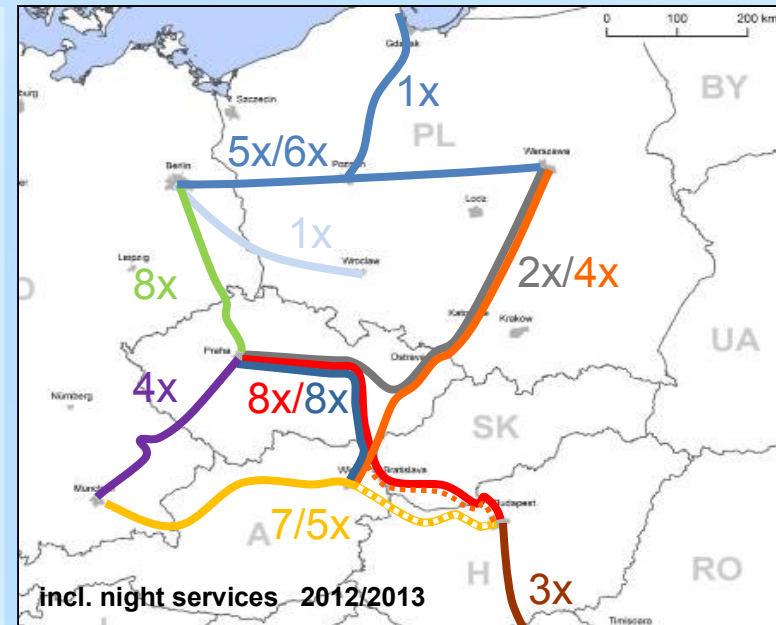
⊕ very dense network, well internationally interconnected

vs.

⊖ low **speed** parameters = low competitiveness, low market share



- capacity problems:
 - especially in suburban areas
 - also on some frequent corridors attractive for open-access operators (more **shorter** trains)
 - problems of co-existence of different types of other





What should be our role?

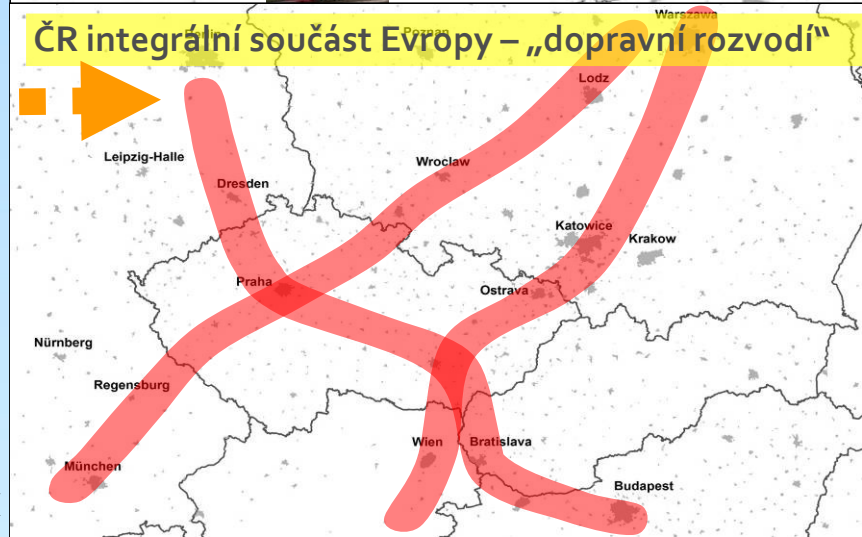
1980 – 95

- national approach = isolated HS development within states
- need for coordination and interconnection

ČR jako vnitřní periferie EU v dálkové dopravě???



ČR integrální součást Evropy – „dopravní rozvodí“



these days:

- HS Railway as the part of EU Transport Policy
- HS - part of TEN-T also in CEE! for the 1st time 😊
- EU funding possibility – tool for single HS network



EU transport policy

White paper for transport:

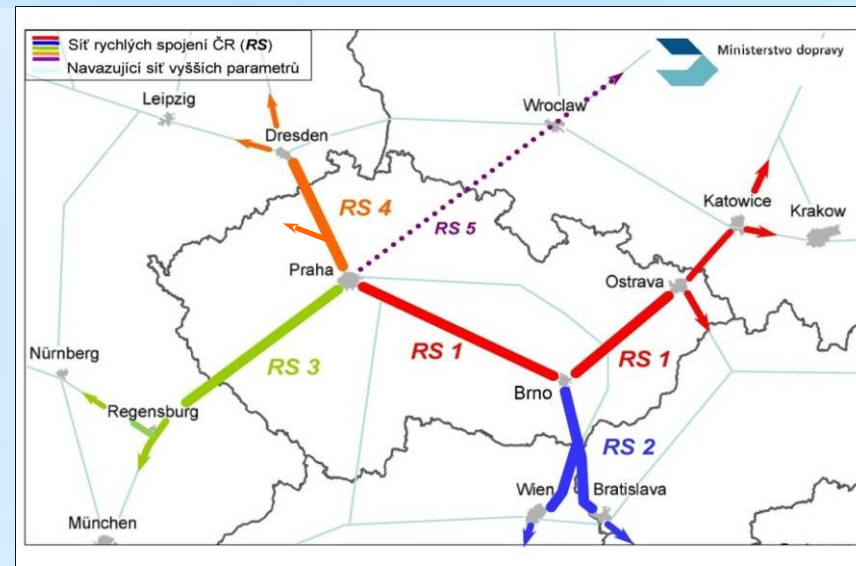
- structural change in transport sector proposed
- railway importance increase:
 - market share in passenger and freight transport for medium and long distances
 - 3 time more HS lines by 2030
- railways = the tool of energetic/safety policy
 - lower oil dependence of transport system
 - EU today 97 % energy for transport comes form oil!!!
- freight corridors – capacity needed
- improvement of capacity and quality of railways – precondition of competitiveness



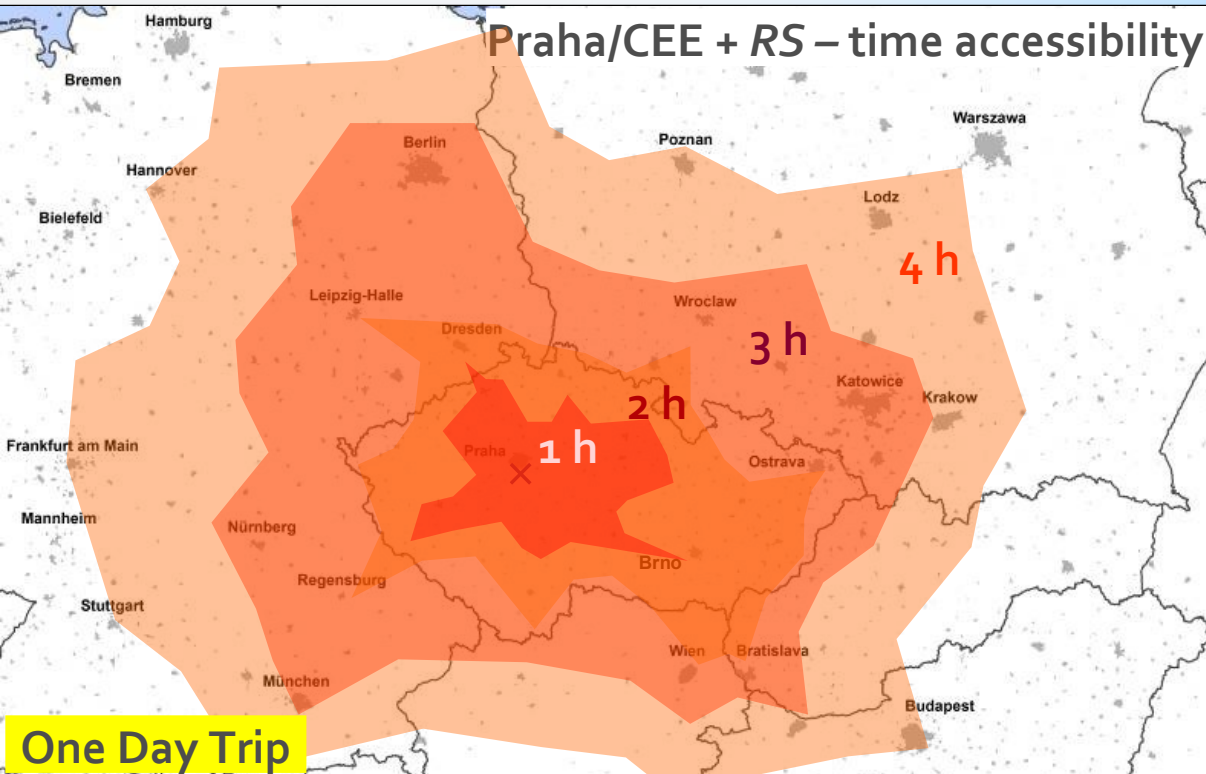


Rapid Services/RS – universal tool

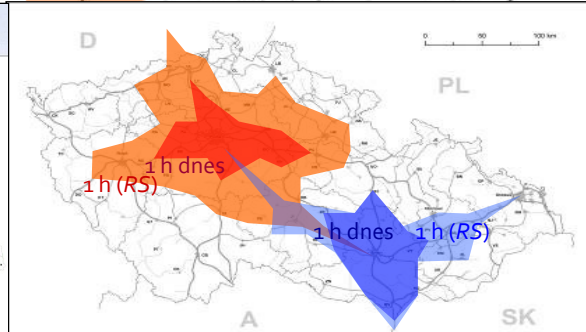
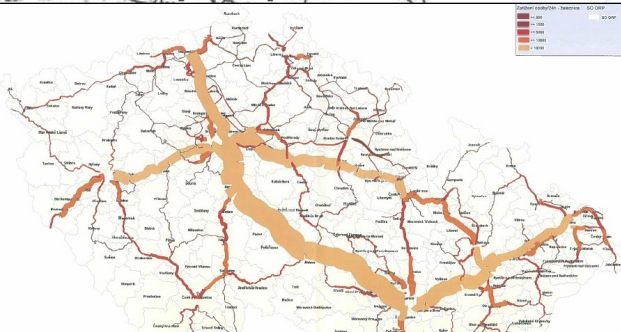
- High-speed – studies prepared since 1995
- Vs. question: „Do we really need HS?“
- new TEN-T policy: network of lines for higher speeds (200 kmph and more)
- HS means not only **speed** but also **capacity** – HS helps to overcome current “diseases” of railway network
- 2011 – reshaping prior concept to **Rapid Service** concept (**RS**)
- complex attitude – infrastructure, landscape, stations, crossing points with the existing network, operational matters, planning of types of future services...
- ...and regional development strategies integration



RS benefits/passenger



- **spatial accessibility** - radical change within CZ and EU
- HS suburban railway – commuting up to 1 hour: shift 60 km → 150 km
- **better spatial coverage**
 - HS terminals as a gate to their hinterland
 - terminals = RS + regional trains, buses, P+R integration = chance for better performance of all modes
 - Fast and frequent

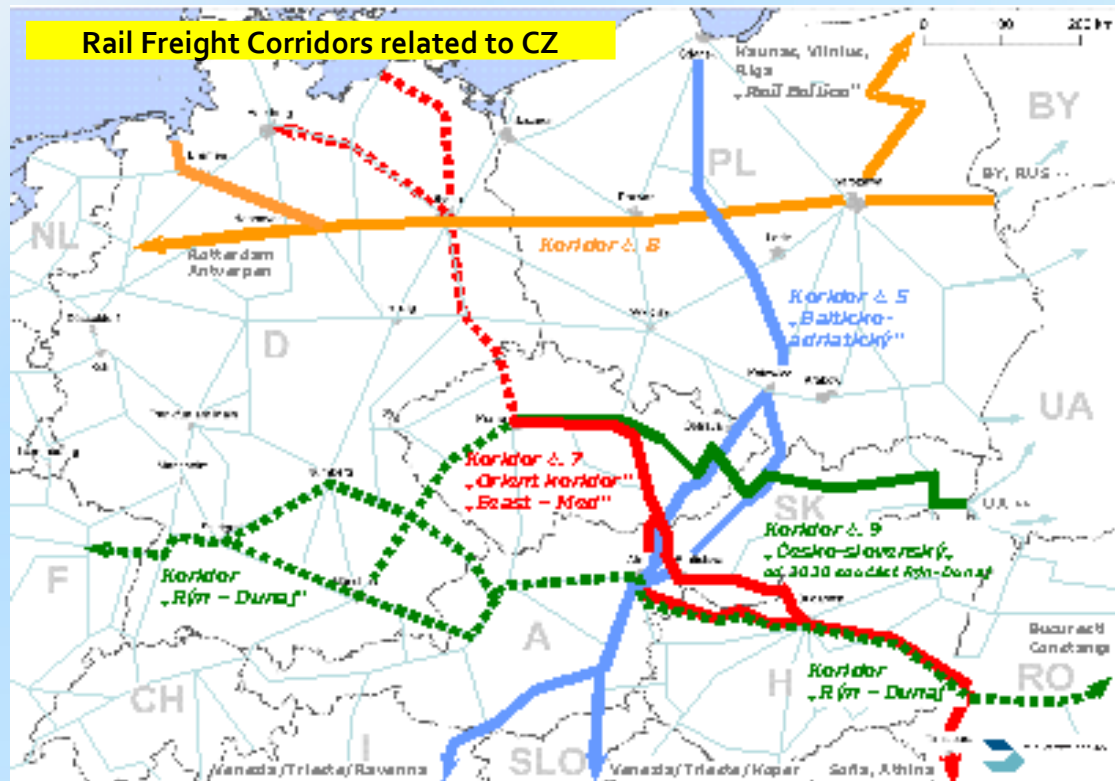


RS as the tool for increase of public transport **attractiveness** and better **efficiency** of public subsidies given to public transport



RS benefits/freight

- main contribution of **RS**-lines for freight transport - improvement of capacity and reliability of traffic on existing lines
- modal **shift from road to rail** – the biggest potential in combined transport
- freight trains on **RS**-lines?
 - for fast and light freight trains and in case of free capacity – off-peak hours
 - high-speed cargo as an alternative to air-cargo)
 - Euro Carex project and very fast combi transport trains – improvement of efficiency of the whole system



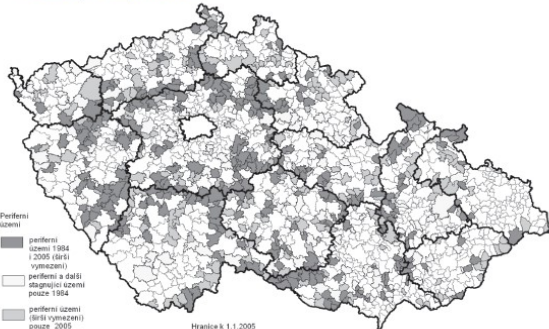


RS and spatial development

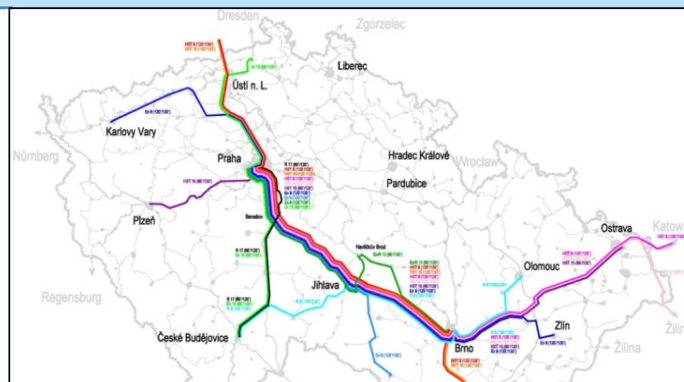
- **RS** = tool for local and regional development
- **RS** = advantage & opportunity for:
 - › making regions more visible (development impulse)
 - › brownfields re-development – better economic, environmental, social and aesthetical performance
- coordination and integration of planning (rail together with region, region together with rail)
- spreading of daily urban region – improving the position of inner peripheries (access to the main urban regions)



Mapa 2. Porovnání periferních území (šedí vymezení 1984 a 2005 podle 916 generelových jednotek 1984 a 1424 subregionálních jednotek 2005)



Inner Periphery within CZ



Variant – services alignment

RS realization phases

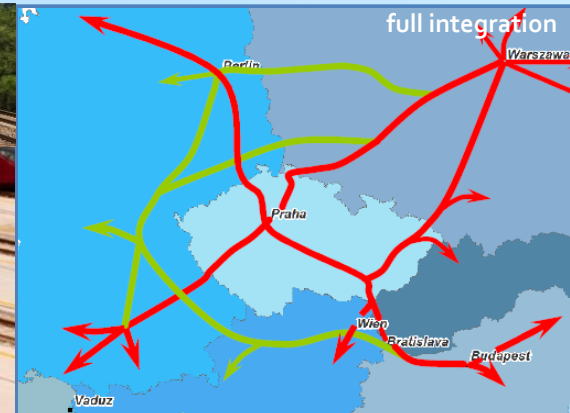
- **TEN-T Core Network**
 - Praha – Litoměřice/Lovosice
 - Brno – Přerov, Brno – Vranovice – Břeclav
- **TEN-T Comprehensive Network**
 - other parts of network – priority
 - Lovosice/Litoměřice – Praha – Brno – Přerov/Vranovice (red backbone):
 - new fast backbone respecting main traffic flows
 - replacement of the most problematic sections on CR network
 - significant cuts already in this phase:
 - Praha – Brno/Wien/Bratislava o 1 ½ h
 - Praha – Ostrava o ¾ h
 - Praha – Ústí n. L./Dresden o ½ h
 - Brno – Ostrava o ¾ h
 - Praha – České Budějovice o 20 min
 - Berlin – Wien o 2 h





RS and rolling-stock

- **Construction model:**
- **1st phase:** RS = capacity in urban agglomerations, interconnected with CR (Prague region, Brno- Přerov)
- Current rolling-stock available in CE for speed up to 200 kmph
- **2nd phase:** RS1 construction Praha – Brno to finish backbone + (Praha to regions: 3 hrs journey)
- Rolling-stocks: 200 – 250 kmph
- **3rd phase:** full integration of RS into European HS system
- full high-speed operation up to 350 kmph and also
- IC segment + RegioExpresses





Thank you for attention

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still something remains...

...our common challenge!

