

## **Smart City – smart World – smart Europe**

## Taking the best from the Digital and the Analogue



## Visegrad, 13.09.2019



## **EPTS FOUNDATION in a nutshell**

**Background:** 

-Æstablished in the 1980s, EPTS Foundation as institution since 2018 ->Today: 15 different countries. 30,000 people in member associations (growing)

Principles: →Neutrality, scientific objectivity, independency →Sustainability, diversity, pluralism

#### **Approaches:**

All transport modes, all mobility objectives, all scientific professions
 All European countries (EU-27 plus) and adjacent regions
 Sponsoring as well as voluntary basis (registered non-profit organisation)

#### Goals:

Æstablishing a network of knowledge for transport scientists
 Æncouraging exchange towards "intercultural interoperability"
 Giving advice to EU stakeholders (administration, politicians, entrepreneurs)



## **EPTS FOUNDATION: current projects**

European Transport Congress ETC, annually: →2018 Warsaw, 2019 Bratislava, 2020 Rostock →European Friedrich-List-Award for Young Transport Scientists

EPTS Partner Congresses and Excursions: →May 2019: Budapest (HU), Day of Transport Culture →July 2019: Leeds (UK), UTSG-Congress →August 2019: Lyon (FR), ESRA Conference →September 2019: Warsaw (PL), Eurotrans →October 2019: Salzburg (AT), IRE Europe Summit →November 2019: Frankfurt (DE), 5<sup>th</sup> German Mobility Congress

Information and Expertise: ->Panel of Experts: network of distinguished Transport Scientists ->News portal and social media: <u>www.epts.eu</u>

#### Pro Sciences – pro Variety – pro Europe



## **Smart City – smart World – smart Europe**

# Do smart technologies and digitization play key roles in making transport sustainable?

->Global challenges for mobility and transport

->Public transport: major systemic advantages and threats

->mobility perspectives 2030 and beyond



source: trend.at

17. September 2019



## **Global challenges for mobility and transport**

#### ->WHY do we need a transformation?



source: forschung-und-lehre.de



source: ramasuri.de

#### General human approach:

Imposibility of people and goods is a major achievement in all free societies
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Anvironmental impact of our current way of practicing mobility isn't sustainable, energy consumption, emissions and land use are far too high
 Aparis Agreement (2016), IPCC Report (2018), "Fridays for future": high and increasing pressure to take action



## PT: major systemic advantages and threats



source: pixabay.com



source: bote.ch

#### **Chances:**

High capacity, low spatial impact, ideal for large quantities
 principally environmental friendly

Challenges: ->complexity relatively high, cost effectiveness often too low ->difficult time-scale: long-term planning phases vs. short political election periods

17. September 2019



## **Mobility perspectives 2030+**



source: Tesla Motors



source: News Øresund / Jenny Andersson



source: Deutsche Bahn

→ digitization leads to automated and autonomous vehicles, yet the mobility is still carried out analogue

->e-cars cause green congestions

Anter-modality raises efficiency, but can't replace spatial framework



## A complementary perspective: reducing the impact!



source: Getty Images





source: Armchair travel club

Substitution of physical mobility coincides
 with availability of reliable and affordable
 electronic devices, like the internet
 ATTENTION! over-compensating effects to
 virtual mobility are likely



## **Interim conclusions**

→From a general perspective, rail and PT have got splendid prospects in a smart world

→Metropolis areas are growing fast all over the world

→More variety in life patterns: great chances to reduce demand peaks and to increase inter-modality

-Limitations between transport modes become more indistinct

→More mobility options (E / A) will not automatically lead to more sustainability



source: News Øresund / Jenny Andersson



source: Getty Images



## **Recommendations**

Fig. 2. Die Ergänzungsgebiete im System der zentralen

->Balance between strong legal framework and equally strong entrepreneurial environment needed

->Use digitization and telematics to reduce complexity and enhance capacity

-Spatial planning: pay high attention to the chances of traffic avoidance, space scarcity and distance reductions

-integrate bike and foot modes: they are natural allies of Public Transport

->Planes, cars, ships: handle with care!



source: zeithistorische-forschungen.de



### Last message

## Smart life is neither a demon nor a saviour!

All new technologies – smart as well as analogue – are (just) new tools!

We still have to agree on how to use them.



source: tekton.com



"Mille grazie – Dekuji – Hvala – Köszönöm szepen – Dziekuje bardzo – Vielen Dank – Merci beaucoup – Grazia fitg – Thank you very much – Blagodaram – Muchas gracias – Takk – Dakujem – Paldies – Acio – Kiitos – Dank u wel – Go raibh maith agat – Tack "



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