Department of Transportation Systems (Horská 3, Prague 2, CZ – 128 03, +420 – 224 355 087) Jiří Čarský, Jana Jirků, Josef Kocourek: International student's traffic engineering project seminar MEPS



# International student's traffic engineering project seminar MEPS

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11th European Transport Congress 2013

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# **MEPS** – history and tradition

### **MEPS** = Middle European Project Seminar:

- tradition in cooperation among technical universities in Czech Republic, Hungary and Austria since 1990 ⇒ already 24 years !!!
- form to support project oriented education at the Faculty of Transportation Sciences (used for already 18 years)
- MEPS established and organized at our faculty since 1997 by Department of Transportation Systems
- target of this seminar solve chosen transport problems in one of the cities in the Czech Republic, Hungary or Austria ⇒ cooperation of students groups from 3 various countries



example: MEPS 2010 (Wiener Neustadt, Austria)

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# **MEPS** – history and tradition

### **Cooperation** of 3 technical universities:



### **Czech Technical University in Prague**

Faculty of Transportation Sciences
Praha (Prague), Czech Republic





# **Budapest University of Technology and Economics**

Faculty of Civil Engineering Budapest, Hungary





### **Vienna University of Technology**

Faculty for Civil Engineering Wien (Vienna), Austria



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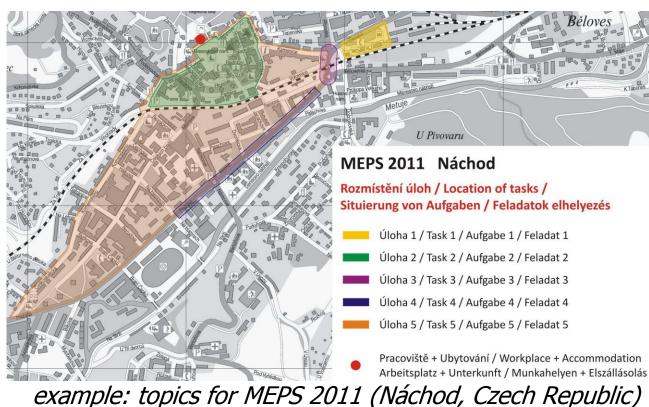


## **MEPS** – choice of topics

topics chosen several weeks before the beginning od MEPS (students can think about ideas in advance)

### **⇒** cooperation of:

- representatives of the city
- transport specialists
- organisations
   focused on
   regulation and
   planning of traffic
   in the chosen area
- organizing university



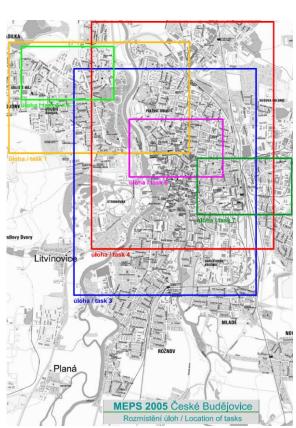
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## **MEPS** – choice of topics

### usual topics for students are focused on:

- intersections designing and evaluation (including traffic lights plan)
- public mass transport planning (including layout of stations and terminals) and quality
- layout of traffic organisation and regulation
- traffic calming
- pedestrian and cycling transport, routes, crossings and layout
- aspects of transport safety



example: location of topics for MEPS 2005 (České Budějovice, Czech Republic)

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## **MEPS** – international character

important to keep international character of seminar

- ⇒ students assigned into 5 to 7 groups:
- each group should have at least
   1 student from each country
   (Czech Republic, Hungary, Austria)
   ⇒ students learn new ways of planning and cooperating in group
- different technical parameters used in different countries
- official language = English
   (many students use German language as well) ⇒ student can learn basics of each language
- every student group solves1 topic



example: group in MEPS 2010 (Wiener Neustadt, Austria)

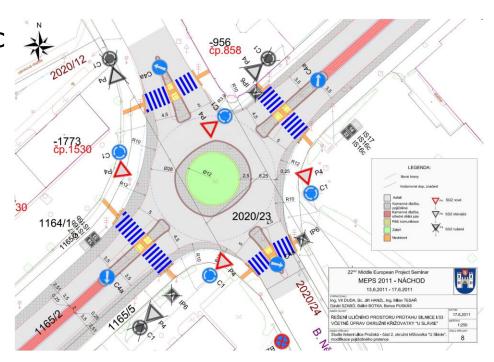
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## **MEPS** – solution of topics

# students asked to find new solutions or low cost and effective solutions:

- students need to get always basic row traffic data and information about transport status of the city (view of the history, evolution and characteristics of the city)
- realisation of own traffic surveys
- discuss the new proposals with teachers and experts during seminar
- using modern technologies
   (AutoCAD, creating 3D models, traffic simulations)



example: results of group Nr. 4 in MEPS 2011 (Náchod, Czech Republic)

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# **MEPS** – final presentations

# evaluation of the work ⇒ chance to **present ideas to** city representatives:

- taken in English language
- visited by city representatives, communication media and public (everybody, who is interested in new solutions)
- new solutions ⇒ usually graphical outputs (modern technologies designing new solutions)



example: student during final presentation in MEPS 2011 (Náchod, Czech Republic)

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# **MEPS** – final presentations

# evaluation of the work ⇒ chance to **present ideas to** city representatives:

- taken in English language
- visited by city representatives, communication media and public (everybody, who is interested in new solutions)
- new solutions ⇒ usually graphical outputs (modern technologies designing new solutions)
- beside presentation created small exhibition with photos and graphical outputs



example: group Nr. 3 with their results in MEPS 2011 (Náchod, Czech Republic)

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# **MEPS** – final presentations

# evaluation of the work ⇒ chance to **present ideas to** city representatives:

- taken in English language
- visited by city representatives, communication media and public (everybody, who is interested in new solutions)
- new solutions ⇒ usually graphical outputs (modern technologies designing new solutions)
- beside presentation created small exhibition with photos and graphical outputs
- presentations with results given to the city representatives



example: President of the Region Hradec Králové Lubomír Franc BSc. and Mayor of Náchod Mr. Jan Birke getting results of MEPS 2011 (Náchod, Czech Republic)

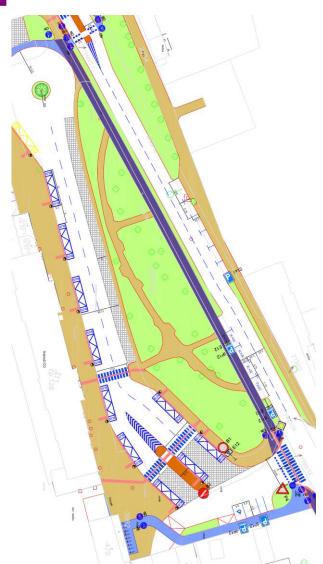
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# **MEPS** – final presentations

### examples of results:

concept of the bus station



example: results of topic Nr. 1 of MEPS 2011 (Náchod, Czech Republic)

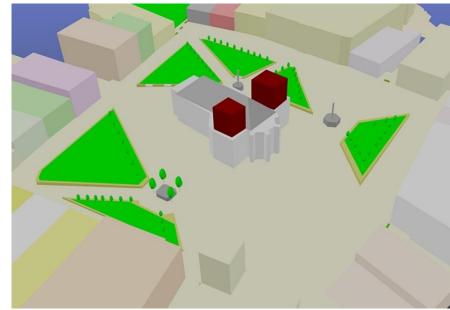
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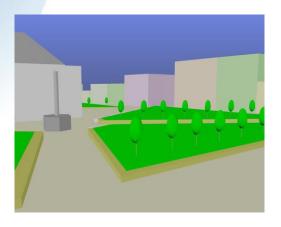


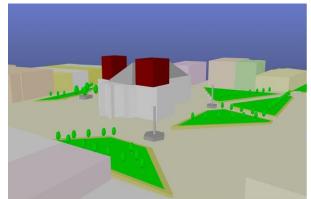
# **MEPS** – final presentations

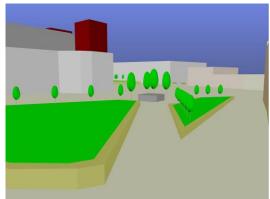
### examples of results:

- concept of the bus station
- parking in city centre









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# **MEPS** – final presentations

### examples of results:

- concept of the bus station
- parking in city centre
- redesign of roundabouts

example: results of topic Nr. 3 of MEPS 2011 (Náchod, Czech Republic)

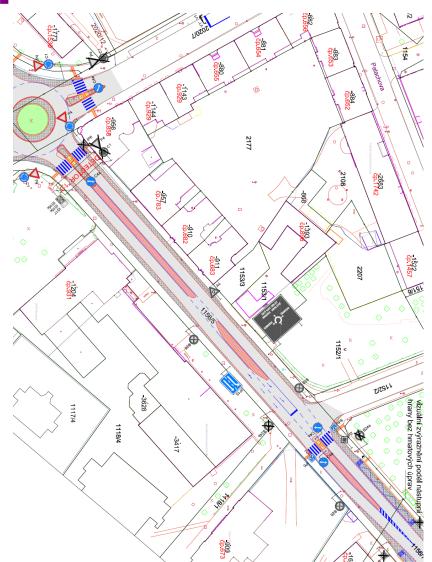
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# **MEPS** – final presentations

### examples of results:

- concept of the bus station
- parking in city centre
- redesign of roundabouts
- new design of through road



example: results of topic Nr. 4 of MEPS 2011 (Náchod, Czech Republic)

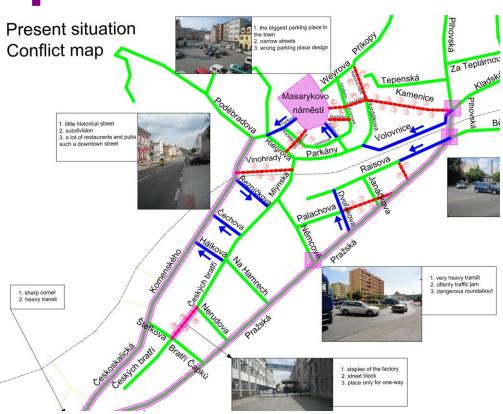
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# **MEPS** – final presentations

### examples of results:

- concept of the bus station
- parking in city centre
- redesign of roundabouts
- new design of through road
- organization and regulation of part of city centre



example: results of topic Nr. 5 of MEPS 2011 (Náchod, Czech Republic)

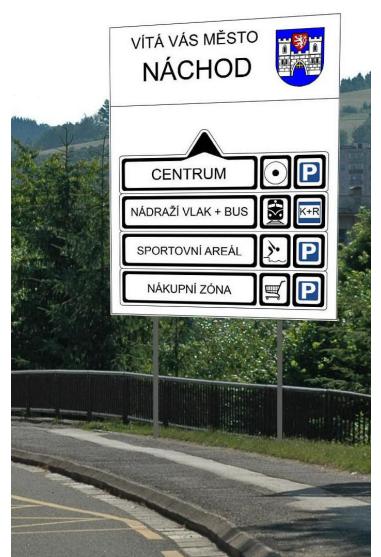
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# **MEPS** – final presentations

### **examples of results:**

- concept of the bus station
- parking in city centre
- redesign of roundabouts
- new design of through road
- organization and regulation of part of city centre
- new city information system



example: results of topic Nr. 6 of MEPS 2011 (Náchod, Czech Republic)

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## **MEPS** – next future

### already passed 24 seminars MEPS in all 3 countries

### List of MEPS cities in chronological order

- 1. (1990) Kralupy nad Vltavou
- 2. (1991) Kalocsa
- 3. (1992) Bruck a.d. Mur
- 4. (1993) Liberec
- 5. (1994) Tata
- 6. (1995) Salzburg
- 7. (1996) Litomyšl
- 8. (1997) Sopron
- 9. (1998) Feldkirchen
- 10. (1999) Teplice
- 11. (2000) Szentendre
- 12. (2001) Kufstein



### List of MEPS cities in chronological order

- 13. (2002) Mladá Boleslav
- 14. (2003) Esztergom
- 15. (2004) Tulln a.d. Donau
- 16. (2005) České Budějovice
- 17. (2006) Hévíz
- 18. (2007) Bruck a.d. Mur
- 19. (2008) Jihlava
- 20. (2009) Siófok
- 21. (2010) Wiener Neustadt
- 22. (2011) Nachod
- 23. (2012) Gyula
- 24. (2013) Feldkirch

# currently **looking for candidate** matchmaker city in Czech Republic **to organize 25th MEPS 2014 !!!**



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# Thank you