

"ADVENTURES" PROJECT, 2001-2004
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- LABORATORY TOOLS and EXERCISES-
TRANSPORTATION NETWORK MODELS

Author: Francesco P. Deflorio
Politecnico di Torino



Politecnico di Torino
Department DITIC -Transport
Italy



University of Sarajevo
Faculty of Transport, Traffic and Communications
Bosnia-Herzegovina



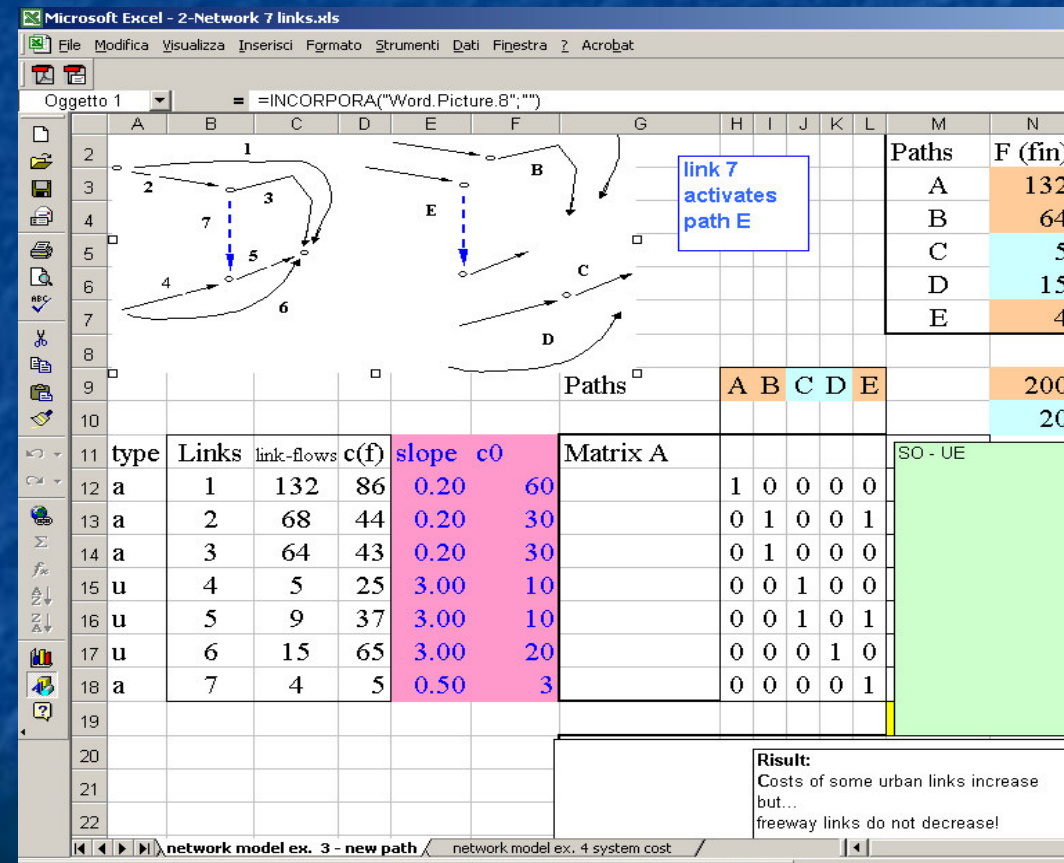
University of Southampton
Transportation Research Group
United Kingdom

Transportation Network models

- Macroscopic approach
 - Topology -> Graphs
 - Users in the system -> Flow variables
 - Congestion -> Cost functions
 - Network loading models (path flow -> link flow)
- Microscopic approach
 - Detailed network description
 - Vehicle movement rules
(car-following, lane-changing, path choice)
 - Experiments and statistics

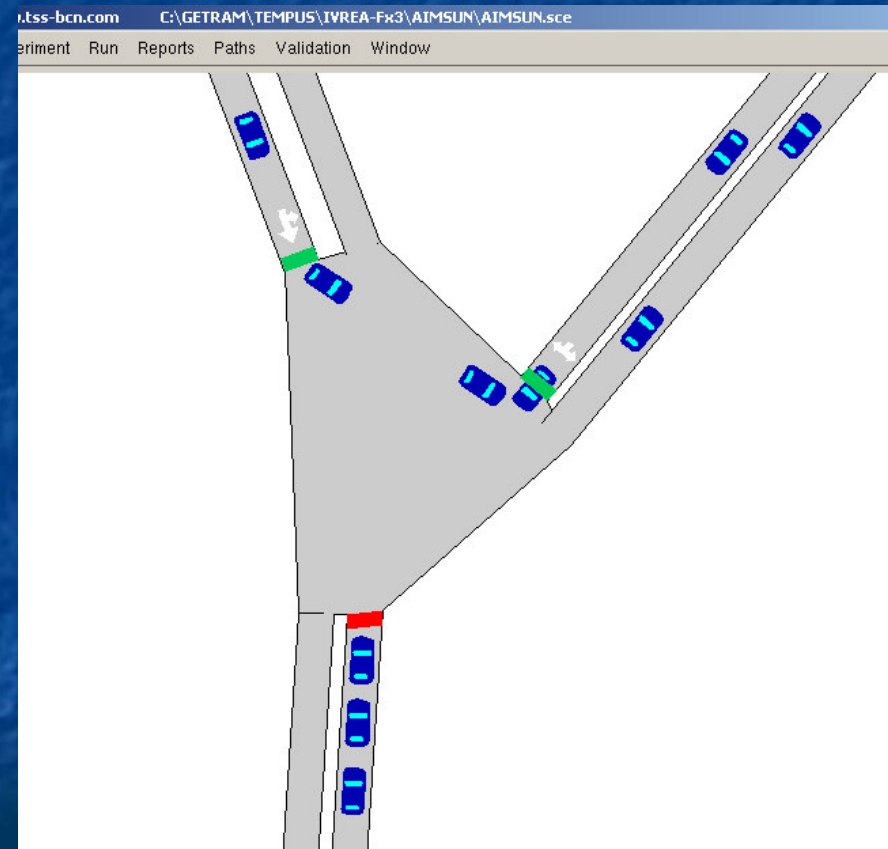
Lab Material (1/3)

- Macroscopic models
 - Transport networks – Supply modelling (introduction and 4 exercises)
 - 2-Network 7 links.xls (solutions of 4 exercises on supply models)



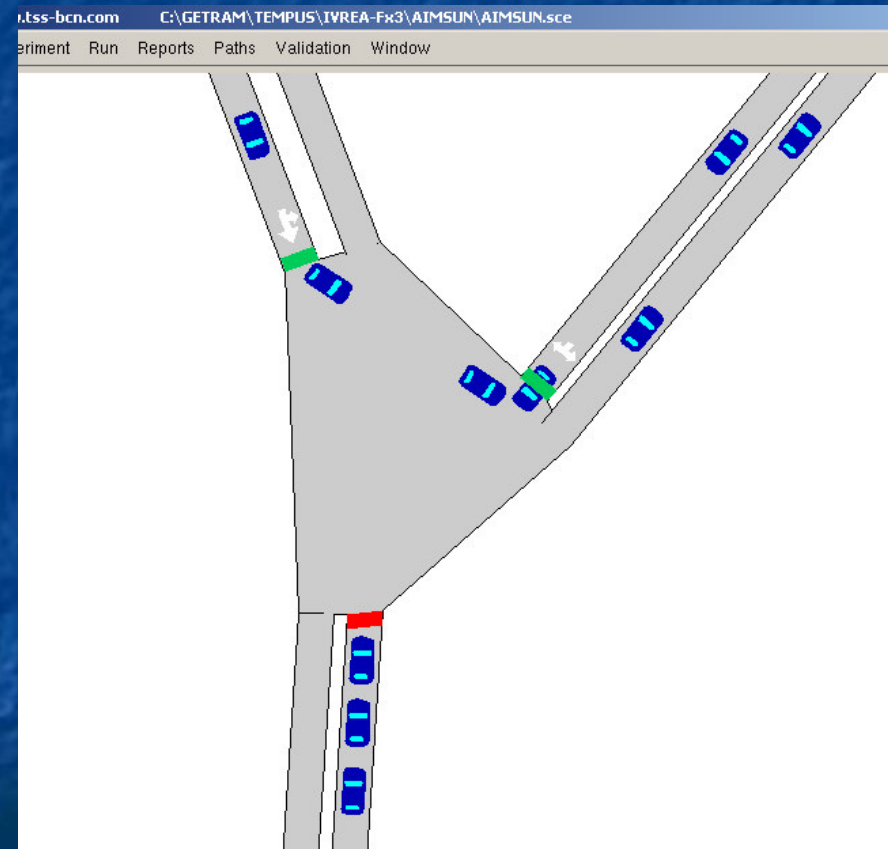
Lab Material (2/3)

- Microscopic Model
 - GETRAM tools
 - TEDI
 - AIMSUN 4.1.4
 - AIMSUN 3D
 - GETRAM extensions



Lab Material (2/3)

- Microscopic Model
 - Manuals (4 "pdf" files)
 - Examples models
 - guide for examples – (Power point presentation)
- HASP + license file + xwin32 code + contract



LABORATORY TOOLS and EXERCISES

- Tomorrow, in the morning, at TEMPUS LAB
- How to build simple supply models for transportation network
 - Macro
 - Presentation of 4 Exercises by using Microsoft excel
 - Micro
 - Presentation of some exercises by using AIMSUN