Electronic Toll System in Hungary

XV. EUROPEAN TRANSPORT CONGRESS AND X. BUDAPEST INTERNATIONAL ROAD CONGRESS

8-9th June 2017

KTE

Content

- Historical overview
- Benefits of electronic toll collection
- Milestones in e-toll implementation in Hungary
- Key features of the HU-GO system
- Experiences with a distance-based electronic toll collection system

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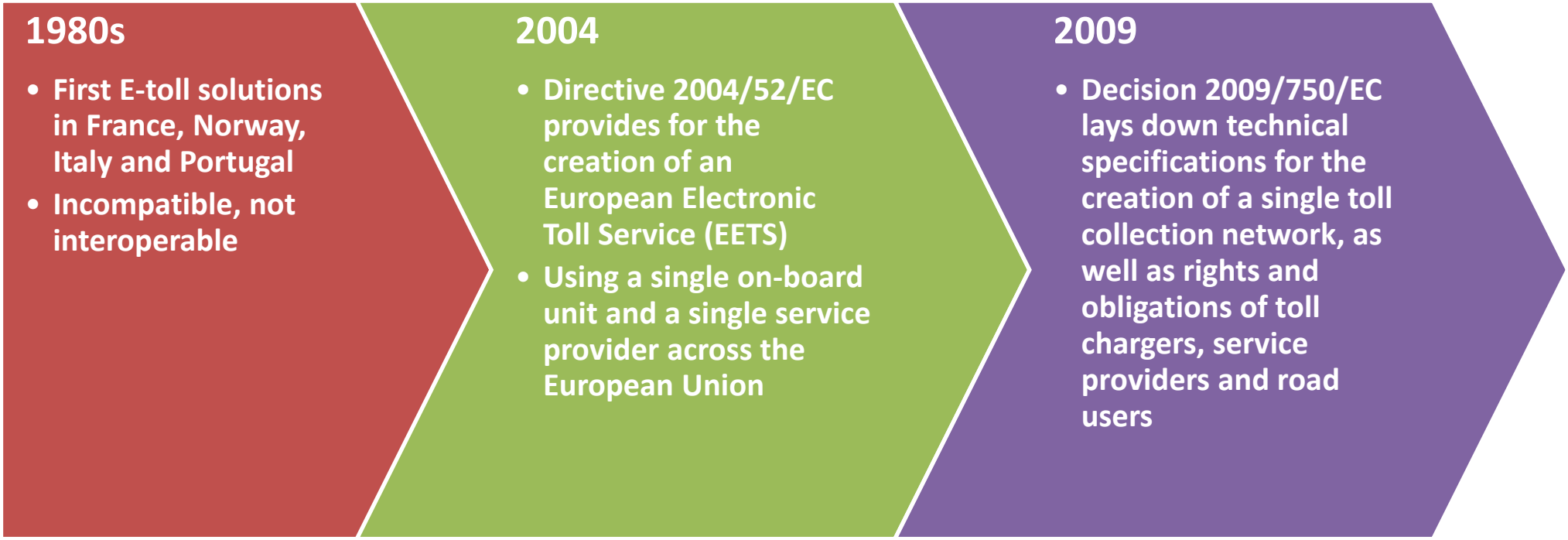
E-toll in Europe



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Benefits of electronic toll collection

- Applies “polluter pays” principle
- Distance-based
- Takes account of axle load
- Takes account of environmental category
- Effective authorisation control
- Revenue increase in proportion to road network expansion

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Benefits in Hungary

- Funding is ensured for road network maintenance
- Improved state budgetary balance
- More equitable burden-sharing
- Reduced competitive disadvantage for Hungarian freight forwarders
- Fair participation of international freight forwarders in road network maintenance
- Interconnectivity with other control systems (Electronic Public Road Trade Control System, Axle-Load Measurement System)

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Milestones in Hungarian implementation

Date	Milestone
1996	Tolling on Motorway M1 commences
1999	Use-based vignette toll payment (HD) is introduced
2003	The Ministry of Economy and Transport gives mandate to the State Motorway Management Company (SMMC) to develop a long-term charge policy. In the current circumstances, the implementation of use-proportionate electronic toll collection is proposed.
2006	The Transport Ministry gives mandate to the Coordination Center for Transport Development to prepare a plan to change the toll collection system.
2011	The implementation of electronic toll collection is integrated into the New Széchenyi Plan and the Széll Kálmán Plan.
April 2012	The Government adopts a Decree setting out tasks related to the implementation of distance-based electronic toll collection and the basic operating framework for the newly launched system.
May 2013	The Hungarian Parliament adopts the Toll Act on distance-based tolls payable for the use of motorways, expressways and main roads.
1 July 2013	The HU-GO distance-based electronic toll system (UD) is launched for vehicles over 3.5 tons.
1 November 2013	Organisational restructuring: Speedway development and maintenance responsibilities are transferred to Hungarian Public Road Non-profit Ltd. National Toll Payment Services Plc. (NTPS) is established as the successor to SMMC to operate and develop the toll collection systems (UD and HD)

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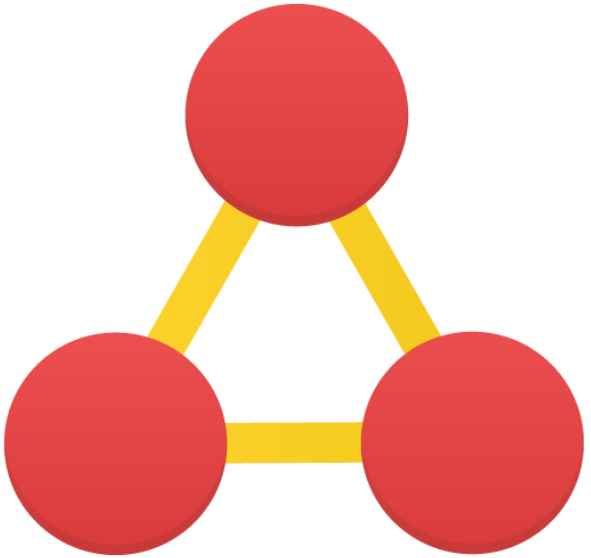

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European toll collection systems

Toll gate

- Traffic stoppage
- Considerable infrastructure
- High labour requirement

Croatia
Italy
France
Portugal
Spain

Microwave

- Distance-based system ensuring continuous traffic flow
- DSRC payment gates
- Considerable infrastructure

Austria
Czech Republic
Poland
Belarus
+14 other European countries

GNSS system

- Distance-based system ensuring continuous traffic flow
- OBU of a certain type required
- Gates only for control purposes

Germany
Slovakia

HU-GO

- Distance-based system ensuring continuous traffic flow
- Route ticket purchase
- No OBU required
- Standardised interface for toll declaration
- Gates only for control purposes

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Toll declaration methods

- **Self-declaration** is at the core of operation
- Route ticket a possibility!
- On-board unit (OBU) usage
  - ✓ More then 50 OBU types accepted
  - ✓ 24 audited toll declaration operators
  - ✓ 3 of which are international
  - ✓ Integrating existing system components, system-integrated use of components existing elsewhere

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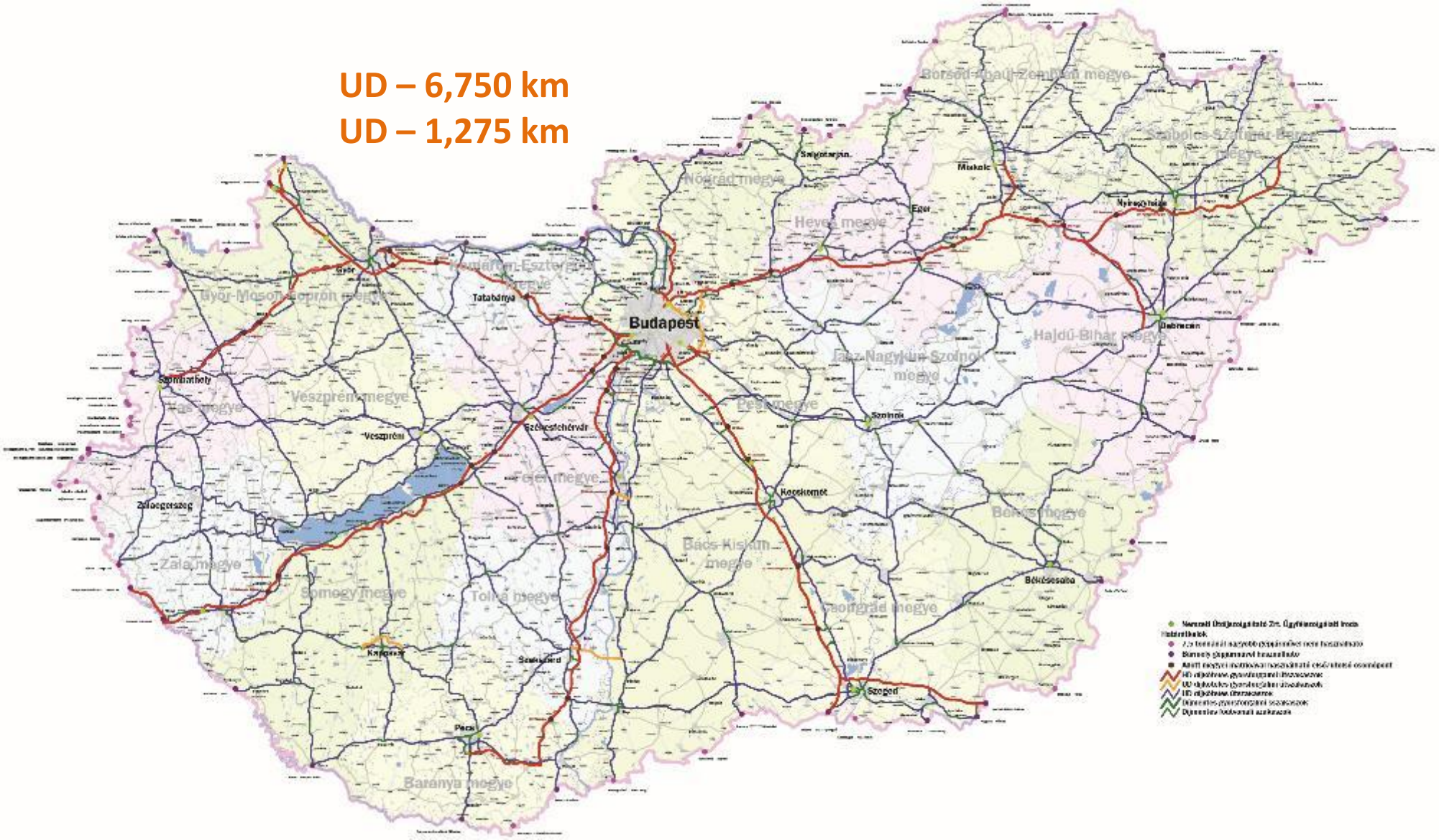
Toll road network

UD – 6,750 km
UD – 1,275 km



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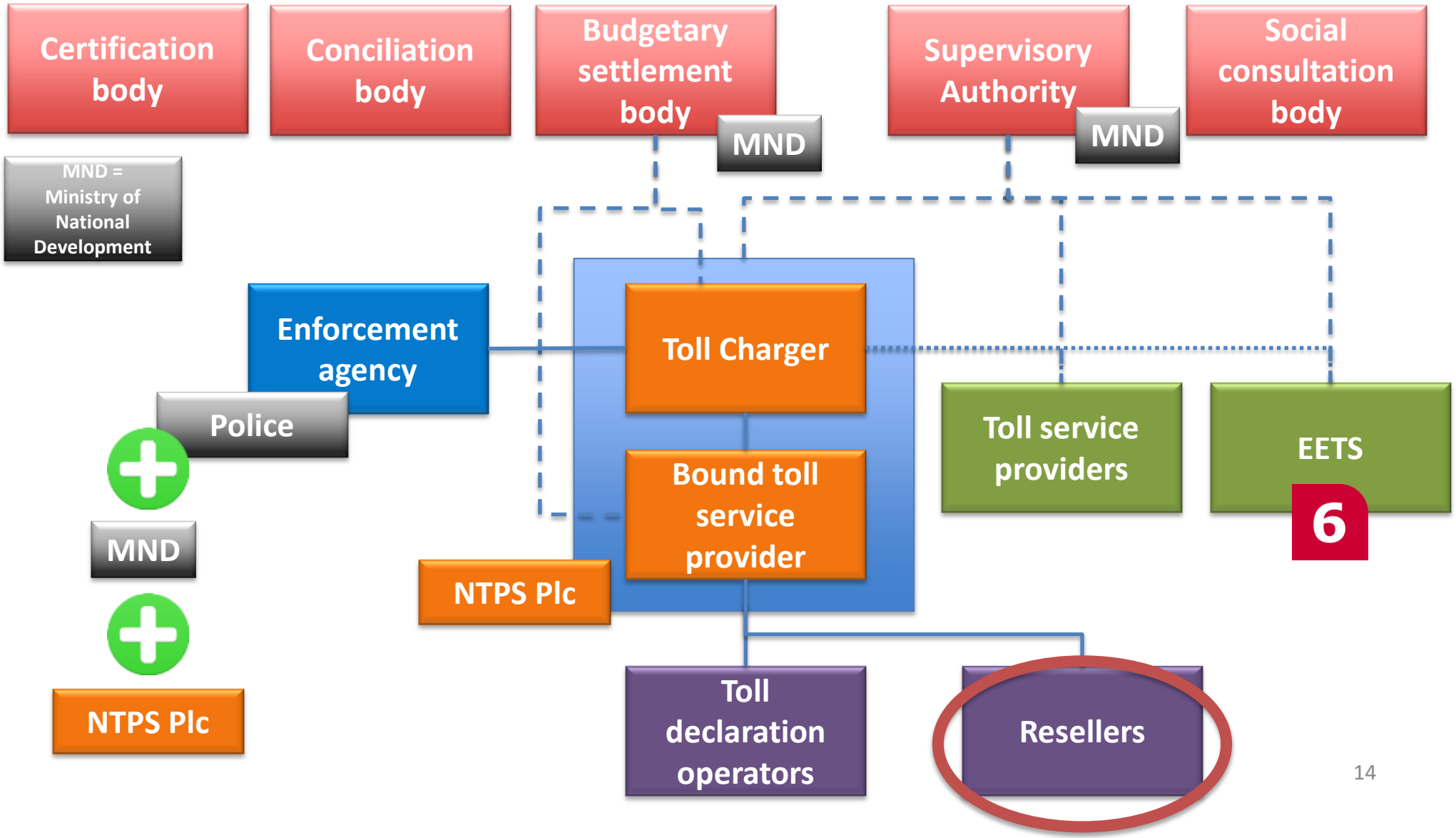
Toll collection and control system



EU rating: A+

- The HU-GO system fully **complies with** the professional requirements laid down by the EU
- **Innovative** because
  - It is platform-based
  - It allows for the use of existing logistics on-board units
  - It does not require purchasing an on-board unit
- It allows for a route ticket to be purchased **easily and in multiple ways**
- It is unparalleled, on an international level, in promoting **interoperability** among countries
- The **budget** allocated for its implementation **was used efficiently** as development and maintenance costs are far below the European average

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External economic relations

Recommendation from the World Bank
A+ EU rating

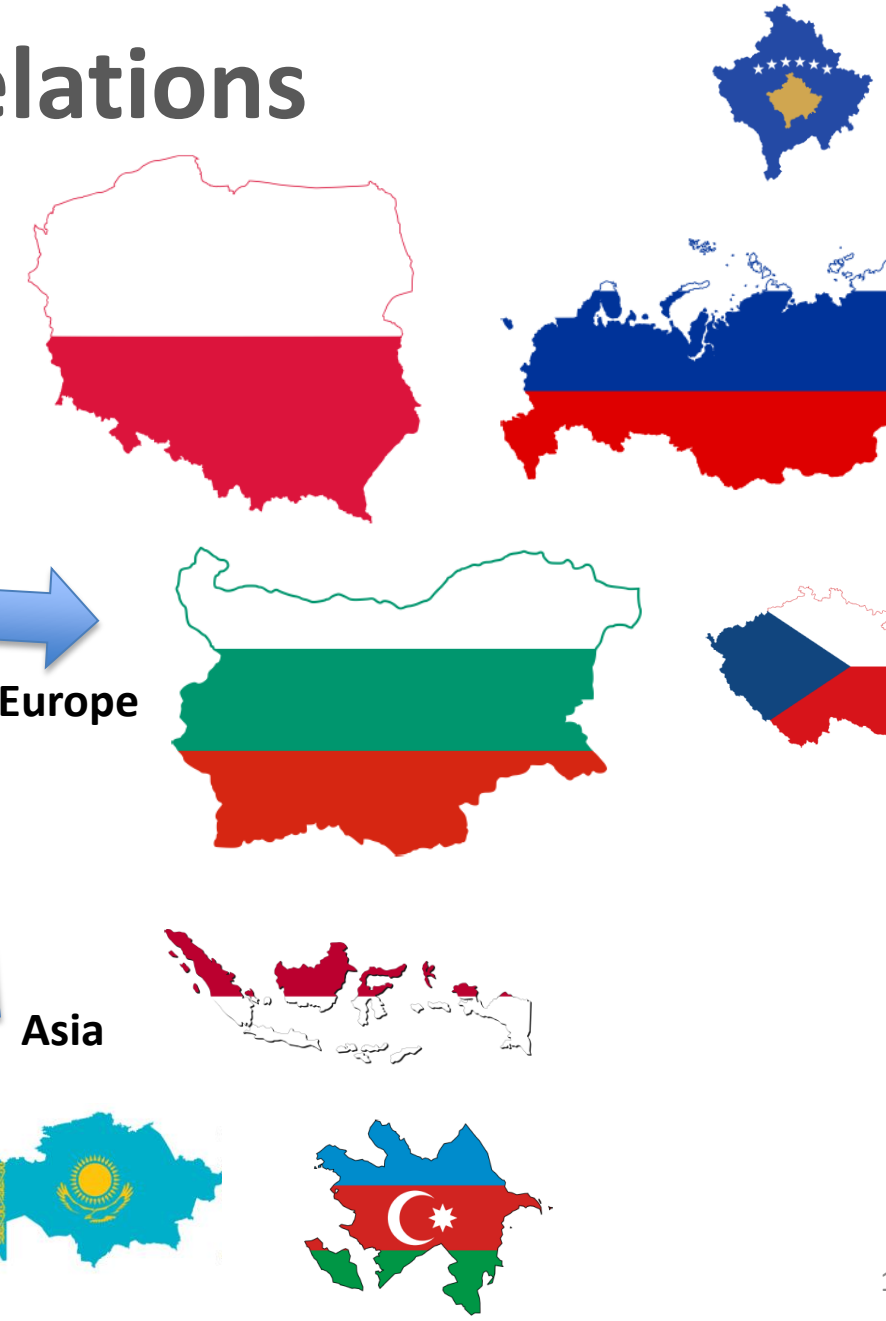
HU-GO

ELECTRONIC TOLL SYSTEM

Europe

Africa

Asia



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Basic information

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Toll revenue figures by calendar year

Toll revenues, Gross (HUF)	2013	2014	2015	2016	2017 Projected (According to business plan)
E-vignette	**HUF 56.28 bn**	**HUF 47.32 bn**	**HUF 57.70 bn**	**HUF 64.13 bn**	**HUF 64.15 bn**
No. of vignettes	12.67 M	11.07 M	11.98 M	12.93 M	13.04 M
HU-GO	**HUF 78.88 bn**	**HUF 162.79 bn**	**HUF 185.77 bn**	**HUF 199.28 bn**	**HUF 206.33 bn**
No. of tickets taken	285.35 M	615.38 M	673.17 M	678.6 M	-
Total	**HUF 135.16 bn**	**HUF 210.1 bn**	**HUF 243.47 bn**	**HUF 263.41 bn**	**HUF 270.48 bn**
EUR	**429,1 m**	**666,9 m**	**772,9 m**	**836,2 m**	**852,0 m**

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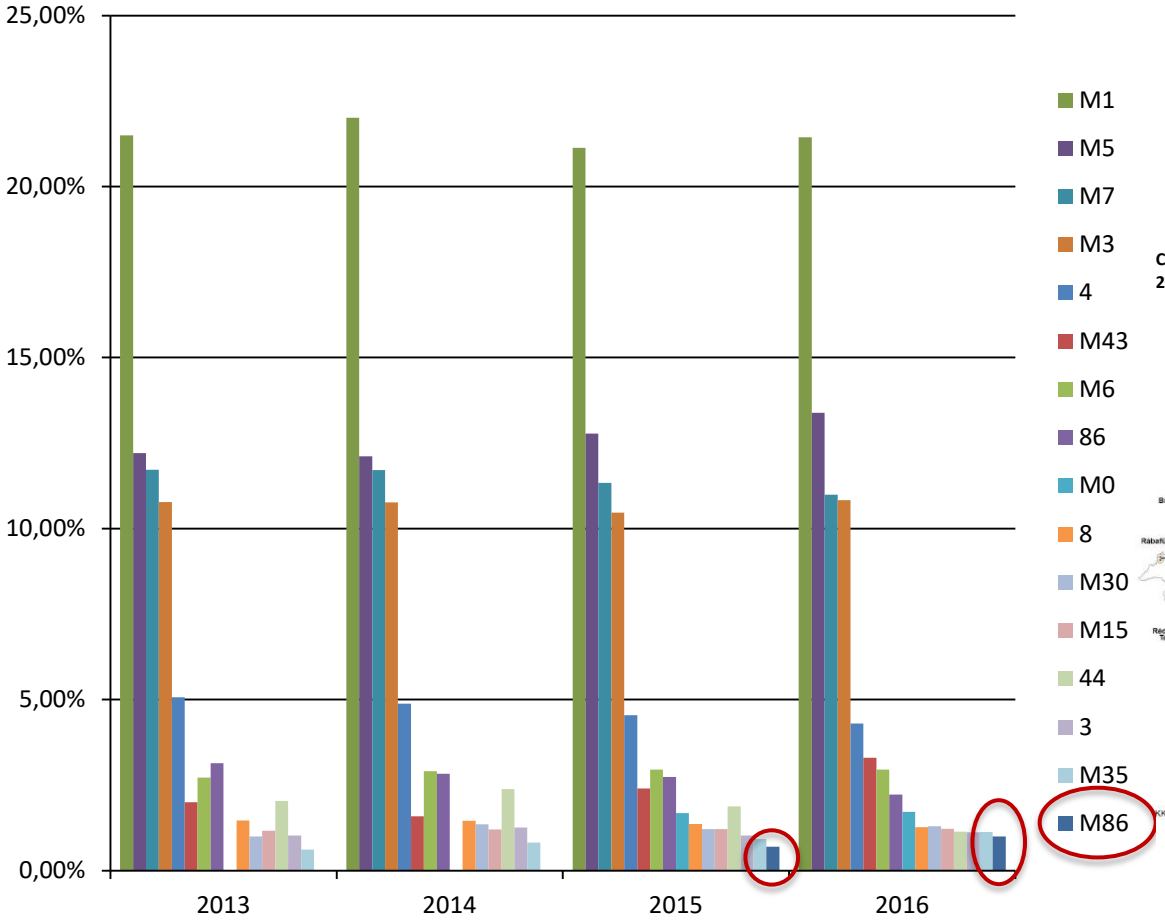
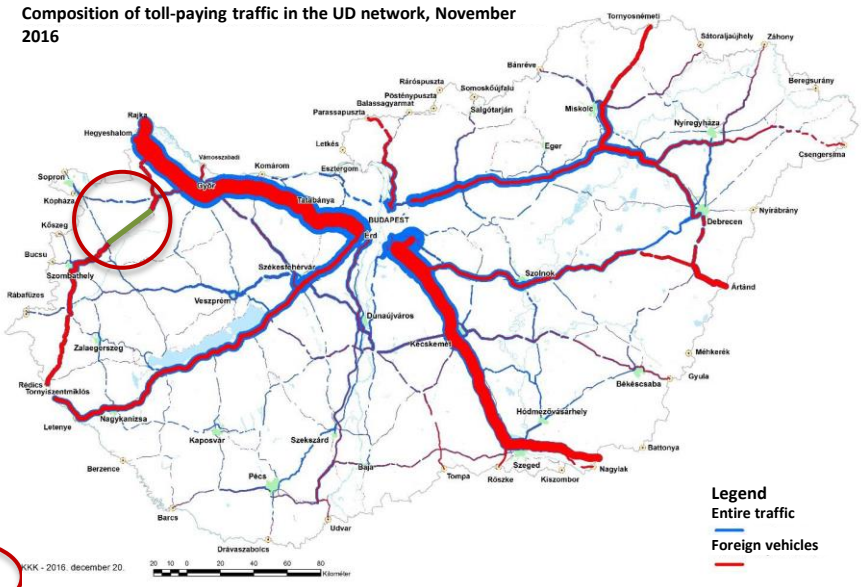
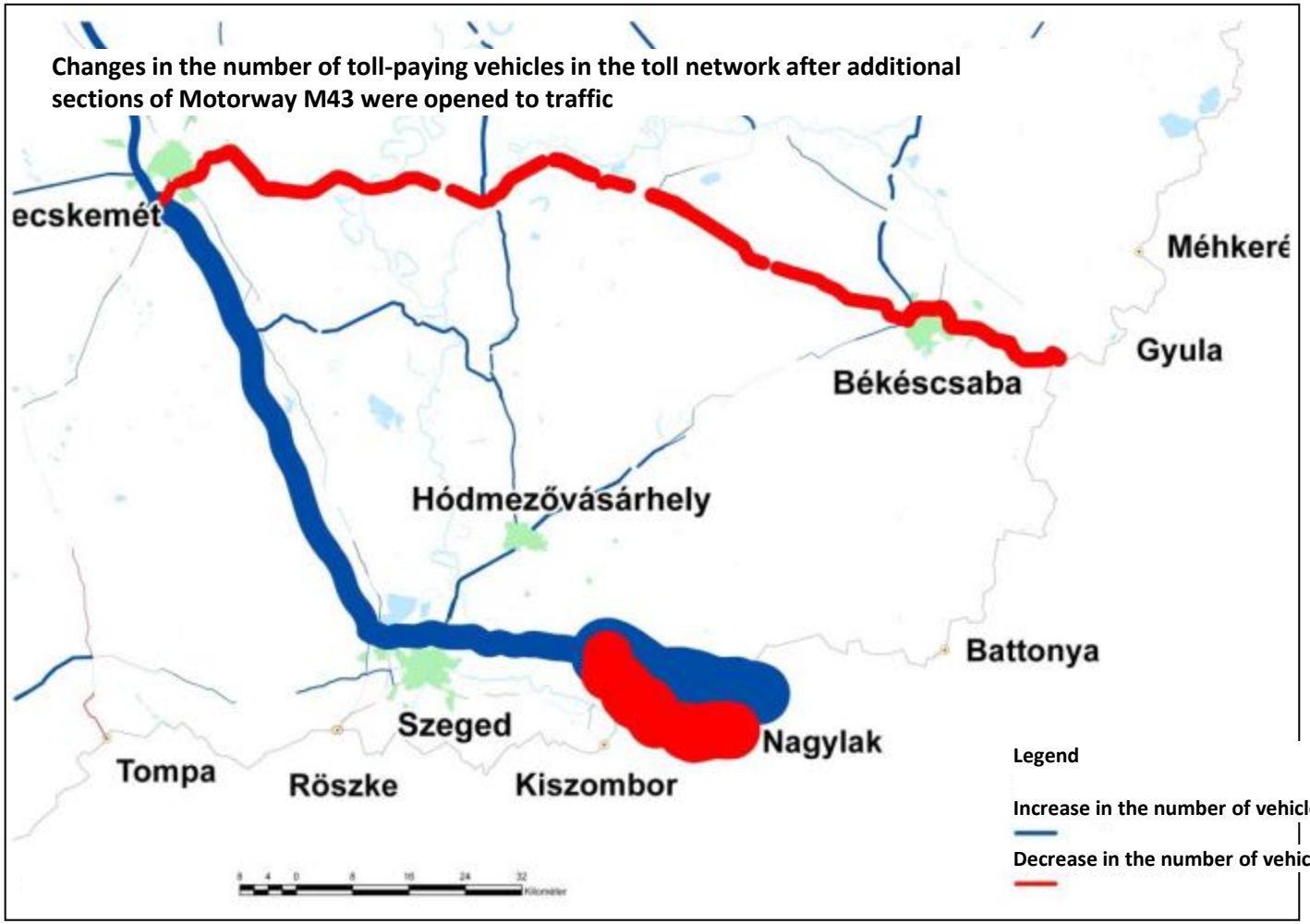
Road use habits





Shift in freight traffic on M43



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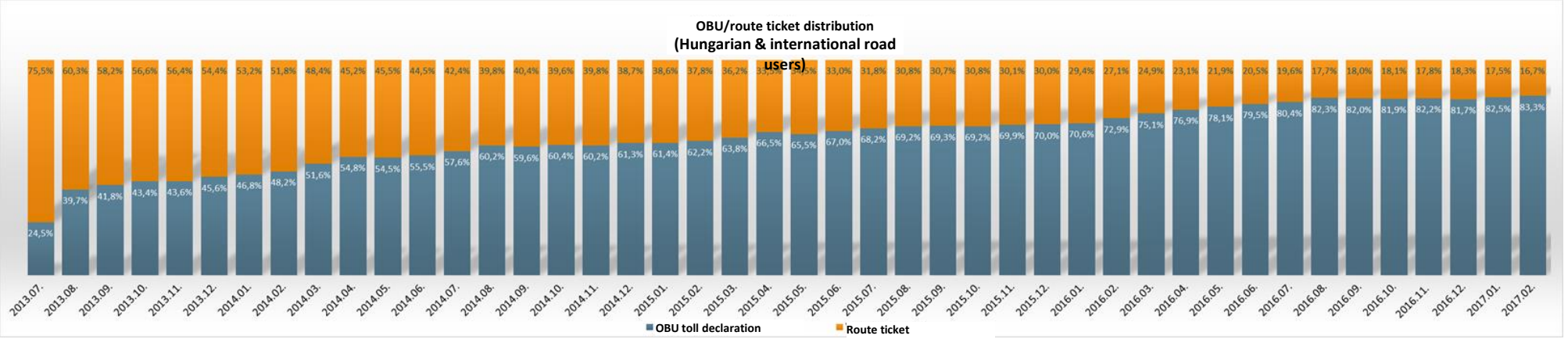
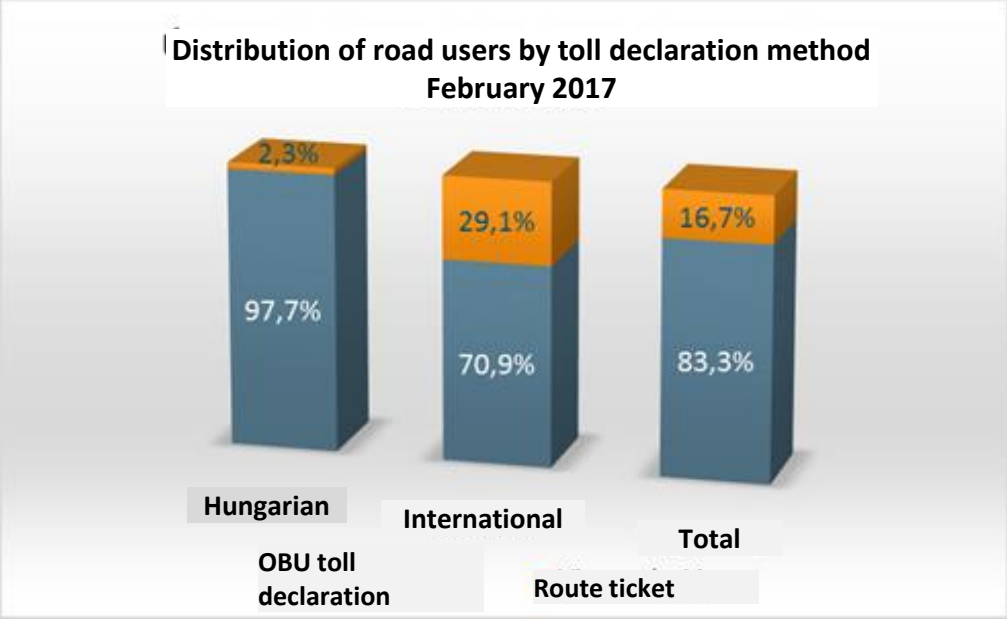
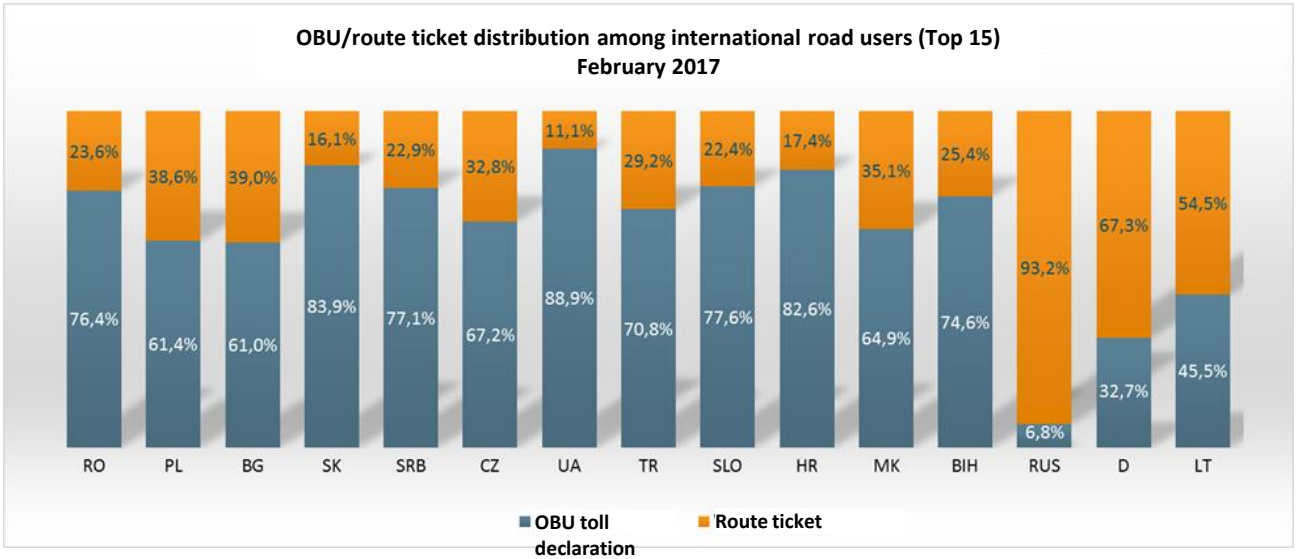
Source:
Coordination Center for Transport Development, monthly UD report, July 2015

On-board unit penetration





Distribution of international road users



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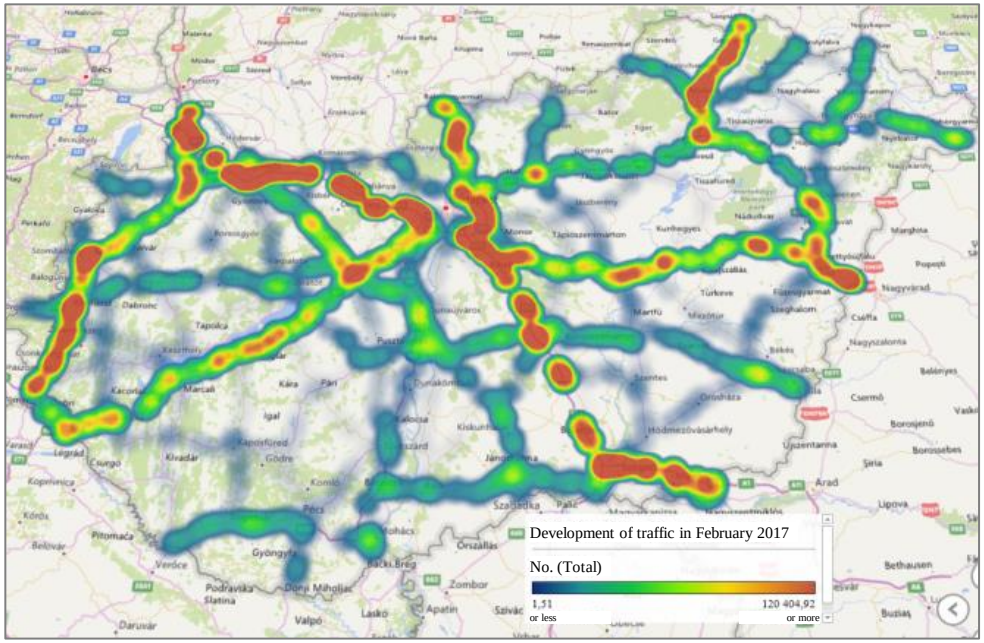
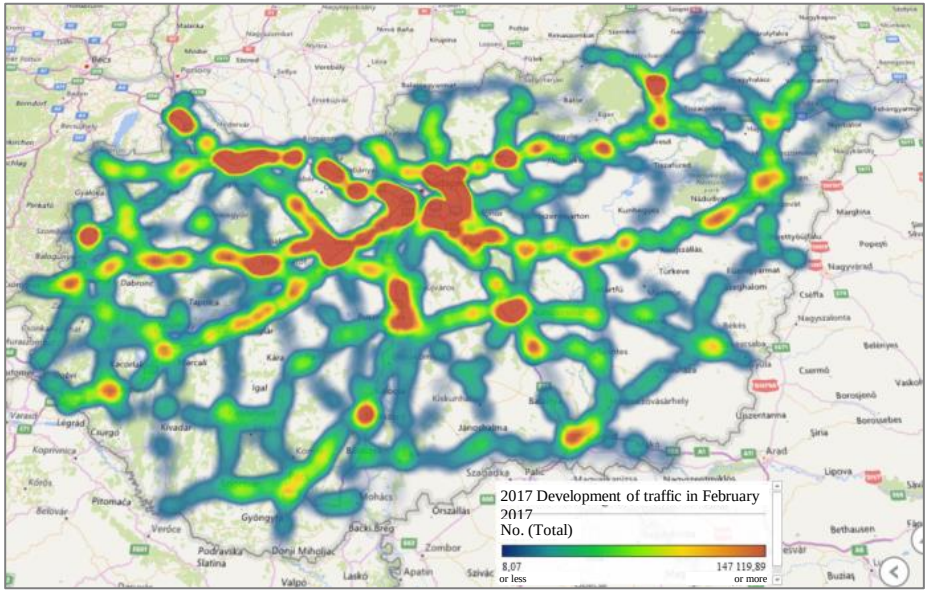
We are a transit country



Development of international traffic



Development of Hungarian traffic

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Thank you for your attention!

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