USING GIS IN GOVERNANCE OF TRANS-EUROPEAN TRANSPORT NETWORKS (TEN-T): TRANSPORT INFORMATION MANAGEMENT SYSTEM OF TURKEY

European Transportation GIS Summit
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HELLO!

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I am here to present Turkey’s TIMS Project.
AGENDA

❖ BACKGROUND
❖ TIMS PROJECT and GIS FUNCTIONS
❖ FUTURE WORKS
❖ CONCLUSION
1. BACKGROUND
EU ACCESSION of TURKEY AND TEN-T

- Turkey is an important partner on transport playing a key role in the extension of the EU’s Trans-European Network for Transport (TEN-T) to other neighbouring countries.

- European Commission is also working on improving transport relations with Turkey within the framework of the accession process. 2 accession negotiations chapters dealing with transport: Chapter 14 on Transport Policy and Chapter 21 on Trans European networks.

- EU is also supporting financially both the development of the infrastructure as well as institution building in Turkey. Through the Instrument for Pre-Accession (IPA) the EU financed a number of projects in recent years.
EU ACCESSION of TURKEY AND TEN-T

- Turkey participated in the Transport Infrastructure Needs Assessment (TINA) study to develop a multi-modal transport network within the Republic of Turkey and to extend the EU’s TEN-T into Turkey.

- An information system was established, however, the system offered limited use: it had no editing tools, no regular up-to-date database and no software licence maintenance. It was also unable to keep pace with the recent rapid development of relevant technology and, as a result, its functionality was seriously compromised.
EU ACCESSION of TURKEY AND TEN-T

- EC has developed the TENtec Information System to support for transport modelling of future policy and budgetary scenarios, briefings, the mapping of TEN-T/Connecting Europe Facility (CEF) co-funded projects and other layers with seamless inclusion of GIS providing interactive maps and satellite images.

- Due to the development of TEN-T in Turkey the need for a similar information system in Turkey has emerged. It was also part of the technical negotiations of Chapter 21 and so the system has to be compatible with technical requirements of TENtec and it has to be developed for an eventual integration with TENtec.
Objective: To establish a central database and create a bespoke GIS-based TIMS to monitor the performance indicators and data for transport and infrastructure for all modes, border crossings, road safety and project prioritization

End Beneficiary: MoTMAC DG FREU

Stakeholders: All agencies of MoTMAC

Contractor: [IDOM Dornier]

Start Date: 16 June 2016

Finish Date: 16 December 2017
2. TIMS and GIS FUNCTIONS
MAIN FUNCTIONS

TRANSPORT WEB MAP VISUALIZATION
TRANSPORT DATA COLLECTION AND VERIFICATION
TRANSPORT AND SPATIAL ANALYSIS
TRANSPORT INDICATOR MONITORING
PROJECT PRIORITIZATION
PHYSICAL ARCHITECTURE
WEB MAP VIEWER

Interface for Public Users
WEB MAP VIEWER

Interface for Logged in User
SPATIAL ANALYSIS

Ex: Growth Trend of Freight in Railways for selected regions
SPATIAL ANALYSIS

Ex: Served population by railways
TRANSPORT ANALYSIS

Ex: Traffic analysis: rail passenger volumes
TRANSPORT ANALYSIS

Ex: Travel times to Ankara by rail
REPORTING MODULE

An example of report showing filtered data for specific location.
3. FUTURE WORKS
JOBS AHEAD

TIMS STILL UNDER DEVELOPMENT
Finalization of the system development will be end of this year. Some functions need to be developed.

REAL-TIME DATA IN TIMS
Mobile phone data is planned to integrate into the system with a new project.

OPEN TO NEW IDEAS
New modules or features requested by stakeholders can be added editing source code of the system.
4. CONCLUSION
BENEFITS OF TIMS

WORKING ONLINE
MoTMaC personnel will be able to submit data online and share this data with maps with transport modelling options.

EU HARMONIZATION
TIMS will be integrated to TENtec system and help membership process. It also will allow users to extend geographic scope of TEN-T in Turkey.

COMPREHENSIVE
TIMS will be Turkey’s first of its kind GIS-based system for all transport modes. It will also help decision makers in transport planning and funding.
THANKS!
Any questions?
www.udhb.gov.tr