ENTERPRICE

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Adam Opel AG (DE)
ASIT Ltd. (CH)
AS&P Consultants (DE)
DeTeMobil (DE)
Empresa Mixta de Trafico / SICE (ES)
Eratosthenes Ltd. (GR)
Heusch Boesefeldt GmbH (DE)
Rijkswaterstaat / AVV (NL)
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OBJECTIVES

ENTERPRICE aims at designing, developing and evaluating European-wide standardised regional <u>Mo</u>bility and <u>T</u>raffic <u>I</u>nformation <u>C</u>entres (MOTIC) which have the capability to generate, integrate and provide intermodal, value-added traffic information. The MOTICs is able to produce multi-modal traffic situation reports enabling traffic authorities to prepare and to take decisions in the framework of a traffic management concept. Furthermore, this integrated information is made available to private service providers in the light of private-public partnerships via an open standardised interface. This will ensure that common system-optimised, non conflicting information concerning the Trans European Network will be provided to the end users through different MOTIC-based services.

Figure 1 below shows the overall functional architecture of ENTERPRICE, highligthting the role of MOTIC. Figure 2 shows the functional architecture of MOTIC Strategy management centre (SMC).
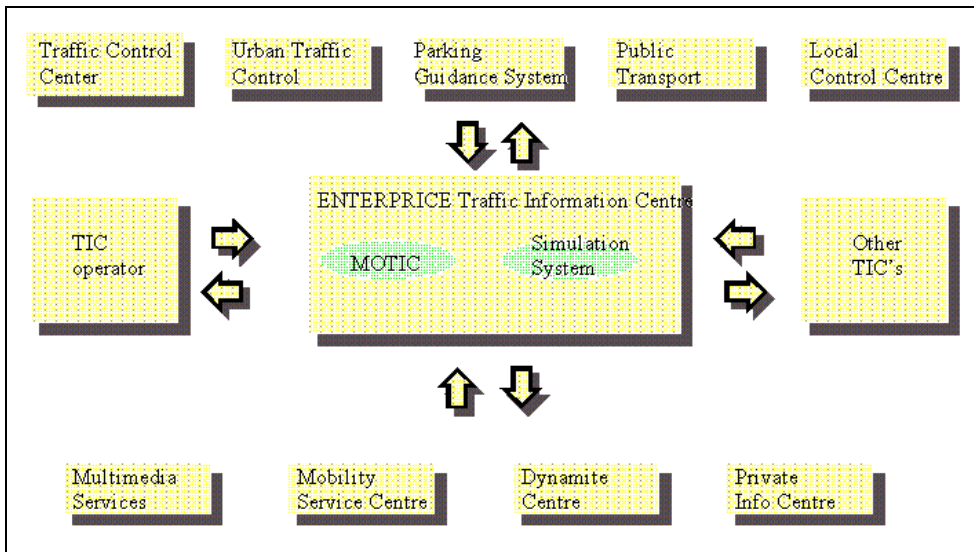

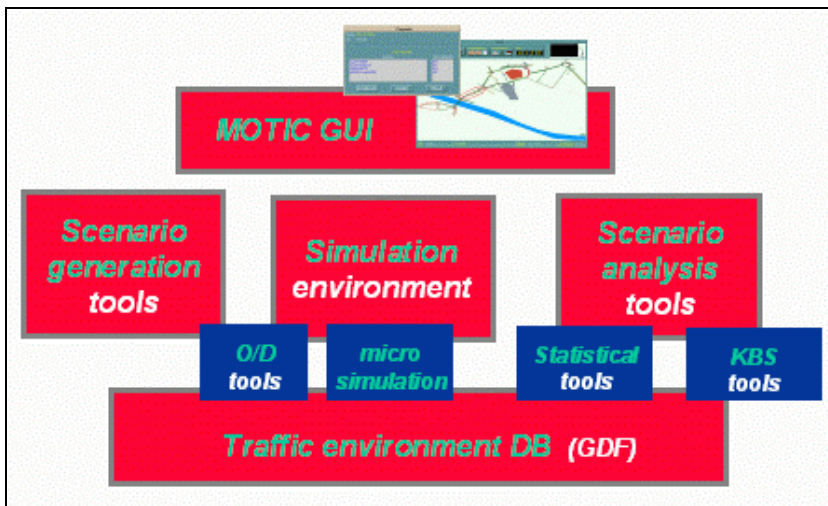*Fig. 1 – ENTERPRICE functional architecture*

Fig. 2 – Main functional components of MOTIC

The MOTIC-SMC is based on several functional components. These include a multimodal, GDF-based, on-line traffic database, several components for traffic information generation and management, a transport scenario editing tool, a knowledge-based shell for the implementation of traffic management strategies.

SOFTECO SISMAT has contributed to design and development of key functionalities of –SMC, including the intermodal strategy scenario editor, the MOTIC-SMC manager and the integration of simulation services.

TECHNOLOGIES AND APPROACH USED

ENTERPRICE follows the approach defined by the MOTIC functional architecture to integrate multimodal traffic data from different sources and the Mobility Service Centre (MSC) for traffic information. The technologies involved include mobile information terminals based on GSM communications and others, Road Truck Pricing based on Mobile Data Communication (GSM), Automated Vehicle Tracking using GPS.

Some core functionalities of the MOTIC devoted to traffic data and information management and traffic management strategies use Artificial Intelligence based modelling approach and tools. Also, traffic simulation models are implemented on-line for traffic scenario prediction and analysis purposes. The basis of the SMC platform is provided by GeoDyn (Heusch Boesefeldt GmbH), a transportation network oriented GIS system, a road database implemented through Informix ™ DBMS, and the Xwindow / Motif graphical system for the MOTIC operator GUI.

Fig. 3 - Sample view of MOTIC GUI

END-USERS INVOLVEMENT

Within the ENTERPRICE consortium different types of organisations have cooperated, including ministries, regional and urban authorities responsible for traffic and transport services. The end-users involved include the Hessian Road and Traffic Authoritiy (HLSV, Hessiches Landesamt für Straßen- und Verkehrswesen), the Dutch Ministry of Transport, Public Works and Water Management (RWS-AVV, Rijkswaterstaat), the Danish Road Directorate (Vejdirektoratet). A Swiss consortium, linked to one of the work areas of ENTERPRICE, involved several federal organisations.

TEST SITES

Demonstrations of ENTERPRICE functionalities and the MOTIC architecture have been implemented in the Hessian motorway near Frankfurt. TIC architectures based on the MOTIC approach have been implemented in the Rotterdam corridor (EURODELTA pilot site) and studied in Switzerland, within the national TIC located in Geneva. Feasibility studies have been carried out for Madrid motorway and the Greek motorway network.