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challenging limits

Kapsch TrafficCom

EcoTrafIX™ Suite.

EcoTrafIX™ boosts the efficiency of City operators in their day-to-day activities, providing a fully map-based situational awareness of the entire intersections & arterials network, accelerating collaboration between multiple stakeholders, optimizing safety & response plans thanks to automatic detection of incidents, forecast of future traffic conditions and decision support tools.

Making mobility more efficient, safe & sustainable.

EcoTrafIX. At a glance.

- > Efficient, safe and sustainable traffic management software for city and highway operations
- > Situational awareness and a common operational view supports collaborative informed decisions
- > Advanced event management tools to improve coordination, response time and safety
- > Decision support system to automate / assist response actions
- > Performance measurement via report tools and real-time dashboards
- > Data Analysis and Data Mart allowing data sharing and trend analysis
- > Latest in information and communication technology for easy deployment and support
- > Monitor or control any field device. Extensive list of compatible, tested devices using NTCIP & proprietary protocols

EcoTrafIX™ is a web based integrated traffic and transportation management solution supporting the coordination of management strategies to optimize mobility, improve travel time reliability and safety as well as reduce vehicle fuel use and GHG emissions.

The EcoTrafIX™ Suite can be tailored to meet your agency's needs and budget. There are three basic products which can be configured for City and for Highway applications:

- > **EcoTrafIX™ Command** – entry level traffic signal control system and for ITS device control
- > **EcoTrafIX™ Expert** – including adaptive traffic control, decision support system, weather alerts, event management, traffic prediction;
- > **EcoTrafIX™ Mobility** - multi-agency collaboration multi-modal event management and coordination, traveler information, and data fusion.

Select the product and add the modules you need. EcoTrafIX™ is the right software solution for every agency.

Finally – a Software Application that is easy to deploy and to maintain.

Ease of integration is a key aspect of the EcoTrafIX™ product. EcoTrafIX™ is built using a web services oriented architecture (SOA), including an enterprise service bus (ESB), combined with modern database design and data interface techniques such as Extract Transform- Load (ETL). The information and communication technology (ICT) infrastructure upon which EcoTrafIX™ is built allows for a very cost effective and easy to maintain application deployment because everything is maintained on the server. There are no client applications to patch and update. EcoTrafIX™ can be deployed on customer premises or as a hosted application.

Unequalled list of supported devices.

EcoTrafIX™ is agnostic to hardware or devices such as traffic controllers, meaning there are no dependencies on a particular brand or model; all types of devices can be integrated for monitoring command and control – both NTCIP and proprietary protocols. This wide range of device integration capabilities allow highly flexible and modular evolution of installed systems to support legacy systems, while adding newer features, devices and subsystems with no dependency on a particular brand or model.

EcoTrafIX™ boosts operational efficiency.

EcoTrafIX™ software is the result of 30 years of experience across all aspects of transportation. We have combined our trusted expertise with the best of new technology to maximize the functionality and usability of this software suite to support transportation management and operational efficiency



Advanced event management tools to improve coordination, agency response times and safety.

EcoTrafIX™ includes advanced features for event management and responses. The solution combines data fusion and analytics with alarm management and incident detection. Proactive transportation management is now possible, allowing faster event detection, response, clearance and recovery. Weather responsive transportation management strategies are enabled by built-in interfaces for real-time and predictive weather data.

EcoTrafIX™ leverages the geo-spatial map-centric operations to locate and associate incident response resources, such as CCTV, DMS and service patrol trucks improving incident response and clearance activities.

Situational awareness for informed decisions.

EcoTrafIX™ is designed to capture, aggregate, and archive all data, status and alarms presenting a common operational view which each operator and stakeholder can tailor to its need and area of responsibility.

Traffic conditions are monitored continually, feeding dynamic

map displays and visualizations. Monitoring of field devices and equipment provide live status and real-time data.

Decision support system.

EcoTrafIX™ includes a Decision Support System (DSS) to help make quick decisions about alternative responses and find the best fit for the situation. DSS functions include selection rules based on your agency's standard operating policies & procedures (SOPs). The DSS and response plan selection is user-configurable to allow for full automation of some or all functions or require manual confirmation of all system responses.

Reporting and dashboards.

EcoTrafIX™ uses its real-time and historical content for dashboard displays and generation of performance measurement reports. A predetermined set of dashboards and canned reports are available as well as the tools and templates required for user customizable reports. Creating your own reports has never been so easy, and publishing them in PDF, XLS or web formats opens wide options for dissemination within the agency or even to external users.

- > EcoTrafIX™ has been designed to monitor, command and control all your ITS and traffic control devices & systems.
- > EcoTrafIX™ enables the optimization of traffic flow for higher efficiency, safety sustainability.
The flexibility of the EcoTrafIX™ solution will support your operations today and adapt to future technology changes.

Technical features.

Standards compliance

- > NTCIP base protocols & standards including device & object protocols
- > C2C data exchange standards (1-way or 2-way; TMDD conformant), XML/SOAP; REST

Device compatibility

Extensive list of compatible and tested devices using NTCIP & proprietary protocols, including:

- > Traffic signal controllers - NEMA, Type 170, 2070 and ATC versions
- > Dynamic message signs
- > Changeable speed limit signs
- > CCTV cameras and video management subsystems
- > Traffic sensor systems (in-pavement, non-intrusive, video)
- > Parking sensors
- > Environmental sensor systems(RWIS)
- > Ramp metering controllers
- > Air quality stations
- > Machine vision incident detection

Center to Field Communications

All communications media supported, configurable to meet device requirements:

- > Configurable polling rates
- > I P over Ethernet
- > Direct wire-line
- > POTS dial-up
- > Wireless: cellular dial-up, IP via GPRS/UMTS, CDMA
- > I P/TCP or UDP
- > RS232 / RS422 asynchronous

Software architecture

- > Web Services Oriented Architecture (SOA)
- > Browser-based GUI
- > Enterprise Service Bus (ESB)
- > .NET/Java programming
- > Extract-Transform-Load data interfaces

Computer / Operating System architecture

- > Windows and/or Linux servers (physical or virtual)
- > Virtual Environments (VMware)
- > ICT system health monitoring & notification (NAGIOS / ZABBIX)
- > BI Reporting / Dashboards



Kapsch TrafficCom

Kapsch TrafficCom is a provider of intelligent transportation systems (ITS) in the segments of toll collection, city access control and parking space management, traffic management, traffic monitoring, utility vehicle monitoring, electronic vehicle registration and V2X cooperative systems. The end-to-end solutions of Kapsch TrafficCom cover the entire value creation chain of its customers, from components and design to the installation and operation of systems, all from a single source. The core business comprises the development, installation and operation of electronic toll collection and traffic management systems. Reference projects in more than 50 countries on all continents have made Kapsch TrafficCom a globally recognized ITS provider. As part of the Kapsch Group, an Austrian family-owned technology group founded in 1892, Kapsch TrafficCom is headquartered in Vienna, Austria, and has subsidiaries and branches in 33 countries. It has also been listed since 2007 on the Vienna Stock Exchange (KTCG) and earned revenues of EUR 526 million in the 2015/16 fiscal year. The company employs over 4,600 employees worldwide.

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