

INFORMACIÓN EN TIEMPO REAL DEL TRANSPORTE PÚBLICO EN SOFÍA – Sofia (Bulgaria)

Objetivos de la Práctica

La principal meta de esta práctica es incrementar el número de pasajeros proporcionando información confiable en tiempo real acerca de los servicios de transporte público en el municipio de Sofía.

Los parámetros del sistema de transporte público de Sofía son los más grandes y más complejos de los sistemas del país e incluyen operaciones en tranvía, trolebús, autobús y metro.

Descripción de la Práctica

Todos los e-servicios en tiempo real se basan en sistemas de alta tecnología de gestión y control del transporte público, basado en el posicionamiento GPS. Todos los vehículos de transporte público están equipados con dispositivos especiales. El sistema GPS permite la instalación de paneles informativos en las paradas de transporte público mostrando el tiempo restante para la llegada del vehículo así como proporcionando información en tiempo real por internet.

La red de transporte público está perfectamente desarrollada con 93 líneas de autobús, 15 líneas de tranvía, 9 líneas de trolebús y 2 líneas de metro.

El grupo objetivo son los pasajeros del transporte público (450 millones durante el 2012) así como los usuarios de otros modelos de transporte.

Resultados, evidencias de éxito y transferibilidad:

En la página web del Centro de Movilidad Urbana de Sofía (www.sofiatraffic.bg) están disponibles varios e-servicios, tales como:

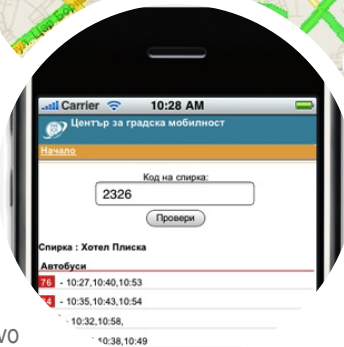
- Tabletas virtuales – Información en tiempo real sobre el tiempo restante para la llegada del vehículo en cada una de las 2.500 paradas existentes. Opciones para la búsqueda de las paradas de transporte público por ruta, estación o plano. La información proporcionada nos indica si el vehículo es accesible y / o si presenta aire acondicionado.
- Calendario y rutas – Información detallada tocante al calendario y rutas de todas las líneas de transporte público.
- Planificador de viaje de transporte público – El Sistema ofrece varias opciones de ruta incluyendo: ruta recomendada, ruta con la menor transferencia y ruta con el menor desplazamiento a pie.
- Modificación de rutas – Información acerca de las modificaciones en las rutas del transporte público.
- Mapa de información de tráfico – Para más de 30 calles e intersecciones se proporciona información detallada acerca del tráfico y el retraso esperado. El mapa presenta información acerca de las obras en curso, eventos públicos y otras circunstancias que afecten al tráfico.
- Calculador de tarifa – Basándose en los datos introducidos por el usuario y teniendo en cuenta el número y frecuencia de los viajes el sistema calculará el viaje en transporte público que mejor se adapta.



- Comprobación del remolcado del vehículo – Se puede verificar si un vehículo ha sido remolcado y en que aparcamiento está localizado.
- Versión móvil de esta página web (m.sofiatraffic.bg) – Esta plataforma para móviles contiene todas las novedades, artículos, etc., localizadas en esta página. A través de un menú rápido e intuitivo, el usuario puede fácilmente obtener la información necesaria. Conviene que sea usado en las paradas del transporte público para recibir información en tiempo real acerca del tiempo que resta para la llegada del vehículo únicamente introduciendo el código identificativo de cada parada de transporte.



Información del movimiento de vehículos en tiempo real



+ info

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 El estudio completo se puede descargar [aquí](#)



COMPONENT 3
REGIONAL STUDIES OF
SUSTAINABLE MOBILITY

THEMATIC: OTHERS

REGION: SOFIA



European Union
European Regional Development Fund



BEST PRACTICE 2

REAL-TIME PUBLIC TRANSPORT INFORMATION

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DATA COMPILATION TEMPLATE

1.1. IDENTIFYING DATA OF THE PRACTICE

🚦 Name of the practice/project.

Real-time public transport information

🚦 Issue tackled by the practice.

Promoting public transport

🚦 Name of the contact person.

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🚦 Position of the contact person.

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1.2. OBJECTIVES OF THE PRACTICE

Increasing the number of passengers by providing reliable real-time information regarding public transport services.

1.3. PROCESS AND DETAIL CONTENT OF THE PRACTICE (DESCRIPTION)

On Sofia Urban Mobility Centre website (www.sofiatraffic.bg) are available various e-services, such as:

- Virtual Tables
- Schedules and routes
- Public transportation route
- Route changes
- Traffic information map
- Tariff calculator
- Check for towed-away vehicle
- Interactive discussion
- Mobile version of site

Virtual tables – Real-time information for the remaining time for vehicle arrival on each of the 2500 public transport stops. Options for search of the public transport stop by route, by station or map search. Information is provided whether the vehicle is accessible and/or air-conditioned.

Schedules and routes - Detailed information regarding schedules and routes of all public transport lines.

Public transport journey planner - The System offers several route choices including: recommended route, route with the least transfer and route with the least walking.

Route changes - Information about changes in the routes of public transport

Traffic information map - For more than 30 streets and intersections is provided detailed information about the traffic and the expected delay. The map presents information about ongoing repairs, public events and other events affecting traffic.

Tariff calculator – Based on data entered by the user regarding number and frequency of trips the system will calculate the most suitable public transport travel document.

Check for towed-away vehicle - You can verify whether a car was towed-away and at which car park is located.

Mobile version of site (m.sofiatraffic.bg) - Mobile platform contains all news, articles, etc., located on the site. Through fast and intuitive menu, the user can easily obtain the necessary information. Convenient to be used at public transport stops for receiving real-time information about the remaining time for vehicle arrival only by entering the unique code placed at each public transport stop.

1.4. ORIGIN

All real-time e-services are based on a high-technology system for management and control of the public transport, based on GPS positioning. All public transport vehicles are equipped with special devices. GPS system allows installing information boards at public transport stops showing the remaining time for vehicle arrival as well as providing real-time information in internet.

1.5. BODIES INVOLVED/IMPLEMENTATION

Sofia Urban Mobility Centre, MUSAT - Micro-processing devices and systems for transport.

1.6. FINANCIAL FRAMEWORK (FUNDING)

All costs related to operation and maintenance of the website and e-services are covered by Sofia Urban Mobility Centre – 100% municipally owned company.

1.7. LEGAL FRAMEWORK (CURRENT LAW AND INCENTIVES SYSTEM)

1.8. TARGET GROUP ADDRESSED BY THE PRACTICE

Public transport passengers (450 mil. for 2012) as well as users of other transport modes.

1.9. COMMUNICATION AND AWARENESS CAMPAIGNS

Press releases, SUMC website, Presentations, Interviews, Facebook

1.10. GEOGRAPHIC AND POPULATION SCOPE

- 📍 Geographic position (country, region or district or metropolitan area or municipality)

Sofia is the capital of Bulgaria. Sofia Municipality is an administrative and territorial unit.

- 📍 Extension.

The territory of the municipality extends on 1, 311 km² of which 245.5 km² residential and urban areas.

- 📍 Climatology.

Sofia has a humid continental climate with long winters and long summers. The average annual temperature is 10.3 °C. Summers are quite warm, though Sofia generally remains a little bit cooler than other parts of Bulgaria, due to its higher altitude. However, the city is also subjected to frequent heat waves with high temperatures exceeding 30 °C for weeks and approaching to 40 °C in the hottest days, particularly in July and August.

Springs and autumns in Sofia are very short. Generally they offer mild weather, but sometimes can experience either heat waves or snowfalls. With around 85 rainy days annually, the city receives an average precipitation of 610 mm a year, reaching its peak in the beginning of the summer when thunderstorms are not uncommon.

- 📍 Orography.

The municipality is located in the Sofia Valley with an altitude of about 550m.

- 📍 Population densities.

The population is 1 291 591 inhabitants (2011). 930 people/km² for 2010.

- 📍 Urban characteristics.

The territory of the municipality also includes the areas of 4 towns - Sofia, Bankya, Novi Iskar, Buhovo, and 34 villages,

- ✚ Urban growth trends.

The population density has been increasing, e.g. in 2009 it was 925 people/km².

1.11. AREA OF STUDY. ZONING.

The whole area of Sofia municipality.

1.12. SOCIOECONOMIC CHARACTERISTICS

- ✚ Spatial distribution of the population:

The biggest districts are: 'Liulin', 'Mladost', 'Poduyane' and 'Krasno Selo'; the territory of Sofia is 492,092 square kilometres.

- ✚ Population density:

930 people per square kilometre for 2010

- ✚ Population growth rates:

-1.1 % for 2011

- ✚ Distribution of family units.

- ✚ Age groups, aging index:

The average age is 35.3 years.

- ✚ Economic activity. Labour force and unemployment. Labour market.

- ✓ Unemployed (total/women/men).

For Sofia-City: 23 859 in total; 12 964 women and 10 895 men.

- ✓ Unemployment rate % (total/women/men):

1,1% for 2012 according to Eurostat

- ✓ Employment rate % (total/women/men):

55.7% of the population of 15 or more years – 60.1% men and 51.9 women (According to data from 2011)

Most developed: industry, construction, services.

- ✚ Employment generation:

1.13. AREAS OF STUDY DEVELOPED IN THE PRACTICE

- ✚ Public transport.




- ✚ Intermodality.

- ✚ Mobility management.

1.14. TIMESCALE

1.15. NECESSARY HUMAN/ECONOMIC/TECHNOLOGIC RESOURCES AND SKILLS TO REALIZE AND TO MANAGE THE BEST PRACTICE

1.16. MONITORING AND RESULTS

-  Proved successful.
-  Potential to be transferred to a different geographic area.
-  Tangible and measurable results in achieving a specific objective.