Integrated Transport Information and Navigation System (i-TINS)

Press Conference – Wednesday 19 March 2014
Jumeirah Hotel – Etihad Towers – Abu Dhabi
Surface Transport Master Plan
and
Intelligent Transportation Systems Strategy
Main Pillar of the Surface Transport Master Plan

Global City with Sustainable Transport

Abu Dhabi Plan 2030 calls for the implementation of a unique and sustainable transportation system that follow the economic prosperity, social development and considers the environment and is based on the following main pillars:

1 – Develop and Expand the Road Network
2 – Develop Public Transport Modes
3 – Develop Transport Regulations and Policies
4 – Implement Intelligent Transportation Systems
Intelligent Transportation Systems Strategy

Smart Systems for Sustainable Transport

- ITS Strategy was published in September 2010 and was approved by the Executive Committee of the Executive Council

- The Strategy was developed in accordance with the strategic objectives stated in the STMP meeting the needs of the stakeholders, road users and passengers

- It contains an action plan to deploy a list of key projects that will serve all transport modes

- The strategy is updated on regular basis, the next major update is scheduled in 2015
ITS: The 3 Step Process

What is ITS?

A set of integrated transportation management systems that encompasses a broad range of information systems, communications and technologies to enhance the safety, efficiency and operation of the transportation systems.
ITS Strategy Development Process

The strategy was developed in a systematic and collaborative manner to address key stakeholders’ needs and to ensure the integration of all modes and infrastructure:

Build an integrated, coordinated, multi-modal and multi-agency world class ITS in support of the fulfillment of the safety, mobility and environmental needs of Abu Dhabi Emirate
Integrated Transport Information and Navigation System (i-TINS) Project
Previous Conditions

- Users have no access to real time transport information
- Users have no access to unified platform for transport services
- No integration between the various transport systems
Project Objectives
Project Objectives

Design, Develop and Install the Integrated Transport Information and Navigation System to:

- Make available to road and public transport users the latest information and services provided by DoT and Key Stakeholders through a unified system.
- Provide real time information about the traffic conditions through smart phones, internet and in-car satellite navigation systems
- Collect and archive transport / traffic data to be utilized by specialist to evaluate and improve level of service of the transport network.
- Training and development of UAE nationals workforce to operate and manage the system
System Operational Context Diagram
System Operational Context Diagram

Main Sources of Data and Information
- CCTV
- DoT Sources (Bus AVM, Traffic Counting, Etc.)
- TransAD
- TMC Operators

Information Processing
- i-TINS Data Fusion And Processing

System Outputs
- GeoTrans Website
- Darb Mobile App
- In Car Navigation System
- Darb Website
System Outputs
Interactive Information on “Darb” Website

- Real-time traffic updates
- Traffic incidents and road works notifications
- Customers Geofeedback on Darbi to report transport problems and issues

www.darb.ae
In-Car Navigation Satellite Systems

i-TINS output to in-car navigation satellite systems (under development)

- Real time traffic update to in car sat nav
- Advice to motorist to avoid congestion and incident locations
- Ability to plan your journey
On DoT Geotrans

- Provide traffic data for transport planners to evaluate and improve network performance
- Executive dashboard for management to access KPI and Level of Service and other useful information
Lunching of Darb Mobile App
“Darb” Smartphones Application
“Darb” Smartphones Application

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<tr>
<th>App Services</th>
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<tr>
<td>Developed for</td>
<td>IOS (iPhone/IPad)</td>
<td>IOS 7.0</td>
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<tr>
<td></td>
<td>(Phone/Tablet)</td>
<td>Android 4.1</td>
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<td>Based on DoT Map Engines</td>
<td>ADSIC ESRI NAVTEQ Navigable Network</td>
<td>Base Map</td>
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Car Travel

- Real-time information about traffic conditions on the road network
- Real-time traffic incidents and planned events
- Route guidance: Fastest, Shortest
- Preferred destinations
- Preferred routes (origin – destination)
Public Transport

- Identify near by bus stops through a navigable map
- Selecting the required bus stop
- Display of bus route numbers, directions and arrival times
- Display the bus stops and estimated arrival time at destination
Maritime (Ferry Services)

- Display Ferry Route/Schedule
- Display Ferry Bus Service/Schedule
- Display Bus Stops for Ferry Buses
Airport Services

- Access to ADAC mobile web service
- Flight arrivals and departure information and updates
- Public car parks locations and availability at airport terminals
- Other Abu Dhabi Airport Services
Parking “MAWAQif”

- Pay for on-street parking
- Access m-Mawaqif site to top-up / register
- Locations of multi-storey public car parks
Book A Taxi Service

- Book a Taxi Service directly through TransAD
- Taxi dispatched automatically to your exact location
- Users can track the booked taxi
- Estimated arrival time
- Taxi number and driver’s telephone number
Traffic Updates

- Traffic updates available as a notification.
- Special Events available as a notification.
- Detail about each event and update available.
- Traffic Twitter feed available.
Darbi (Geo-feedback)

- User can report DoT service or infrastructure problems also take / send photo of the incident.
My Accounts

- My Accounts accesses personalized services.
- My Routes
- My Mawaqif
- My Places
- My Notifications
- Provides ability to edit information about your services
- Entries can be edited and deleted from this module
Thank You