



**XXIV<sup>th</sup> World  
Road Congress  
Mexico 2011**  
Mexico City 2011.

# Social Innovation and Intelligent Transport Systems

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# Intelligent Transport Systems



**Real-Time Operations**

**24 hours x 7 days a week**

# Network operations use ITS ...



**accidents**



**capacity overload**



**road works**



**events**

**Traffic situation  
analysis / forecast**

**... to remove and reduce traffic problems**



# The I.T.S. Handbook from PIARC

## 2<sup>nd</sup> Edition

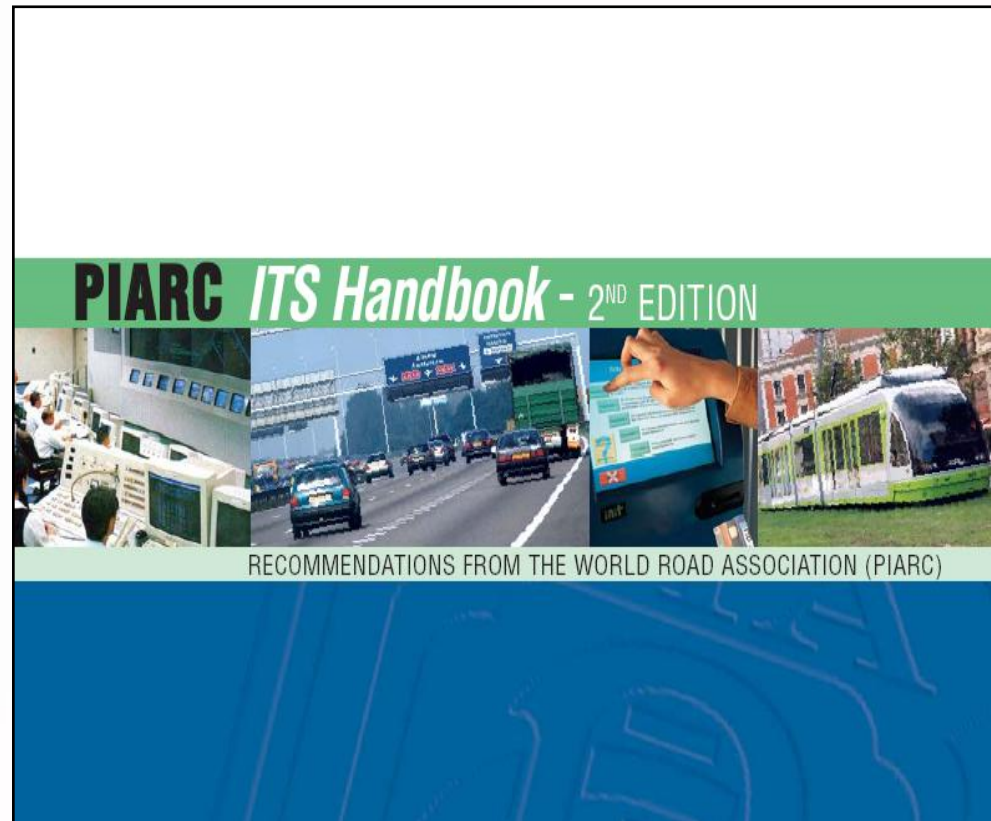
English

French

Chinese

Spanish

2011 on-line with  
free down-load for  
teaching and training  
purposes





# Comité Technique sur l'Exploitation des Réseaux

L'exploitation des réseaux routiers et les activités qui la composent

Rechercher...

MENU PRINCIPAL

Exploitation des réseaux

1 Domaine

2 Contenu

3 Rôle de l'ITS

4 Manuels

Manuel STI

Exploitation des réseaux

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Terminologie

Remerciements

OUTILS

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Liens utiles

Recherche

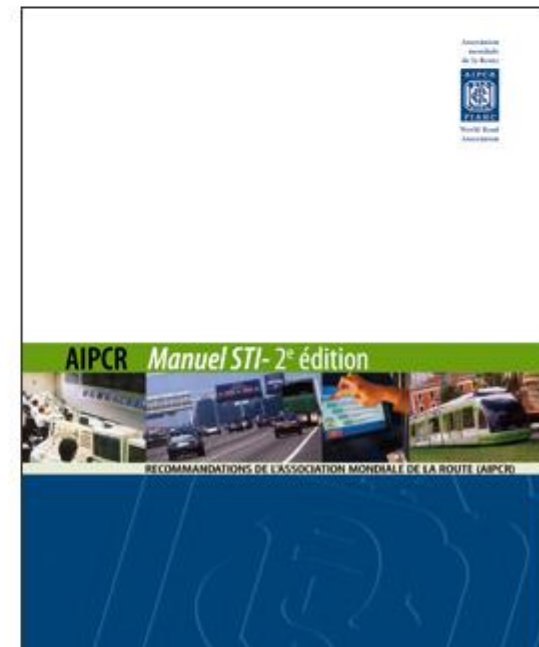
## ■ Systèmes de Transports Intelligents - Index



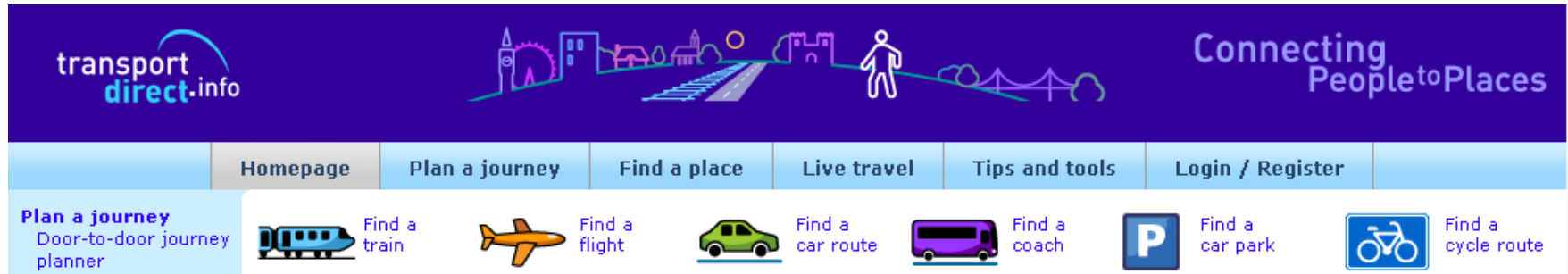
## Table des Matières - Manuel STI

[its-handbook.piarc.org](http://its-handbook.piarc.org)

- **1. Que sont les systèmes de transport intelligents ?**
  - 1.1 Définition des STI
  - 1.2 Contexte des STI
  - 1.3 Domaines d'applications des STI et usages
  - 1.4 Concepts de base
  - 1.5 Systèmes évolués de gestion du trafic
  - 1.6 Systèmes évolués d'information aux voyageurs
  - 1.7 Systèmes évolués de contrôle de véhicules
  - 1.8 Systèmes d'exploitation de véhicules commerciaux
  - 1.9 Systèmes évolués de transports en commun
  - 1.10 Systèmes de paiement électronique
  - 1.11 Systèmes de sûreté et d'intervention en cas d'urgence
  - 1.12 Conclusions
- **2. Comment fonctionnent les systèmes de transport intelligents ?**
  - 2.1 Technologies des STI
  - 2.2 Acquisition de données
  - 2.3 Obtention des informations : Traitement de données
  - 2.4 Communications et échanges de données
  - 2.5 Utilisation de l'Information
  - 2.6 Paiement électronique
  - 2.7 Réseaux jumelés



# “Transport Direct” in the UK



The header features the Transport Direct logo on the left, a central illustration of a cityscape with a person walking, and the slogan "Connecting People to Places" on the right. Below this is a navigation bar with links to "Homepage", "Plan a journey", "Find a place", "Live travel", "Tips and tools", and "Login / Register". A secondary row of icons provides quick access to "Find a train", "Find a flight", "Find a car route", "Find a coach", "Find a car park", and "Find a cycle route".

<http://www.transportdirect.info/>

**Plan a door-to-door journey** [More...](#)







From

To

Leave

Show  Public transport  Car route

**Tips and tools** [More...](#)

-  Check CO2 emissions
-  Add Transport Direct to your website for free
-  Speed up your travel searches with our free toolbar
-  Get live departures on your mobile
-  Get live departures through Digital TV
-  Freight Grants - Environmental Benefits Calculator

# Communicating in real time

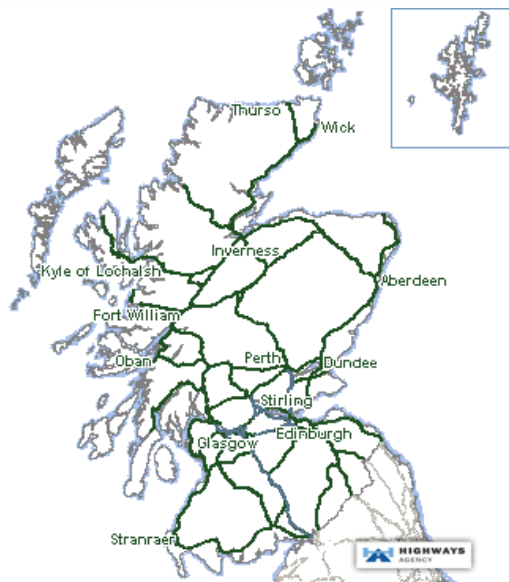


- Changeable message signs are widely deployed by road operators
- Smart phones and the mobile internet bring new potential: the “connected vehicle”
- Mobile Internet: Microsoft, Google, and Yahoo! all have real-time traffic overlays on their mapping products



# The Traffic Scotland Web Service

(<http://www.trafficscotland.org>)



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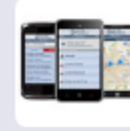
## Journey Times

You can use our Route Journey Times tool to get the latest travel times between our destination points.



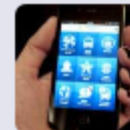
## RSS / Twitter

We publish live traffic information as RSS Feeds and also as Twitter updates. Find out what information is available here.



## Mobile Website

Traffic Scotland's new mobile optimised website is available now at [m.trafficscotland.org](http://m.trafficscotland.org).



## Smartphone Apps

Traveline Scotland, in partnership with the Traffic Scotland service, provide free Android and iPhone smartphone apps. Available now at the Android and Apple App Stores.





# Tweeting about the traffic situation



## Traffic Update

**@traffic\_update** United Kingdom

*When travelling becomes a pain in the bumper, use Traffic Update to stay ahead of the traffic*

<http://www.traffic-update.co.uk>



# “Crowd sourcing” map data



TomTom Map Share 

Give your map a daily boost with Map Share

Map corrections 12:34

 <b>(Un)block street</b>	 <b>Reverse traffic direction</b>	 <b>Edit street name</b>
 <b>Add missing POI</b>	 <b>Edit POI</b>	 <b>Report other error</b>
<b>Done</b>		

Current position:  
Engelse Pelg Steeg

TomTom have 16 million Map Share™ community members



# Social network using GPS smart phones



“Because the people input it, we know what's going on on the road, we know about road closures, we know about exits not working, we know about signals not working, things that we can actually effect and improve people's driving”

Michal Roman Habdank, a spokesman for Waze.com.



# Why road managers have to get connected

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- Early notification of incidents and accidents
- Greater ability to influence drivers and routeing
- Increased safety and smoother traffic flow
- More and better quality traffic data and intelligence
- Road condition alerts
- Reduced signage costs
- Increased journey time reliability
- Improved enforcement (e.g. speeding, over-weight vehicles)
- Great PR opportunities



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# Thank you for your attention!

Please visit the ITS Handbook & Network  
Operations **Web Site**

[www.its-handbook.piarc.org](http://www.its-handbook.piarc.org)

<http://road-network-operations.piarc.org>

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