INTERNATIONAL AWARDS

More than 240 applications from over 40 countries were submitted for the 2013 edition. UITP revealed the winners at the 60th UITP World Congress & Exhibition in Geneva on 26 May 2013.

Business model (i-move 2.0)

- **MTR Corporation Limited (Hong Kong, China)**
  'Rail plus property development business model in Shenzhen Longhua Metro Line'.

Customer Service

- **Swiss Federal Railways (SBB/CFF/FFS) (Switzerland)**
  'SBB.Connect – travelling with friends'.

Integrated mobility

- **Land Transport Authority (Singapore)**
  'MyTransport.SG – your one-stop integrated transport companion'.

Information Technologies

- **IVU – Traffic Technologies AG (United Kingdom)**
  'Open data for London buses: new lean United Real-Time Interface (URA) for real-time data from Countdown 2 system using cloud technology'.

Design

- **RATP Group (France)**
  'Osmose Bus Station'

Political commitment

- **Istanbul Metropolitan Municipality (Turkey)**
  'Istanbul's 2023 Vision'.

HONG KONG, CHINA

Rail plus Property Development Business Model in Shenzhen Longhua Metro Line

Project submitted as part of the UITP Grow with Public Transport Awards.
All information correct as of July 2013.

Project/initiative:	Rail plus Property Development Business Model in Shenzhen Longhua Metro Line
Organisation:	MTR Corporation Limited http://www.mtr.com.hk
Launch date:	08/2011
End date:	12/2016

Description

Established in 1975, MTR operates a network of 9 railway lines in Hong Kong, carrying an average of 4.9 million passengers every weekday. Building on its success in Hong Kong, the Corporation has a vision to expand into the Mainland of China and the international market. To date, MTR has railway investment projects in Beijing, Hangzhou and Shenzhen, as well as franchise operations in London, Stockholm and Melbourne. To achieve this overseas growth vision, business model innovations are often required so as to satisfy the needs of governments and different stakeholders.

In August 2011, MTR won a bid for a property development site at the Shenzhen Longhua Metro Line Depot with a total developable gross floor area of 206,167 square metres. This is a first-of-its-kind project, successfully modifying the rail plus property development business model in Hong Kong to suit the local context with part of the net

profit generated from this project to be shared with the Shenzhen Municipality to support metro development in Shenzhen.

The rail plus property development business model has been successfully implemented in Hong Kong as a means to internalise the added external economic benefits along the railway corridor for subsidising railway construction and operations. The business model has substantially relieved the burden on the government and released more public funds for other social welfare uses. Under this business model, the property development rights of some stations or depot-associated sites are bundled with the railway project. With the development profit generated from these developments, the return of the railway project is able to increase to a commercially viable level.

The business model also enables MTR to create a sustainable community along the railway alignment. Property developments are integrated with the railway stations, giving residents convenient access to public transport. This, in turn, stimulates patronage and enhances land values. Fares can also be kept at reasonable levels, without the need for government subsidies on day-to-day operations.

With plans to develop a metro network of over 500km by the year 2030, Shenzhen Government was seeking an innovative approach to fund the Shenzhen Metro Longhua Line and issued an invitation of investment by the end of 2003. MTR has been in discussion with Shenzhen Government since then to develop a business model based on the successful model in Hong Kong. With the deal modifications accepted, the investment into Longhua Line under a Build-Operate-Transfer model was first approved in January 2009. This is followed by the award of the property development site at the depot in August 2011.

What are the project/initiative's innovative features?

The implementation of the rail plus property development model in Mainland China is limited by legal constraints. Unlike the Hong Kong model, the grant of land use rights must be by competitive public sales through tender, auction and listing. Bundling rail and property development into a single deal is therefore restricted.

To satisfy the constraints, the model is modified by structuring rail and property development into two separate deals. The rail deal, approved in 2009 under a Build-Operate-Transfer model requires MTR to invest, build and operate the line. Concurrently, MTR fully participated in advance in town planning along the railway corridor to ensure planning and land use is socially and commercially sustainable. The Shenzhen Government entrusted MTR to carry out the railway enabling works to ensure full integration of rail and future property development and also to implement the Transit Oriented Development (TOD) planning along the Longhua Line in future.

The award of the property development site in 2011 marks the first-of-its-kind business model in China. MTR can realise the benefit of such integrated model, while the Shenzhen Municipality can use the shared profit to support metro development in Shenzhen.

Contribution to sector ambition of doubling the public transport market share

Rail development will significantly improve land values around stations. The business model enables the rail operator to carry out comprehensive TOD planning and integrated development of the rail and property development site and further increases the overall property value. In many fast developing cities where fares need to be maintained low, the profits shared from property development will be a particularly-needed relief in the financial burden for the government in further expanding the metro network, which leads to an increased public transport market share.

Conversely, the participation of an operator in town planning along the railway has optimised land use and intensified development density on the railway land parcels around stations which will help improve railway ridership and hence its financial viability for participation in railway development.

Also, the integrated rail and property development master planning and design would ensure effective and efficient connectivity between property and railway, thus facilitating a better public transport offer.

How could this be replicated in another country/region/city?

This is a showcase project to structure the rail plus property development business model with flexibility to adapt to local constraints. The modified business model is able to address the particular challenges and establish a way forward that is acceptable to major stakeholders and yet able to achieve the ultimate goal. The project can be replicated in different cities in China as well as other countries. Some other cities in China have been considering the application of similar models in their railway development.

The effect would be especially significant in the transit-oriented development (TOD) mode for the new town areas as it not only internalises increased land values to fund rail construction, but also enhances the ridership and hence its financial viability.

Partners

Different parties in the Shenzhen Municipality provided strong support and were the key to the successful implementation of this model. The discussion started in 2003 with the rail and property development deals finalised in 2009 and 2011 respectively. During the period, MTR was working collaboratively with various government bureaux on town planning, railway planning and investment structures. The Shenzhen Government had also entrusted MTR to carry out the railway enabling works and implement the TOD planning along the line.

With support from the Mainland China Central Government and Hong Kong Special Administrative Region Government, the liberalisation measures under the Mainland and Hong Kong Closer Economic Partnership Arrangement (CEPA) have been extended to the rail transport services which are under the Catalogue of Restricted Foreign Investment Industries. This allows Hong Kong service supplier to form wholly-owned units to construct, operate and manage the Shenzhen Longhua Line project, thus encouraging closer cooperation and better knowledge transfer to the project.

SWITZERLAND

SBB.Connect – travelling with friends

Project submitted as part of the UITP Grow with Public Transport Awards.
All information correct as of July 2013.

Project/initiative:	SBB.Connect – travelling with friends
Organisation:	SBB CFF FFS (Swiss Federal Railways) http://www.sbb.ch/home.html
Launch date:	12/2012
End date:	Ongoing

Description

SBB Mobile is the official mobile timetable app (iOS, Android, Windows) for Swiss public transport. All services provided by transport companies in Switzerland are integrated in this official timetable. As it offers comprehensive information on the Swiss train timetable – including delays and other functionalities – SBB Mobile is one of the most popular apps in Switzerland, with more than 2.6 million downloads. This broad user base gave us a unique opportunity to build the biggest "interactive social community" in Switzerland. SBB.Connect went live in December 2012. A new mobile app from SBB that works perfectly in sync with SBB Mobile (via InApp Link), it offers many ways to make people's journeys more enjoyable. You can find out whether your Facebook or Twitter friends are on the same train, tram, bus or boat as you. You can

then meet up with them on the journey and (physically and virtually) chat and travel together. By "checking in" your train, the app is capable of recording the distance you travel. The opportunity to collect points and badges based on travel activities – and thereby benefit from vouchers at a later date – is another incentive to log in frequently. SBB.Connect is free and works on iOS and Android smartphones. The main idea behind this project was to build on the fact that more and more of our clients plan their travel with a smartphone. The new SBB.Connect product creates a community for each public transport connection. It makes travelling more attractive because you can see when your friends are travelling on the same route as you. Travelling then becomes more than just getting from A to B: you can interact spontaneously with people you know or get to know new people on the same transport mode. To let people know at what time respectively on which route you are travelling, you "check in" either via the InApp Link in the timetable app (SBB Mobile) or directly in the SBB.Connect application. With just a few clicks your friends are informed about your travel plans and can for example adapt their schedule so that you can play a card game together, have a chat or enjoy a shared bottle of wine in the dining car. Since the launch of the app two month ago, 25,000 people have already linked up to SBB.Connect, they have checked in 227,608 times and have already travelled 6,994,225 km together.

What are the project/initiative's innovative features?

SBB.Connect thus addresses and also promotes the biggest advantages of public transport in comparison to travelling individually by car: the much more efficient use of travel time. Reading a book in a train, surfing the internet in a bus or listening to music in a tram are already things that commuters and travellers are used to. SBB.Connect elevates the activities on a train to a higher level by combining the growing virtual world with the physical world. However, using public transport as a way to systematically meet friends and get to know new people has not yet been tried on a nationwide scale. SBB.Connect gives Swiss residents exactly this possibility – and not only in one city or in one region, as it is possible to "check in" on any service in Switzerland. SBB.Connect even covers the major international connections.
One of the main criteria was to make the interface extremely user friendly, so that letting your friends know about your travel schedule (if you are in the mood for a chat) is the easiest thing in the world. Therefore, an InApp connection with the already heavily used timetable app was at the core of the software design. This app is truly the first of this kind. It is clearly new territory, but is something that people will soon get used to. It is a step towards making public transport even more multifaceted and useful.

Contribution to sector ambition of doubling the public transport market share

56.5% of Swiss residents over 16 already own a travel card (e.g. Half-Fare or regional travel card) and thus use public transport regularly. Switzerland has by far the highest share of passenger-km per resident in Europe in terms of public transport usage. Around a million people use SBB's train services every day. The public transport network is extremely dense, with hourly connections even to quite remote villages. In such a saturated environment, it is not easy to increase the share of the public transport market. Only with really innovative ideas is it possible to make travelling

more interesting and therefore also attractive for the client. SBB.Connect is a cost-efficient option to make travelling more personal and meaningful. The underlying idea is to enable the client to use his or her travel time even more efficiently. Why wait to meet a friend in the next city if by chance he is sitting in the same train? With SBB.Connect public transport is no longer just a means to get from A to B. It brings people together and clients get the feeling of being "at home on the train".

How could this be replicated in another country/region/city?

The concept of SBB.Connect could be adapted extremely easily to another country, as only the inApp link needs to be created with existing route-planning apps. The concept is based on real-time timetable apps, which are already offered by most transport companies in Europe.

Partners

In addition to the app-creators of SBB.Connect, the same partners as for SBB Mobile (official timetable app) or other projects relating to public transport timetables have been involved. This group comprises all Swiss transport enterprises.

SINGAPORE

MyTransport.SG – Your One-Stop Integrated Transport Companion

Project submitted as part of the UITP Grow with Public Transport Awards.
All information correct as of July 2013.

Project/initiative:	MyTransport.SG – Your One-Stop Integrated Transport Companion
Organisation:	Singapore Land Transport Authority (LTA) http://www.lta.gov.sg
Launch date:	10/2010
End date:	Ongoing

Description

"Our vision for Singapore's land transport is to provide ***more connections, better service*** and to support an ***inclusive, liveable community*** for an improved travel experience that contributes to a better quality of life for all." Mr Lui Tuck Yew, Minister of Transport (Singapore), January 2013.

Singapore's 5.2 million residents today make over 11 million journeys daily, which will increase to over 15 million journeys by 2020. Given the land constraint of our small island state, the projected increase in travel demand must be met largely by public transport as it is the most space-efficient means of carrying large numbers of people. To further enhance and promote inter-modal transport such as car-bus-train travel, an integrated solution to provide info-on-the-go travel advisory services was envisioned.

This initiative led to the launch of **MyTransport.SG** (available on both App Store and Google Play) in 2010. MyTransport is the gateway to all commuting needs and is a single source of trusted transport information offered through various digital channels.

It empowers commuters, motorists and cyclists to make informed decisions and better plan their journey with information on the nearest bus-stops and taxi ranks, available cycle paths, parking location and availability, real-time road conditions and even the latest life-style events and promotions. This information is clearly plotted out for users within a built-in map, putting information along the island's transport network at their fingertips.

It also enables the public to give feedback about road defects and report crowdedness at transport nodes with snap and send pictures leveraging on location-aware features on smart devices.

While LTA provides basic layers of information and closely monitors transit performance through advance data analytics, it promotes open data by sharing transport data to co-create personalised transit apps which are readily available on any devices.

What are the project/initiative's innovative features?

The key features behind the success of **MyTransport.SG** are:

Integrated Services – a trusted one-stop channel that offers the public easy access to a suite of transit and traffic info services, integrating real-time traffic, news and alerts, weather, parking availability with public transport information.

Open Data - transform LTA's transport data into high-impact commuter applications, and make transport info easily accessible on various mobile devices. Anonymous data (up to 3 years) are offered to research institutes such as MIT, ETH & Stanford for commuter behavioural studies for longer term planning to better understand the demand management of public transport.

Personalised Services – give commuters the power to decide and customise their favourite transport services on their devices. The concierge service allows commuters to select preferred routes and destinations together with frequently accessed information into a personalised dashboard. Alert services on train disruption and flooding on roads are also available.

Contribution to sector ambition of doubling the public transport market share

Singapore's daily morning peak hour public transport modal share was 59% in 2008 and **we aim to increase this to 70%** by 2020 when daily journeys are projected to increase by 60%.

While Singapore has embarked on an ambitious plan to double its rail network from **178 km** to **278 km** by 2020 and further expansion to **360 km** by 2030, current transport resources must be fully optimised to address immediate challenges.

MyTransport.SG aims to serve this purpose by offering an integrated platform to promote inter-modal information services. By offering commuters a variety of transport information to make informed decision on how best to use these modes seamlessly, it can be used to influence commuter preference to embrace public transport as the mode of choice. The monthly hit-rate of MyTransport.SG (both portal and mobile) has grown more than **30 times** from its initial launch in 2010 to **6.1m** today. In addition, LTA's open data initiative has nurtured more than 30 3rd party transit apps.

How could this be replicated in another country/region/city?

The significance of this initiative is not the technology, but rather the way it empowers commuters in significant new ways. Singaporeans now have ready access to information that could help them at work or at play. Entrepreneurs and industry players are able to create useful new software apps that overlay, or 'mash', different sets of LTA data to offer new transport-related solutions. The possibilities are endless.

MyTransport.SG is built upon a strong Public-Private-People Partnership foundation to create a vibrant and integrated transport eco-system and this can be easily replicated by other cities.

Partners

An ecosystem of partners including:

Public Transport Operators (eg. Bus, Train, Taxi Operators) – delivering of quality and innovative integrated mobility services and information

Other Government Agencies (eg. National Parks Board and National Environmental Agency) – providing cycling facilities, walking path and weather information

3rd Party Developers (eg. Gothere.SG, SGNextBus) – developing innovative, reliable and cost efficient transport-related mobile solutions and services for diverse needs

Mobility Service Companies (eg. Google, GEWI) – creating integrated mobility services on portals and navigation devices

UNITED KINGDOM

Open data for London Buses

Project submitted as part of the UITP Grow with Public Transport Awards.
All information correct as of July 2013.

Project/initiative:	Open data for London Buses: New lean Unified Real-Time Interface (URA) for real-time data from Countdown 2 system using cloud technology
Organisation:	Joint application: IVU Traffic Technologies *and* Transport for London, London Buses www.ivu.de www.tfl.gov.uk
Launch date:	06/2012
End date:	Ongoing

Description

Since 2010, Transport for London (TfL) have published operational data through a process known as data syndication, in line with the objectives of the Greater London Authority (the Office of London Mayor, Boris Johnson).

Data syndication formed part of a wider TfL Digital Strategy where the Authority would not generally produce smartphone or other apps. The primary reasons being that a) the cost of keeping up to date with the number of emerging platforms was prohibitive and b) smartphone app development is not core business and c) by following a data syndication route, innovation was far more likely.

Following this policy, real-time bus arrival data for over 19,000 bus stops and 8,500 vehicles has been made accessible through an official, supported and open interface.

The data is used in third-party information services like mobile apps, websites, corporate signs, etc. The service was officially launched in June 2012 and was immediately adopted, especially by the community that provides mobile smartphone apps.

Within the few weeks following the release of the service, the usage of the new service grew rapidly, whereas in parallel the server load of TfL's conventional countdown website dropped by 50%.

This proves that a) there is high demand for this service and b) prior to the service release, people were 'abusing' the conventional website to retrieve the real-time data – regardless of whether it was officially provided.

The interface service is an integrated part of TfL's 'Countdown 2' system, which provides real-time information on London Bus services consistently through all information channels: classic signs at stops and stations, (mobile) web services, SMS and the new interface that has been installed and published called URA (Unified Real-time API). Its lean design allows for direct access by clients with limited resources (CPU, RAM, storage), without need for an intermediate server process. Nevertheless, the same API is also used to feed the data in stream format into other servers.

The server infrastructure that provides the interface is operated in 'the cloud', which gives high performance and flexibility to adjust to growing/varying usage.

What are the project/initiative's innovative features?

TfL is one of the first large public transport executives (PTEs) to provide free and open access to real-time data. This enhances the development and publication of innovative information services, especially in the form of mobile apps for all popular smartphone platforms.

From a technical perspective, the innovative design of the URA interface and the server IVU.realtime.cloud include several noteworthy features:

- Lean, simple and easy-to-implement interface based on HTTP and JSON;
- Suitable especially for clients with limited resources rather than complex servers;
- Static and dynamic network information, as well as real-time trip information in one single interface, i.e. no need for metadata to use the service;
- Integrated search and filter functionality;
- Request/response and push/streaming modes available;
- Scalable server architecture for in-house or cloud operation.

Contribution to sector ambition of doubling the public transport market share

Providing real-time information is one of the key factors to enhance public awareness and to facilitate easy use of public transport, which in turn is crucial for increasing market shares.

Classic information channels, like signs at stops / stations and (mobile) web services, can only partially cover the growing need for real-time information. Especially in the case of electronic signs, they are very costly for a PTE in terms of investment, maintenance and operation.

In parallel, a rapidly growing sector of commercial and non-commercial online information services has emerged, and it is willing to incorporate public transport real-time data.

The URA/IVU.realtime.cloud approach leverages this trend to broaden the reach of information on public transport and to support the easy use of public transport.

How could this be replicated in another country/region/city?

The specification of the URA interface is open and the intention is that IVU will submit it as a future standard for transport operators. The standard is not tailored to TfL-specific terminology, so it can immediately be adopted at other PTEs. The interface is already starting to be used for some projects in Germany.

Due to the scalable server infrastructure, the system can be easily adopted to meet other regional needs. The operation of the system can be either in-house with the PTE or cloud-based.

The real-time information can be taken from any existing ITCS/AVL/AVM system, using the well-established standard interfaces in accordance with VDV or SIRI.

FRANCE

Osmose Bus Station

Project submitted as part of the UITP Grow with Public Transport Awards.
All information correct as of July 2013.

Project/initiative:	Osmose Bus Station Part of the EBSF R&D Project, financed under the European Commission's FP7 programme
Organisation:	RATP Group www.ratp.fr
Launch date:	06/2011
End date:	02/2012

Description

The RATP Group has launched an innovative bus station demonstrator in Paris called Osmose as part of the EBSF (European Bus System of the Future) project. The purpose of this operation is to test new services for passengers and the local community in one multifunctional place, all designed to a high standard to make the bus system more attractive.

The stop has a surface area of 85m², with a sheltered area of approximately 35m² (compared to 6.5m² in the previous standard shelter). This area has a wooden floor and is large enough to hold alighting and waiting passengers, who can circulate freely in a crossover space. It is of course accessible to disabled persons (wheelchair users and people with visual or hearing impairments). The stop includes a wide range of features.

Easier access to information

• Two real-time information screens (showing next buses due and main disruptions on the multimodal network).

• Two interactive information touchscreens, accessible to wheelchair users (transport information, local points of interest, latest news in the local area).
• Resized and backlit signage to facilitate visual accessibility.
• Conventional information panels with maps and timetables.
• Two backlit totem signs to identify the station on one side of the sign, as well as to give information on local transport services on the other side of the sign.

Innovative services
• A mini-outlet corner for mobile retailers (e.g. coffee, snacks, juices).
• An interactive terminal with advertising about Paris.
• A self-service station for electric bikes.
• A self-service library hosting a book-crossing service.
• A public Wi-Fi hotspot and power outlet to charge personal devices.
• A defibrillator for emergency situations.
• Ledges on which to place bags and a courtesy mirror.

A comfortable atmosphere
• Original ceramic benches (11 seats).
• Atmospheric lighting that varies according to the time of day or night.
• Background music broadcast through an invisible sound system that limits the noise level to the bus stop area.
• An original general design inspired by the Paris transport standards (Guimard-style canopy, bevelled white tiles for the benches).

What are the project/initiative's innovative features?

This station is innovative in terms of its functionalities, the technologies used, and the working methods adopted in the design stage.

1. The entire solution is based on a complete functional analysis of waiting time in bus systems, bearing in mind that the bus station must be included in the streetscape.
2. The station is therefore a place in its own right, combining two half-products: a transport station for the bus passengers, and an urban space designed for the local community and passers-by.
3. Accessibility objectives were taken into account from the beginning (e.g. resized and backlit signage, sound design).
4. The new features like the library, the retail corner, the original furniture design, and the audio and visual design create a serene and harmonious space, despite moments of crowding.
5. New forms of technology are carefully and discreetly included: all the information displays are connected in IP mode and new touch screens bring transport services up to the level of computer tablets.
6. The modular design of the station means that its functions can evolve over time as required.

Contribution to sector ambition of doubling the public transport market share

The bus station demonstrator has achieved very positive results.

1. As a form of research, funded by the European Commission (EBSF project) and the RATP Group, the proof of concept has been established: a multifunctional bus station can play a major role in making the bus an appealing mode of transport; and the station can fit into a compact area on a pavement if it is very well designed.
2. As a service, the station was highly appreciated by the users (98% of satisfied passengers); almost all the included services were appreciated.
3. As an event, the station was a real breakthrough in terms of attracting very high levels of worldwide press attention.
4. As a business tool, the new concept has changed the strategies previously adopted by urban space stakeholders: the city of Paris has decided to enhance stations through its future bus shelter tenders, and urban furniture operators are already studying modular and standardised solutions to include in their offers in response to the municipal tenders.

More than a design case, this station has a real business case, and has paved the way for new business models.

How could this be replicated in another country/region/city?

The Osmose bus station for EBSF has shown how to create new solutions and new business models to facilitate the replication of the project.

- On a large scale in Paris: the city of Paris has already decided to include other enhanced stations in the next bus shelter tender.
- In the Paris region: municipalities will be contacted before their own future bus shelter tenders, because the demonstrator must be kept in place (TBC).
- In France and Europe: the demonstrator has been presented to national transport associations and to urban furniture operators to show how the bus stops have the potential to become a real feature in the urban landscape, gathering local services (in addition to the transport functions).

Partners

- Co-financing: European Commission (Research and Development Framework Programme 7)
- Framework project: EBSF, European Bus System of the Future, led by UITP
- Land authorisation: the city of Paris
- Designer: Marc Aurel
- Manufacturer of the station and seats: Metalco Mobilconcepts
- Lighting concept: Philips
- Sound designer: Audionaute
- Passenger information systems developer: IXXI (RATP subsidiary)
- Electric bikes: Tracetel and Arcade
- Urban advertising terminal and maintenance of the station: JC Decaux
- Retail corner: Promométro (RATP subsidiary)
- Local information designer: Pages Jaunes
- Book-crossing library manager: Circul'Livre

TURKEY

Istanbul's 2023 Vision

Project submitted as part of the UITP Grow with Public Transport Awards.
All information correct as of July 2013.

Project/initiative:	Istanbul's 2023 Vision
Organisation:	Istanbul Metropolitan Municipality www.ibb.gov.tr/en-us/Pages/Home_Page.aspx
Launch date:	06/2012
End date:	01/2023

Description

Istanbul Metropolitan Municipality, the local government in the Istanbul metropolitan area, launched its future vision for railway transport in 2012, together with Istanbul Ulasim, the city's public transport operator. As part of this vision, the ultimate aim is to create a metro network with a length of 641km by the year 2023 (i.e. the centennial anniversary of the Republic of Turkey). This vision was formulated in 2009 with Istanbul's Transport Master Plan, which was later revised and finalised in mid-2011, calculating transport demand in the entire metropolitan population for the short, medium and long term. Collaborating to this end with the Japanese International Cooperation Agency (JICA), as well as numerous transport experts from all around the world, Istanbul Metropolitan Municipality committed itself to this ambitious goal, which has been clearly understood as the only way to have a sustainable, liveable city in the 21st century.

The city of Istanbul is committed to meeting the ever-increasing demand for mobility as well as the needs of a rapidly growing population by creating a metro network that will constitute the backbone of the transport network. Compared to the share of road transport, which is 83% as of 2012, only 13% of all trips are currently made by rail-based transport. Istanbul's future vision and the ongoing projects will, without doubt, be a 'game-changer', increasing the modal share of railway transport to 31% and decreasing that of road transport down to 66% in the year 2014. With the projects currently under construction and in the design phase, as well as the increasing network

effect and enhanced connectivity, the ultimate vision for 2023 is to have a metro network where 72.5% of all public transport trips are made, vis-à-vis a road transport network with a modal share of 26.5%.

Such a network will definitely alleviate the effects of greenhouse gases on the city's environment, and will bring down the average trip time per resident to more reasonable, acceptable levels, thus providing a comfortable, sustainable, economical and safe means of transport for the citizens of Istanbul. Last but not least, this commitment will help Istanbul gain the upper hand in the candidacy selection process for the 2020 Olympics, in which the city is competing with two major global metropolises, Madrid and Tokyo.

What are the project/initiative's innovative features?

One of the innovative features of the Transportation Master Plan of Istanbul, which is the framework document for Istanbul's future transport vision, was the integration between the Transport Master Plan and the Urban Development Plan. This is a question of particular importance as the main cause of the city's transport problems in the past has always been unplanned urbanisation.

The innovative features of the vision also include driverless metro lines using unattended train operation (UTO), starting with the Uskudar-Umraniye Metro Line (future M5).

In addition to the Marmaray immersed tube, which passes 60m under the Bosphorus and will start revenue operations in October 2013, there is another metro project in the design phase (Kazlicesme-Sogutlucesme Metro Project), which will also pass under the Bosphorus.

Last but not least, Istanbul's vision incorporates the idea of a 'tribute to history'; that is to say, alleviating the pressure of rubber-tyre transport modes on the historical localities. This is in line with the Metropolitan Municipality's ongoing project, launched four years ago, of gradually pedestrianising the historical peninsula.

Contribution to sector ambition of doubling the public transport market share

The future vision of Istanbul is actually one of the greatest commitments that could exemplify UITP's PTx2 vision. In the year 2004, the city had a network length of 45km, and later 75km at the time when the initiative was launched. This figure is now 100km, and will soon rise to 120km. Given the Marmaray line currently under construction, three important extensions to integrate the whole network plus the Uskudar-Umraniye Metro Line (future M5), this figure will soon exceed 155km. It should also be noted that if Istanbul is selected as the Host City for the 2020 Olympics – to be decided in September 2013 – this will also create even greater momentum and synergy. Istanbul is already taking firm steps to build its future: three new heavy metro lines, two of

which have been undertaken by the central government, will soon be tendered this year. For further details, please refer to the maps in the attached document.

How could this be replicated in another country/region/city?

The case of Istanbul serves as an inspiring example particularly for the eastern hemisphere, which currently hosts two-thirds of the world's overall population. This part of the globe has various developing countries with rapidly growing populations and an ever-growing demand for mobility, but with funding problems at the same time. Istanbul stands here as a case to replicate, particularly due to the fact that it is one of the few cities in the world with profit- making urban railway lines, thus, needing no subsidy for operations. This is mainly thanks to the well-planned metro lines, which were subsequently optimised in line with the Master Plan in question, as well as the changing local needs.

The fruits of such well-planned expansion are already reflected in the growing interest of various developing countries such as Saudi Arabia, Pakistan, Morocco and Egypt, who often pay visits to the city to carefully examine the experiences on site, and are happy to work with Istanbul Metropolitan Municipality and Istanbul Ulasim for international consultancy jobs. With its economic dynamism and its strategic location, Istanbul serves as an inspiring centre for all countries in the eastern hemisphere, as it has succeeded in rapidly expanding its metro network, even at a time when great economic powers are suffering as a result of the financial crisis.

Partners

In order to materialise such an ambitious vision, Istanbul Ulasim is working in close cooperation with Istanbul Metropolitan Municipality. As its affiliate company responsible for operations, maintenance and engineering & consulting, Istanbul Ulasim serves as the main support for Istanbul Metropolitan Municipality. In such huge capital projects, Istanbul Metropolitan Municipality is the owner, investor & financer, while Istanbul Ulasim prepares planning, feasibility and design studies, prepares all necessary tender documents and operates the urban railway lines once the projects are finalised.