13 December 2024

CIHT Dubai Seminar – Bulletin

Martin Tillman – Chair of CIHT Dubai Raymond Pau – Chair of CIHT Hong Kong

About the Event

This interesting and informative CIHT Hong Kong and CIHT Dubai joint event was hosted at the University of Wollongong in Dubai and online. It was part of a CIHT Hong Kong visit to Dubai which also marked a special occasion as they celebrated their 40th anniversary. The seminar focused on key mobility challenges that Hong Kong and Dubai have faced in recent years and delved into the opportunities that lie ahead in terms of infrastructure development and technological advancements. Both regions have undergone rapid urbanization and growth, presenting unique challenges in terms of transportation systems, traffic congestion, and infrastructure planning. These issues, however, have also spurred innovation and opened doors for new solutions to emerge.

About the Panel Speakers



Martin Tillman, Chair of CIHT Dubai, has over 20 years of experience in transport planning. Leading multiple projects in the Middle East and Africa. An expert in mobility strategies and transit forecasting, he advises global organisations promoting best practices in sustainable urban development and transportation innovation.



Raymond Pau, Chair of CIHT Hong Kong and Executive Director, AECOM Asia Company Ltd., has 20 years of post-chartered experience in project management, design and construction of major infrastructure projects, focusing on developing sustainable transport solutions in Hong Kong.

Seminar content summary

Mobility in Dubai:

In his opening address, Martin warmly welcomed attendees and the CIHT Hong Kong delegation and provided an overview the CIHT Dubai group. Martin highlighted the similarities between Middle East cities in terms of their transport challenges and opportunities and pointed out that his speech will focus on Dubai.

Challenges:

Martin highlighted the transport challenges in Dubai including:

- Dubai being a car-centric city with congestion challenges, a growing highway network to cater for significant population growth, and one of the lowest fuel prices in the World.
- limited pedestrian connectivity and restrictions hindering the adoption of active and micromobility
- High road traffic fatalities



13 December 2024



Bike Sharing scheme – Dubai

Interventions and future outlook:

A multitude of interventions have been developed and are being planned to combat the aforementioned challenges and satisfy the mobility needs of the growing population in an efficient and sustainable manner. These interventions include:

- Development of the Dubai driverless Metro (inaugurated on 09/09/2009) which was an instant success. The metro network is to be expanded further with the addition of the Blue Line due for completion in 2029.
- Introduction of the Dubai Tram service in 2014 with a network length of 10km.
- Development of a public transport bus network with a fleet of 1400 vehicles, 2,490 bus stops, and 25% mode share. There is a plan to double the number of bus lanes in the next two years and introduce more electric buses.
- Launch of the Dubai Walk Masterplan as part of the Dubai 2040 Masterplan which aims to improve accessibility with a people-centric approach. The plan includes developing shaded pedestrian loops and pedestrian connection interventions within Dubai in the next 10 years.
- The Dubai 2040 Masterplan includes an expansion of the number of cycle tracks including a new 93km climate controlled route.
- Introduction of 4 e-scooter hire schemes with 20 micromobility permitted use areas.
- Introduction of 3 car sharing schemes with 5% of the fleet being electric.
- A growing mobility-on-demand taxi service with a ridership of 183 million, offered by local and international suppliers such as Careem and Uber.
- Dubai is also making significant strides in deploying advanced mobility technologies such as Flying taxis and Vertiports, Robo-taxis, and 3D-printed electric water taxis.
- In efforts to combat congestion, Dubai has a road tolling scheme (Salik) and is also making changes to the parking regime in the city.



2

13 December 2024



Dedicated cycling lanes - Dubai

Mobility in Hong Kong:

Challenges:

Raymond highlighted the mobility challenges facing Hong Kong which include:

- Road congestion.
- The ability to cater for anticipated population growth.
- Resilience of the transport network especially in relation to external accessibility.
- Limited availability of cycling routes.



West Kowloon Terminus - Hong Kong



13 December 2024

Interventions and future outlook:

Similar to Dubai, Hong Kong is taking proactive measures to improve network efficiency, resilience, and capacity. Such measures include:

- Major transport infrastructure projects in the past 10 years mostly to connect Hong Kong to other regions. These include High-speed rail, road tunnels, and bridges including the longest bridge-cum-tunnel sea crossing in the World.
- Introduction of an infrastructure-led and capacity-creating approach and a transport infrastructure development blueprint with the railway as its backbone. This is to combat the anticipated mobility demand growth over the coming 20 years as a result of a new development program with an expected population intake of 2.5 million.
- Development of a future mobility vision underpinned by digital and physical measures that aim to create a positive change. Proposed measures include the development of Transport Interchange Hubs, Intelligent Transport Systems on strategic routes, Smart Motorway and contraflow schemes, Intelligent journey planning, cycling safety measures, and autonomous mobility systems such as the Autonomous Rapid Transit (ART) system.
- Development of regulations and infrastructure interventions to enhance the use of electric micromobility (a.k.a. Electric Mobility Devices EMD). The regulations include age limit, helmet use, as well as device speed, weight, and dimensions. Currently EMD are not allowed on footpaths and carriageways, however, new developments are expected to have well-planned cycle tracks to enable the use of EMD. An example is the 13km GreenWay pilot scheme in Kai Tak adopting a shared space for cyclists and pedestrians.



Cross Bay Link – Hong Kong





13 December 2024

It is understood that the Hong Kong train system is the only profitable one in the world. Is it still the case and what lessons can be learnt from Hong Kong?

Most Public Transport services face profitability issues if they only rely on transport fare revenue. In Hong Kong, MTR (the transport operator) find alternative financial revenues such as income from property development and increased land value as a result of transport schemes.

What policies, initiatives, or systems from Hong Kong that could work well in Dubai?

Development of a flexible regulation framework that can adapt to new services and technologies rather than hinder them – Uber is a good example. Furthermore, introduction of congestion charging for traffic into the city centre would combat peak hour congestion. Hong Kong also has high fuel prices and high tax for owning vehicles, which encourage the use of public transport.

What are the planned use cases for drones in Dubai (e.g. drone delivery services)?

The Dubai Silicon Oasis area is used as an autonomous test bed including autonomous package delivery. Drone delivery services are likely to face operational challenges in a dense city like Dubai.

With regards to the ART implementation, what are the right-of-way and safety requirements as well as the expected customer behaviour?

ART is being considered for Dubai and is already in operation in Abu Dhabi in a non-segregated manner. Considering the Dubai Tram as a similar example, it currently runs in a segregated route and only interacts with other vehicles at traffic signals. While it is very safe, it impacts traffic congestion at junctions and ART could a solution to this issue.

Has Hong Kong considered Flying Taxis as a potential future transport mode?

The Hong Kong government is interested in flying taxis and keen to explore the technology. However, the technology has many challenges due to the city density and limited space in Hong Kong.

This Bulletin is issued by CIHT Dubai. For further information, contact <u>ciht.dubaigroup@gmail.com</u>.

