

**UITP Asia-Pacific Working Group Meeting
Improving Air Quality in Our Cities by Improving Mass Transportation**

**8/F, Assembly Hall, MTR Tower, Kowloon Bay, Hong Kong
September 6 & 7, 2000**

Programme

September 6, 2000 (Wednesday)

19:00 – 20:30 Reception at the Regent Hotel hosted by MTR Corporation Limited

(Banquet Suite A, Mezzanine Floor, 18 Salisbury Road, Tsimshatsui, Kowloon)

September 7, 2000 (Thursday)

08:30 – 09:00 Registration *(8/F, Assembly Hall, MTR Tower, Kowloon Bay)*

09:00 – 09:05 Introduction by Dr Glenn Frommer, Environmental Manager,
MTR Corporation Limited

09:05 – 09:10 Welcome by Mr Phil Gaffney, Operations Director,
MTR Corporation Limited

**Session 1: Health and Social Impact - The Economic and Social Cost of Air
Pollution**

09:10 – 09:40 “Why Clean Air?”

By Mr C.W. Tse, Assistant Director (Air), Environmental Protection
Department

09:40 – 10:20 “Paying the Price of Air Pollution in Hong Kong”
By Ms Christine Loh, Former Legislative Councillor

10:20 – 10:40 *Coffee Break*

Session 2: Contribution of Mass Transportation

10:40 – 11:10 “Role of Public Transport in Improving Air Quality in Hong Kong”

By Ms Carolina L.C. Yip, Principal Transport Officer,
Transport Department

11:10 – 11:45 “Achieving Healthy Cities with Public Transport –
Draft UITP Focus Paper”

By Dr Glenn Frommer, Environmental Manager,
MTR Corporation Limited

(Paper written by Mr Roger Torode of UITP Brussels)

- 11:45 – 12:00 Wrap up of Sessions 1 and 2 by Dr Glenn Frommer
- Session 3:** **Impact of Current and Future Technologies**
- 12:00 – 12:30 “Ultra-Low-Sulphur-Diesel (ULSD)”
- By Mr Kwok Wing Keung, Technical & Product Quality Manager,
 Shell Hong Kong Ltd
- 12:30 – 14:00 *Lunch (23/F, Private Dining Room, MTR Tower)*
- “Impact of Current and Future Technologies on Air Quality
 Improvement - KMB Perspectives”
- By Mr Kane Shum, Engineering Manager, The Kowloon Motor Bus
 Co. (1933) Ltd
- 14:00 – 14:30 “History of Development at Neoplan for Hybrid Buses & the Present
 Status”
- By Mr Helmut Wandrey, International Sales Director, Neoplan,
 Germany
- Session 4:** **Strategies and Roles of Transport Planning**
- 14:30 – 15:00 “Planning for New Railways”
- By Mr Malcolm Gibson, Chief Design Manager, MTR Corporation
 Limited
- 15:00 – 15:30 *Coffee Break*
- Session 5:** **Workshops**
- 15:30 – 16:30 - Technology
 - Transport Planning
 - Legislative Framework
- 16:30 – 17:00 Closing Plenary
- Presentation of Workshop Discussions
 - Closing of Meeting
- 18:30 – 22:00 Dinner at the Kowloon Club hosted by The Kowloon Motor Bus Co.
 (1933) Ltd
- (15/F, East Wing, New World Office Building, 24 Salisbury Road,
 Tsimshatsui, Kowloon)*
- End of Programme –

Date: Sept 5, 2000

UITP Asia-Pacific Working Group Meeting on Air Quality Improvement
8/F Assembly Hall, MTR Tower, Telford Plaza, Kowloon Bay, Hong Kong

September 7, 2000

List of Participants

Local Participants			
No.	Name	Title	Company/Organisation
1.	Dr Alice Kwan	Environmental Manager	Airport Authority
2.	Ms Yuyu Tse	Environmental Scientist	Airport Authority
3.	Mr Stuart Dobie	Marketing Manager	Citybus Limited
4.	Mr John Blay	Engineering Consultant	Citybus Limited
5.	Ms Christine Loh*	--	Civic Exchange
6.	Ms Lisa Hopkinson	--	Civic Exchange
7.	Mr C.W. Tse*	Assistant Director (Air)	Environmental Protection Department
8.	Mr Kenneth Pang	Tunnel Manager	Hong Kong Tunnels & Highways Management Co. Ltd
9.	Mr Michael Wong	Deputy Tunnel Manager	Hong Kong Tunnels & Highways Management Co. Ltd
10.	Mr Steven Chan	Engineering Manager	Hongkong Tramways Ltd
11.	Mr Alexander Wong	General Manager, Light Rail Engineering	Kowloon-Canton Railway Corporation
12.	Ms Katy Lam	General Manager, Quality	Kowloon-Canton Railway Corporation
13.	Mr Chris Calton	Construction Engineering Manager	Kowloon-Canton Railway Corporation
14.	Ms Celina Yuen	Tender Services Manager	Kowloon-Canton Railway Corporation
15.	Mr Martin Brown	Head of Operations	MTR Corporation Limited
16.	Dr Glenn Frommer*	Environmental Manager	MTR Corporation Limited
17.	Mr Malcolm Gibson*	Chief Design Manager	MTR Corporation Limited
18.	Mr Franco Fabbian	Operations Engineering Services Manager	MTR Corporation Limited
19.	Mr Mark Savelli	Director & General Manager	New World First Bus Services Ltd
20.	Mr Tsang Wing Hang	Assistant to Managing Director	New World First Bus Services Ltd
21.	Mr Kwok Wing Keung*	Technical & Product Quality Manager	Shell Hong Kong Ltd
22.	Ms Joanna Chow	Sales Manager - Transport	Shell Hong Kong Ltd
23.	Mr Rayman Yuen	Deputy General Manager	The Hongkong & Yaumati Ferry Co. Ltd
24.	Mr Ng Yam	Operations Development Manager	The Hong Kong School of Motoring Ltd
25.	Mr John Chan	Managing Director	The Kowloon Motor Bus Co. Ltd

26.	Mr Lui Po Chiu	Operations Director	The Kowloon Motor Bus Co. Ltd
27.	Mr Tim Ip	Traffic Manager	The Kowloon Motor Bus Co. Ltd
28.	Mr Mark Leung	Planning & Development Manager	The Kowloon Motor Bus Co. Ltd
29.	Mr Kenrick Fok	General Manager (Long Win Bus Co.)	The Kowloon Motor Bus Co. Ltd
30.	Mr Ho Chi Man	General Manager (Shatin Depot)	The Kowloon Motor Bus Co. Ltd
31.	Mr Woo Kin Keung	General Manager (Tuen Mun Depot)	The Kowloon Motor Bus Co. Ltd
32.	Mr Kane Shum*	Engineering Manager	The Kowloon Motor Bus Co. Ltd
33.	Mr Lee Wai Sum	Project Manager	The Kowloon Motor Bus Co. Ltd
34.	Mr So Hing Shun	Deputy Engineering Manager	The Kowloon Motor Bus Co. Ltd
35.	Dr Dorothy Chan	Deputy Commissioner for Transport	Transport Department
36.	Ms Carolina Yip*	Principal Transport Officer	Transport Department
37.	Mr Yu Chee-Kuen	Chief Engineer/ Transport Planning	Transport Department
38.	Mr Sunny Wong	Operations Manager	Western Harbour Tunnel Co. Ltd
39.	Mr James Rourke	Deputy General Manager	Yardway Group Limited
40.	Mr Mike Hudson	Consultant Environmental Division	Yardway Group Limited
Overseas Participants			
41.	Mr Helmut Wandrey*	International Sales Director	Neoplan
42.	Mr Tan Geok Watt	Section Manager	Singapore MRT Ltd
43.	Mr Barry S.K. Chiu	Accounting Manager/ Personnel Manager	Sociedade de Transportes Colectivos de Macau, SARL
44.	Mr Antonio Lam	Administrative Manager	Sociedade de Transportes Colectivos de Macau, SARL
45.	Mr Zhou Pei-Yuang	General Manager	The First Bus Company of Guangzhou
46.	Mr Shi Yong-Ming	General Manager	The Second Bus Company of Guangzhou
47.	Mr Deng Zhi-Jun	Engineer	The Second Bus Company of Guangzhou
48.	Mr Deng Lin-Hua	Engineer	The Second Bus Company of Guangzhou
49.	Mr Zhong Gui-Ming	Assistant Engineer	The Second Bus Company of Guangzhou
50.	Mr Billy H.K. Chan	Deputy General Manager	Transmac-Transportes Urbanos De Macau
51.	Mr C.K. Fung	Depot Manager	Transmac-Transportes Urbanos De Macau

* Speaker

Date: September 6, 2000

**UITP Asia-Pacific Working Group Meeting
Improving Air Quality in Our Cities by Improving Mass Transportation**

Summary Report

1. Meeting

A meeting of UITP members and potential members was held by the MTR Corporation (MTRC) and Kowloon Motor Bus Co. (1933) Ltd (KMB) on 7 September 2000. Eleven overseas participants from Singapore, Macau, Guangzhou and Germany joined with 40 local participants for the daylong informal event at the MTRC Headquarters in Hong Kong. Local participants represented transport providers in Hong Kong, a fuel supplier as well as the Transport and Environmental Protection Departments of Hong Kong Government. A list of participants is enclosed.

2. Programme

A welcome reception hosted by MTRC was held in a hotel in Tsim Sha Tsui on the evening preceding the seminar. Martin Brown, local Vice-Chairman of UITP Asia-Pacific welcomed the overseas and local participants.

The seminar was designed to allow discussion on a broad base of issues. Expert presentations were given in the morning session, with the afternoon session using workshops to address particular needs. A copy of the programme is attached.

2.1 Summary of Presentations

Phil Gaffney, Operations Director of MTRC, welcomed participants and focused on the need to develop special transport solutions for Hong Kong and the Asian region. He noted that a larger contingent of UITP members from overseas was crucial for sharing experience.

The tone of the meeting was set by C.W. Tse, Assistant Director (Air) of Environmental Protection Department, who noted that air pollution, though generally in line with WHO standards, cost Hong Kong HK\$3.8 billion every year and caused approximately 2000 premature deaths. He then examined the willingness to pay versus willingness for others to pay and focused particularly on the roles of the community as Informer, Driving Force, Stakeholder, Sponsor, Media and Audience. Questions afterwards focused on regional issues of the Pearl River Delta Region and the establishment of practically achievable goals of air quality.

Christine Loh, a prominent speaker on environmental issues and ex-legislator presented a different "report card" on Hong Kong's performance on air quality and noted that air quality generally failed to meet international standards. The trend was unfortunately pessimistic. Attention was turned to Transport Strategy in particular a tentatively planned highway on Hong Kong Island. Christine showed that a railway with significant societal benefit, provided the

existing railway funding arrangements were amended to be similar to that for highways could replace the roadway. Questions examined the difference in funding relationships between roads and rail.

Carolina Yip, Principal Transport Officer of Transport Department, presented a very detailed overview of work Transport Department had made examining the sources of air pollution and their resultant impacts. She also presented Hong Kong Government's Policy of considering railways as the backbone with major efforts on providing infrastructure and services in an environmentally friendly fashion. She touched on Government's shorter-term policy of having taxis switch from diesel to Liquid Propane Gas (LPG) and the longer-term policy of more efficient use of the existing bus fleet. Questions looked at the infrastructure for policy making in Hong Kong government and the role of Transport Department in adjusting loading from buses.

Glenn Frommer, Environmental Manager of MTRC presenting Roger Torode's paper examined adverse health effects of traffic and focused on UITP's vision of sustainable mobility. The role of public transport in achieving sustainable mobility was examined and the presentation concluded with UITP's call on members to lobby Government, improve service standard and improve sustainability and energy efficiency. Questions brought out the vast difference between Europe and Hong Kong, where 80% of all daily trips are taken on public transport.

W. K. Kwok, Technical & Product Quality Manager of Shell Hong Kong Limited, introduced the specifications of Ultra-Low-Sulfur-Diesel (ULSD), and showed how ULSD was necessary for proper utilization of particulate matter traps and catalytic converters. He also showed how ULSD integrated into the progression of improving diesel engine performance requirements from Euro 1 through Euro 4 engines. Questions noted that ULSD was not a long-term solution but a critical part of a comprehensive strategy.

Kane Shum, Engineering Manager of KMB showed how KMB was implementing exhaust emission control to better air quality externally as well as internally. Details of the catalytic converter retrofit programme were presented. This provided an 89% reduction in carbon monoxide and 52% reduction in smoke, and was due to finish in 2001. Improvements in driveline efficiency, which improved fuel efficiency by 3 – 10%, were also discussed. The use of electrostatic filters for saloon air quality was presented. Questions examined the positive cost effectiveness of the measures taken by KMB.

With railway investments spanning over 40 years, Malcolm Gibson, Chief Design Manager of MTRC discussed the impact of new railways on residential and commercial developments of Hong Kong. In particular Malcolm discussed Hong Kong of 1970 and showed the tremendous benefits mass transit has brought to the city. He also showed that with the projected increase in population in Hong Kong, technology would have to be 6 times better in reducing waste and emissions if we are to improve the quality of life in Hong Kong. Questions focused on the need for clear targets for the highest levels of Governments and the benefits and disincentives of competitive bidding.

Helmut Wandrey, Sales Director Export Overseas of Neoplan from Germany presented an overview of Neoplan's hybrid buses. The strategy of having common drives for a multitude of energy sources was highlighted. Storage of energy in batteries and with flywheels was also described. It was particularly interesting that the hybrid bus with flywheel storage could actually run with zero emission for a portion of its capacity. Questions showed that Neoplan had the experience with its hybrid buses, and the current focus was on application and satisfying client's needs.

3. Afternoon Workshops

The participants divided into two workshops, one in Transport Planning and the other in Technology. Short reports were given by representatives to the plenary at the close of the sessions.

3.1 Transport Planning

The issues discussed were:

- Need for a clear definition of environmental objectives
- Payment for the cost of improvements and sources of funding
- Clear competition policy to reduce wasteful competition
- Support for the Polluter Pays Principle
- Need for a comprehensive analysis of investment options
- Improvements at critical locations through road pricing
- Issues in land use, transport planning and pedestrianization

3.2 Technology

The issues discussed were:

- Government policies on pollution remediation in Macau and Guangzhou
- Fuel and maintenance standards in Macau and Guangzhou
- Areas of future cooperation between Hong Kong, Macau and Guangzhou

4. Conclusion

Martin Brown summarized the intensive discussions presented throughout the day and thanked participants for their contributions. In particular Martin concluded that much sharing had already occurred in this one-day event, and asked if there was a need for further seminars of this type. Following the group's opinion, it was noted that further meetings would be best held in Hong Kong possibly on the same or closely related issues.

John Chan, Managing Director of KMB, hosted the closing dinner.

A press release was issued by MTRC after the meeting as attached.

Date: Sept 26, 2000

PR/A 1559
17 September 2000

Solutions for Cleaner Air discussed by Environmental Experts

Environmental experts gathered at the Headquarters of the MTR Corporation to explore solutions for cleaner air.

At the first meeting of the Asia-Pacific working group of the International Association of Public Transport (UITP) on improving air quality, officials from government departments, major transport operators in Hong Kong, an oil company, as well as transport operators from Hong Kong, Guangzhou, Macau, and Singapore gathered to explore ways to improve the seriously deteriorating air quality. Among the keynote speakers were Mr. C W Tse, Assistant Director (Air) of the Environmental Protection Department, Ms. Christine Loh, former Legislative Councillor and a green advocate, and Dr. Glenn Frommer, Environmental Manager of the MTR Corporation.

Information shows that hospitalization days for respiratory cases in Hong Kong has increased by 23% annually since 1996 and transport related emissions are identified as the single biggest source of respirable suspended particulates, non-methane volatile organic compounds and roadside nitrogen oxides, which are harmful to human health.

Speakers at the meeting identified rail as one of the cleanest transport modes for metropolitan cities in achieving sustainable mobility. It is recommended that road and railway developments should be evaluated on equal basis as a solution for air pollution in Hong Kong. Other solutions including cleaner city fuel, tightening of vehicle emission controls, and development of hybrid buses were also explored.

UITP, based in Brussels, Belgium, is the worldwide association of urban and regional passenger transport operators and their suppliers. With more than 2,000 members from all over the world, it seeks to promote a better understanding of public transport and provides information and analysis about the infrastructure, operations, organization and management. Improving air quality has been identified as one of its mission by the UITP Asia-Pacific Working Group.

The meeting was organized jointly by the MTR Corporation and the Kowloon Motor Bus (1933) Co Ltd. The MTR Corporation has assumed a leading role in promoting environmental issues and began a territory-wide Clean Air Campaign in June last year to raise public awareness on air pollution problems in Hong Kong and the importance of clean air.

- End -