

For information

Legislative Council Panel on Public Service

Follow-up to meeting on 15 January 2007

National studies and exchange programmes

Purpose

This paper provides the following additional information requested by Members at the meeting on 15 January 2007 :

- (1) a list of national studies seminars conducted by Mainland experts/scholars in 2006;
- (2) a list of civil servants attachments under our international exchange programmes from 2004 to 2006; and
- (3) a note on the effectiveness of the exchange programmes with the Mainland authorities, detailing the attachment programmes of officers from Transport Department as examples.

(1) A Sample List of Seminars on National Studies by Mainland Speakers in 2006

Topic	Speaker
The Road of 'the Rule of Law' in PRC	Professor Zhang Lihua Department of Political Science Tsinghua University
The Influence of Globalization on National Economy and Foreign Relations	Professor Hai Wen (Vice President) and Professor Wang Yong Peking University
China's 11 th Five-Year Plan and its Impact on Hong Kong	Mr Xu Lin, Deputy Director-General Department of Development Planning The National Development and Reform Commission
The National Economy: Latest Developments and Policy Direction	Dr Wang Yiming, Executive Vice Director The Academy of Macroeconomic Research The National Development and Reform Commission
The Current Banking Reform in the Mainland	Mr Li Jiange, Deputy Director The Development Research Centre of the State Council
The Impact of Privately-owned Enterprises' Investment on Hong Kong's Economy	Professor Feng Xiaoyun College of Economics Jinan University
The Impact of Privately-owned Enterprises' Investment on Hong Kong's Economy	Professor Zuo Zheng College of Economics Jinan University
Collaboration between Shenzhen and Hong Kong	Professor Feng Xiaoyun College of Economics Jinan University
Complementary or Competitive: Economic Developments of Guangdong and Hong Kong	Professor Feng Bangyan College of Economics Jinan University
An Overview of the Trade Regulations for Setting Up Business in China	Professor Li Boqiao Law School Jinan University
An Introduction to the Public Security and Criminal Proceedings Systems of China	Professor Nie Lize School of Law Sun Yat-sen University

(2) International exchange programmes for civil servants

International exchange programmes involving other jurisdictions and international organisations are organised by some departments/grades to widen their officers' exposure, and share experience and expertise with their counterparts in other countries. In the past three years a total of 60 officers from 16 bureaux/departments have been attached to government authorities or organisations in Australia, Belgium, Canada, France, Germany, Japan, Malaysia, Netherlands, New Zealand, Singapore, Switzerland, Thailand, UK, and USA.

2. While on exchange, participants are given the opportunity to learn about the legislative framework and regulatory practices of the host countries, and to observe the management and operation of the host organisations. Duration of the attachment period varies, depending on the objectives of the exchange. It ranges from one week to longer periods of three months to two years. A list of the attachments from 2004 to 2006 is at Appendix.

International Exchange Programmes Organized for Civil Servants from 2004 to 2006

	Bureau/Department	Name of Government Authority / International Organisation attached	Place (city, country)	Duration of attachment	Participant
Programmes in 2004					
1	Food and Environmental Hygiene Department	US Department of Commerce	Seattle, USA	5 days	Senior Health Inspector
2				5 days	Chief Health Inspector
3				5 days	Veterinary Officer
4		Medical Entomology Unit	Kuala Lumpur, Malaysia	5 days	Pest Controller
5	Government Laboratory	The laboratories of National Metrology Institute of Japan (NMIJ) and Australian Government Analytical Laboratories	Japan and Australia	9 days	Chemist
6		Institute for Reference Materials and Measurements (IRMM, Belgium), Federal Institute for Materials Research and Testing (BAM, Germany) and Netherlands	Belgium, Germany and Netherlands	13 days	Chemist
7		i.) US California Air Resources Board and ii.) Environment Canada	USA and Canada	12 days	Chemist
8		National Food Research Institute, Ibaraki	Japan	1 month and 10 days	Chemist
9	Hong Kong Police Force	Centrex	Bramshill, UK	2 years	Superintendent of Police
10		Interpol General Secretariat, Lyon	Lyon, France	2 years	Superintendent of Police
11		Interpol Liaison Office, Bangkok	Bangkok, Thailand	2 years	Chief Inspector of Police
12	Hong Kong Post	Australia Post, Melbourne	Melbourne, Australia	14 days	Controller of Post
13	Independent Commission Against Corruption	Metropolitan Police	UK	6 months	Commission Against Corruption Officer (Upper)
14	Intellectual Property Department	Intellectual Property Australia	Canberra, Australia	12 days	Senior Solicitor
15	Planning Department	International Planning Section, Fukuoka City	Tokyo, Shiga-ken & Fukuoka, Japan	6 months	Town Planner
16	Rating & Valuation Department	Valuation Office Agency	London, UK	6 months	Valuation Surveyor
17	Transport Department	Roads and Traffic Authority; and VicRoads International	Melborne & Sydney, Australia	11 days	Senior Engineer
18		Roads and Traffic Authority; and VicRoads International	Melborne & Sydney, Australia	11 days	Engineer

	Bureau/Department	Name of Government Authority / International Organisation attached	Place (city, country)	Duration of attachment	Participant
Programmes in 2005					
19	Civil Aviation Department	Council of International Civil Aviation Organization (ICAO)	Montreal, Canada	1 month and 17 days	Air Traffic Control Officer I
20	Electrical and Mechanical Services Department	Therapeutic Goods Administration (TGA)	Canberra, Australia	26 days	Electronics Engineer
21	Fire Services Department	Lancashire Fire and Rescue Service	UK	19 days	Assistant Divisional Officer
22	Food and Environmental Hygiene Department	Regional Office of the Canadian Food Inspection Agency	Vancouver, Canada	12 days	Senior Superintendent
23				12 days	Senior Health Inspector
24		New South Wales Food Authority' Australian Quarantine and Inspection Service, Food Safety Unit, Department of Human Services in Victoria	Sydney, Canberra, and Melbourne, Australia	12 days	Chief Health Inspector
25				12 days	Senior Health Inspector
26	Government Laboratory	Federal Institute for Material Research and Testing (BAM)	Germany	5 days	Chemist
27	Department of Health	World Health Organization	Geneva, Switzerland	11 months	Medical & Health Officer
28	Department of Justice	Legislative Services Branch of the Department of Justice and the Office of the Law Clerk of the House of Commons	Ottawa, Canada	3 months	Senior Government Counsel
29		London Parliamentary Counsel Office at the Tax Law Rewrite Project and the UK Law Commission	London, UK	3 months	Senior Government Counsel
30	Hong Kong Police Force	Singapore Police Force	Singapore	1 month and 10 days	Superintendent of Police
31		Singapore Police Force	Singapore	1 month and 10 days	Chief Inspector of Police
32		Metropolitan Police	UK	20 days	Superintendent of Police

	Bureau/Department	Name of Government Authority / International Organisation attached	Place (city, country)	Duration of attachment	Participant
33	Independent Commission Against Corruption	Metropolitan Police	UK	6 months	Commission Against Corruption Officer (Upper)
34		Metropolitan Police	UK	6 months	Commission Against Corruption Officer (Upper)
35	Office of the Telecommunications Authority	Australian Communications and Media Authority	Canberra and Melbourne, Australia	3 months	Chief Telecommunications Engineer
36	Rating & Valuation Department	Valuation Office Agency	London, UK	6 months	Senior Valuation Surveyor
37	Transport Department	Transport for London	London, UK	19 days	Senior Technical Officer (Traffic)
Programmes in 2006					
38	Civil Aviation Department	Council of International Civil Aviation Organization (ICAO)	Montreal, Canada	1 year	Senior Operations Officer
39	Civil Service Bureau - Administrative Officer Grade	European Commission (EC)	Belgium	6 months	Senior Administrative Officer
40	Electrical and Mechanical Services Department	Energy Market Authority (EMA)	Singapore	6 days	Electrical & Mechanical Engineer
41	Food and Environmental Hygiene Department	New Zealand Food Safety Authority	Auckland and Wellington, New Zealand	11 days	Chief Health Inspector
42				11 days	Senior Health Inspector
43		New South Wales Food Authority	Sydney, Australia	5 days	Research Officer (Food)
44	Government Laboratory	Staffordshire University	Staffordshire, UK	5 days	Chemist
45		Research Biolabs Pte Ltd	Singapore	5 days	Chemist
46	Department of Health	World Health Organization	Geneva, Switzerland	11 months	Medical & Health Officer

	Bureau/Department	Name of Government Authority / International Organisation attached	Place (city, country)	Duration of attachment	Participant
47	Hong Kong Police Force	Singapore Police Force	Singapore	13 days	Superintendent of Police
48		Singapore Police Force	Singapore	13 days	Senior Inspector of Police
49		Metropolitan Police	UK	21 days	Superintendent of Police
50		Centrex	Bramshill, UK	2 years	Superintendent of Police
51		Interpol General Secretariat, Lyon	Lyon, France	2 years	Superintendent of Police
52		Interpol General Secretariat, Lyon	Lyon, France	2 years	Senior Inspector
53	Hong Kong Post	Australia Post, Sydney main Office	Sydney, Australia	9 days	Assistant Controller of Post II
54		Australia Post, Sydney main Office	Sydney, Australia	9 days	Assistant Controller of Post II
55	Independent Commission Against Corruption	Metropolitan Police	UK	6 months	Commission Against Corruption Officer (Middle/Lower)
56		Metropolitan Police	UK	6 months	Commission Against Corruption Officer (Upper)
57		Assets Recovery Agency	UK	1 week	Commission Against Corruption Officer (Middle/Lower)
58		Assets Recovery Agency	UK	1 week	Assistant Commission Against Corruption Officer
59	Intellectual Property Department	Singapore Intellectual Property Office	Singapore	14 days	Senior Intellectual Property Examiner
60	Rating & Valuation Department	Valuation Office Agency	London, UK	6 months	Senior Valuation Surveyor

(3) The effectiveness of the exchange programmes with the Mainland authorities, detailing as examples the attachment programmes of officers from Transport Department.

In keeping with the frequent contacts and growing ties between Hong Kong and the Mainland, the Civil Service Bureau (CSB) organizes the civil service exchange programme with the municipal governments of Beijing and Shanghai, the city government of Hangzhou and the provincial government of Guangdong, with a view to widening civil servants' exposure, enhancing their understanding of the operation and management practices of their counterparts, as well as facilitating the sharing of expertise and experience, and fostering partnership and communication between both sides.

2. In addition to learning about the systems, practices and development of their fields in the Mainland, civil servants participating in the programme also act as representatives of the HKSARG and their departments. They brief the host departments on the work of their parent departments, the latest development in their fields, the government structure in HKSAR, and the latest development in Hong Kong. As such, civil servants on exchange programmes to the Mainland are usually officers at the professional level, i.e. those on Master Pay Scale (MPS) 45 or above (or equivalent), and have a good command of Putonghua. Departments nominate suitable staff members to the exchange programme, taking into account the scope of exchange and the operational and training needs of individual staff and the departments as a whole.

3. Before their departure, civil servants attend briefings arranged by CSB. They also gather general information on Hong Kong, specific information on their departments, and other relevant reference materials on the Mainland so as to get fully prepared for the attachment. Upon their return from the attachment, they and their departments are requested to complete a questionnaire to evaluate the effectiveness of the exchange programme, such as their views on the activities arranged, any difficulties encountered, and the benefits derived from the programme.

In the returned questionnaires, the participating officers and departments of both sides all comment favourably on the exchange programme.

4. In addition to completing the evaluation questionnaires, attachees are also required to prepare learning reports to summarise what they have learnt from the exchange programmes. These learning reports are uploaded to the Civil Service Cyber Learning Centre for sharing with other civil servants. Participating departments also hold experience-sharing sessions as well so that the attachees share with colleagues in their own departments what they have learnt from the exchange programmes.

5. Officers from the Transport Department who have participated in the exchange programme reported that the attachments have enabled them to :

- gain a comprehensive understanding of the latest developments of the public transport systems of the host cities, the formulation and implementation of transport policies in these cities, and how they deal with their challenges and their solutions;
- get to know the competitive edge and problems of the host cities, allowing them to reflect on the situation of Hong Kong and identify areas for improvement in Hong Kong;
- learn from the useful experiences of the host cities. One example is the comprehensive and systematic approach adopted in Shanghai in the management of taxis. Another example is the quasi-government GPS vehicle surveillance centre in Hangzhou. Through the use of advanced technology, it monitors the movement of taxis, dangerous goods vehicles and commercial vehicles. The pros and cons of their GPS and its mode of operation provide useful references for Hong Kong;
- learn about the rapid development of the transport network in

Shanghai. With population rising to 20 million, Shanghai will in the next few years expand its network of railways and expressways by hundreds of kilometres to link up with the satellite towns in the suburb to become a mega city in central China or even in the world;

- recognize that with the commissioning of the Yangshan container port in Shanghai, the future extension of magnetic levitation rail link to Hangzhou, and the existing link of high speed train between Nanjing and Beijing, the economic development of the Yangtze River Delta is in full gear;
- enhance Mainland officers' understanding of Hong Kong through briefings about Hong Kong's public traffic and transport systems;
- establish close ties with relevant Mainland officers. This helps enhance communication and facilitate exchange of information between both sides, and is conducive to the planning and implementation of joint projects in future;
- personally experience the latest developments of the host cities and the daily lives of the people;
- have a much better understanding of the structure of the local governments and the relations among different units through visits to different workplaces;
- acquire first hand knowledge of the workflow of the host departments and the work culture of Mainland civil servants;
- further enhance proficiency in Putonghua; and
- gain a deeper and broader understanding of the country's overall development and social conditions.

6. Annex A is a sample of the programme itinerary of an officer from the Transport Department attached to the Mainland. Annex B is a

detailed learning report by a Transport Officer on his attachment to the Mainland.

Civil Services Bureau
January 2007

**Staff Exchange Programme between HKSARG and the Mainland
Programme Itinerary**

Attachee: Principal Transport Officer, Transport Department
Receiving Mainland Authority: The Shanghai Municipal Construction and
Communications Committee
Attachment Period: About 2.5 months in 2006

14 February (Tuesday)

Shanghai Municipal Urban Communications Administration Bureau – Organizational
Personnel Department

- Introduction of the duties of the Shanghai Municipal Urban Communications Administration Bureau, the transportation system of the Shanghai Municipality

15 February (Wednesday)

Shanghai Municipal Urban Communications Administration Bureau – Department of
Policy and Laws

- Introduction of the formulation and implementation of transportation laws and rules

16 February (Thursday)

Shanghai Municipal Urban Communications Administration Bureau – Passenger
Transportation Department

- Introduction of the administration of Shanghai's urban passenger transportation, transport safety control and transport security during major events

17 February (Friday)

Shanghai Municipal Urban Communications Administration Bureau – Cargo
Transportation Department

- Introduction of the management, operation and coordination of cargo transportation in Shanghai

20 February (Monday)

Shanghai Municipal Urban Communications Administration Bureau – Shanghai
Urban Communications Trade Centre and Shanghai Urban Communications
Information Centre

- Introduction of Shanghai's smart transportation infrastructure and the flow of

business handling, with arrangements for on-site visits

21 February (Tuesday)

Shanghai Municipal Urban Communications Administration Bureau – Technology Education Department

- Introduction of Shanghai's transportation infrastructure and environmentally friendly transport facilities

22 February (Wednesday)

Shanghai Municipal Urban Communications Administration Bureau – Transportation Administration and Law Enforcement Team

- Introduction of the daily supervision, operation, examination and law enforcement of Shanghai's public transport, with visit to the long-haul passenger terminal of the Shanghai Railway Station

23 February (Thursday)

Shanghai Municipal Urban Communications Administration Bureau – Integrated Planning Department

- Introduction of Shanghai's urban transport planning, with visit to Shanghai's rail communications

24 February (Friday)

Shanghai Municipal Urban Communications Administration Bureau – Office

- Exchange forum: Sharing of experience in Hong Kong's transportation management and planning by the attachee, followed by discussion on relevant issues with the mainland counterparts

27 February (Monday)

Shanghai Municipal Urban Communications Administration Bureau – Transportation Management Department

- Introduction of the management of Shanghai's transportation and communications trade, and the management of taxis

28 February (Tuesday)

Shanghai Municipal Urban Communications Administration Bureau – Transportation Management Department

- Visits to the taxi mainframe enterprise, Shanghai Haibo Taxi Company Limited and the 10th Operating Branch of Shanghai Dazhong Taxi Company

1 March (Wednesday)

Shanghai Municipal Urban Communications Administration Bureau – Transportation Management Department

- Visits to small and medium taxi enterprises, and Shanghai Shenlian Taxi Development Company Limited

2 March (Thursday)

Shanghai Municipal Urban Communications Administration Bureau – Transportation Management Department

- Introduction of the management of Shanghai's cargo transportation by the 5th Unit (Cargo) of the Transportation Management Department

3 March (Friday)

Shanghai Municipal Urban Communications Administration Bureau – Transportation Management Department

- Discussion on the major arrangements for phase II of the attachment with the Organizational Personnel of the Transportation Management Department, and familiarization with the work environment

6 March (Monday)

Shanghai Urban Development Information Research Centre

- Introduction of the Shanghai Urban Development Information Research Centre, and visits to the Shanghai Urban Space Information Application Service System and the Shanghai Municipality Gridding Management System

7 March (Tuesday)

Shanghai Municipality Urban Integrated Traffic Regulation Research Centre

- Introduction of the Shanghai Municipality Urban Integrated Traffic Regulation Research Centre

8 March (Wednesday)

Shanghai Municipality Urban Integrated Traffic Regulation Research Centre

- Visit to the Songjiang District and introduction of the planning and development of the Shanghai metro

9 March (Thursday)

Integrated Planning Department

- Introduction of the Integrated Communications Department, Construction and Communications Committee of the Shanghai Municipal People's Government

- Introduction of the Planning and Technology Education Division, Construction and Communications Committee of the Shanghai Municipal People's Government

10 March (Friday)

Integrated Planning Department

Discussion with the Integrated Communications Department, Construction and Communications Committee of the Shanghai Municipal People's Government

13 March (Monday)

Shanghai Municipal Urban Communications Bureau – Transportation Management Department

- Exchange with the Shanghai Municipal Urban Communications and Transportation Management Department; introduction of the rail transport management by the 3rd division there
- Visit to the maglev trains

14 March (Tuesday)

Shanghai Municipal Urban Communications Administration Bureau – Transportation Management Department

- Introduction of the management of Shanghai's long-haul passenger transportation by the 4th division of the Transportation Management Department
- Visit to Shanghai South Station, the newest Shanghai Municipal Long-haul Passenger Terminal

15 March (Wednesday)

Shanghai Municipal Urban Communications Administration Bureau – Transportation Management Department

- Introduction of Shanghai's parking management by the 8th division of the Transportation Management Department
- Visits to car parks, toll management of manual and meter parking

16 March (Thursday)

Shanghai Municipal Urban Communications Administration Bureau – Transportation Management Department

- Discussion with the Legal Planning Division of the Transportation Management Department on integrated management of transport, transport control, management planning and statistics

17 March (Friday)

Shanghai Municipal Urban Communications Administration Bureau – Transportation Management Department

- Exchange forum arranged by the Organizational Personnel of the Transportation Management Department: Introduction of the management and planning of Hong Kong's public transport and car parks, and sharing of experience with the mainland counterparts

20 March (Monday)

Shanghai Municipal Urban Communications Administration Bureau – Transportation Administration and Law Enforcement Team

- Exchange with the Transportation Administration and Law Enforcement Team, and introduction of the case handling procedures by the Case Handling Division of the Team

21 March (Tuesday)

Shanghai Municipal Urban Communications Administration Bureau – Transportation Administration and Law Enforcement Team

- Introduction of the related regulations by the Legal Planning Division of the Transportation Administration and Law Enforcement Team
- Introduction of the law enforcement and complaint handling work by the Control Room (Tactical Unit)

22 March (Wednesday)

Shanghai Municipal Urban Communications Administration Bureau – Transportation Administration and Law Enforcement Team

- Introduction of law enforcement work at highway entrances by the 8th Unit
- Visit to the Fengjing toll counter of the Shanghai-Hangzhou Highway

23 March (Thursday)

Shanghai Municipal Urban Communications Administration Bureau – Transportation Administration and Law Enforcement Team

- Introduction of urban transport administration and enforcement work by the 5th, 6th and 7th Units
- Visits to the People's Square, etc

24 March (Friday)

Shanghai Municipal Urban Communications Administration Bureau – Transportation Administration and Law Enforcement Team

- Exchange forum by the Organizational Personnel of the Law Enforcement Team and summary of attachment arrangements

27 March (Monday)

Shanghai Municipal Urban Communications Administration Bureau – Transportation Administration and Law Enforcement Team

- Introduction of law enforcement work at the traffic nodes and the Xujiahui District by the 2nd Law Enforcement Unit
- Visit to the Shanghai Tour Gathering Centre at the Ten Thousand People Stadium
- Study of illegal car combating by the Administration and Law Enforcement Unit at the Xujiahui entrance
- Visit to the public transport station on Caobaolu, Shanghai

28 March (Tuesday)

Shanghai Municipal Urban Communications Administration Bureau – Transportation Administration and Law Enforcement Team

- Introduction of law enforcement at the Pudong Airport traffic node by the 3rd Law Enforcement Unit
- Visits to law enforcement related to Pudong Airport taxis, buses, long-haul passenger transportation and car parks

29 March (Wednesday)

Shanghai Municipal Urban Communications Administration Bureau – Examination Centre

- Exchange with the Shanghai Urban Communications Examination Centre
- Visit to the examination on theories related to Pudong taxis and vehicles carrying dangerous goods

30 March (Thursday)

Shanghai Municipal Urban Communications Administration Bureau – Department of Bureau Promotion

- Exchange forum by the Communications Administration Bureau: Attachee's introduction of the Hong Kong Transport Department's press release and emergency transport coordination centre, and sharing of experience with the mainland counterparts from Bureau Promotion, Transport Control and Law Enforcement.

31 March (Friday)

Shanghai Municipal Urban Communications Administration Bureau

- Visits to transport enterprises arranged by the Organizational Personnel of the Urban Communications Administration Bureau

3 April (Monday)

Shanghai Municipal Urban Communications Administration Bureau – Transport Enterprises

- Meeting with the Corporate Deputy General Manager of Shanghai Bus Corporation and discussion on Shanghai's urban public transport
- Visit to Xinxin Shanghai Bus Service Company

4 April (Tuesday)

Shanghai Municipal Urban Communications Administration Bureau – Transport Enterprises

- Meeting with Managing Director of Shanghai Dazhong Taxi Company and discussion on issues related to Shanghai's taxis
- Visits to the Taxi Coordination Information Application Service System and Management System

5 April (Wednesday)

Shanghai Municipal Urban Communications Administration Bureau – Transport Enterprises

- Meeting with Director of Shanghai Communications and Transportation Corporation and discussion on issues related to cargo logistics and sea transport

6 April (Thursday)

Shanghai Municipal Urban Communications Administration Bureau – Transport Enterprises

- Meeting with Operations Manager of Shanghai Shentong Metro Corporation and discussion on issues related to the operation of Shanghai's rail transport
- Visit to the coordination and management systems of railways Nos. 1 and 2

7 April (Friday)

Shanghai Municipal Urban Communications Administration Bureau

- Discussion with the Shanghai Municipal Urban Communications Administration Bureau, and attachee's experience sharing on the contracting-out of tunnel management work

10 April (Monday)

Shanghai Municipal Commission of Construction and Administration

- Introduction of the work of the Shanghai Municipal Commission of Construction and Administration
- Visit to the Urban Speedway Supervision Centre of the Shanghai Municipal Commission of Construction and Administration

11 April (Tuesday)

Shanghai Municipal Commission of Construction and Administration

- Introduction of the informatization of Shanghai's urban roads and bridges, and the evaluation system of data collection
- Introduction of the work of the Research Centre of Urban Road Construction, Management and Integrated Transport Planning of Shanghai

12 April (Wednesday)

Shanghai Municipal Commission of Construction and Administration

- Introduction of the development of Shanghai's Lupu Bridge and visit to the bridge control room
- Introduction of the operation of Shanghai's Fuxinglu Tunnel and visit to the Shanghai Tunnels Planning and Development Centre

13 April (Thursday)

Shanghai Municipal Commission of Construction and Administration

- Exchange with the Planning Division of the Shanghai Municipal Commission of Construction and Administration to understand the funding and application for construction projects
- Introduction of the in-city road construction and transport planning by the Works Division of the Shanghai Municipal Commission of Construction and Administration

14 April (Friday)

Shanghai Municipal Commission of Construction and Administration

- Exchange with the Shanghai Municipal Commission of Construction and Administration, and summary of exchange experience

17 April (Monday)

Shanghai Municipal Road Management Department – Construction Management Division

- Exchange with the Shanghai Municipal Road Management Department
- Introduction of Shanghai's BOT road management system and highway tolling by the Shanghai Municipal Road Management Department

- Introduction of Shanghai's 15-year road planning and the management style of the project companies by the Planning Division

18 April (Tuesday)

Shanghai Municipal Road Management Department – Highway Management Division

- Visit to the Highway Management Division of the Shanghai Municipal Road Management Department, and introduction of the management style and enforcement work of the Division
- Visit to the toll counter at the Shanghai-Nanjing Speedbridge
- Visit to the toll management centre

19 April (Wednesday)

Shanghai Municipal Road Management Department

- Exchange with Shanghai Jiajin Highway Company
- Visit to the Songjiang District to understand the construction and project development of the 65-km Jiajin Highway (Jiading to Jinshan A5)

20 April (Thursday)

Shanghai Municipal Road Management Department – Information Management Division/Road Law Enforcement Division

- Introduction of the work of the Information Management Division of the Shanghai Municipal Road Management Department
- Introduction of the administrative examination and inspection of vehicle safety by the Road Law Enforcement Division

21 April (Friday)

Shanghai Municipal Road Management Department

- Discussion with the Shanghai Municipal Road Management Department, and introduction of the MOM and BOT contract management in Hong Kong by the attachee

24 April (Monday)

Shanghai Municipal Urban Communications Administration Bureau – Transport Management Department

- Introduction of the management of Shanghai's cargo trades, professional and non-professional transportation, transport vehicles and vehicles carrying dangerous goods by the 5th Division (Cargo) of the Transport Management Department

- Visit to Shanghai Gongxing Logistics Company Limited to understand the development of cargo transportation in Shanghai

25 April (Tuesday)

Shanghai Municipal Urban Communications Administration Bureau – Transport Management Department

- Visit to Shanghai Jixiang Logistics Company Limited to understand Shanghai's land transport of cargo containers
- Visit to Donghai Bridge in the Nanhui District, the container port and port control room

26 April (Wednesday)

Shanghai Municipal Urban Communications Administration Bureau – Office of Policy Research

- Exchange with the Office of Policy Research
- Experience sharing by the attachee on the management of public light buses and car parking in Hong Kong

27 April (Thursday)

Shanghai Municipal Urban Communications Administration Bureau

- Summary of exchange experience with the Organizational Personnel of the Shanghai Municipal Urban Communications Administration Bureau

28 April (Friday)

The Shanghai Municipal Construction and Communications Committee

- Meeting with the Construction and Communications Committee of the Shanghai Municipal People's Government and Director Mr He Haimin, and summary of exchange experience in Shanghai

**Staff Exchange Programme
between Hong Kong and Hangzhou**

**Learning Report by a
Hong Kong Officer Attached to Hangzhou**

Attachment period: 24 October to 25 November 2005

Host department: Hangzhou Traffic Bureau and Hangzhou Traffic Police

Attachee: Senior Engineer/Computer Services, Transport Department

1. Introduction

I attended an exchange programme with Hangzhou from 24 October 2005 to 25 November 2005, and was attached to the Hangzhou Traffic Bureau during the captioned period.

My targeted areas of interest were information technology (IT) and Intelligent Transport Systems (ITS). The programme was well designed to provide adequate exposure to such areas. The Traffic Bureau is only responsible for traffic engineering and transport management in expressways and roads outside the urban areas; it is not responsible for traffic engineering and traffic control within the urban areas, which are under the purview of the City Construction Committee (CCC) and the Traffic Police respectively.

The Traffic Bureau was kind enough to make a special arrangement for me to have one week's attachment at the Traffic Police's office. However, it was not possible to arrange for attachment to the CCC as well due to shortage of time. As a result, I spent three and a half weeks in the Traffic Bureau and one week in the Traffic Police. A summary of my learning experiences and my comments on specific areas of interest are presented in the following paragraphs. The comments made are those of my own and do not reflect the view of the Transport Department.

2. Office Automation

In the Hangzhou Traffic Bureau, office automation (OA) is highly developed with OA and Internet access for all employees. There are two totally separate physical networks - the corporate OA network and the Internet via an ISP, and a manual Ethernet switch was employed to switch over from Internet to OA network and vice versa. This simple but effective physical separation has apparently worked well in terms of system security and user convenience, as Windows XP can connect to any available network switched into it. As regards mail and database servers, due to historical reasons Lotus Domino 5.x is still employed and works in the background, but the Notes client is not used. Instead, there is a web-based mail client developed with the assistance of the Zhejiang University.

For Intranet and Internet homepages, there is a web content management system but no demonstration was given.

A web-based Document Management System (DMS) was developed at the provincial level and is also based on Lotus Domino servers working in the background. Like the mail system, The DMS dispenses with the Notes client and employs a web-based client using ordinary web browsers.

Video streaming is provided in the Intranet, and video clips including some feature films are available for on-line viewing by employees during lunch time. In the Intranet Homepage, a lot of up-to-date messages are posted by different divisions to describe their current work and a marking system is employed to give high marks to those divisions that post the most messages.

Comments:

The OA System in Hangzhou is very well developed and although Domino servers are still used in the background, web-based clients have been developed to serve as the man-machine interface for Domino-based applications. A DMS has also been developed as a standard throughout the whole province and is now fully operational. By contrast, our Government is still working on the feasibility study of an Electronic Record Keeping System (ERKS) and there are several incompatible DMS in use in our Civil Service. The physical separation of the Internet and the OA network has achieved a reasonable degree of IT security in a highly cost-effective manner.

3. Highways ITS Infrastructure

The Traffic Bureau constructs and manages all highways and county roads except for

the urban road network which is constructed and managed by the City Construction Bureau. The highway communication network for ITS applications has been well developed and an optical fibre communication backbone linking all expressways have been completed. The Traffic Bureau is also responsible for highway management and maintenance. A visit to the Control Centre for the Hangzhou Ring Expressway was made. The main traffic control and surveillance facilities available are variable message signs, loop detectors, CCTV cameras and emergency telephones. Another visit to a rural tunnel control centre was also made. The centre is equipped with an integrated control and surveillance system (primarily for traffic and ventilation).

Comments:

The traffic control and surveillance systems currently employed in Hangzhou may not be as sophisticated as those employed in the HKSAR, but the availability of a wide-area optical fibre communication backbone for expressways would facilitate the future implementation of advanced ITS applications in Hangzhou.

4. Public Transport Surveillance of Coaches, Goods Vehicles and Taxi

Coaches are kept under close surveillance via CCTV cameras at all interchanges and major stations. The video signals are originally analogue signals but are converted to digital form before transmission over VPN (virtual private network over the Internet) to the office network. The officers in the office can view the CCTV live images via their desktop or notebook computers. The recurrent costs for CCTV monitoring are in the order of \$150,000. An in-house enforcement team is responsible for the proper operation of the public transport interchanges and stations. Video conferencing is possible between the Traffic Bureau office and the public transport stations using the same VPN channel as the CCTV.

Comments:

The integration of CCTV monitoring with the OA network is an innovative approach to dispense with the need of a control centre and yet maintain the capability to perform round-the-clock surveillance of public transport termini/interchanges. This, however, requires a high-speed broadband link (100Mb/s) for VPN, already widely available in Hangzhou but not in HKSAR.

5. GPS Surveillance Centre

A sophisticated GPS Surveillance Centre is operational to monitor the taxis (about 2400 vehicles), dangerous goods vehicles, and also commercial vehicles under subscription. The centre is managed by a quasi-government unit. GPRS is employed for the wireless transmission of the location information and other data (such as passenger occupied/not occupied, speed, etc.) to the Centre. A digital map of 2000 km radius is covered and in fact, the whole country can be covered technically. The database is linked to the OA network and is backed up every three months.

Comments:

The GPS Surveillance Centre is developed, maintained and managed by a quasi-government unit that has now become financially self-sufficient. Income is derived from the GPS services rendered to customers. This approach has resulted in fast and well-coordinated implementation in line with government objectives. The pros and cons of this approach vis-a-vis private-sector initiative should be reviewed.

6. Integrated Traffic Information Command Centre (ITICC)

The System had been commissioned but was not yet operational. It is essentially an integrated traffic information and incident management system for the trunk roads under Traffic Bureau's purview. There are a large number of preset incident plans with flowchart and workflow instructions, fixed and mobile CCTV surveillance, video wall and direct communication links with the police. The CCTV images from other organizations such as the tunnel/expressway control centres, public transport management and the police can all be viewed from this Command Centre via VPN. The on-line database from the GPS Surveillance Centre is also directly accessible. The mobile CCTV employs 8 CDMA GPRS channels in parallel to improve bandwidth. There is video conferencing capability amongst the control centres and other stakeholders.

Comments:

The ITICC is quite similar to Transport Department's proposed Incident Management System under study. The ITICC project will need to undergo a business process re-engineering process, resulting in a situation where the equipment is almost ready to be commissioned but the business processes have to be re-engineered before the equipment can be put to good use.

7. Expressway Surveillance and Toll Collection

A visit was made to a high-level control centre at the provincial level. A closed type toll collection system distributed throughout the Zhejiang province and fully interconnected under a wide area network has made it possible to charge tolls based on the entry and exit points of vehicles due to the real-time sharing of database. The Centre collates traffic data from regional control centres of individual expressways/tunnels via the wide area network. Some VMS and loop detector data are sent automatically from these regional control centres to the high-level control centre and some data are sent manually.

Comments:

The network interconnection of regional traffic control centres to a control centre in a higher hierarchy has not been implemented in Transport Department, although we do have integration of CCTV images from other control centres at our ETCC Control Centre.

8. Integrated Transport Management System

This IT System was developed at the provincial level for deployment at various cities. The System covers the surveillance and maintenance of all public coaches and dangerous goods vehicles. Video surveillance of all the coach termini is via a 100Mb/s VPN broadband. All coaches and dangerous goods vehicles are equipped with GPS equipment subject to a yearly inspection. The GPS equipment facilitates the monitoring of activities of coaches and any abnormal activities are logged. The maintenance records of all coaches are also kept in a database and all the vehicle repair shops are interconnected to the System via a wide area network.

Comments:

This appears to be a major IT System for transport administration that Transport Department does not have. As the amount of information monitored/required by the respective governments and the corresponding workflows differ, whether there are advantages in developing a similar system for HKSAR should be investigated.

9. Driving Tests

An electronic IC card is provided to all trainees. Each trainee has to attend a minimum of 35 hours' training before attending the road tests. All training records are recorded on the IC card. Tests on some basic skills such as parking are monitored via infrared sensors to minimize disputes. A Notes-based OA System is employed to automate the

workflow and issue of Training Certificates.

Comments:

This appears to be a major IT System for transport administration that Transport Department does not have. As the amount of information monitored/required by the respective governments and the corresponding workflows differ, whether there are advantages in developing a similar system for HKSAR should be investigated.

10. Vehicle Maintenance and Examination

All the major vehicle repair centres are interconnected via a wide area network to the Traffic Bureau. The maintenance and test records of all licensed vehicles are entered by these repair centres and kept in a database, which can be retrieved on-line by the Traffic Bureau. The same information is also made available to the Traffic Police on-line.

Comments:

This appears to be a major IT System for transport administration that Transport Department does not have. As the amount of information monitored/required by the respective governments and the corresponding workflows differ, whether there are advantages in developing a similar system for the HKSAR should be investigated.

11. Urban Traffic Control and Surveillance

I was assigned to the Traffic Police office for one week. The Traffic Police is responsible for the overall management of traffic in the urban area – essentially the area bounded by the Ring Expressway, including the provision and operation of a SCATS-based area traffic control system via an ATC control centre. There are 104 fully adaptive junctions out of a total of 600 signalized junctions. For each arm of a typical major junction, apart from the loop detectors for adaptive control, there are multiple cameras mounted on a single cantilever pole – incident cameras, red light cameras and 1 pan-tilt-zoom camera. The incident cameras detect traffic queues automatically. For some strategic junctions, there may also be O-D cameras installed to collect origin-destination data for traffic analysis and modeling purposes. The version of SCATS software installed has an ITS (Intelligent Transport System) subsystem that calculates the average speeds of traffic flow through the junctions via analysis of the loop detector data. These speed data are then used to update a speed map to indicate congested, slow or normal traffic at some major road segments.

A number of public car parks have car-parking vacancy display signs installed at strategic locations upstream of the respective car parks. The vacancy data are derived from the loop detector vehicle count data at the car park entrances and exits.

There are a small number of fully variable message signs installed along the roadside. They are compact signs with small characters which are adequate for slow-speed traffic.

Comments:

The version of SCATS system employed in Hangzhou is installed in 2003 and appears to be more advanced than that employed in Kowloon. In particular, its ITS Subsystem is capable of deriving the average speed of traffic from the stop-line loop detector data and thereby produce useful traffic information such as a speed map. Liaison with the original software developer of SCATS may be useful in terms of upgrading the capabilities/functional requirements of our SCATS for existing and future system development. The use of variable signs in the urban areas also seems to be quite extensive. Although we have a small number of gantry-mounted Journey Time Indication signs at Hong Kong Island, Hangzhou has a much larger number of roadside variable signs for other applications such as car park vacancy variable signs and fully variable message signs

12. Bus Surveillance and Management

A visit was made to the City Management Office, which oversees bus management for the urban areas. A GPS Surveillance and Scheduling System for buses is operational, keeping track of the positions of all buses at all times. This enables real-time rescheduling and re-deployment of buses. Also the bus position information can be fed to roadside bus information display panels installed at major bus stops. The distances (in metres) and IDs of the buses due to arrive can be displayed consecutively on a LED digits display. A LCD video display unit is also provided at the panel for commercial advertisement purposes. The information panel system had not been commissioned at the time of attachment and was still under testing.

Comments:

The said GPS surveillance and Scheduling System and the Information Display Panel System are state-of-the-art ITS applications deployed for public transport (bus) management in the Hangzhou urban area. It may be worthwhile to consider the

deployment of similar systems in the HKSAR.