

**LegCo Panel on Planning, Lands and Works**  
**Policy Initiatives of the Environment, Transport and Works Bureau**

**Introduction**

This note elaborates on those new initiatives in the 2005-06 Policy Agenda relevant to the works portfolio of the Environment, Transport and Works Bureau (ETWB) as well as progress of on-going initiatives in the 2005 Policy Agenda.

**2005-06 Policy Agenda – New Initiatives**

*Effective Governance*

**Work in collaboration with the construction industry to monitor and control payment of workers' wages and reduce non-value added multi-layer subcontracting to raise industry standards**

A descriptive account of the initiative

2. A working group comprising representatives from ETWB, Labour Department, Architectural Services Department (ArchSD), Civil Engineering Development Department, Mandatory Provident Fund (MPF) Authority, labour unions and contractor trade associations has been formed to devise measures to monitor payment of wages for workers and regulate multi-layer subcontracting. These new measures soon to be tested in two building contracts and one civil engineering contract include installation of computerised smart card site access control, requirement for workers to enter written employment contracts with their employers,

control/monitoring of wage payment and MPF contributions through designated banks, imposition of a limit on the number of sub-contracting layers and deployment of special teams to handle complaints.

**Further improve the quality and efficiency of the Electrical and Mechanical Services Trading Fund by adopting a “Total Quality Management” approach and participating in a quality award programme in 2006 to benchmark itself with other well-managed organisations**

A descriptive account of the initiative

3. The Electrical and Mechanical Services Trading Fund (EMSTF) has to face outside competition as a service provider to government departments and public bodies. In addition to 25% productivity gain and attainment of ISO 9001/ISO 14001/OHSAS 18001 certification, EMSTF has embarked on the “Total Quality Management” approach and intends to participate in the Quality Award to be organised by the Hong Kong Management Association in 2006.

## **2005-06 Policy Agenda – On-going Initiatives**

### *Effective Governance*

**Developing a Works Project Information Standard to facilitate the electronic exchange of public works project data and the reliability of electronic communications among stakeholders**

#### Progress Made/Present Position

4. The contract for developing the Works Project Information Standard (WPIS) was awarded in August 2005 and the first phase is progressing well. We will liaise closely with project participants to ensure that WPIS could meet prevailing needs of the industry upon its completion in two years.

**Continuing to examine the feasibility of adopting Public-Private-Partnership for the in-situ reprovisioning of the Sha Tin Water Treatment Works and related issues**

#### Progress Made/Present Position

5. ETWB has joined hands with the Water Supplies Department (WSD) to maintain a close dialogue with the staff unions in addressing their specific concerns. We will consult this Panel again in due course before deciding on a way forward.

**Carrying out testing, tuning and software customisation of the Enterprise Resource Planning corporate computer system, which helps enhance the efficiency and service quality of the Electrical and Mechanical Services Trading Fund (EMSTF); and continuing the effort to set up e-portals for EMSTF major clients**

Progress Made/Present Position

*Enterprise Resource Planning Corporate Computer System*

6. The EMSTF will launch its Enterprise Resource Planning Corporate Computer System in early-2006 to integrate discrete business processes ranging from finance and accounting to operations and human resources management for a seamless flow of data.

7. The system is undergoing customisation and programme coding at the moment, after which data input/migration as well as testing and fine-tuning will proceed.

*e-Portals for Major Clients*

8. Making use of the government data network, EMSTF installed in 2004 a total of 11 e-Portals through which major clients may monitor crucial items such as state of equipment and project progress or request for services. Building on the favourable feedback, EMSTF will make available similar e-Portals for more clients in future.

**Targetting the Architectural Services Department to achieve the overall outsourcing to 68% in 2005-06 and 70% in 2006-07 for the delivery of new projects under its re-engineering programme**

Progress Made/Present Position

9. Outsourcing is an integral part of the re-engineering programme to re-align ArchSD for strategic roles as the corporate adviser of Government on public building development/maintenance matters and an advocate of high standards in construction, site management and safety. To reach the ultimate outsourcing goal of 90%, outsourcing of new projects has increased from 35% in January 2002 to 61% by the end of 2004-05, and 70% by the end of 2006-07. Meanwhile, a dedicated checking unit for building projects has been formed to ensure that the quality of outsourced works is not compromised.

**Continuing to monitor the performance of the new Customer Care and Billing System for over 2.6 million customers of the Water Supplies Department in improving operational efficiency and customer service**

Progress Made/Present Position

10. The Customer Care and Billing System (CCBS) is designed to provide “one-stop shop” and on-line customer services through the Internet on par with other public utilities. It offers valuable and timely information for service planning and management decision-making, capable of interfacing with other existing systems.

11. Phase I of CCBS was completed in December 2003 to convert paper-based documentation into electronic form, thus speeding up information transmission/sharing and reducing the use of storage space. Phase II rolled out in end-2004 to integrate customer services and billing has generated about six million water and sewage charge bills, whereas Phase III introduced in February 2005 has improved data management and prioritised customer services delivery.

12. Some teething problems emerged when the system was first put into place, causing deteriorated service performance in certain aspects. This is not uncommon for major IT projects and has been overcome through fine-tuning and staff training.

13. When the system becomes fully operational, we envisage that CCBS will bring about an annual cost saving of over \$100 million after 2006-07.

**Achieving effective communication with the general public and the media by publicising on the web-site of the Water Supplies Department updated information on the Water Mains Replacement and Rehabilitation projects**

Progress Made/Present Position

14. The replacement and rehabilitation projects cover 3 000 km of water mains sprawling across Hong Kong. Information and related drawings on Stage 1 of the works under construction have been uploaded on the web-site of WSD while design and public consultation details of Stage 2 will be available in December 2005.

## *Vibrant Economy*

**Establishing a Construction Industry Council as an umbrella organisation with self-regulatory powers to pursue continuous quality improvements and to take ownership of a reform programme mapped out by the Construction Industry Review Committee**

### Progress Made/Present Position

15. Based on a broad legal framework of the Construction Industry Council (CIC) endorsed by major stakeholders groups and presented to this Panel, we have drawn up and introduced the CIC (No.2) Bill into the Legislative Council in October 2004. After thorough deliberations, consensus has been achieved on the scope of statutory functions vested with CIC, nomination and appointment mechanism of its membership, representation of labour unions, as well as open meeting arrangements. We will strive for an early passage of the Bill.

**Carrying out registration of existing construction workers, and subsequently, prohibiting unregistered construction workers from carrying out construction work on construction sites as well as employment of unregistered construction workers for such purpose**

### Progress Made/Present Position

16. The Construction Workers Registration Authority has appointed the Construction Industry Training Authority as the Registrar and delegated to it the function of collecting construction levies with effect from February 2005. A contract for the Computerised Registration

Management System to handle registration applications and issue registration cards was also awarded in March 2005.

17. To tie in with commencement of registration at the end of 2005, a regulation outlining the prescribed fees and associated arrangements together with a commencement notice of relevant sections under the Construction Workers Registration Ordinance have been published in the Gazette in October 2005.

**Monitoring and reviewing the re-engineered methodology for planning and implementing infrastructural projects with a view to deriving better efficiency and cost-effectiveness by various means, including the wider adoption of a partnering approach, alternative dispute resolution mechanisms, alternative designs and procurement methods, as well as systematic risk management techniques**

#### Progress Made/Present Position

##### *Partnering Approach*

18. We are promoting non-contractual partnering and have adopted this practice in over 30 public works contracts. A project is being identified for trial use of contractual partnering based on the New Engineering Contract, a new and less adversarial contract form developed in the UK.



### *Alternative design/Procurement method*

19. We have encouraged works departments to invite alternative designs during tender stage whenever there is potential for better value for money and introduced standard contractual provisions to deal with alternative designs proposed by the contractor as well as arrangements to share cost savings. We have also promulgated a reference guide on procurement approaches and associated project delivery techniques for construction projects.

### *Systematic Risk Management*

20. We promulgated in June 2005 a set of requirements and guidelines to facilitate the application of systematic risk management in public works projects. To further assist the works departments, we have conducted a series of training courses for the responsible project staff.

### *Environmentally Responsible Development*

**Implementing a comprehensive greening policy for Hong Kong through the collaboration of different departments and with the input of experts and specialists in the field, and aiming to develop a sustainable greening programme for the urban areas. We have set up a high level Steering Committee on Greening, completed the planting of 14 million trees, shrubs and annuals in 2004-05, and will complete the planting of another 10 million in 2005-06. We have completed the greening master plans for Tsim Sha Tsui and Central in mid 2005 and will continue to produce greening master plans for Sheung Wan/Wan Chan/Causeway Bay and Mong Kok/Yau Ma Tei by end 2006. For implementation of greening enhancement measures, six pilot schemes**

**in Tsim Sha Tsui commenced in July for completion by end 2005. We will continue to implement greening works in Tsim Sha Tsui and Central for completion by end 2006.** *[Note: This is followed by HAB's initiative – The Community Garden Programme has been extended to cover 18 districts in 2005-06. We will continue to organise various greening and horticultural activities to promote greater public awareness and support for a green environment.]*

#### Progress Made/Present Position

21. We continue to pursue a comprehensive greening programme, focusing on enhanced visual quality and streetscape improvement in the urban areas. Four working committees under the Steering Committee on Greening are providing technical/administrative support as well as collating inputs from the community and expert advisers.

#### *Greening Master Plan*

22. The Greening Master Plans (GMPs) for Tsim Sha Tsui and Central have been completed, to be followed by Sheung Wan/Wan Chai/Causeway Bay and Mong Kok/Yau Ma Tei by end-2006.

23. Short-term greening proposals associated with the GMPs for Central and Tsim Sha Tsui will commence in March 2006 for completion within the same year. Similar works for other selected areas in Hong Kong Island and Kowloon West will be implemented in phases.

### *Greening programme*

24. Satisfactory progress has been made in implementing the greening programme for 2005-06. Up to the end of July 2005, about 5 million plants were provided with the following breakdown –

Trees	Shrubs	Annuals	Total
1.82 million	2.65 million	0.48 million	4.95 million

We intend to provide about 8.5 million plants (including trees, shrubs and annuals) in 2006-07, about 75% of which will be in urban areas.

### *Tree Preservation*

25. We have established a register of old and valuable trees on government land which are at least 100 years old or which have a trunk diameter over one metre and posted it onto the Internet for public access. Additional trees, including wall trees, will be progressively incorporated into this register. Felling of the over 500 registered trees is strictly prohibited without prior agreement by ETWB and Lands Department.

26. Moreover, we are running an annual training programme to enhance the knowledge of government front-line staff on tree protection with some 1 600 staff already attended the programme.

**Decking over 16 sections of nullahs in the next ten years to improve the living environment. The land obtained from decking of the nullahs will be used for public purposes such as greening, amenity and road widening**

Progress Made/Present Position

27. Some nullahs in urban areas have long been a source of nuisance to nearby residents. After an initial study, we have identified 16 sections of nullahs that can be improved and formulated a long-term plan to deck over them in phases. Of the 16 projects, eight will be completed in three years, four in six years and the remaining four in ten years. Preliminary design and site investigation works for the first phase projects are in active progress.

**Continuing the implementation of the Total Water Management programme to promote water conservation and water resource protection through education and publicity; to collect test data and canvass public acceptance on desalination by commissioning a pilot plant; and to explore uses of reclaimed water through two pilot schemes at the Ngong Ping Sewage Treatment Plant and the Shek Wu Hui Sewage Treatment Plant**

Progress Made/Present Position

28. Water is an important and irreplaceable resource. We will sustain momentum of the Total Water Management (TWM) programme and extensively promote water conservation within the community. Heavy users of water will continue to pay higher charges. We are also conducting research using latest technologies to desalinate sea water and

encourage reuse of treated domestic effluent, with a view to increasing local water resources as a long-term goal.

29. To help reduce leakage of fresh water, we aim to complete the water mains replacement and rehabilitation programme within a period of 15 years. Two pilot schemes for use of reclaimed water are being pursued actively: the scheme at Ngong Ping Sewage Treatment Plant for operation in late-2005/early-2006 and the scheme at Shek Wu Hui Sewage Treatment Plant in mid-2006. The experience so gained will pave way for wider application of such schemes in the territory. Similarly, the pilot desalination plant operating at Tuen Mun since November 2004 will be re-located to Ap Lei Chau in early-2006 for further testing under different conditions. Based on the outcome of various pilot schemes, we are about to launch a two-year study to map out a comprehensive TWM strategy.

### **Enhancing the use of energy efficient devices and promoting wider adoption of renewable energy in public works projects**

#### Progress Made/Present Position

30. Apart from installing energy saving devices and complying with the building energy codes, we are formulating a policy to require that consideration be given to wider use of such devices and renewable energy when planning and designing public works projects.

**Implementing the flood prevention programme by completing 31 major flood prevention projects since 1997, carrying out 16 and putting 16 under planning and design. We will have substantially minimised the risk of regional flooding in the northern New Territories by 2006 upon the completion of Regulation of Shenzhen River Stage III and Drainage Rehabilitation Works at Ping Yuen River**

Progress Made/Present Position

31. Through the completion of a series of major flood prevention projects with the last one at Ta Kwu Ling in 2006, the risk of extensive regional flooding in northern and north-western New Territories has largely been eliminated.

32. Flooding in north-western New Territories near Shan Pui River and the upstream areas in Yuen Long and Kam Tin has been alleviated by 18 major projects implemented since 1997. This is complemented by flood pumping schemes in Tin Shui Wai, Yuen Long, Kam Tin and San Tin, bringing relief to low-lying villages. Another six flood prevention projects, including the Yuen Long By-pass Floodway and San Tin Eastern Main Drainage Channel, are still in progress.

33. In northern New Territories, 10 major flood prevention projects have been completed since 1997. Stage III of the Shenzhen River Regulation Project is due for completion in 2006; training of 18 km of the primary river network near Fanling and Sheung Shui, comprising River Indus and River Beas, has been done; the drainage rehabilitation scheme for Ping Yuen River in Ta Kwu Ling is under construction.

34. For urban areas, Stages 1 and 2 of the West Kowloon Drainage Improvement Scheme, the Tai Hang Tung Storage Scheme and the Kai Tak Transfer Scheme have obviated flooding problems in Mong Kok.

35. Having completed eight Drainage Master Plan studies, our attention is shifting away from the primary drainage networks, with planning, design and construction currently proceeding on 20 projects to upgrade the secondary drainage networks.

**Continuing with the Landslip Preventive Measures Programme which has greatly improved slope safety and visual impact of the built environment. We will upgrade and landscape 250 substandard government slopes as well as conduct safety-screening for 300 private slopes in the coming year**

Progress Made/Present Position

36. In the first nine months of 2005, we have upgraded and landscaped some 190 substandard government man-made slopes based on a risk-based priority system and conducted safety-screening studies for about 200 private man-made slopes. As a result, Buildings Department has issued Dangerous Hillside Orders to the owners of 35 such slopes. The remaining work is scheduled for completion by the end of this year.

**Reviewing the Landslip Preventive Measures Programme to identify possible scope for improved cost-effectiveness of the slope upgrading works, managing the risk posed by natural terrain landslides on the dense population in Hong Kong, and according priority to dealing with natural slopes which are susceptible to potential landslip**

Progress Made/Present Position

37. We have revised entry requirements for registration under the approved list of specialist LPM contractors to attract more large firms, thereby improving cost-effectiveness and built quality. Natural hillsides that may pose a potential landslide risk to adjacent developments are being located and grouped under a risk-based priority system.

**2005 Policy Agenda – New Initiatives**

*Effective Governance*

**Develop a Works Project Information Standard to facilitate the electronic exchange of public works project data and the reliability of electronic communications among stakeholders**

Progress Made/Present Position

38. This is an on-going initiative in the 2005-06 Policy Agenda. Please refer to paragraph 4 above.



## *Vibrant Economy*

**Establish a Construction Industry Council as an umbrella organisation with self-regulatory powers to pursue continuous quality improvements and to take ownership of a reform programme mapped out by the Construction Industry Review Committee**

### Progress Made/Present Position

39. This is an on-going initiative in the 2005-06 Policy Agenda. Please refer to paragraph 15 above.

## **2005 Policy Agenda – On-going initiatives**

## *Effective Governance*

**Examining the feasibility of adopting Public-Private-Partnership for the in-situ reprovisioning of the Sha Tin Water Treatment Works and related services**

### Progress Made/Present Position

40. This is an on-going initiative in the 2005-06 Policy Agenda. Please refer to paragraph 5 above.

**Enhancing the efficiency and service quality of the Electrical and Mechanical Services Trading Fund by using its investment in information technology, installing an Enterprise Resource Planning corporate computer system, and setting up e-portals for major clients**

Progress Made/Present Position

41. This is an on-going initiative in the 2005-06 Policy Agenda. Please refer to paragraphs 6 – 8 above.

**Targetting the Architectural Services Department to achieve the overall outsourcing to 68% for the delivery of new projects in the coming year under its re-engineering programme**

Progress Made/Present Position

42. This is an on-going initiative in the 2005-06 Policy Agenda. Please refer to paragraph 9 above.

**Monitoring the performance of the new Customer Care and Billing System for over 2.6 million customers of the Water Supplies Department in improving operational efficiency and customer service**

Progress Made/Present Position

43. This is an on-going initiative in the 2005-06 Policy Agenda. Please refer to paragraphs 10 – 13 above.

**Achieving effective communication with the general public and the media by publicising on the web-site of the Water Supplies Department updated information on the Water Mains Replacement and Rehabilitation projects**

Progress Made/Present Position

44. This is an on-going initiative in the 2005-06 Policy Agenda. Please refer to paragraph 14 above.

***Vibrant Economy***

**Making preparations for launching the Construction Workers Registration System**

Progress Made/Present Position

45. This is an on-going initiative in the 2005-06 Policy Agenda. Please refer to paragraphs 16 – 17 above.

**Re-engineering the methodology for planning and implementing infrastructural projects with a view to deriving better efficiency and cost-effectiveness by various means, including the wider adoption of a partnering approach, alternative dispute resolution mechanisms, alternative designs and procurement methods, as well as systematic risk management techniques**

Progress Made/Present Position

46. This is an on-going initiative in the 2005-06 Policy Agenda. Please refer to paragraphs 18 – 20 above.

## *Environmentally Responsible Development*

**Implementing a comprehensive greening policy for Hong Kong through the collaboration of different departments and with the input of experts and specialists in the field, and aiming to develop a sustainable greening programme for the urban areas. We have set up a high level Steering Committee on Greening, completed the planting of 16 million trees, shrubs and annuals in 2003-04, and will complete the planting of another 10 million in 2004-05. We also aim to produce greening master plans for Tsim Sha Tsui and Central by around mid 2005 so that works can start. *[Note: This is followed by HAB's initiative – Six community gardens in different districts have been established in 2004. The programme will be extended to cover all districts in 2005-06. We are also organising various greening and horticulture activities to promote public support for a green environment.]***

### Progress Made/Present Position

47. This is an on-going initiative in the 2005-06 Policy Agenda. Please refer to paragraphs 21 – 26 above.

**Rolling out the Total Water Management programme to promote water conservation and water resource protection through education and publicity by commissioning a pilot desalination plant in Tuen Mun to collect test data and canvass public acceptance, and by planning two pilot schemes at the Ngong Ping Sewage Treatment Plant and the Shek Wu Hui Sewage Treatment Plant to explore alternative use of reclaimed water**

Progress Made/Present Position

48. This is an on-going initiative in the 2005-06 Policy Agenda. Please refer to paragraphs 28 – 29 above.

**Sustaining our efforts to encourage the wider use of recycled construction and demolition materials in public works projects**

Progress Made/Present Position

49. This is an on-going initiative in the 2005-06 Policy Agenda. Please refer to paragraph 30 above.

**Implementing the flood prevention programme by completing 26 major flood prevention projects since 1997, carrying out 17 and putting 19 under planning and design. We will have substantially minimised the risk of regional flooding in the northern New Territories by 2006 upon the completion of Regulation of Shenzhen River Stage III and Drainage Rehabilitation Works at Ping Yuen River**

Progress Made/Present Position

50. This is an on-going initiative in the 2005-06 Policy Agenda. Please refer to paragraphs 31 – 35 above.

**Continuing with the Landslip Preventive Measures Programme which has greatly improved slope safety and visual impact of the built environment. We will upgrade and landscape 250 substandard government slopes as well as conduct safety-screening for 300 private slopes in the coming year**

Progress Made/Present Position

51. This is an on-going initiative in the 2005-06 Policy Agenda. Please refer to paragraph 36 above.

**Reviewing the Landslip Preventive Measures Programme to identify possible scope for improved cost-effectiveness of the slope upgrading works**

Progress Made/Present Position

52. This is an on-going initiative in the 2005-06 Policy Agenda. Please refer to paragraph 37 above.

Environment, Transport and Works Bureau

October 2005