

## MESSAGE

To meet the needs of the community and sustain Hong Kong's position as a world city in Asia, the Government is committed to maintaining a robust investment in building new infrastructure and improving existing ones, and will spend about \$25 billion on capital works in 2001/2002. In the coming few years, the Government shall maintain a steady growth on the capital works expenditure.

As Government's works agent, Works Bureau and the Works Departments will ensure that projects under the Public Works Programme are well-planned; are implemented in a safe, timely and cost-effective manner; and are of high quality and standards.



The Construction Industry Review Committee appointed by the Chief Executive has completed its review on the existing operations of the local construction industry and has recommended a comprehensive package of measures for improving the quality and standards of the industry. Works Bureau will co-ordinate Government's effort and work closely with the industry in the implementation of the recommended improvement measures.

With China's imminent entry into the World Trade Organization and the development of its Western Region, ample opportunities are lying ahead for the local construction industry. Apart from promoting a wider exchange of construction technology and expertise, the Works Bureau will continue to promote and facilitate greater co-operation between local industry stakeholders and their Mainland counterparts.

We will work closely together with the seven Works Departments to ensure that various targets set out in this booklet are efficiently and effectively delivered. Your comments and suggestions, which will help us attain an even higher standard in our services, are most welcome.

A handwritten signature in black ink, reading "Lee Shing-see". The signature is written in a cursive style with a horizontal line under the "ee" at the end.

(Lee Shing-see)  
Secretary for Works

# **Public Works Programme**

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## **Policy Objective and Key Result Areas**

# PUBLIC WORKS PROGRAMME

Our Policy Objective is to ensure the effective planning, management and implementation of the Public Works Programme (PWP) as a whole and the major infrastructure development projects in particular.

## Overall Targets

Our targets this year in pursuing this Policy Objective are –

- to ensure that public works projects are planned and implemented to meet the requirements of the client bureaux/departments
- to streamline the pre-construction activities of public works projects with a view to reducing the time required for the delivery of projects
- to enhance the quality and standards of services provided by the Works Departments, consultants and contractors, and the construction industry as a whole

## Progress

During the past 12 months, we have achieved satisfactory results in pursuing our Policy Objective targets.

We have devoted much effort in ensuring that public works projects were planned and delivered on schedule and within budget in a cost-effective manner. To achieve this, we continued to monitor closely the progress of the projects in the PWP at different stages of implementation. We reviewed the Preliminary Project Feasibility Studies at the initial planning stage to ensure that the feasibility and cost-effectiveness of a project are established before implementation. In the design and development stage, we monitored project progress and changes in cost estimates and programmes. Finally, during construction, we conducted regular meetings to review the progress of construction works and expenditure levels. Through high-level meetings, we also closely monitored the progress of mega projects.

In mid-2001, we carried out a review of PWP procedures and identified areas for streamlining so as to expedite the delivery of projects. We have devised a number of measures for implementation. We have identified a new target at the Policy Objective level to monitor progress in this respect.

As part of our continuous attempts to enhance the quality and standard of services provided by the construction industry, we have developed management guidelines and devised systems to strengthen the monitoring of the performance of contractors and consultants, encouraged conformity with the International Organisation for Standardisation (ISO) 9000 guidelines in the industry, and promoted quality management in Works Departments and site safety awareness.

The Construction Industry Review Committee (CIRC) submitted its report to the Chief Executive in January 2001 and recommended 109 improvement measures aiming to substantially lift the quality and cost-effectiveness of the construction industry. The proposed measures cover a wide range of subjects including quality culture, construction procurement, manpower development, innovation, productivity, safety, environment and institutional framework. To take the matter forward, the Works Bureau was appointed as the lead agency within the Government to drive and co-ordinate with relevant bureaux and departments on the implementation of the CIRC recommendations. We had set out a time frame for the implementing parties to follow. Actions had already been taken on some of the recommendations. We shall monitor the progress and continue to work closely with the construction industry to decide on the best way to take forward those recommendations that have far-reaching implications for the industry.

To enhance the efficiency, quality and standard of services provided by the construction industry, and in line with the recommendation of the CIRC, a new Key Result Area (KRA) to promote electronic services delivery for works projects has been added this year.

We also achieved the following progress in our eight KRAs.

**1 Ensure that public works projects are planned for cost effectiveness, feasibility studies are thoroughly conducted, and planning action is well co-ordinated**

We have ensured that the preliminary feasibility of projects is established before their inclusion in the Public Works Programme through the carrying out of Preliminary Project Feasibility Studies. Where options are available, we have taken steps to ensure that cost-benefit analyses have been properly carried out for public works projects so that the construction costs, social costs and other intangible costs as well as revenues have been duly taken into account in deciding the best option for implementation. We have also continued the land acquisition prioritisation exercise to help allocate resources on land acquisition in such a manner as to suit the importance of projects and their planned implementation programmes. We also monitored closely the upgrading of projects to Category A for the timely commencement of construction. In 2000-2001, 74 new projects were upgraded to Category A, and some 230 new works contracts and consultancy agreements were awarded.

**2 Ensure that the most appropriate methods of procurement and delivery of construction projects are used**

The Construction Industry Review Committee (CIRC) completed reviewing the international expert's recommendations with regard to the allocation of risks in the General Conditions of Contract (GCC). Based on CIRC's recommendation, and after consulting the industry, we have been further reviewing the GCC with the objective of achieving a more equitable allocation of risks between the contracting parties. With a view to ensuring overall value for money, we plan to conduct a study on alternative procurement methods.

**3 Ensure that the quality of consultants and contractors selected to deliver public works will meet the requirements of our projects**

The progress in various fronts contributing to the target was satisfactory. We promulgated the Contractor Management Handbook which has been put in place in April 2001. The Handbook consolidated and updated the existing guidelines and procedures pertaining to administration and monitoring of the performance of Works Bureau's

approved contractors and suppliers. The Contractors' Performance Index System has achieved the useful purpose of providing a ready indication of the contractors' performance standard for reference by the project offices and relevant tender boards in tender evaluation. We have been enhancing the computerised Contractors Management Information System, including developing it into a bilingual (Chinese and English) system, and the enhancement work will be completed by the end of 2001.

The proposal to set up a Consultants' Performance Index System has been well received by the industry. Taking into consideration the industry's suggestion for categorisation of services, we will develop a modified system, which can provide quantified information about each consultant's performance under various categories of works, by 2002.

#### **4 Ensure that contractors for public works maintain a safe and healthy working environment**

In the past year, we continued to achieve satisfactory results in containing the accident rate on public works construction projects to less than 55 accidents per 1 000 workers per year. The Pay for Safety Scheme was expanded to include Design and Build contracts in addition to works contracts and term contracts to encourage public works contractors to implement more efficient safety management systems. To increase the safety awareness of all persons working in construction sites, the trial scheme of Site Safety Cycle has been implemented. The accident reporting system of public works construction sites was also upgraded. Apart from holding safety seminars and safety award schemes for our staff and public works contractors, we held (in collaboration with outside organisations) one safety conference, one seminar and two safety award schemes during the year to promote site safety across the construction industry.

#### **5 Ensure high quality and standards in the construction and maintenance of public works**

All contractors undertaking Group C contracts had fulfilled our ISO 9000 certification requirements. We have also achieved good progress in implementing the Works Departments' quality management plans.

We have completed the consultancy study on the setting up of a central construction standardisation body in Hong Kong. The Construction Advisory Board and the Construction Industry Review Committee (CIRC) have been consulted on the recommendations and indicated support to the setting up of the standardisation body. The CIRC has also recommended in early 2001 in its review of the construction industry to establish an industry coordinating body with one of its tasks to establish the standardisation body. Actions have been taken to take forward the CIRC's recommendation to establish the industry coordinating body.

In order to study whether long-term employment of construction workers would lead to any improvement in construction quality and site safety, we have selected some public works projects to carry out a trial scheme which started in August 2001.

## **6 Ensure that projects in the Public Works Programme are completed on time and within budget**

We have continued to monitor closely the progress and expenditure level of projects in the PWP through a multi-level hierarchy of regular review reports and meetings. As at the end of March 2001, the overall underspending on the PWP was 3.2% against provisions in the 2000-2001 Estimates, which was well within our 5% target. As compared with the annually updated project programmes and project estimates, 85% of the projects scheduled for completion within 2000-2001 were completed on time and within budget.

## **7 Promote the exchange of construction technology and expertise in public works between Hong Kong and the Mainland**

In the past 12 months, we aimed to organise seminars and visits to the Mainland jointly with authorities, trade associations and professional bodies in the Mainland and Hong Kong.

Progress made in this area was satisfactory. We have jointly organised with interested parties conference and study mission to the Mainland to promote the future development and co-operation between the construction industry of the two places. These activities have achieved the useful purpose of enhancing the co-operation between engineering and construction professionals in Hong Kong and the Mainland. To facilitate the contact between the local construction industry and their

Mainland counterparts, a directory of construction service providers in Hong Kong was compiled in December 2000.

The research projects conducted by the Research Centre for Landslip Prevention and Land Development jointly with its Mainland counterparts have achieved satisfactory results. A drilling monitoring system has been developed and a patent application has been filed by the Research Centre. Besides, a Geotechnical Lecture Series Programme has been implemented since February 2001 for reputable local and Mainland researchers and engineers to exchange professional experience and knowledge. Separately, the Research Centre on Construction Safety, which was set up jointly by Tsinghua University and a local contractor, will complete a research on the safety aspects of metal and bamboo scaffolding by the end of 2001.

## **8 Ensure that the stormwater drainage infrastructure is adequate and effective in collecting and discharging surface runoff**

Construction works for six high priority drainage projects in the New Territories and West Kowloon have started as scheduled, and have been making satisfactory progress. We have been working closely with the Shenzhen Authorities with a view to commencing the remaining Stage 3 works of the Shenzhen River Regulation Project near end-2001. Preparation of the tendering documents for the first construction contract has been substantially completed.

We have already completed two high priority drainage projects in the New Territories and will complete three others including river training works for River Beas and Lower River Indus in end-2001. We have been closely monitoring the training works for the Upper River Indus and have put in place measures to expedite the completion of the critical channel works in 2002 so as to bring early relief to the flooding problem in the River Indus basin.

Progress on each previously announced initiative under the above KRAs is set out in the “Detailed Progress” section of this report.

## **Looking Forward**

To achieve our overall targets this year, we will undertake the following initiatives and targets under each of the KRAs for the coming year.

# 1

## **Ensure that public works projects are planned for cost effectiveness, feasibility studies are thoroughly conducted, and planning action is well co-ordinated**

Public works provide the cornerstone of Hong Kong's physical infrastructure. We need to ensure that these projects are properly planned, thoroughly studied and well coordinated before proceeding to the construction stage. In so doing, we must also ensure that the planning and design process is completed efficiently so that construction could start in the shortest possible time in accordance with the planned programmes.

To deliver the desired results, we will continue the requirement for projects to undergo a Preliminary Project Feasibility Study (PPFS) and, where appropriate, value management studies before the design work is carried out. We will ensure that PPFS and value management studies are properly completed so as to meet the needs of the client bureaux/departments and affirm the cost-effectiveness of the solutions.

We are also mindful that all the procedures should be streamlined to make the planning and design process as short as possible. This year, we will focus on simplification of procedures and allow pre-construction activities to be carried out in parallel. Our aim is to reduce the lead time for delivery of projects without compromising on quality.

We will assess our performance in respect of this KRA against the following indicator –

- The percentage of new projects commenced on schedule compared with the Estimates. Our target is to commence not less than 80% of new projects included in the 2001-2002 Estimates.

We will pursue the following initiatives and targets to deliver results in this area –

Initiative *	Target
<p>To streamline Public Works Programme (PWP) procedures, including simplifying Preliminary Project Feasibility Studies, improving the coordination between environmental impact assessment and the statutory gazetting of projects and shortening the land resumption process</p> <p><i>(Works Bureau (WB))</i></p>	<p>To complete the streamlining of PWP procedures by March 2002</p>
<p>To conduct a review on the undertaking of value management studies on major public works projects to better address the needs of all stakeholders</p> <p><i>(WB)</i></p>	<p>To complete the review by March 2002</p>

\* the bracketed information denotes the agency with lead responsibility for the initiative

# 2

## Ensure that the most appropriate methods of procurement and delivery of construction projects are used

To ensure that we achieve efficiency and value for money in the construction of public works and that projects are completed on time and within budget, we must choose the most appropriate method of procurement and adopt the best practices in the design, construction and maintenance of each project.

We will assess our performance in respect of this KRA against the following indicator –

- The percentage of initiatives completed within the target time. Our target is to complete 100% of the initiatives within the target time.

We will pursue the following initiatives and targets to deliver results in this area –

Initiative	Target
To review the recommendations of the consultancy study on the General Conditions of Contract for Public Works Projects with the objective of achieving a more equitable allocation of risks <i>(Works Bureau (WB))</i>	To complete the review by 2003
To investigate alternative methods of procurement for public works <i>(WB)</i>	To carry out a study on alternative methods of procurement for public works in order to ensure overall value for money by March 2003

# 3

## **Ensure that the quality of consultants and contractors selected to deliver public works will meet the requirements of our projects**

The quality of contractors and consultants affects the delivery of the Public Works Programme (PWP). To ensure quality, we have clarified our standards and systems for selecting and managing consultants and contractors. These include monitoring their performance and taking regulating action against poor performance.

We require all contractors and consultants of major public works projects to obtain International Organisation for Standardisation 9000 certification. The certification will show that they have established quality assurance systems up to international standards.

In order to improve the quality of public works, we will also require the contractors to employ more qualified tradesmen and intermediate tradesmen, who are workers with recognised qualifications in the relevant trades, for carrying out the works.

As the PWP represents a large proportion of the overall construction activities in Hong Kong, we can contribute to a broader raising of standards within the local construction industry by improving the quality of our contractors and consultants.

We will assess our performance in respect of this KRA against the following indicator –

- Contractors' Performance Index. Our target is to have over 90% of the contractors on the lists of contractors score a performance index not less than 55 marks.

We will pursue the following initiatives and targets to deliver results in this area –

<b>Initiative</b>	<b>Target</b>
<p>To enhance the consultant selection procedures with a view to encouraging more consultants to participate in public works consultancies</p> <p><i>(Works Bureau (WB))</i></p>	<p>To complete the enhancement by end-2002</p>
<p>To improve the mechanism for monitoring consultants' performance</p> <p><i>(WB)</i></p>	<p>To incorporate categorisation of works in the Consultants' Performance Index System by end-2002</p>
<p>To improve the quality of public works by requiring the contractors to employ more qualified tradesmen and intermediate tradesmen for carrying out the works</p> <p><i>(WB)</i></p>	<p>To review and increase the minimum percentages of qualified tradesmen and intermediate tradesmen to be employed by the contractors of Government works contracts before end-2002</p>
<p>To improve the marking scheme in the consultant selection system such that it adequately reflects all quality aspects critical to a project</p> <p><i>(WB)</i></p>	<p>To promulgate the new marking scheme by mid-2003</p>

# 4

## **Ensure that contractors for public works maintain a safe and healthy working environment**

The construction of high-rise buildings and other major projects can pose hazards to workers and to the public. We recognise this, and are committed to achieving the highest possible standards of safety in Hong Kong's construction industry.

The implementation of safety management systems and the provision of safety training in public works contracts have resulted in a downward trend in accident rates on public works construction sites. The initial target accident rate of less than 60 accidents per 1 000 workers per year was met in 1997 and the subsequent lowered target rate of less than 55 accidents per 1 000 workers has been met since January 2000. We aim to reduce the accident rates to less than 50 accidents per 1 000 workers per year by 2002.

Two major safety initiatives, the Pay for Safety Scheme and the Independent Safety Audit Scheme, were introduced in 1996 to encourage public works contractors to set up more efficient safety management systems and to enhance the standard of safety performance of contractors.

We will continue to work together with the construction industry and related bodies to transform safety attitudes throughout the construction workforce.

We will continue to monitor the site safety performance of our contractors and ensure that only contractors with satisfactory performance will be allowed to tender for public works contracts.

We will assess our performance in respect of this KRA against the following indicator –

- The incidence of accidents. Our target is to have less than 50 accidents per 1 000 workers per year.

We will pursue the following initiatives and targets to deliver results in this area –

Initiative	Target
<p>To monitor the safety performance of public works contractors to achieve the target accident rate of less than 50 accidents per 1 000 workers per year</p> <p><i>(Works Bureau (WB))</i></p>	<p>To achieve the target accident rate of less than 50 accidents per 1 000 workers per year in 2002</p>
<p>To review the trial scheme of Site Safety Cycle and apply it to suitable public works contracts</p> <p><i>(WB)</i></p>	<ul style="list-style-type: none"> <li>● To complete the review in early 2002</li> <li>● To apply the scheme to suitable public works contracts to be invited in mid-2002</li> </ul>

# 5

## Ensure high quality and standards in the construction and maintenance of public works

To ensure the successful delivery of public works, we need to maintain and improve the quality of contractors, consultants and personnel in the construction industry. The development of local construction standards in line with leading international standards is essential, as it can help ensure that the construction of Hong Kong’s public works complies with internationally recognised standards of work.

We will assess our performance in respect of this KRA against the following indicator –

- The percentage of Group C Contractors with International Organisation for Standardisation (ISO) 9000 certification undertaking public works. Our target is 100% of Group C Contractors with ISO 9000 certification undertaking public works.

We will pursue the following initiatives and targets to deliver results in this area –

Initiative	Target
To promote wider use of standardisation in component design and process in construction <i>(Works Bureau (WB))</i>	To establish a database of standardised construction components and processes in 2002 for share use and reference among Works Departments
To further improve the quality management of public works through the certification against the International Organisation for Standardisation (ISO) 9001:2000 standard <i>(WB)</i>	Following the requirements of the ISO on the transition to the ISO 9001:2000 standard, to require all consultants, Groups B and C contractors, and major specialist contractors to obtain ISO 9001:2000 certification by end-2003

<b>Initiative</b>	<b>Target</b>
To enhance materials and compliance testing for public works projects <i>(Civil Engineering Department)</i>	<ul style="list-style-type: none"><li>● To publish standard specifications for testing on Alkaline Aggregate Reactions in 2002</li><li>● To publish standard specifications for soil testing in 2002</li></ul>

# 6

## Ensure that projects in the Public Works Programme are completed on time and within budget

To ensure the effective delivery of public works, projects must be completed on time and within budget. The completion of projects on time allows client bureaux/departments to deliver their services to the public as scheduled. Completion within budget facilitates financial planning and ensures that the works are carried out cost-effectively.

We will assess our performance in respect of this KRA against the following indicators –

- The percentage of overall underspending of the Public Works Programme (PWP). Our target is to ensure that the overall underspending on the Programme is not more than 5% of the corresponding provisions in the 2001-2002 Estimates.
- The percentage of projects in the PWP completed on time. Our target is to ensure the timely delivery of at least 75% of projects that have been scheduled at the start of the financial year for completion in the year.
- The percentage of projects in the PWP delivered within budget. Our target is to deliver 85% of the public works projects that have been scheduled at the start of the financial year for completion in the year within the approved budget.

We will pursue the following initiatives and targets to deliver results in this area –

Initiative	Target
To ensure the timely delivery of infrastructure projects related to the Cyberport (Works Bureau (WB))	<ul style="list-style-type: none"><li>● To complete the sewage treatment plant by October 2002</li><li>● To complete 50% of the bridge foundations of the Northern Access Road by September 2002</li></ul>

Initiative	Target
<p>To ensure the timely delivery of infrastructure projects related to the Hong Kong Disneyland (WB)</p>	<ul style="list-style-type: none"> <li>● To complete works of the Phase 1 theme park site of the Penny's Bay Reclamation by end-2002</li> <li>● To commence the de-contamination work at the Cheoy Lee Shipyard by end-2002</li> <li>● To complete the civil engineering works for the West Resort Road by end-2002</li> </ul>

# 7

## Promote the exchange of construction technology and expertise in public works between Hong Kong and the Mainland

The exchange of public works technology and expertise between Hong Kong and the Mainland contributes to higher standards in the construction industry, promotes general understanding of construction practices in Hong Kong and the Mainland, and broadens the potential for future co-operation.

Contractors and consultants in the construction industry who undertake public works have an important role themselves in developing links with the Mainland. Works Bureau promotes and facilitates such exchanges through seminars and visits. We will continue to maintain close links and establish new contacts with our counterparts in the Mainland.

We will assess our performance in respect of this KRA against the following indicator –

- The number of seminars and visits to the Mainland organised jointly with trade associations and professional bodies. Our target is to organise at least one seminar and one visit each year to the Mainland as set out under the respective initiatives.

We will pursue the following initiatives and targets to deliver results in this area –

<b>Initiative</b>	<b>Target</b>
To promote joint technological research activities and exchange of construction technology with the Mainland <i>(Works Bureau (WB))</i>	To facilitate local and Mainland universities and related organisations in undertaking at least one joint research project in construction engineering in 2002

Initiative	Target
<p>To facilitate contact between the local construction industry and their Mainland counterparts to help enhance mutual understanding in the organisation and practice of the construction industry and to strengthen their co-operation opportunities</p> <p><i>(WB)</i></p>	<ul style="list-style-type: none"> <li>● To co-organise at least one exchange seminar and arrange visits to the Mainland on topics related to systems and practices adopted by the construction industry in Hong Kong and in the Mainland by end-2002</li> <li>● To collaborate with the relevant Mainland authorities on the exchange of construction-related information in 2002</li> </ul>
<p>To foster liaison and co-operation among engineering and construction related professionals for the promotion of a comprehensive service (covering project financing, design, construction and project operation) to the construction industry</p> <p><i>(WB)</i></p>	<p>To co-organise at least one exchange seminar and arrange visits to the Mainland to share experience and promote co-operation between local professionals and their Mainland counterparts by end-2002</p>

## **Ensure that the stormwater drainage infrastructure is adequate and effective in collecting and discharging surface runoff**

Rapid infrastructural development gives rise to the need for improved drainage systems to alleviate the possibility of flooding. Low-lying areas occasionally suffer from severe flooding, and flood prevention measures are required to reduce hardship to residents of these flood-prone areas.

To match the demand arising from new developments and to reduce the risk of flooding in low-lying areas, we will review and upgrade the existing stormwater drainage systems and strengthen preventive maintenance works to ensure proper functioning of the systems over the territory. We will also carry out drainage improvement projects for those flood-prone areas worst affected by flooding.

We will assess our performance in respect of this KRA against the following indicators –

- The number of high priority drainage projects started in the flood-prone areas by end-2002. Our target is to start three high priority drainage projects in the flood-prone areas by end-2002.
- The number of high priority projects completed in the flood-prone areas by end-2002. Our target is to complete four high priority projects in the flood-prone areas by end-2002.
- The value of maintenance works. Our target is to carry out maintenance works worth \$130 million in the year 2001-2002.
- The length of drains and main watercourses inspected. Our target is to inspect 1 540 km of drains and main watercourses in the year 2001-2002.
- The length of drains and main watercourses cleansed. Our target is to clean 380 km of drains and main watercourses in the year 2001-2002.
- The percentage of complaints on blockage addressed within one working day. Our target is to address 99% of complaints on blockage within one working day.

We will pursue the following initiatives and targets to deliver results in this area –

<b>Initiative</b>	<b>Target</b>
To implement village flood protection schemes in Yuen Long <i>(Territory Development Department (TDD)/Drainage Services Department (DSD))</i>	To complete the construction of village flood protection works for Yuen Long Ma Tin Tsuen, Shui Pin Wai and Wang Chau (Phase 2) in 2005
To implement village flood protection schemes in San Tin <i>(TDD/DSD)</i>	To complete the construction of village flood protection works for San Tin Mai Po Lo Wai and Mai Po San Tsuen in 2005
To implement the main drainage channel works for eastern San Tin <i>(TDD/DSD)</i>	To complete the construction of the Eastern Main Drainage Channel for San Tin in 2006
To implement the Yuen Long Bypass Floodway project <i>(TDD/DSD)</i>	To complete the construction of the Yuen Long Bypass Floodway in 2006

Public works projects are complicated undertakings involving a large number of project participants and the exchange of voluminous technical information. At present, most information is exchanged through hard copies. We recognise that the efficiency of works project delivery can be enhanced through the use of information technologies (IT).

We will introduce an Electronic Services Delivery (ESD) for works projects to streamline the communication process through leverage on IT. Under ESD, a common platform for electronic communications will be established. It will facilitate data re-use and foster better collaboration among project participants. These improvements will enhance the efficiency, quality and standard of services provided by the construction industry as a whole.

In its report submitted to the Chief Executive in January 2001, the Construction Industry Review Committee recommended the Government to expedite the development of a common platform for electronic communications within the construction industry. Our ESD strategy is in line with such recommendation.

We will assess our performance in respect of this KRA against the following indicators –

- The percentage of tender documents issued in electronic format. Our target is to issue 100% of our tender documents for works contracts in electronic format.
- The percentage of consultancy invitation documents issued in electronic format. Our target is to issue 100% of our consultancy invitation documents in electronic format.
- The percentage of works projects adopting the unified Computer-Aided Drafting (CAD) Standard for Works Departments (CSWD). Our target is to adopt CSWD for 100% of new works projects.

We will pursue the following initiatives and targets to deliver results in this area –

Initiative	Target
<p>To implement electronic procurement for public works projects <i>(Works Bureau (WB))</i></p>	<ul style="list-style-type: none"> <li>● To commence tender/consultancy proposal submission on removable media by end-2001</li> <li>● To complete the feasibility study for tender/consultancy proposal submission through the Internet by March 2002</li> </ul>
<p>To formulate an Electronic Services Delivery (ESD) strategy for the implementation of works projects <i>(WB)</i></p>	<p>To complete a comprehensive review of the existing works project delivery processes and to formulate an overall ESD strategy for works projects by mid-2002</p>
<p>To implement a unified Computer-Aided Drafting (CAD) Standard for Works Departments (CSWD) <i>(WB)</i></p>	<p>To complete a comprehensive review of the existing CAD practice adopted by the Works Departments, and to formulate and implement a unified CSWD by end-2002</p>

# **Public Works Programme**

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## **Detailed Progress**

# 1

## Ensure that public works projects are planned for cost effectiveness, feasibility studies are thoroughly conducted, and planning action is well co-ordinated

To achieve results in this area, various initiatives have been undertaken in the past years. Details are set out below –

<b>Initiative *</b>	<b>Target #</b>	<b>Present Position +</b>
To conduct a review on the existing mechanism of prioritising public works projects that require land acquisition to enable better planning of the projects <i>(Works Bureau (WB))</i>	To complete the review by March 2001 <i>(2000)</i>	The review, which was completed in March 2001, concluded that the exercise had achieved its objectives and the procedures were adequate.  <i>(Action Completed)</i>
To strengthen the co-ordination in the planning of housing-related infrastructure projects by enhancing the monitoring system for these projects <i>(WB)</i>	To provide a computer database for Works Departments to enhance the monitoring of project planning by 2001 <i>(2000)</i>	A computer database was provided to Works Departments in August 2001 to help enhance the monitoring of project planning.  <i>(Action Completed)</i>
To scrutinise reports of Preliminary Project Feasibility Studies in respect of projects for inclusion in the Public Works Programme within the prescribed time frame <i>(WB)</i>	To maintain the target of checking individual reports within three weeks of receipt of the reports <i>(1999)</i>	This is an on-going task. The target of checking individual reports within three weeks of receipt of the reports has been maintained.  <i>(Action in Progress: On Schedule)</i>

\* the bracketed information denotes the agency with lead responsibility for the initiative

# the bracketed information denotes the year in which the target was set

+ the bracketed information denotes the status of the target

# 2

## Ensure that the most appropriate methods of procurement and delivery of construction projects are used

To achieve results in this area, various initiatives have been undertaken in the past years. Details are set out below –

Initiative	Target	Present Position
<p>To develop procedures and guidelines for the use of Interim Payment Schedules (IPS) in public works contracts in order to simplify the method of interim payments to contractors <i>(Works Bureau (WB))</i></p>	<p>To complete and implement the new IPS guidelines and procedures by 2001 <i>(1999)</i></p>	<p>A working group with representatives from the Government, quasi-government and professional and trade associations has been reconstituted to finalise the procedures and guidelines for the use of IPS (i.e. milestone payments) in government contracts by end-2001.  <i>(Action in Progress: On Schedule)</i></p>
<p>To modify the General Conditions of Contract (GCC) so as to adopt the most appropriate terms of contract for cost-effective procurement <i>(WB)</i></p>	<p>To complete the exercise by June 2001 <i>(1998)</i></p>	<p>The exercise has been completed with the introduction of relevant amendments to the GCC.  <i>(Action Completed)</i></p>

# 3

## Ensure that the quality of consultants and contractors selected to deliver public works will meet the requirements of our projects

To achieve results in this area, various initiatives have been undertaken in the past years. Details are set out below –

Initiative	Target	Present Position
To enhance the efficiency in the management of the List of Approved Contractors for Public Works and List of Approved Suppliers of Materials and Specialist Contractors for Public Works <i>(Works Bureau (WB))</i>	To complete the enhancement of the computerised Contractors Management Information System including its development into a bilingual (Chinese and English) system by end-2001 <i>(2000)</i>	The design of system enhancement has been completed and conversion of the system is in progress. The enhancement of the system will be completed by end-2001. <i>(Action in Progress: On Schedule)</i>
Together with the Independent Commission Against Corruption, to reinforce corruption resistant systems and procedures in the consultants management system <i>(WB)</i>	To complete a comprehensive review of the existing guidelines governing the management of consultants and to encourage the consultants to establish and maintain a code of conduct by end-2001 <i>(2000)</i>	A sample code of conduct was issued in June 2001 for the industry's reference. Consultants have been encouraged to establish and maintain their own Code of Conduct. Guidelines governing the management of consultants are being reviewed. <i>(Action in Progress: On Schedule)</i>
To strengthen the criteria for the selection of consultants and evaluation of proposals <i>(WB)</i>	To formulate a Consultants' Performance Index System by end-2000 <i>(1999)</i>	The formulation of the Consultants' Performance Index System was completed in November 2000. <i>(Action Completed)</i>

Initiative	Target	Present Position
<p>To improve the guidelines and procedures and issue a Contractor Management Handbook for administering and monitoring the performance of contractors on approved lists (WB)</p>	<p>To finalise and promulgate the Contractor Management Handbook by 2000 (1998)</p>	<p>The Handbook was promulgated for implementation in April 2001. <i>(Action Completed)</i></p>

# 4

## Ensure that contractors for public works maintain a safe and healthy working environment

To achieve results in this area, various initiatives have been undertaken in the past years. Details are set out below –

Initiative	Target	Present Position
To upgrade the accident reporting system on the monitoring of accidents statistics in public works construction sites <i>(Works Bureau (WB))</i>	To complete the system upgrade in early 2001 <i>(2000)</i>	The system was upgraded and put into use in July 2001. <i>(Action Completed)</i>
To implement a trial scheme of Site Safety Cycle in public works contracts <i>(WB)</i>	To implement the trial scheme in early 2001 <i>(2000)</i>	The trial scheme, which included six suitable contracts, was implemented in 2001. <i>(Action Completed)</i>
To monitor the safety performance of public works contractors to ensure that accident rates remain below our target of 55 accidents per 1 000 workers per year <i>(WB)</i>	To maintain the accident rate below our target of 55 per 1 000 workers per year in 2000 <i>(1999)</i>	The accident rate in 2000 was 46 accidents per 1 000 workers. <i>(Action Completed)</i>

## 5

## Ensure high quality and standards in the construction and maintenance of public works

To achieve results in this area, various initiatives have been undertaken in the past year. Details are set out below –

Initiative	Target	Present Position
<p>To consult the local construction industry on recommendations to set up a central construction standardisation body in Hong Kong, and to formulate an action plan for its establishment</p> <p><i>(Works Bureau (WB))</i></p>	<p>To consult the local construction industry and formulate an action plan in 2001</p> <p><i>(2000)</i></p>	<p>The Construction Advisory Board and the Construction Industry Review Committee (CIRC) have been consulted, and both parties supported the setting up of the standardisation body. The CIRC recommended in early 2001 the establishment of an industry coordinating body with one of its tasks to set up the standardisation body. Actions are in hand to establish the coordinating body.</p> <p><i>(Action Completed)</i></p>
<p>To host an international conference to promote better construction in future. The themes of the conference will encompass quality and standards in construction, safe and healthy environment, information technology and private finance initiatives</p> <p><i>(WB)</i></p>	<p>To hold the conference in June 2001 in Hong Kong</p> <p><i>(2000)</i></p>	<p>The conference was successfully held in June 2001 in Hong Kong.</p> <p><i>(Action Completed)</i></p>

Initiative	Target	Present Position
<p>To extend the requirement for consultants and contractors to obtain International Organisation for Standardisation (ISO) 9000 certification (WB)</p>	<ul style="list-style-type: none"> <li>● To require all engineering consultants for consultancy agreements with fees of \$10 million and below to obtain ISO 9000 certification in 2001</li> <li>● To require all Group B contractors and Landslip Preventive Measure specialist contractors to obtain ISO 9000 certification in 2001</li> </ul> <p>(2000)</p>	<ul style="list-style-type: none"> <li>● All consultants undertaking the relevant consultancy agreements have fulfilled the requirement.</li> <li>● All Group B contractors and Landslip Preventive Measure specialist contractors undertaking the relevant contracts have fulfilled the requirement.</li> </ul> <p>(Action Completed)</p>
<p>To implement the first stage of a construction personnel registration system for construction workers (WB)</p>	<p>To complete drafting of the new legislation by end-2001 (2000)</p>	<p>Drafting of the new legislation is in progress. We plan to submit the draft bill to the Legislative Council in 2002.  (Action in Progress: On Schedule)</p>
<p>To carry out a trial scheme on the employment of long-term construction workers in selected public works contracts (WB)</p>	<p>To start the trial scheme in early 2001 (2000)</p>	<p>Some public works contracts had been selected to carry out the trial scheme which started in August 2001.  (Action Completed)</p>

# 6

## Ensure that projects in the Public Works Programme are completed on time and within budget

To achieve results in this area, various initiatives have been undertaken in the past years. Details are set out below –

Initiative	Target	Present Position
To ensure the timely delivery of infrastructure projects related to the Cyberport <i>(Works Bureau (WB))</i>	<ul style="list-style-type: none"> <li>To complete the mainlaying works along the Southern Access to the Cyberport by end-2001</li> <li>To commence the construction of the Northern Access Road and the sewage treatment plant by end-2001</li> </ul>	<ul style="list-style-type: none"> <li>The mainlaying works along the Southern Access were substantially completed in September 2001.</li> <li>Construction of the Northern Access Road and the sewage treatment plant started in October 2000.</li> </ul>
	<i>(2000)</i>	<i>(Action Completed)</i>
To ensure the timely delivery of infrastructure projects related to the Hong Kong Disneyland <i>(WB)</i>	<ul style="list-style-type: none"> <li>To complete the first stage of Stage 1 of the Penny's Bay Reclamation by end-2001</li> <li>To commence the tendering procedures for Infrastructure Works Group I by end-2001</li> </ul>	<ul style="list-style-type: none"> <li>The first stage of Stage 1 of the Penny's Bay Reclamation was 95% completed, with the remaining works to be completed in October 2001.</li> <li>Tenders for the construction of the Infrastructure Works Group 1 were invited in June 2001.</li> </ul>
	<i>(2000)</i>	<i>(Action in Progress: On Schedule)</i>  <i>(Action Completed)</i>

Initiative	Target	Present Position
<p>To assess the cumulative effect of the housing development programme on infrastructure capacity, so as to identify the need for new infrastructure projects and co-ordinate the planning for these projects, to monitor their progress and to ensure their timely completion</p> <p>(WB)</p>	<p>To compile quarterly progress reports on high impact housing-related infrastructure Public Works Programme (PWP) projects starting from early 2000 to enhance monitoring</p> <p>(1999)</p>	<p>This is an on-going task. A reporting system has been established with quarterly reports being compiled for monitoring purpose.</p> <p><i>(Action in Progress: On Schedule)</i></p>
<p>To maintain the expenditure of public works on target against the provisions in the Estimates</p> <p>(WB)</p>	<p>To ensure that underspending on public works will be less than 5% against the provisions in the Estimates</p> <p>(1999)</p>	<p>This is an on-going task. The underspending on public works was 3.2% in 2000-2001. The monitoring of underspending in 2001-2002 is being carried out.</p> <p><i>(Action in Progress: On Schedule)</i></p>
<p>To strengthen the monitoring of the progress of High Impact Public Works Programme (PWP) projects to ensure that there will be no undue delay</p> <p>(WB)</p>	<p>To ensure that High Impact PWP projects are implemented according to the approved programme and project estimate</p> <p>(1998)</p>	<p>This is an on-going task. High Impact PWP projects are being monitored closely by means of quarterly reports and regular review meetings to ensure their implementation in accordance with the approved programme and project estimate.</p> <p><i>(Action in Progress: On Schedule)</i></p>

## 7

## Promote the exchange of construction technology and expertise in public works between Hong Kong and the Mainland

To achieve results in this area, various initiatives have been undertaken in the past years. Details are set out below –

Initiative	Target	Present Position
<p>To promote joint technological research activities and exchange of construction technology with the Mainland <i>(Works Bureau (WB))</i></p>	<p>To liaise with local and Mainland universities and related organisations on joint research activities in construction engineering in 2001 <i>(2000)</i></p>	<p>The Jockey Club Research and Information Centre for Landslip Prevention and Land Development has developed a drilling monitoring system, and implemented a geotechnical Lecture Series Programme since February 2001 for reputable researchers and engineers of the two places to exchange professional experience and knowledge.</p> <p>The Research Centre on Construction Safety set up jointly by Tsinghua University and a local contractor will complete its study on the safety aspects of metal and bamboo scaffolding by end-2001.</p> <p><i>(Action in Progress: On Schedule)</i></p>

Initiative	Target	Present Position
<p>To facilitate contact between the local construction industry and Mainland counterparts to help enhance mutual understanding in the organisation and practice of the construction industry and to strengthen their co-operation opportunities</p> <p><i>(WB)</i></p>	<ul style="list-style-type: none"> <li>● To co-organise at least one exchange seminar and arrange visits to the Mainland on topics related to systems and practices adopted by the construction industry in Hong Kong and in the Mainland by end-2001</li> <p><i>(2000)</i></p> <li>● To compile a directory of construction service providers in Hong Kong for the information of the Mainland counterparts by end-2000</li> <p><i>(1999)</i></p> </ul>	<ul style="list-style-type: none"> <li>● An exchange conference “Conference on the Development and Co-operation of the Construction Industry of the Mainland and Hong Kong and Exploration of the International Market” was held in Kunming in September 2001.</li> <li>● The “Directory of Hong Kong Construction Services Providers” was compiled in December 2000.</li> <p><i>(Action Completed)</i></p> </ul>
<p>To foster liaison and co-operation among engineering and construction related professionals for the promotion of a comprehensive service (covering project financing, design, construction and project operation) to the construction industry</p> <p><i>(WB)</i></p>	<ul style="list-style-type: none"> <li>● To co-organise at least one exchange seminar and arrange visits to the Mainland to share experience and promote co-operation between local professionals and their Mainland counterparts by end-2001</li> <p><i>(2000)</i></p> </ul>	<ul style="list-style-type: none"> <li>● A study mission to Yunnan and Guangxi Provinces was organised in September 2001.</li> </ul>

Initiative	Target	Present Position
	<ul style="list-style-type: none"> <li>● To co-organise at least one exchange seminar and arrange visits to the Mainland by end-2000 to share experience and promote co-operation between local professionals and their Mainland counterparts <i>(1999)</i></li> </ul>	<ul style="list-style-type: none"> <li>● A study mission “Hong Kong Infrastructure Study Mission to Guiyang, Chengdu and Chongqing” was organised in August 2000. A conference with the Ministry of Water Resources on “Mainland and Hong Kong Conference on Construction Management of Large-scale Infrastructure Projects” was held in December 2000.  <i>(Action Completed)</i></li> </ul>

## 8

## Ensure that the stormwater drainage infrastructure is adequate and effective in collecting and discharging surface runoff

To achieve results in this area, various initiatives have been undertaken in the past years. Details are set out below –

Initiative	Target	Present Position
To upgrade the flood protection standard in West Kowloon <i>(Drainage Services Department (DSD))</i>	To commence the construction of a flood storage tank underneath Tai Hang Tung Playground and a drainage transfer scheme from Kowloon Tong to Kai Tak Nullah in 2001 <i>(2000)</i>	The construction of the flood storage tank and the drainage transfer scheme commenced in January and March 2001 respectively. <i>(Action Completed)</i>
To implement Phase 2 of the river training scheme in Ngau Tam Mei in Northwestern New Territories <i>(Territory Development Department (TDD))</i>	To complete Phase 2 of the river training works by end-2002 <i>(2000)</i>	River training works started in March 2000, with progress on schedule. <i>(Action in Progress: On Schedule)</i>
To implement Stage 2 of the river training scheme in Yuen Long and Kam Tin in Northwestern New Territories <i>(TDD/DSD)</i>	To complete Phases 1 and 2 of the river training works by end-2002 <i>(2000)</i>	River training works started in mid-1999, with progress on schedule. <i>(Action in Progress: On Schedule)</i>

Initiative	Target	Present Position
<p>To work closely with the Shenzhen authorities on the implementation of Stage 3 of the Shenzhen River Regulation Project (DSD)</p>	<p>To commence construction of Stage 3 of the Shenzhen River improvement works in 2001 (1999)</p>	<p>Preparation of tender documents for the first construction contract has been substantially completed with a view to starting work in end-2001. <i>(Action in Progress: On Schedule)</i></p>
<p>To implement Phase 1 of the river training scheme in Ngau Tam Mei in Northwestern New Territories (DSD)</p>	<p>To complete the river training works in 2002 (1999)</p>	<p>River training works are in progress for completion in 2002. <i>(Action in Progress: On Schedule)</i></p>
<p>To upgrade the stormwater drainage system in West Kowloon (DSD)</p>	<ul style="list-style-type: none"> <li>● To complete Stage 1 of the West Kowloon drainage improvement works in 2003</li> <li>● To complete Stage 2 Phase 1 of the West Kowloon drainage improvement works in 2004 (1999)</li> </ul>	<ul style="list-style-type: none"> <li>● Stage 1 works are in progress for completion in 2003.</li> <li>● Stage 2 Phase 1 works are in progress for completion in 2004. <i>(Action in Progress: On Schedule)</i></li> </ul>

Initiative	Target	Present Position
<p>To implement river training schemes in the flood-prone areas of Northern New Territories (TDD/DSD)</p>	<ul style="list-style-type: none"> <li>● To complete river training and rehabilitation works for River Beas and River Indus in 2001</li>   <li>● To complete river training works in Area 30B in Sheung Shui in 2001 (1998)</li> </ul>	<ul style="list-style-type: none"> <li>● Training and rehabilitation works for River Beas and Lower River Indus are in progress for completion in 2001.</li>   <li>Progress in the training works for the Upper River Indus is slower than expected. Actions are in hand to closely monitor the progress of works and to expedite the critical channel works for completion in 2002 to bring early relief to the flooding problem in the River Indus basin.</li>   <li><i>(Action in Progress: Behind Schedule)</i></li>   <li>● River training works are in progress for substantial completion in 2001.</li>   <li><i>(Action in Progress: On Schedule)</i></li> </ul>

Initiative	Target	Present Position
<p>To complete the Drainage Master Plan (DMP) Studies for Northern New Territories, Sha Tin/Tai Po and Sai Kung/East Kowloon/Southern Lantau to ensure that all stormwater drainage systems in the areas conform to a common high standard of flood protection</p> <p><i>(DSD)</i></p>	<p>To complete the DMP Studies for Northern New Territories and Sha Tin/Tai Po in 1999 and the Sai Kung/East Kowloon/Southern Lantau studies in 2000</p> <p><i>(1998)</i></p>	<p>The DMP Studies for Northern New Territories and Sha Tin/Tai Po and for Sai Kung/East Kowloon/Southern Lantau were completed in 1999 and 2000 respectively.</p> <p><i>(Action Completed)</i></p>
<p>To recommend comprehensive plans to extend and upgrade the stormwater drainage systems under the seven DMP Studies. To implement in phases the recommended drainage improvement works upon the completion of these studies</p> <p><i>(DSD)</i></p>	<p>To begin construction in 2001</p> <p><i>(1997)</i></p>	<p>Tendering for the Phase 1 works is in progress with a view to starting works in end-2001.</p> <p><i>(Action in Progress: On Schedule)</i></p>